

# Environmental Assessment

## Determinations and Compliance Findings for HUD-assisted Projects

### 24 CFR Part 58

#### **Project Information**

Project ID: PR-RGRW-01214

**Project Name:** Hacienda Yuquiyú, Inc.

**Responsible Entity:** Puerto Rico Department of Housing

**Grant Recipient** (if different than Responsible Entity):

**State/Local Identifier:** Puerto Rico/Carolina

**Preparer:** Clifford Jarman

#### **Certifying Officer Name and Title:**

Permit and Compliance Officers:

Sally Acevedo Cosme  
Pedro De León Rodríguez  
María T. Torres Bregón  
Angel G. López-Guzmán  
Ivelisse Lorenzo Torres  
Santa Ramírez Lebrón  
Janette Cambrelén  
Limary Velez-Marrero  
Juan Carlos Perez Bofill

**Consultant** (if applicable): Tetra Tech, 251 Calle Recinto Sur, Ste. 202, San Juan, PR 00091

**Direct Comments to:** PRDOH (environmentcdbg@vivienda.pr.gov)

**Project Location:** Carr. 857 km. 4.4, Bo. Canovanillas, Carolina, PR 00987

The property is a 6.244-acre farm located at Carr. 857 km. 4.4, Bo. Canovanillas, Carolina, PR 00987 (Parcel ID: 117-000-007-75-001). The coordinates of the project site are 18.345594, -65.923582.

This land/farm was previously used for the sugar cane and cattle 50 years ago and is currently used for fruit trees (bananas, mango, mamey, and avocado).

#### **Description of the Proposed Project** [24 CFR 58.32; 40 CFR 1508.25]:

The proposed total project area is approximately 0.07 acres. The proposed Scope of Work for this project includes the purchase and installation of a greenhouse and the purchase of trees. Ground disturbance will be required for the installation of the

greenhouse. No tree removal will be required. The area for the scope of work of the greenhouse is not graded. The proposed greenhouse will be installed at coordinates 18.345594, -65.923582. The greenhouse will have a footprint of 100 feet by 30 feet. The building will be a metal structure with saran and plastic net for cover. The greenhouse will be used for grafting cacao, mango, and avocado. No water and power connection are required for this project. In May 2023, the applicant cleaned part of the parcel for future use to grow cacao. The current land in use is for growing bananas and fruit trees such as mango, mamey, and avocado. In the past this land was used for growing sugar cane, and for raising cattle about fifty years ago. Site photos are included in **Appendix A**. A site map (**Figure 1**) is included in **Appendix B**.

**Statement of Purpose and Need for the Proposal** [40 CFR 1508.9(b)]:

In September of 2017, Hurricanes Irma and María produced sustained winds and intense rainfall that impacted agricultural production throughout the island of Puerto Rico. These hurricanes caused the loss of eighty percent of crop value island wide, exacerbating challenges to food security and agricultural business development. The Puerto Rico Department of Agriculture (PRDA) estimated seven hundred and eighty million dollars (\$780 million) worth of damages from the hurricanes to the agricultural sector of the economy.

Many properties were damaged in Hurricane Maria, resulting in struggling businesses. The Re-Grow Puerto Rico Urban-Rural Agriculture Program (Re-Grow Program) will develop greater agricultural capacity and address the needs created by Hurricanes Irma and María with a substantial investment of CDBG-DR funds for a wide variety of viable and sustainable agricultural activities.

The Re-grow PR Urban-Rural Agriculture Program promotes and increases food security throughout the Island. It also improves and expands agricultural production related to economic revitalization and the development of activities.

The applicant does not have the resources to purchase farming equipment and materials for their agricultural operation. This farming business project is associated with the cultivation and production of cacao trees and will deliver with the overall objectives of the economic development program. The proposed project will promote the production of traditional crops in high demand and contribute to the food sustainability of Puerto Rico.

**Existing Conditions and Trends** [24 CFR 58.40(a)]:

The proposed project is located in a rural, mountainous terrain with mature vegetation. The property lies to the west on Route PR-857 in Carolina, near the limit with the town of Canóvanas to the east. The town limit runs along Quebrada Limones in this area. This area has residential and farm properties along Route PR-857.

The existing area for the proposed purchase and installation of a greenhouse is and traditionally has been used for agricultural purposes. Therefore, there is no change in land use associated with this project and some ground disturbance will be required.

**Structure of this Environmental Review Report (ERR).**

This ERR discusses the Funding Information immediately below. The environmental impacts of the proposed action are discussed in the Compliance with 24 CFR 58.5 and 58.6 Laws and Authorities checklist and Environmental Factors checklist. The listing of Additional Studies Performed, and Sources, Agencies and Persons Consulted follows the checklists. The discussions of Public Outreach, Cumulative Impacts, Alternatives, and Summary of Findings and Conclusions are presented at the end of the ERR, before the listing of Mitigation Measures and Determination signatures. The appendices contain detailed information.

- Appendix A – Site Inspection
- Appendix B – Maps
- Appendix C – Additional Documentation
- Appendix D – Endangered Species
- Appendix E – SHPO Consultation

### **Funding Information**

<b>Grant Number</b>	<b>HUD Program</b>	<b>Funding Amount</b>
B-17-DM-72-0001	Community Planning and Development (CPD) / Community Development Block Grant – Disaster Recovery (CDBG-DR)	\$1,507,179,000
B-18-DP-72-0001	CPD / DBG-DR	\$8,222,783,000
B-19-DP-78-0002	CPD / DBG-DR	\$277,853,230
B-18-DE-72-0001	CPD / DBG-DR	\$1,932,347,000

**Estimated Total HUD Funded Amount:** \$47,053.00

**Estimated Total Project Cost** (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$47,053.00

## **Compliance with 24 CFR 58.5 and 58.6 Laws and Authorities**

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits or approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

<b>Compliance Factors:</b> Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.6</b>		
<b>Airport Hazards</b>  24 CFR Part 51 Subpart D	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The proposed project consists of the purchase and installation of a greenhouse and purchase of cacao trees. The nearest civil airport is approximately 39,383 feet from the proposed site. The nearest military airport is approximately 39,383 feet from the proposed site. The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements.</p> <p>See <b>Figure 2</b> in <b>Appendix B</b>.</p>
<b>Coastal Barrier Resources</b>  Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>This proposed project is not located in a CBRS Unit. The proposed project is located 21,353 feet south of the nearest CBRS (PR-87). Therefore, this project has no potential to impact a CBRS Unit and is in compliance with the Coastal Barrier Resources Act.</p> <p>See <b>Figure 3</b> in <b>Appendix B</b>.</p>
<b>Flood Insurance</b>  Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	<p>The proposed project site is not located in a 100-year floodplain per FEMA Flood Insurance Rate Map (FIRM) 72000C0760J, effective date 11/18/2009. The proposed project will not require flood insurance. The proposed project is in compliance with flood insurance.</p> <p>See <b>Figure 4</b> and <b>Figure 5</b> in <b>Appendix B</b>.</p>

**STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.5**

<p><b>Clean Air</b></p> <p>Clean Air Act, as amended, particularly section 176(c) &amp; (d); 40 CFR Parts 6, 51, 93</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The proposed project site is not located in a county or air quality management district that is in non-attainment status for any criteria pollutants. The Municipio of Carolina is not listed in the EPA Green Book as being in non-attainment. The proposed purchase and installation of a greenhouse and the purchase of trees would have no impact on air quality. The project is in compliance with the Clean Air Act.</p> <p>See EPA listing in <b>Appendix C</b>.</p>
<p><b>Coastal Zone Management</b></p> <p>Coastal Zone Management Act, sections 307(c) &amp; (d)</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The proposed project is located 16,096 feet from the nearest Coastal Zone Management area and does not affect a Coastal Zone as defined in the PR Coastal Zone Management Plan. The project is in compliance with the Coastal Zone Management Act.</p> <p>See <b>Figure 7</b> in <b>Appendix B</b>.</p>
<p><b>Contamination and Toxic Substances</b></p> <p>24 CFR Part 58.5(i)(2)</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>A site visit conducted on May 18, 2023, noted no debris, rubbish, visible signs vegetative stress, contamination, or toxic substances at the project site.</p> <p>Site contamination was evaluated through online data searches to determine if toxic sites are located within 3,000-feet of the proposed project. There are no sites of environmental concern identified within 3,000 feet of the project site.</p> <p>The project is in compliance contamination and toxic substances.</p> <p>See <b>Figures 8 and 9</b> in <b>Appendix B</b>.</p>
<p><b>Endangered Species</b></p> <p>Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The proposed project will have No Effect on listed species. The proposed project is located 31,422 feet from the nearest endangered species critical habitat. The proposed purchase and installation of a greenhouse, and purchase of trees will not involve cutting down any trees.</p>

		<p>Additionally, there are no critical habitats in the proposed project area.</p> <p>A 'No Effect' determination has been made based on the lack of suitable habitat for the Puerto Rican Boa, as well as previous disturbance and current land use of the proposed project area.</p> <p>If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa moves off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the Boa.</p> <p>See <b>Figures 10 and 11</b> in <b>Appendix B</b> and IPaC report in <b>Appendix D</b>. The proposed project is in compliance with the Endangered Species Act</p>
<p><b>Explosive and Flammable Hazards</b></p> <p>24 CFR Part 51 Subpart C</p>	<p>Yes    No</p> <p><input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The proposed project does not include development, construction, or rehabilitation that will increase residential density. The project is in compliance with Explosive and Flammable Hazard requirements.</p> <p>Refer to site visit report in <b>Appendix A</b>.</p>
<p><b>Farmlands Protection</b></p> <p>Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<p>Yes    No</p> <p><input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The project site is not designated as prime farmland. The proposed purchase and installation of a greenhouse does not include any activities that could potentially convert agricultural land to nonagricultural use. This project is in compliance with the Farmland Protection Policy Act.</p> <p>See <b>Figure 12</b> in <b>Appendix B</b>.</p>
<p><b>Floodplain Management</b></p> <p>Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<p>Yes    No</p> <p><input type="checkbox"/>   <input checked="" type="checkbox"/></p>	<p>The project is located in a Zone X, FIRM Panel 72000C0760J, effective date 11/18/2009. The site is not located in a Preliminary Firm or an Advisory Base Flood Elevation (ABFE) special flood hazard area. The project is in compliance with Floodplain management requirements.</p> <p>See <b>Figure 5 and 6</b> in <b>Appendix B</b>.</p>

<p><b>Historic Preservation</b></p> <p>National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>The project site was evaluated on August 01, 2023, by an SOI qualified Architect and on August 4, 2023, by and SOI Qualified Archaeologist. Documentation with maps was subsequently submitted to SHPO on August 14, 2023. SHPO concurred with a finding of <b>“No Historic Properties Affected”</b> within the project’s Area of Potential on Effects on August 18, 2023.</p> <p>See <b>Figure 13</b> in <b>Appendix B</b> and SHPO Submittal and Concurrence Documentation in <b>Appendix E</b>.</p>
<p><b>Noise Abatement and Control</b></p> <p>Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>HUD’s noise regulations protect residential properties from excessive noise exposure. The proposed project consists of the purchase and installation of a greenhouse and purchase of cacao trees.</p> <p>HUD noise regulations do not apply as the project does not include new construction for residential use or rehabilitation of an existing residential property. The proposed project is in compliance with Noise Abatement and Control.</p>
<p><b>Sole Source Aquifers</b></p> <p>Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>There are no EPA sole source aquifers in Puerto Rico. The project is in compliance with Sole Source Aquifer requirements.</p>
<p><b>Wetlands Protection</b></p> <p>Executive Order 11990, particularly sections 2 and 5</p>	<p>Yes    No</p> <p><input type="checkbox"/>    <input checked="" type="checkbox"/></p>	<p>NWI maps show no wetlands on the proposed project area or adjacent to the proposed project area. The nearest wetland is located approximately 275-foot east of the proposed project location. A man-made pond is located directly west of the proposed project area. This proposed project will not impact any on or off-site wetlands and includes no activities that would require further evaluation under Executive Order 11990. The project is in compliance with wetland protections.</p>

		See <b>Figure 14</b> in <b>Appendix B</b> .
<b>Wild and Scenic Rivers</b> Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	This project is not within proximity of a National Wild and Scenic River (WSR). The distance to the nearest WSR is approximately 48,217 feet. The project is in compliance with the Wild and Scenic Rivers Act. See <b>Figure 15</b> in <b>Appendix B</b> .
<b>ENVIRONMENTAL JUSTICE</b>		
<b>Environmental Justice</b> Executive Order 12898	Yes    No <input type="checkbox"/> <input checked="" type="checkbox"/>	No adverse environmental impacts were identified in any other compliance review portion of this project that may disproportionately be high for low-income and/or minority communities. Therefore, the proposed activity complies with Executive Order 12898.

**Environmental Assessment Factors** [24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features, and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable, and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

**Impact Codes:** Use an impact code from the following list to make the determination of impact for each factor.

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement



Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>LAND DEVELOPMENT</b>		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	<p>The proposed project is located on a private farm. The proposed project consists of the purchase and installation of a greenhouse, and purchase of cacao trees.</p> <p>The project site is not zoned. The proposed action is compliant with the current rural residential/agricultural land use of the project area.</p>
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	<p>The proposed project is located in a rural, mountainous terrain with mature vegetation. The soil around the APE is mainly Mucara silty clay loam, eroded (MuE2) with 20 to 40 percent slopes.</p> <p>Projects larger than 1 acre must comply with the CWA and develop a SWPPP with the NPDES. The proposed project area is approximately 0.07 acres.</p> <p>The project sites are in area is rated "low to "moderate" for landslide susceptibility (see <b>Figure 16</b> in <b>Appendix B</b>).</p> <p>No changes in drainage or erosion are expected from this project. There will be little to no additional runoff associated with the project.</p>
Hazards and Nuisances including Site Safety and Noise	2	<p>During implementation of the project, construction activities may result in temporary elevation of ambient noise levels in immediate areas around active construction areas.</p> <p>There is no access to the project area by the public. Standard BMPs, such as construction fencing, would be applied to protect the farm residents and public from typical construction hazards.</p>
Energy Consumption	2	The proposed project will not require a power connection and will not utilize power.
Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>SOCIOECONOMIC</b>		

Employment and Income Patterns	2	An agronomist report completed on 7/15/2022 indicated that there are currently two employees working the farm. As a result of the proposed project it is projected that 3-4 new permanent jobs will be created. These workers are expected to come from the local region. The proposed project would have a minor positive impact on employment or income patterns.
Demographic Character Changes, Displacement	2	The proposed project would not result in demographic character changes or displacement. Given the nature of the project area, no relocations or demolition of residential structures or businesses would occur as part of this project.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>COMMUNITY FACILITIES AND SERVICES</b>		
Educational and Cultural Facilities	2	The project would not result in any change to regional or local area educational and cultural facilities or increase demand for them.
Commercial Facilities	2	The agricultural activity of the project property will improve. Other commercial facilities would not be impacted by the proposed project.
Health Care and Social Services	2	Health care and social services facilities would not be impacted by the proposed project. The project would not increase demand for health care and social services facilities.
Solid Waste Disposal / Recycling	2	Waste vegetation from any clearing activities will either be composted on site or at regional composting centers. Soil from any grading would be recycled on the farm as fill. Left over construction materials that could be reused on the farm (e.g., piping, structural materials) would be stored for later use. The remaining construction solid waste materials would be collected for transport to the local landfill. The amount of impact of solid waste resulting from the construction of the proposed project would be minor. During operations, the products and byproducts would be agricultural, which waste would be biodegradable.
Wastewater / Sanitary Sewers	2	The proposed project would not include any bathrooms, wastewater, or sewage facilities. Current farm conditions would remain unchanged.

Water Supply	2	The applicant has stated no new water connection is required. The proposed project is for the purchase of trees and installation of a greenhouse. The proposed project will have no impact on the water supply.
Public Safety - Police, Fire and Emergency Medical	2	The proposed project would not create any new demand for emergency or health services.
Parks, Open Space and Recreation	2	The proposed project would not create or destroy any new parks, open space, or recreational activities. It also would not increase use of those facilities.
Transportation and Accessibility	2	The proposed project would not involve the creation of new roads nor any increase in long-term traffic on existing roads. There would be some minor use of the existing road during construction. All residents and businesses would retain access to their properties during and after the project.

Environmental Assessment Factor	Impact Code	Impact Evaluation
<b>NATURAL FEATURES</b>		
Unique Natural Features, Water Resources	2	The proposed project will be situated on an existing agriculture property and will have no impact to unique natural features or water resources.
Vegetation, Wildlife	2	The proposed project will occur in land previously used for agricultural purposes and will continue in that capacity. The proposed project will have no impact on vegetation and wildlife.
Climate Change	2	This is a small project with no measurable impact on climate change factors. The proposed project considered the potential impacts of climate change on the short- and long-term suitability and resilience of the project. The project will have no change in foreseeable future conditions due to climate change

**Additional Studies Performed:** None Required

**Field Inspection** (Date and completed by): **Carlos O. Medina, 5/18/2023.**

**List of Sources, Agencies and Persons Consulted** [40 CFR 1508.9(b)]:

Puerto Rico State Historic Preservation Office

FAA, National Plan for Integrated Airport Systems:

[www.faa.gov/airports/planning\\_capacity/npias/reports/NPIAS-Report-2017-2021-Appendix-B-Part6.pdf](http://www.faa.gov/airports/planning_capacity/npias/reports/NPIAS-Report-2017-2021-Appendix-B-Part6.pdf)

John H. Chafee Coastal Barrier Resources System, Puerto Rico [map](http://www.fws.gov/CBRA/Maps/Locator/PR.pdf).  
[www.fws.gov/CBRA/Maps/Locator/PR.pdf](http://www.fws.gov/CBRA/Maps/Locator/PR.pdf)

National Wild and Scenic Rivers System: [www.rivers.gov/puerto-rico.php](http://www.rivers.gov/puerto-rico.php)

Puerto Rico Community Development Block Grant Disaster Recovery Action Plan, July 2018. [www.cdbg-dr.pr.gov/en/action-plan/](http://www.cdbg-dr.pr.gov/en/action-plan/)

Programmatic Agreement among the Federal Emergency Management Agency, the Puerto Rico State Historic Preservation Office and the Central Office for Recovery, Reconstruction and Resilience – amended to include the Puerto Rico Department of Housing.

US Environmental Protection Agency, National Ambient Air Quality Standards, Nonattainment Areas for Criteria Pollutants (Green Book):  
[www3.epa.gov/airquality/greenbook/anayo\\_pr.html](http://www3.epa.gov/airquality/greenbook/anayo_pr.html)

US EPA, Environmental Topics, Air Topics: [www.epa.gov/environmental-topics/air-topics](http://www.epa.gov/environmental-topics/air-topics)

US Fish and Wildlife Service, Environmental Conservation Online System:  
<https://ecos.fws.gov/ecp/report/species-listings-by-state?stateAbbrev=PR&stateName=Puerto%20Rico&statusCategory=Listed>

Federal Emergency Management Agency, Flood Mapping Service:  
<https://msc.fema.gov/portal/home> (compilation of numerous maps)

US Fish and Wildlife Service, National Wetlands Inventory:  
[www.fws.gov/wetlands/data/mapper.html](http://www.fws.gov/wetlands/data/mapper.html) (compilation of numerous maps)

Puerto Rico Coastal Zone Management Program Plan, September 2009.

US EPA, Sole Source Aquifers. Esri HERE, Garmin, NOAA, USGS, EPA.

US Geological Survey, Data Release of May Showing Concentration of Landslides Caused by Hurricane Maria,

[www.sciencebase.gov/catalog/item/59de6459e4b05fe04ccd39d8](http://www.sciencebase.gov/catalog/item/59de6459e4b05fe04ccd39d8)

**List of Permits Obtained:** None Required

**Public Outreach** [24 CFR 58.43]:

The local community has been very proactive in the recovery process. Puerto Rico Department of Agriculture has worked closely with the agricultural community. The project will include a FONSI / NOI-RROF in compliance with NEPA regulations for HUD.

**Cumulative Impact Analysis [24 CFR 58.32]:**

In accordance with 24 CFR 58.32 (Aggregation), there are no cumulative impact associated with the proposed project. The agricultural activities at the farm would increase to a minor degree above current levels due to the implementation of the project. Applicant has stated that no new water or power connection is required.

**Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]**

The RGRW Program's goal is to increase agricultural capacity while promoting and increasing food security island wide. This Program seeks to enhance and expand agricultural production related to economic revitalization and sustainable development activities. The applicant submitted a proposal to enhance and expand agricultural production on their property. The proposed use of grant funds will allow the applicant to expand the cultivation, processing, and delivery of agricultural products through purchase and installation of a greenhouse, and purchase of cacao trees. Any alternative that would involve an off-property location would not enhance and expand agricultural production or allow for the economic development for this applicant. The actions are proposed in an area with no trees and close to a man-made pond. The proposed site has been previously cleared. Alternative locations on the property would be farther from the man-made pond and would require extensive tree removal.

**No Action Alternative [24 CFR 58.40(e)]:**

Under the No Action Alternative, the applicant would not receive federal funding for the proposed project which would inhibit the economic growth opportunity that the applicant would not otherwise have under the PRDOH Re-Grow Puerto Rico program. As a result, these owners may not be able to experience the growth needed to recover and expand their agriculture activities. A provision of the grant allows for economic development for businesses. The No-Action alternative would not allow for the economic development for this applicant.

**Summary of Findings and Conclusions:**

The proposed activity has no adverse effects on the environment nor is there the requirement for further consultation with federal agencies associated with the topics evaluated above. There are no environmental review topics addressed above that result in the need for additional formal compliance steps with federal agencies or the requirement for mitigations other than those listed below. There may be additional approvals or permits from local agencies.

**Mitigation Measures and Conditions [40 CFR 1505.2(c)]**

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These

measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure


**Determination:**

**Finding of No Significant Impact** [24 CFR 58.40(g)(1); 40 CFR 1508.27]

The project will not result in a significant impact on the quality of the human environment.

**Finding of Significant Impact** [24 CFR 58.40(g)(2); 40 CFR 1508.27]

The project may significantly affect the quality of the human environment.

Preparer Signature:  Date: 10/10/2023

Name/Title/Organization: Clifford Jarman, Senior Environmental Scientist, Tetra Tech Inc.

Certifying Officer Signature:  Date: October 07, 2023

Name/Title: Limary Vélez Marrero / Permits and Environmental Compliance Specialist

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

# **APPENDIX A**

## **Site Inspection and Photos**



## Environmental Field Observation - Puerto Rico Department of Housing

APPLICANT INFORMATION			
Application ID	PR-RGRW-01214		
Applicant Name	Hacienda Yuquiyú, Inc.		
Property Address	Carr 857 km 4.4 Bo. Canovanillas		
Parcel ID	117-000-007-75-000		
Coordinates	18.345594, -65.923582		
Inspector Name	Carlos O. Medina		
Inspection Date	05/18/2023		
Building Type	N/A		
Number of Units	0		
Number of Stories	0		
Year Built; Data Source	N/A		
ENVIRONMENTAL OBSERVATIONS (attach photos and notes, as necessary, for any YES answers)			
OBSERVATION ITEMS	YES	NO	COMMENTS
A. Is the <b>structure in use</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B. Is <b>structure a greenhouse</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C. Is <b>Electricity connected</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D. Is <b>water connected</b> ? (Utilities or Well)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1. Are there signs of <b>poor housekeeping</b> on site? (mounds of rubble, garbage, storm debris, solid waste, petroleum products, paint, pesticides, cleaning fluids, vehicle batteries, abandoned vehicles, pits, pools, ponds of hazardous substances, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Are there any <b>55-gallon drums</b> visible on site? If yes, are they leaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Are there any (or signs of any) <b>underground storage tanks</b> on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Are there signs of <b>ASTs</b> on the parcel or adjacent parcel? If yes, list approximate size and contents, if known.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Is there any <b>stained soil or pavement</b> on the parcel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Is a water <b>drainage system</b> in use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is a warehouse in use for storage of <b>Fertilizer or Pesticides</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. Are there any <b>groundwater monitoring wells</b> on the site or adjacent parcel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Is there evidence of a <b>faulty septic system</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Is there <b>distressed vegetation</b> on the parcel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Is there any visible indication of <b>MOLD</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

12. Is there any visible evidence of <b>asbestos, chipping, flaking or peeling paint, or hazardous materials</b> present in or on the structure?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13. Are any <b>additional site hazards</b> observed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
14. Is there any <b>permanent standing water</b> , such as a pond or stream, located on the site (do not include ponding from recent rain / weather events)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pond with bass and shrimp
15. Does the subject property have <b>water frontage</b> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
16. Is there any indication of the presence of <b>Wetlands</b> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Located southeast out of the APE
17. Are there any obvious signs of <b>animals or birds nesting</b> on or near the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
18. Is the applicant aware of any <b>significant historical event or persons</b> associated with the structure, or of it being located in a historic district/area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
19. Is a <b>historic marker</b> present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Notes:

Re Grow Additional Notes:  
Case: PR-RGRW-01214  
Project Name: Hacienda Yuquiyú, Inc.  
Coordinates: 18.345594, -65.923582

Is the field graded? For what purpose the field was graded? Month, Year: May, 2023, applicant clean part of the parcel for future use in growing cacao. The area for the scope of work of the greenhouse is not graded.

Scope of Work: Purchase and installation of a greenhouse and purchase of trees.

Land current in use for: some bananas and fruit trees (mango, mamey and avocado)

Past Land use was: sugar cane and cattle 50 years ago

The applicant plans to do: a greenhouse

Where the applicant plans to do the ground disturbances for the scopes of work, add the coordinates, descriptions and approximately the measurements:

Scope of work: 18.345594, -65.923582

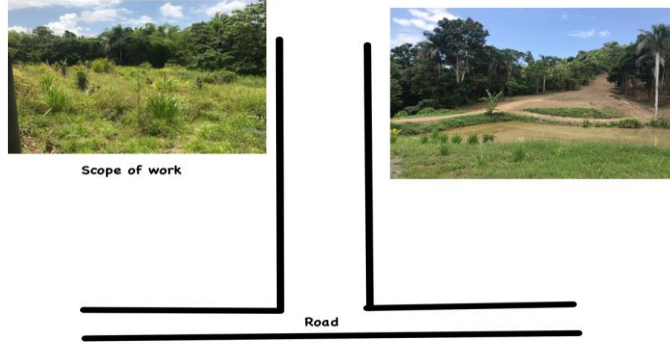
Installation of a greenhouse with a footprint of 100' x 30 in metal, plastic and Saran. Grafting of cacao, mango and avocado.

Any new water connection or power connection?

No water and power connection is required.

May, 2023, applicant clean part of the parcel for future use in growing cacao. The area for the scope of work of the greenhouse is not graded.

## Site Sketch



**Front of Structure**

Photo Direction: South



**Facing Away From Front**

Photo Direction: North



**Side #1 of Structure**

Photo Direction: Southeast



**Facing Away From Side #1**

Photo Direction: Northwest



**Back of Structure**

Photo Direction: Northeast



**Facing Away From Back**

Photo Direction: Southwest



**Side #2 of Structure**

Photo Direction: Southwest



**Facing Away From Side #2**

Photo Direction: Northeast



**Streetscape #1**

Photo Direction: Northeast



**Streetscape #2**

Photo Direction: West





**Address**

Photo Direction: South



Structural Details

Photo Description: Architectural details

Photo Direction: Southeast



Structural Details

Photo Description: Architectural details

Photo Direction: Southwest



Structural Details

Photo Description: Architectural details

Photo Direction: West



Structural Details

Photo Description: Architectural details

Photo Direction: East



Structural Details

Photo Description: Architectural details

Photo Direction: Southwest



Structural Details

Photo Description: Architectural details

Photo Direction: South



Structural Details

Photo Description: Architectural details

Photo Direction: South



Structural Details

Photo Description: Architectural details

Photo Direction: South



Structural Details

Photo Description: Architectural details

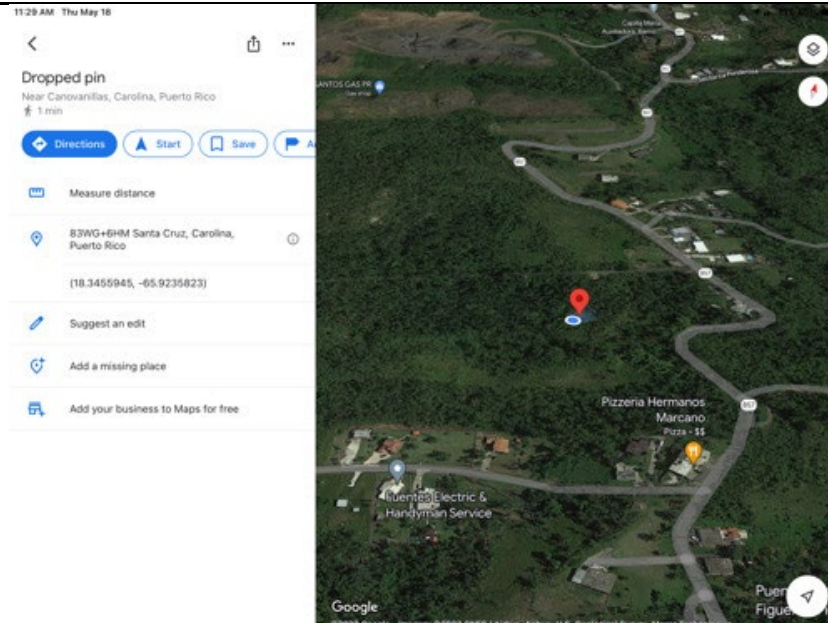
Photo Direction: Southwest



Structural Details

Photo Description: Architectural details

Photo Direction: North



Standing Water

Photo Description: Pond

Photo Direction: Southwest



Wetlands

Photo Description: Water stream

Photo Direction: Southeast





**Scope Of Work**

Photo Description: Scope of work: installation of a greenhouse

Photo Direction: East



**Scope Of Work**

Photo Description: Scope of work: installation of a greenhouse

Photo Direction: Northeast



**Scope Of Work**

Photo Description: Scope of work: installation of a greenhouse

Photo Direction: North



**Scope Of Work**

Photo Description: Scope of work: installation of a greenhouse

Photo Direction: Southeast



Scope Of Work

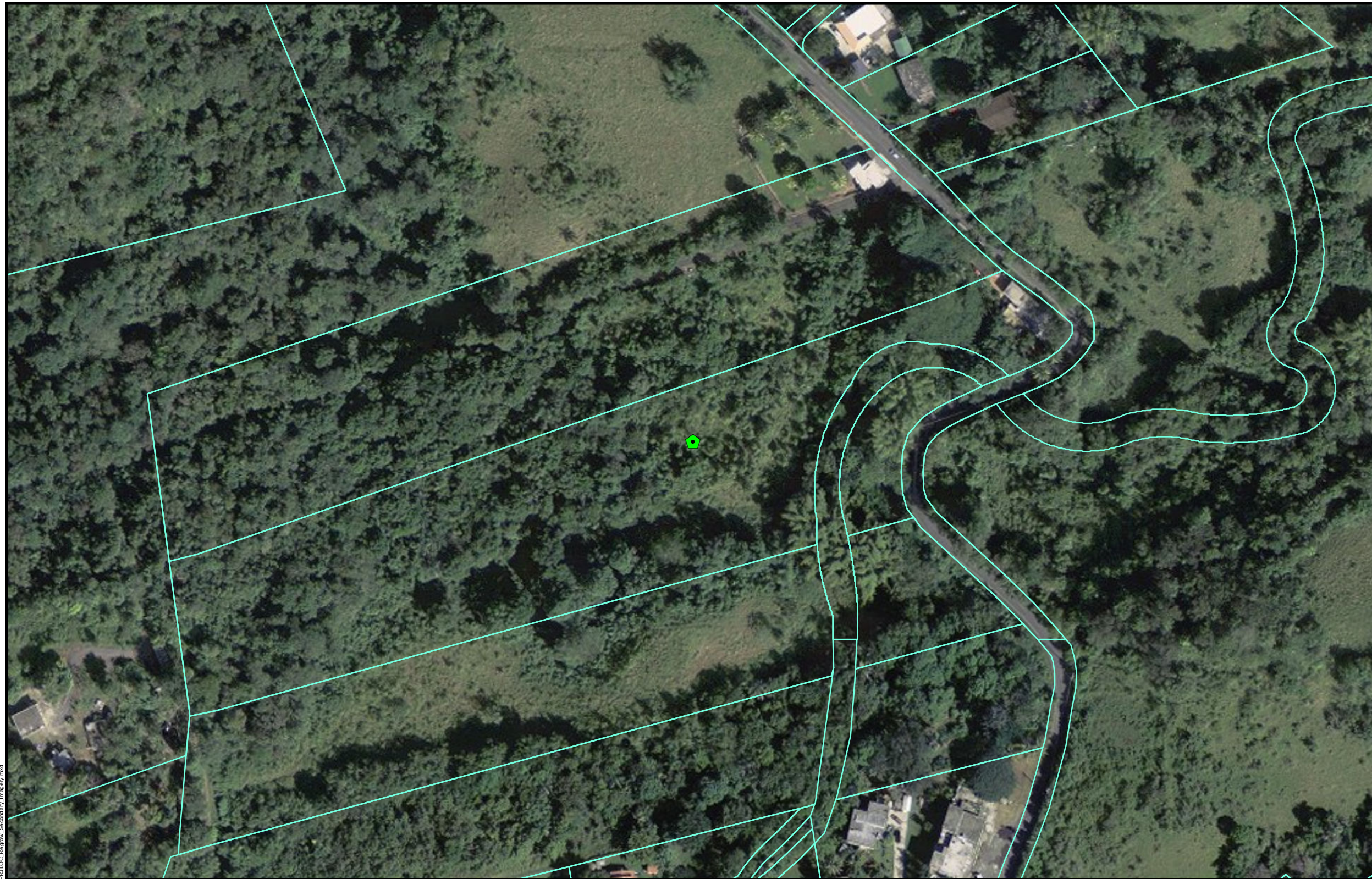
Photo Description: Scope of work: installation of a greenhouse

Photo Direction: North



# APPENDIX B

## Maps



- Legend**
- ▣ Project Parcel
  - Parcels

**PUERTO RICO**



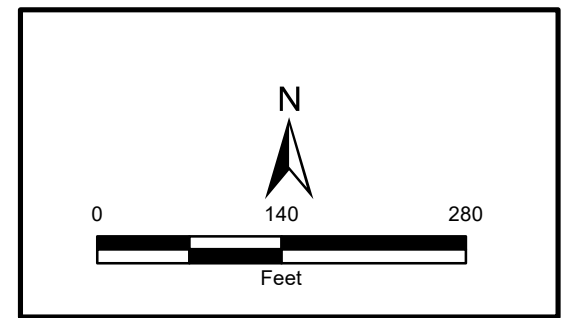
**Figure 1: PROJECT LOCATION**

**APPLICANT ID: PR-RGRW-01214**

**ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987**

Name of Development: Hacienda Yuquiyú, Inc.

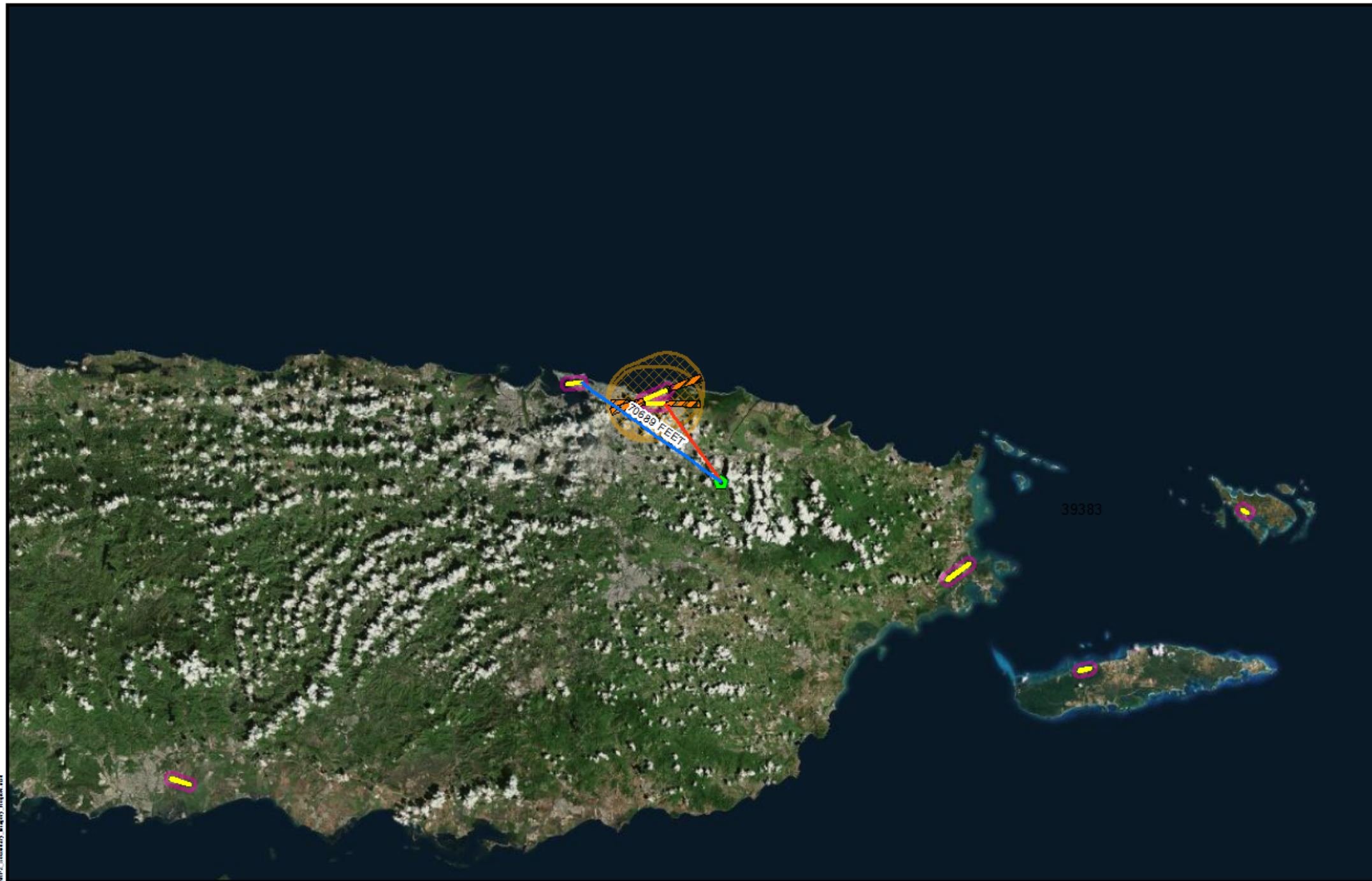
Parcel Coordinates: 18.345594 , -65.923582



Source: U. S. Fish & Wildlife Service  
<https://www.fws.gov>

Author: TG Date: 6/6/2023

File Path: \\esl102\gis\100\PR\Caracas\Share\TDR\data\USFWS\PR\LOC\_Regrow\_Secondary\_imagery.mxd



**Legend**

-  Project Parcel
-  Civilian Runway Protection Zones
-  Military Accident Potential Zones
-  Airport Runways
-  Civilian Airport 2,500 Feet Buffer
-  Military Airport 15,000 Feet Buffer

**Distance to Nearest Airport  
in Feet: 39383 FEET**

**PUERTO RICO**



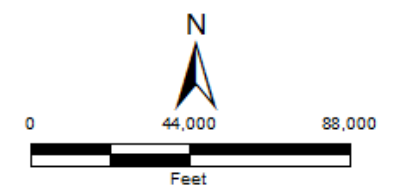
**Figure 2: AIRPORT ZONES  
APPLICANT ID: PR-RGRW-01214**

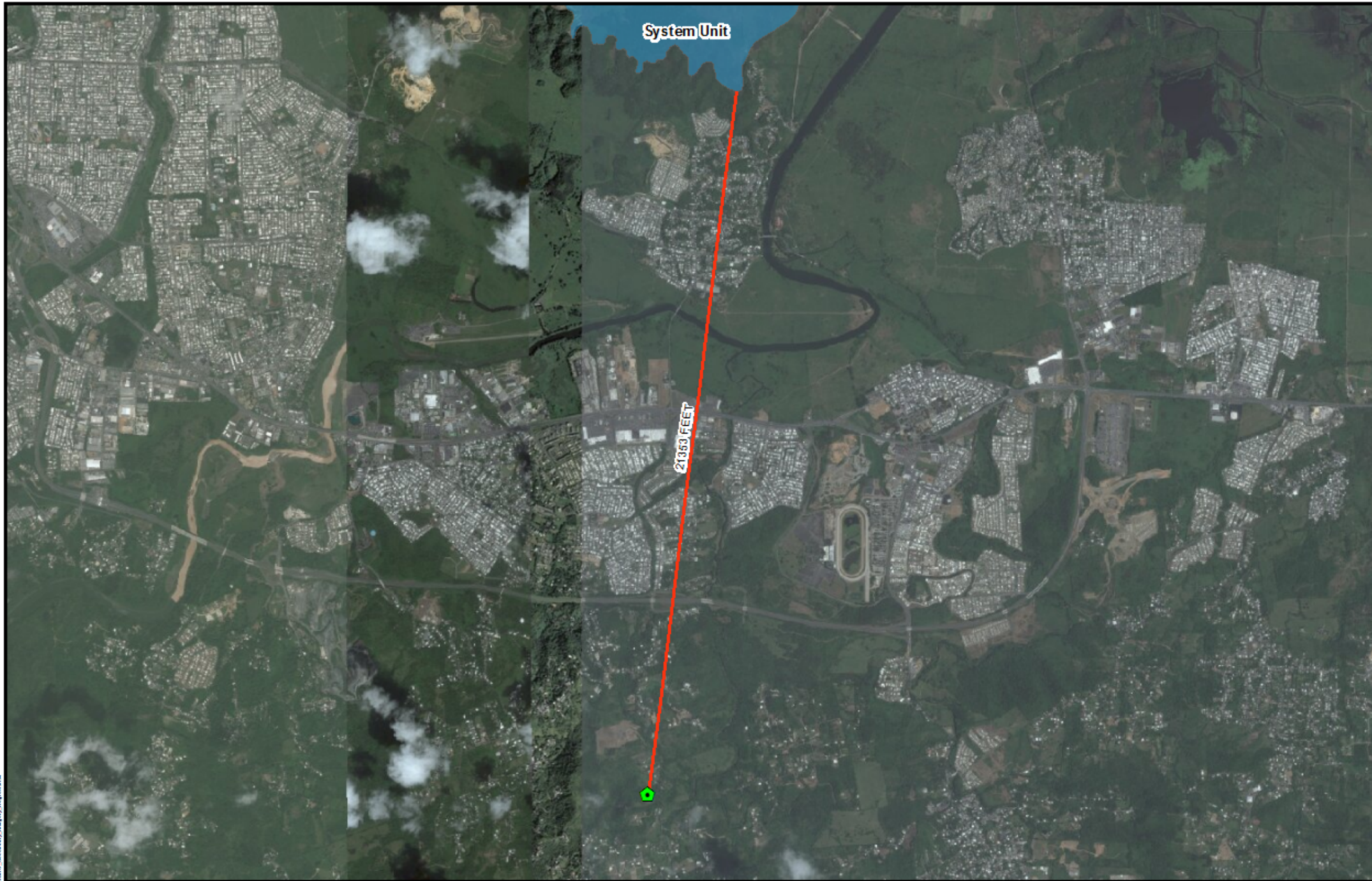
ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987  
 Name of Development: Hacienda Yuquiyú, Inc.  
 Parcel Coordinates: 18.345594, -65.923582



Source: USDOT  
<https://www.faa.gov>

Author: TG Date: 6/2/2023





**Legend**

Project Parcel

**Coastal Barrier Resources System Unit Type**

Otherwise Protected

System Unit

Distance to Nearest Coastal Barrier Resources System in Feet: 21353 FEET

**PUERTO RICO**



**Figure 3: COASTAL BARRIERS IMPROVEMENT ACT  
APPLICANT ID: PR-RGRW-01214**

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

Name of Development: Hacienda Yuquiyú, Inc.

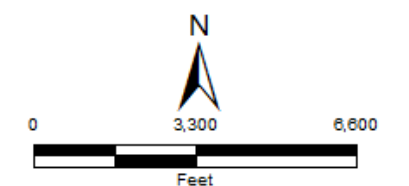
Parcel Coordinates: 18.345594, -65.923582



Source: U. S. Fish & Wildlife Service  
<https://www.fws.gov>

Author: TG

Date: 6/5/2023





- Legend**
- Project Parcel
  - FIRM Panels
  - Floodway
  - 100 Yr Floodzone
  - 500 Yr Floodzone
  - Area Of Minimal Flood Hazard
  - Unmapped for Floodplain

**PUERTO RICO**



The data in this document is for informational purposes only. It is not intended to be used for any other purpose.



Source: FEMA  
<https://msc.fema.gov>

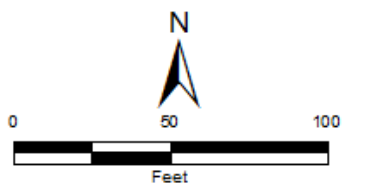
Author: TG Date: 6/1/2023

**Figure 4: FLOODPLAIN MANAGEMENT  
 APPLICANT ID: PR-RGRW-01214**

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

Name of Development: Hacienda Yuquiyú, Inc.

Parcel Coordinates: 18.345594, -65.923582





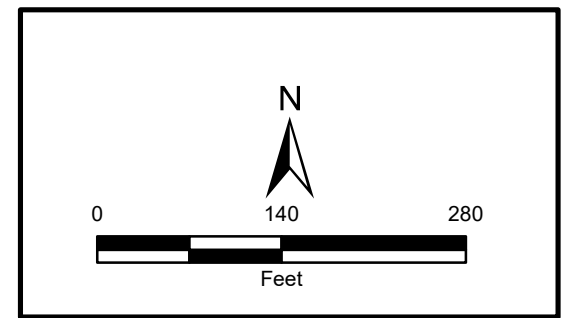


**Legend**

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

<b>SPECIAL FLOOD HAZARD AREAS</b>		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
<b>OTHER AREAS OF FLOOD HAZARD</b>		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
<b>OTHER AREAS</b>		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
<b>GENERAL STRUCTURES</b>		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
<b>OTHER FEATURES</b>		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
<b>MAP PANELS</b>		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



**FIGURE 5: NATIONAL FLOOD HAZARD LAYER FIRMETTE**

**APPLICANT ID: PR-RGRW-01214**

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

Name of Development: Hacienda Yuquiyú, Inc.

Parcel Coordinates: 18.345594 , -65.923582



Source: FEMA  
<https://www.msc.fema.gov>

Author: TG Date: 5/31/2023

File Path: \\sala20\gis\GIS\CDR\PR\Acc\GIS\SHAPE\TDR\DATA\USFIRM\FIRM\PR\LOC\_Regrow\_Secondary\_Imagery.mxd



**Legend**

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes, Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

**PUERTO RICO**



**Figure 6: ADVISORY BASE FLOOD ELEVATION**  
**APPLICANT ID: PR-RGRW-01214**

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

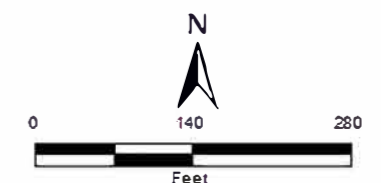
Name of Development: Siembra Vida Inc

Parcel Coordinates : 18.345594 , -65.923582





Source: FEMA  
<https://gis.fema.gov>

Author: TG Date: 6/7/2023





**Legend**

-  Project Parcel
-  Coastal Zone Management Boundary

Distance to Nearest Coastal Zone: 16096 FEET

**PUERTO RICO**



**Figure 7: COASTAL ZONE MANAGEMENT**

**APPLICANT ID:PR-RGRW-01214**

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

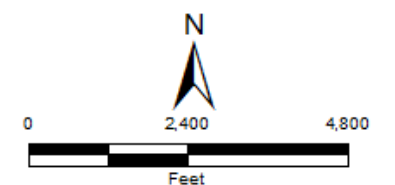
Name of Development: Hacienda Yuquiyú, Inc.

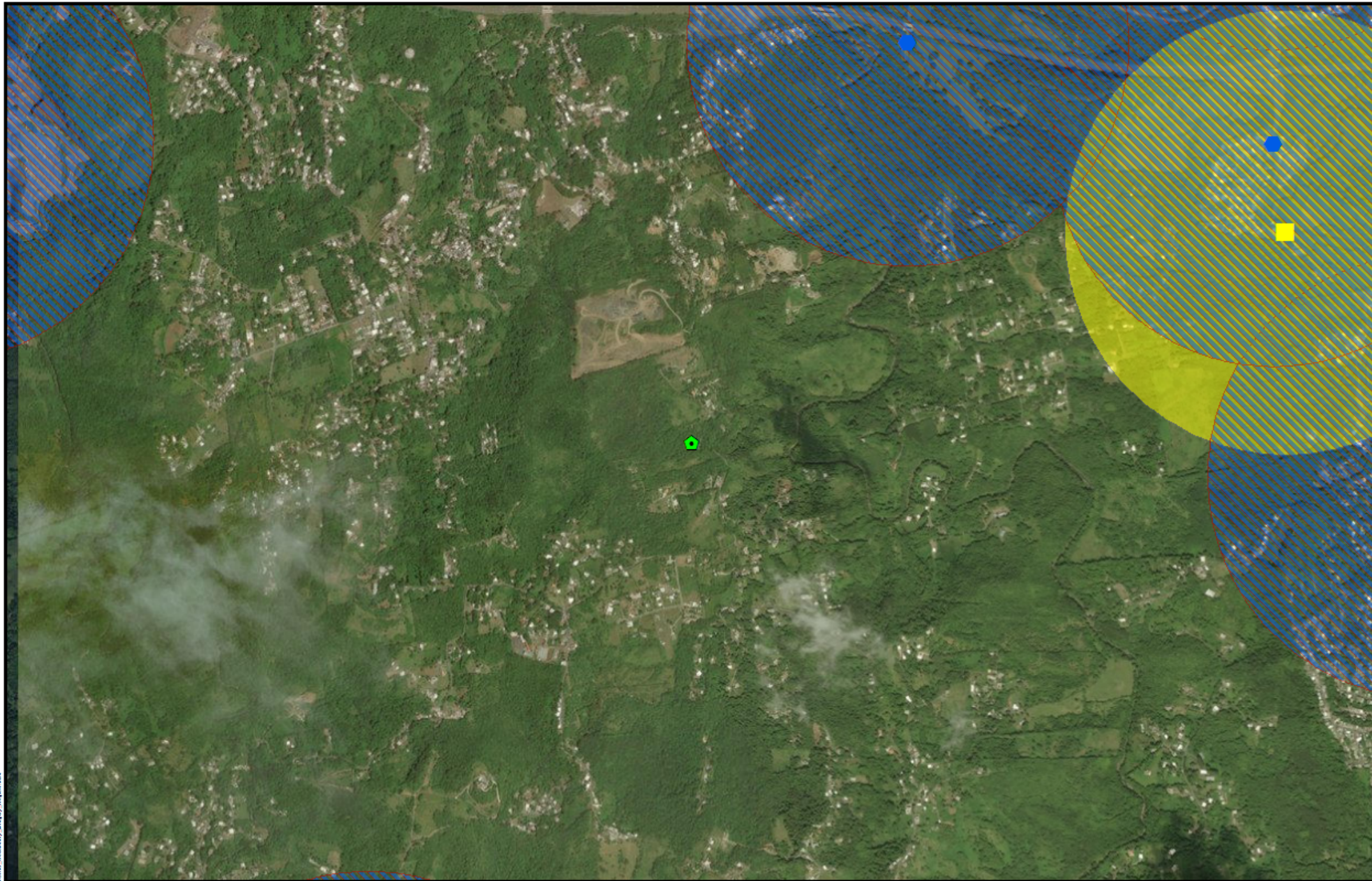
Parcel Coordinates: 18.345594, -65.923582



Source: NOAA's Ocean Service  
<https://data.noaa.gov>

Author: TG Date: 6/5/2023





- Legend**
- RCRA
  - ⬠ Project Parcel
  - ▲ Toxic Release Inventory Site
  - Superfund Site
  - Brownfield Sites
  - 3000 Ft Buffer TRI
  - 3000 Ft Buffer Superfund
  - 3000 Ft Buffer RCRA
  - 3000 Ft Buffer Brownfield

**PUERTO RICO**



**Figure 8: TOXIC CHEMICALS AND GASES, HAZARDOUS MATERIALS, CONTAMINATION, AND RADIOACTIVE SUBSTANCES**  
**APPLICANT ID: PR-RGRW-01214**

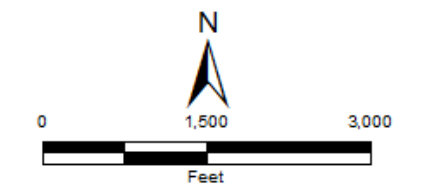
ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987  
 Name of Development: Hacienda Yuquiyú, Inc.  
 Parcel Coordinates: 18.345594, -65.923582

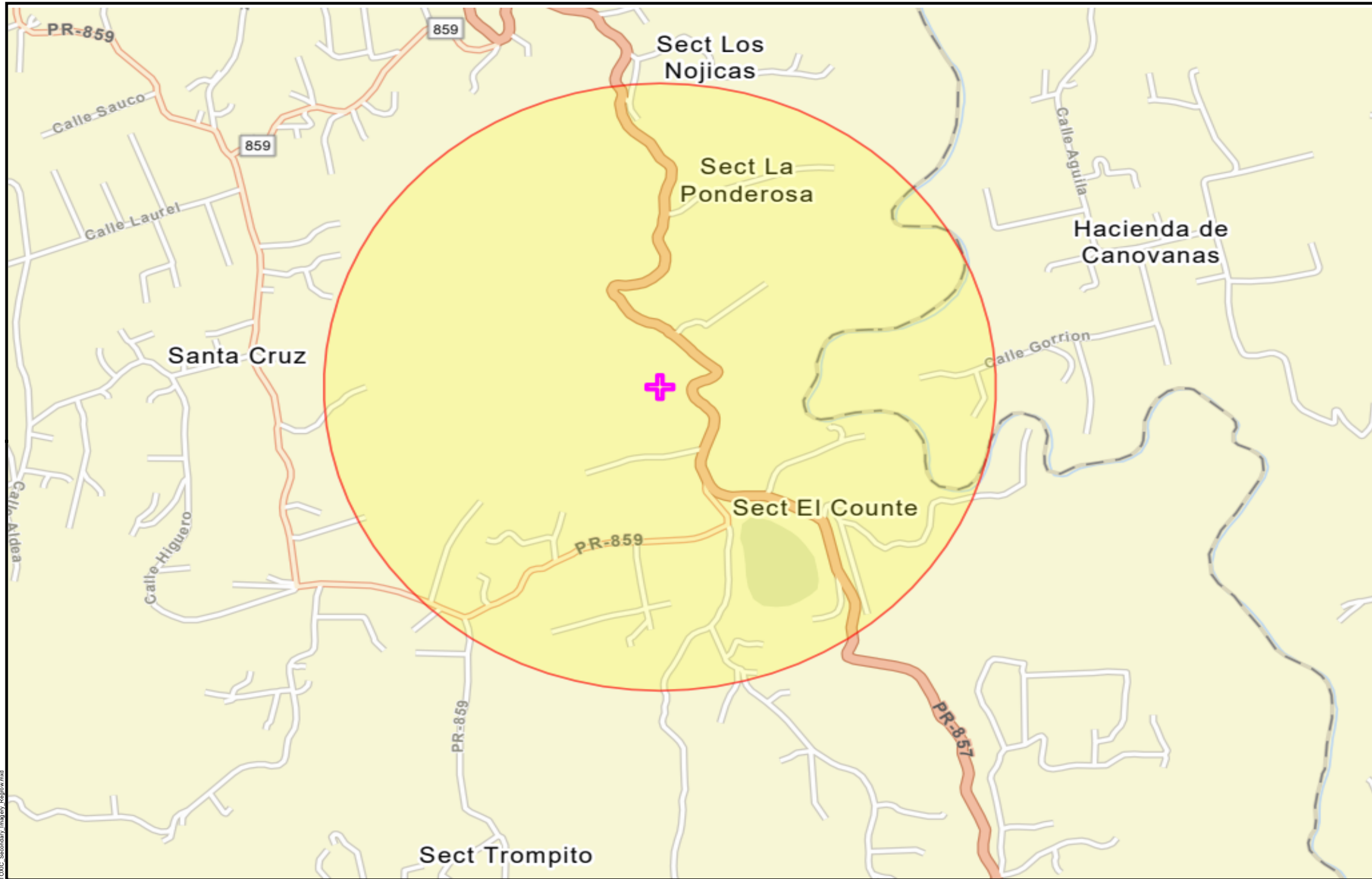


Source: E.P.A.

<https://www.epa.gov/fs/geospatial-data-download-service>

Author: JBI/AK Date: 6/1/2023





**Legend**

- Superfund (NPL)
- Toxic Substances Control Act (TSCA)
- Toxic Releases (TRI)
- Brownfields (ACRES)
- Hazardous Waste (RCRAInfo)

**PUERTO RICO**



**Figure 9: NEPA Assist Map**

**APPLICANT ID: PR-RGRW-01214**

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

Name of Development: Hacienda Yuquiyú, Inc.

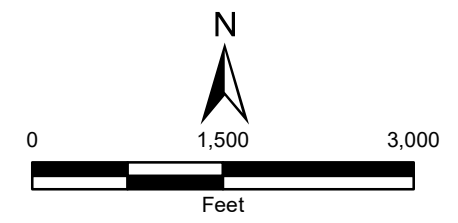
Parcel Coordinates: 18.345594 , -65.923582



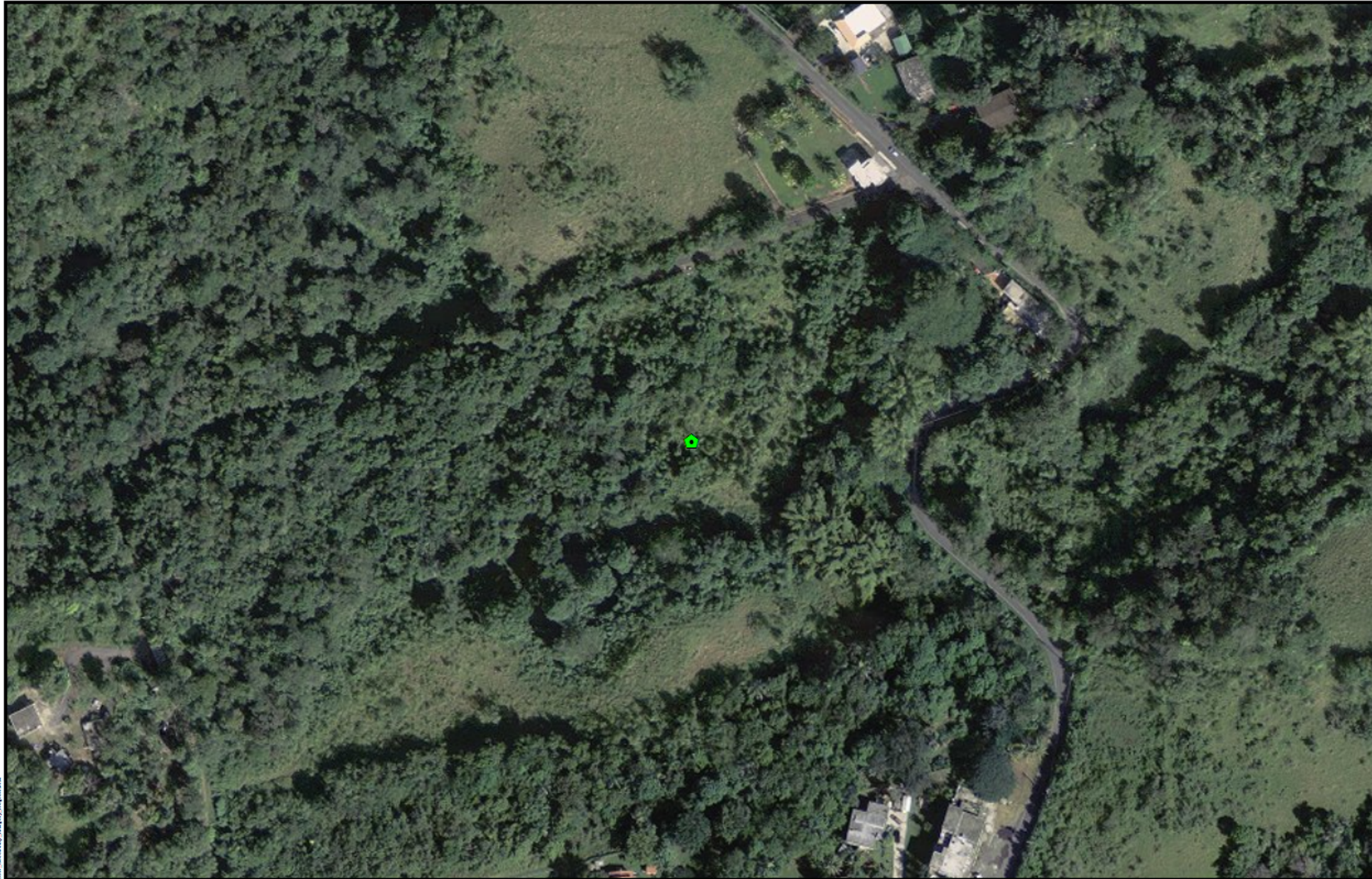
Source: E.P.A.

<https://www.epa.gov/frs/geospatial-data-download-service>

Author: JB/AK Date: 5/18/2023



File Path: \\nas0102\gis\GIS\Projects\GIS\MapServer\MapServer\TOPIX\_Secundary\_Imagery\_Register.mxd



Legend  
Project Parcel

### PUERTO RICO



## Figure 10: ENDANGERED SPECIES ACT APPLICANT ID: PR-RGRW-01214

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

Name of Development: Hacienda Yuquiyú, Inc.

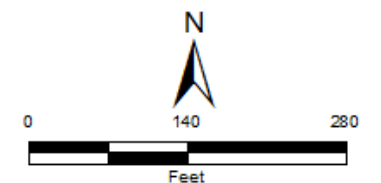
Parcel Coordinates: 18.345594, -65.923582



Source: U.S. FISH & WILDLIFE SERVICE  
<https://ecos.fws.gov>

Author: TG

Date: 6/1/2023




PR-2023-06-01-10:00:00 AM



**Legend**

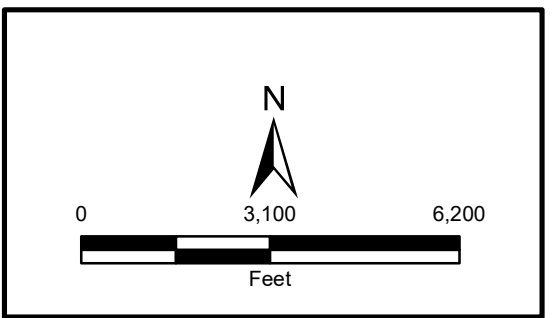
 Project Parcel

**comname**

 Elfin-woods warbler

Distance to Nearest Critical Habitat in Feet: 31422 FEET

**PUERTO RICO**



**Figure 11: CRITICAL HABITATS  
APPLICANT ID: PR-RGRW-01214**

**ADDRESS:** Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

Name of Development: Hacienda Yuquiyú, Inc.

Parcel Coordinates: 18.345594, -65.923582



Source: U.S. FISH & WILDLIFE SERVICE  
<https://ecos.fws.gov>

Author: TG

Date: 6/1/2023

File Path: \\nas1208\gis\GIS\CDR\Access\Share\DR\Data\USPR\Fig\CRITICALHABITATS\_Secondary\_Imagery\_Export.mxd



**Legend**

- Project Parcel
- Farm Class**
- All areas are prime farmland
- Farmland of statewide importance
- Farmland of statewide importance, if irrigated
- Prime farmland if drained
- Prime farmland if irrigated
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Prime farmland if protected from flooding or not frequently flooded during the growing season

**PUERTO RICO**



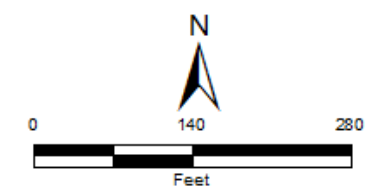
**Figure 12: FARMLAND PROTECTION**  
**APPLICANT ID: PR-RGRW-01214**

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987  
 Name of Development: Hacienda Yuquiyú, Inc.  
 Parcel Coordinates: 18.345594, -65.923582

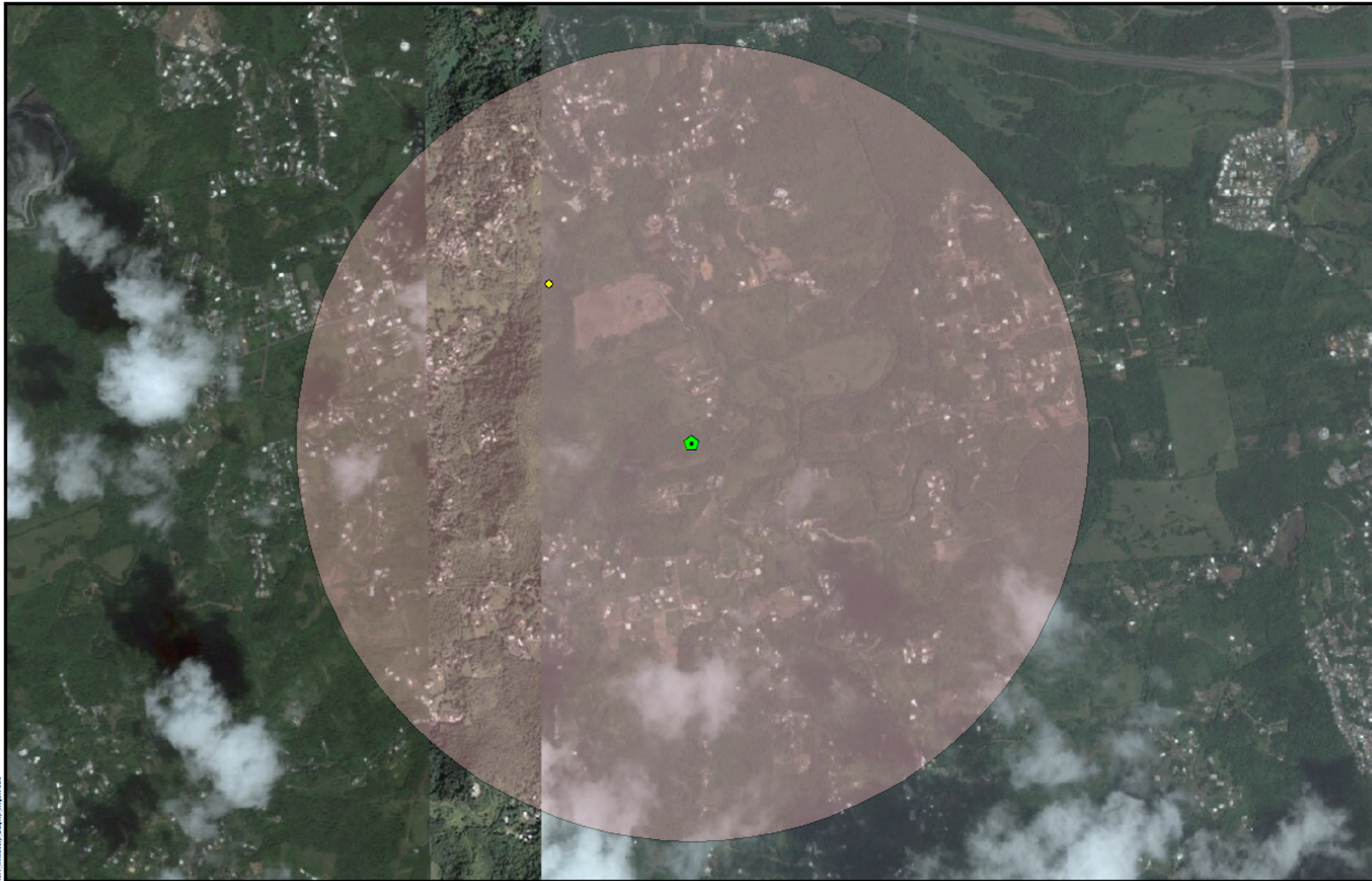


Source: USDA  
<https://websoilsurvey.sc.egov.usda.gov>














Author: TG Date: 6/1/2023







**Legend**

-  Project Parcel
-  Historic ICP Sites
-  Cultural Resource Building Point
-  Cultural Resource District Point
-  Cultural Resource Site Point
-  Cultural Resource Structure Point
-  Historic Comunidades
-  Traditional Urban Centers
-  Cultural Resource Building Polygon
-  Cultural Resource District Polygon
-  Cultural Resource Site Polygon
-  Cultural Resource Structure Polygon
-  1 Mile Property

**PUERTO RICO**



**Figure 13: HISTORIC PRESERVATION  
 APPLICANT ID: PR-RGRW-01214**

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

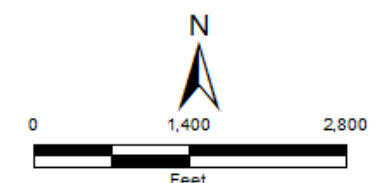
Name of Development: Hacienda Yuquiyú, Inc.

Parcel Coordinates: 18.345594, -65.923582



Source: National Park Service  
<https://www.nps.gov/>

Author: TG Date: 6/1/2023





**Legend**

- Project Parcel
- WETLAND TYPE**
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

**PUERTO RICO**



**TETRA TECH**

Source: U. S. Fish & Wildlife Service  
<https://www.fws.gov>

Author: TG      Date: 6/1/2023

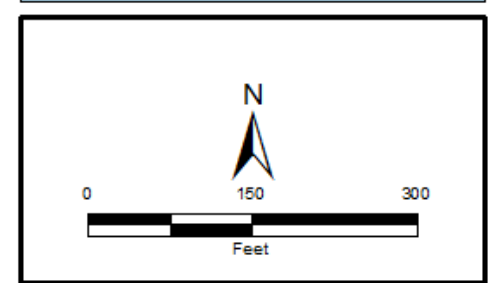
**Figure 14: WETLANDS**

**APPLICANT ID: PR-RGRW-01214**

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

Name of Development: Hacienda Yuquiyú, Inc.



Parcel Coordinates: 18.345594, -65.923582



1. This map was prepared by Tetra Tech, Inc. for the project described herein. It is not to be used for any other purpose without the express written consent of Tetra Tech, Inc.



**Legend**

-  Project Parcel
-  Wild and Scenic Rivers

Distance to Nearest Wild and Scenic River in Feet: 48217 FEET

**PUERTO RICO**



**Figure 15: WILD AND SCENIC RIVERS ACT  
APPLICANT ID: PR-RGRW-01214**

ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

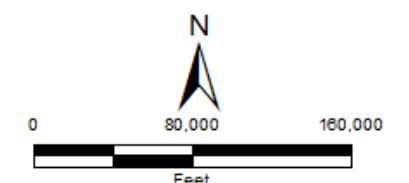
Name of Development: Hacienda Yuquiyú, Inc.

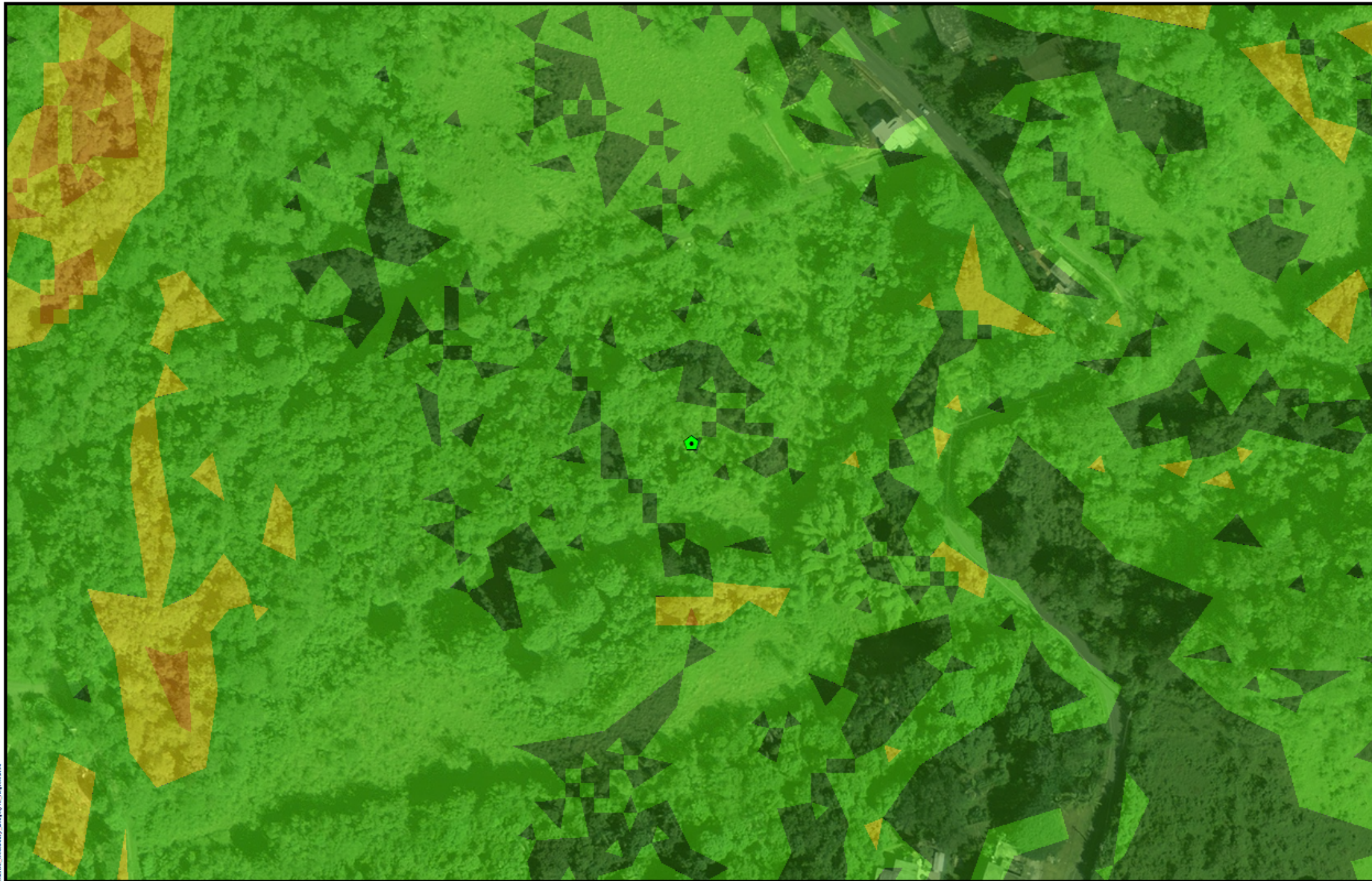
Parcel Coordinates: 18.345594, -65.923582









Source: U. S. Forest Service  
<https://www.fs.usda.gov>

Author: TG Date: 6/1/2023





- Legend**
-  Project Parcel
- Landslide Susceptibility**
-  Extremely High
  -  Very High
  -  High
  -  Moderate
  -  Low

**PUERTO RICO**



**Figure 16: SLOPE AND EROSION  
APPLICANT ID: PR-RGRW-01214**

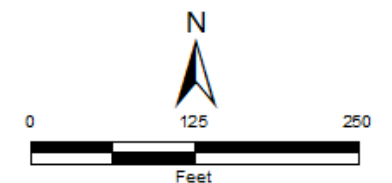
ADDRESS: Carr 857 km 4.4 Bo. Canovanillas, Carolina, PR 00987

Name of Development: Hacienda Yuquiyú, Inc.

Parcel Coordinates: 18.345594, -65.923582



Source: PRDOH  
<http://s://uegs.maps.arcgis.com/apps/webappviewer/index.html?x=-105.06007115491d&e=17.647719248ee>  
 Author: TG Date: 6/1/2023



# APPENDIX C

## Additional Information



**You are here:** EPA Home > Green Book > >National Area and County-Level Multi-Pollutant Information >Puerto Rico Whole or Part County Nonattainment Status by Year Since 1992 for all Criteria Pollutants

# Puerto Rico Whole or Part County Nonattainment Status by Year Since 1992 for all Criteria Pollutants

Data is current as of April 30, 2023

Listed by State, County, NAAQS (W=Whole County,P=Partial County designated nonattainment as of report date)  
 The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

The 1997 Primary Annual PM-2.5 NAAQS (level of 15 µg/m<sup>3</sup>) is revoked in attainment and maintenance areas for that NAAQS. For additional information see the PM-2.5 NAAQS SIP Requirements Final Rule, effective October 24, 2016. (81 FR 58009)

Change the State:

Important Notes

Download National Dataset: [dbf](#) | [xls](#) | [Data dictionary \(PDF\)](#)

PUERTO RICO		92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
<b>County</b>	<b>NAAQS</b>																																		
Arecibo Municipio	Lead (2008)																					P	P	P	P	P	P	P	P	P	P	P	P		
Bayamon Co	Sulfur Dioxide (2010)																												P	P	P	P	P	P	
Catano Co	Sulfur Dioxide (2010)																												W	W	W	W	W	W	
Guaynabo Co	PM-10 (1987)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P															
Guaynabo Co	Sulfur Dioxide (2010)																													P	P	P	P	P	P
Salinas Municipio	Sulfur Dioxide (2010)																												P	P	P	P	P	P	
San Juan Municipio	Sulfur Dioxide (2010)																												P	P	P	P	P	P	
Toa Baja Co	Sulfur Dioxide (2010)																												P	P	P	P	P	P	

Important Notes

Discover.

Connect.

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2023-04-30

## **APPENDIX D**

### **"No Effect" Determination and IPaC Report**

Date: August 25, 2023

Applicant ID: PR-RGRW-01214  
Street Address: Carr 857 km 4.4 Bo. Canovanillas  
Municipality: Carolina

### **Subject – Endangered Species No Effect Determination for PR-RGRW-01214**

Tetra Tech conducted a site specific review of endangered species in accordance with the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 et seq.) for the proposed project located at Carr 857 km 4.4 Bo. Canovanillas, in the Municipality of Carolina, Puerto Rico (Parcel ID# 117-000-007-75-000).

The proposed project is for the purchase and installation of a greenhouse and purchase of trees for the inside of the greenhouse which will be located at 18.345594, -65.923582. The greenhouse will measure approximately 100-feet by 30-feet and be used for the grafting of cacao, mango, and avocado trees. No new utility connections are needed for the proposed project.

The parcel is located in rural, mountainous terrain with mature vegetation throughout. The parcel was previously used for livestock and sugarcane, but is currently being used for growing banana, avocado, mango, and mamey. Site photos show the proposed project area is located on a site that is currently being used to grow mango and bananas (Appendix A). Trees will not be removed during this project. Surrounding landscape includes tall grasses to the east and north, and mature vegetation to the south of the proposed project area.

The National Wetlands Inventory indicated that no wetlands are located within the proposed project area (Figure 14). A man-made pond is located directly west of the proposed project area.

Using the Information for Planning and Consultation (IPaC) system, we have determined that the proposed project lies within the range of the following federally listed species:

Species	Status
Puerto Rican Boa ( <i>Chilabothrus inornatus</i> )	Endangered

No Critical Habitats were noted within the project area (Figure 10). Based on site review and site photos, no suitable habitat was found within the proposed project area for the Puerto Rican Boa. Upon review of iNaturalist.org, no sightings of the Puerto Rican Boa have been recorded within 2.5 miles of the proposed project area. Based on the nature of the project, previous site disturbance, scope of work, information available, and a careful analysis of the Project Site, and IPaC species list, we have made the following



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effects determinations:

<b>Species</b>	<b>Effect Determination</b>	<b>Conservation Measures to be implemented (if needed)</b>
Puerto Rican Boa ( <i>Chilabothrus inornatus</i> )	No Effect	No Conservation Measures

A 'No Effect' determination has been made based on the lack of suitable habitat for the Puerto Rican Boa, as well as previous disturbance and current land use of the proposed project area.

If a Puerto Rican Boa is found in the project activity site, work shall cease until the Boa moves off on its own. If the Boa does not move off, the Construction Manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the Boa.

**Attachments:**

IPaC Resource List

Shelby McDowell



B.S. Biologist, TetraTech

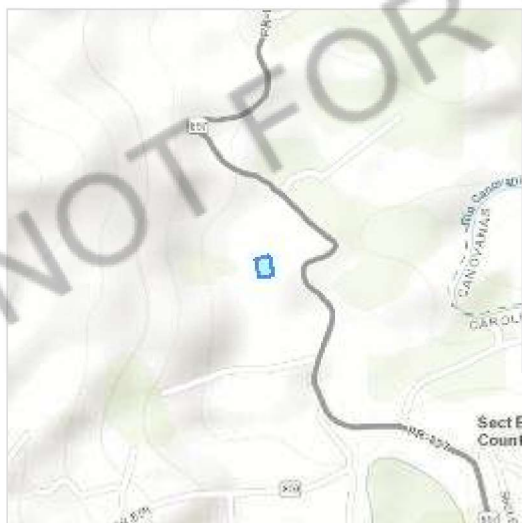
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Carolina County, Puerto Rico



## Local office

Caribbean Ecological Services Field Office

☎ (787) 834-1600

📠 (787) 851-7440

✉ [CARIBBEAN\\_ES@FWS.GOV](mailto:CARIBBEAN_ES@FWS.GOV)

MAILING ADDRESS

Post Office Box 491

Boqueron, PR 00622-0491

PHYSICAL ADDRESS

Office Park I

State Road #2 Km 156.5, Suite 303}

Mayaguez, PR 00680

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Reptiles

NAME	STATUS
Puerto Rican Boa <i>Chilabothrus inornatus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6628">https://ecos.fws.gov/ecp/species/6628</a>	Endangered

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

## Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

### What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The [data](#) in this location indicates there are no migratory [birds of conservation concern](#) expected to occur in this area.

There may be migratory birds in your project area, but we don't have any survey data available to provide further direction. For additional information, please refer to the links above for recommendations to minimize impacts to migratory birds or contact your local FWS office.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?



If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

# Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location did not intersect any wetlands mapped by NWI.

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

## Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

## Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

## Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies.

Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

# **APPENDIX E**

## **Section 106 Consultation**



# GOVERNMENT OF PUERTO RICO

## STATE HISTORIC PRESERVATION OFFICE

Executive Director | Carlos A. Rubio-Cancela | [carubio@prshpo.pr.gov](mailto:carubio@prshpo.pr.gov)

August 18, 2023

### Lauren Bair Poche

HORNE- Architectural Historian Manager  
10000 Perkins Rowe, Suite 610 Bldg G  
Baton Rouge, LA 70810

SHPO: 08-14-23-07 PUERTO RICO DISASTER RECOVERY, CDBG-DR RE-GROW PR URBAN-RURAL AGRICULTURAL RE-GROW PROGRAM, PR-RGRW-01214, HACIENDA YUQUIYÚ, INC., CARR. 857 KM 4.4, BO. CANOVANILLAS, CAROLINA, PUERTO RICO

Dear Ms. Poche,

Our Office has received and reviewed the above referenced project in accordance with 54 USC 306108 (commonly known as Section 106 of the *National Historic Preservation Act, as amended*) and 36 CFR Part 800: *Protection of Historic Properties* from the Advisory Council on Historic Preservation. The State Historic Preservation Officer (SHPO) is to advise and assist federal agencies and other responsible entities when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce the project's effects.

Our records support your finding of **no historic properties affected** within the project's area of potential effects.

Please note that should the Agency discover other historic properties at any point during project implementation, you should notify the SHPO immediately. If you have any questions concerning our comments, do not hesitate to contact our Office.

Sincerely,

Carlos A. Rubio-Cancela  
State Historic Preservation Officer  
CARC/GMO/LGC



August 14, 2023

Carlos A. Rubio Cancela  
State Historic Preservation Officer  
Puerto Rico State Historic Preservation Office  
Cuartel de Ballajá (Tercer Piso)  
San Juan, PR 00902-3935

**Puerto Rico Disaster Recovery, CDBG-DR Re-Grow PR Urban-Rural Agricultural (Re-Grow PR) Program**

**Section 106 NHPA Effect Determination Submittal: PR-RGRW-01214 – Hacienda Yuquiyú, Inc. – Carr 857 Km 4.4, Bo. Canovanillas, Carolina, Puerto Rico – *No Historic Properties Affected***

Dear Architect Rubio Cancela,

In accordance with Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR Part 800, HORNE is providing information for your review and requesting your concurrence regarding the above-referenced projects on behalf of the Puerto Rico Department of Housing (PRDOH). On February 9, 2018, an allocation of Community Development Block Grant - Disaster Recovery (CDBG-DR) funds was approved by the United States Department of Housing and Urban Development (HUD) under the Federal Register Volume 83, No. 28, 83 FR 5844, to assist the Commonwealth of Puerto Rico in meeting unmet needs in the wake of Hurricanes Irma and Maria. On August 14, 2018, an additional \$8.22 billion recovery allocation was allocated to Puerto Rico under the Federal Register Volume 83, No. 157, 83 FR 40314. With these funding allocations, the Puerto Rico Department of Housing (Housing) aims to lead a comprehensive and transparent recovery for the benefit of Puerto Rico residents.

On behalf of PRDOH and the subrecipient, the Puerto Rico Department of Agriculture, HORNE is submitting documentation for activities proposed by Hacienda Yuquiyú, Inc. at the property located at Carr 857 Km 4.4 in Bo. Canovanillas in the municipality of Carolina. The proposed activities for this project include the purchase and installation of a greenhouse and the purchase of trees. Ground disturbance will be required for the installation of the greenhouse. The area for the scope of work of the greenhouse is not graded and will have a footprint of 100 feet by 30 feet. The building will be a metal structure with saran and plastic net for cover. The greenhouse will be used for grafting cacao, mango, and avocado. No water and power connection are required for this project. In May 2023, the applicant cleaned part of the parcel for future use to grow cacao. The current land in use is for growing bananas and fruit trees such as mango, mamey, and avocado. In the past this land was used for growing sugar cane, and for raising cattle about fifty years ago.

Based on the submitted documentation, the Program requests a concurrence that a finding of no historic properties affected is appropriate for this proposed project.


Please contact me by email at [lauren.poche@horne.com](mailto:lauren.poche@horne.com) or phone at 225-405-7676 with any questions or concerns.

Kindest regards,



**Lauren Bair Poche, M.A.**

Architectural Historian, Historic Preservation Senior Manager  
Attachments

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b>		
<b>REGROW PUERTO RICO PROGRAM</b>		
<b>Section 106 NHPA Effect Determination</b>		
<b>Applicant:</b> Hacienda Yuquiyú, Inc.		
<b>Case ID:</b> PR-RGRW-01214	<b>City:</b> Carolina	

<b>Project Location:</b> Carr 857 km 4.4 Bo. Canovanillas	
<b>Project Coordinates:</b> 18.345594, -65.923582	
<b>TPID (Número de Catastro):</b> 117-000-007-76-00	
<b>Type of Undertaking:</b>	
<input type="checkbox"/> Substantial Repair/Improvements <input checked="" type="checkbox"/> New Construction	
<b>Construction Date (AH est.):</b> c1960	<b>Property Size (acres):</b> 6.23

<b>SOI-Qualified Architect/Architectural Historian:</b> Maria F. Lopez Schmid
<b>Date Reviewed:</b> 8/01/2023
<b>SOI-Qualified Archaeologist:</b> Roberto G. Muñoz-Pando
<b>Date Reviewed:</b> August 4, 2023

In compliance with Section 106 of the National Historic Preservation Act (NHPA), the Program is responsible for identifying historic properties listed in the NRHP and any properties not listed that would be considered eligible for listing that are located within the geographic area of potential effects (APE) of the proposed project and assessing the potential effects of its undertakings on these historic properties.

### Project Description (Undertaking)


The proposed Scope of Work for this project includes the purchase and installation of a greenhouse and the purchase of trees. Ground disturbance will be required for the installation of the greenhouse. The area for the scope of work of the greenhouse is not graded. The proposed greenhouse will be installed at coordinates 18.345594, -65.923582. The greenhouse will have a footprint of 100 feet by 30 feet. The building will be a metal structure with saran and plastic net for cover. The greenhouse will be used for grafting cacao, mango, and avocado. No water and power connection are required for this project.

In May 2023, the applicant cleaned part of the parcel for future use to grow cacao. The current land in use is for growing bananas and fruit trees such as mango, mamey, and avocado. In the past this land was used for growing sugar cane, and for raising cattle about fifty years ago.

### Area of Potential Effects

As defined in 36 CFR §800.16(d), the area of potential effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. Based on this definition and the nature and scope of the Undertaking, the Program has determined that the direct APE for this



<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>REGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
<b>Applicant:</b> Hacienda Yuquiyú, Inc.	
<b>Case ID:</b> PR-RGRW-01214	<b>City:</b> Carolina

project is the area described as the scope of work section of this form with a 15-meter buffer to allow for variation in placement of the greenhouse due to site conditions and the visual APE is the viewshed of the proposed project area.

### Identification of Historic Properties - Archaeology

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information, by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that the project area does not have any previously recorded archaeological sites within a 0.5-mile radius of the APE. One archaeological study was conducted in 2003 by Madeliz Gutiérrez (ICP/CAT-CA-03-19-01) titled "Documnetación de Algunos Yacimientos Arqueológicos Ubicados ene el Cuadrángulo de Gurabo, Carolina, Puerto Rico." This study was a Phase 1B, Analog. The soil around the APE is mainly Mucara silty clay loam, eroded (MuE2) with 20 to 40 percent slopes. This soil makes the probability of finding *in situ* archaeological artifacts low to moderate.

### Identification of Historic Properties - Architecture

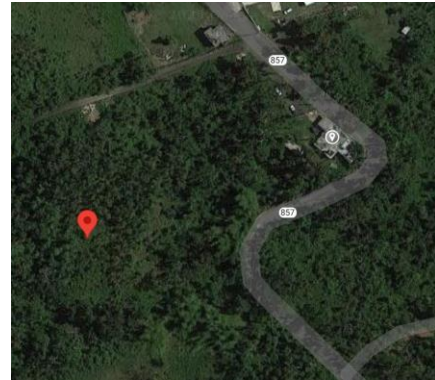
Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information, by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that the project area **not** within the boundaries of a National Register of Historic Places (NRHP)-eligible or listed Traditional Urban Center or Historic District. Additionally, there are **no** NRHP-listed historic properties within the quarter mile buffer zone from the APE.

The proposed project is located in a rural, mountainous terrain with mature vegetation. The property lies to the west on Route PR-857 in Carolina, near the limit with the town of Canóvanas to the east. The town limit runs along Quebrada Limones in this area. This area has residential and farm properties along Route PR-857. A circa 1960 building that is the applicant's house is located east of the APE geocoordinates. This building, shown below, appears in a 1962 aerial image, the earliest available for the area.

Applicant: Hacienda Yuquiyú, Inc.

Case ID: PR-RGRW-01214

City: Carolina




**Figures 1 & 2.** Detail of 1962 aerial image and of 2023 Google Maps aerial image indicating the location of the building on the property.

The building on the property (shown below) is a one-story reinforced concrete house with a flat concrete roof in the center and metal roof structure terrace on the left side of the house. On the right side, a concrete wall addition has metal and glass windows but is missing a roof.



**Figure 3.** Image from 2023 Google Maps of the building on the property, view to the northwest.

This building **does not** meet the requirements to be eligible for listing on the National Register of Historic Places.


<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>ReGROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
<b>Applicant:</b> Hacienda Yuquiyú, Inc.	
<b>Case ID:</b> PR-RGRW-01214	<b>City:</b> Carolina

### Determination

The following historic properties have been identified within the APE:

- Direct Effect:
  - N/A
- Indirect Effect:
  - N/A

The project area is not located within the boundaries of a National Register of Historic Places (NRHP)-eligible or listed Traditional Urban Center or Historic District. Based on the results of our historic property identification efforts, the Program has determined that no previously identified historic properties are located within or adjacent to the parcel that contains the proposed Area of Potential Effect. In addition, the lack of previously identified archaeological sites within a 0.5-mile radius of the project area and the soil in which the APE lies limit the probability of finding significant archaeological materials in this area, as described in the “Identification of Historic Properties- Archaeology” section of this form. Therefore, no impact to historic properties is anticipated for this project.

<b>PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM</b> <b>REgROW PUERTO RICO PROGRAM</b> <b>Section 106 NHPA Effect Determination</b>	 GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING
<b>Applicant:</b> Hacienda Yuquiyú, Inc.	
<b>Case ID:</b> PR-RGRW-01214	<b>City:</b> Carolina

**Recommendation**

The Puerto Rico Department of Housing requests that the Puerto Rico SHPO concur that the following determination is appropriate for the undertaking (Choose One):

- No Historic Properties Affected
- No Adverse Effect  
     Condition (if applicable):
- Adverse Effect  
     Proposed Resolution (if applicable)

**This Section is to be Completed by SHPO Staff Only**

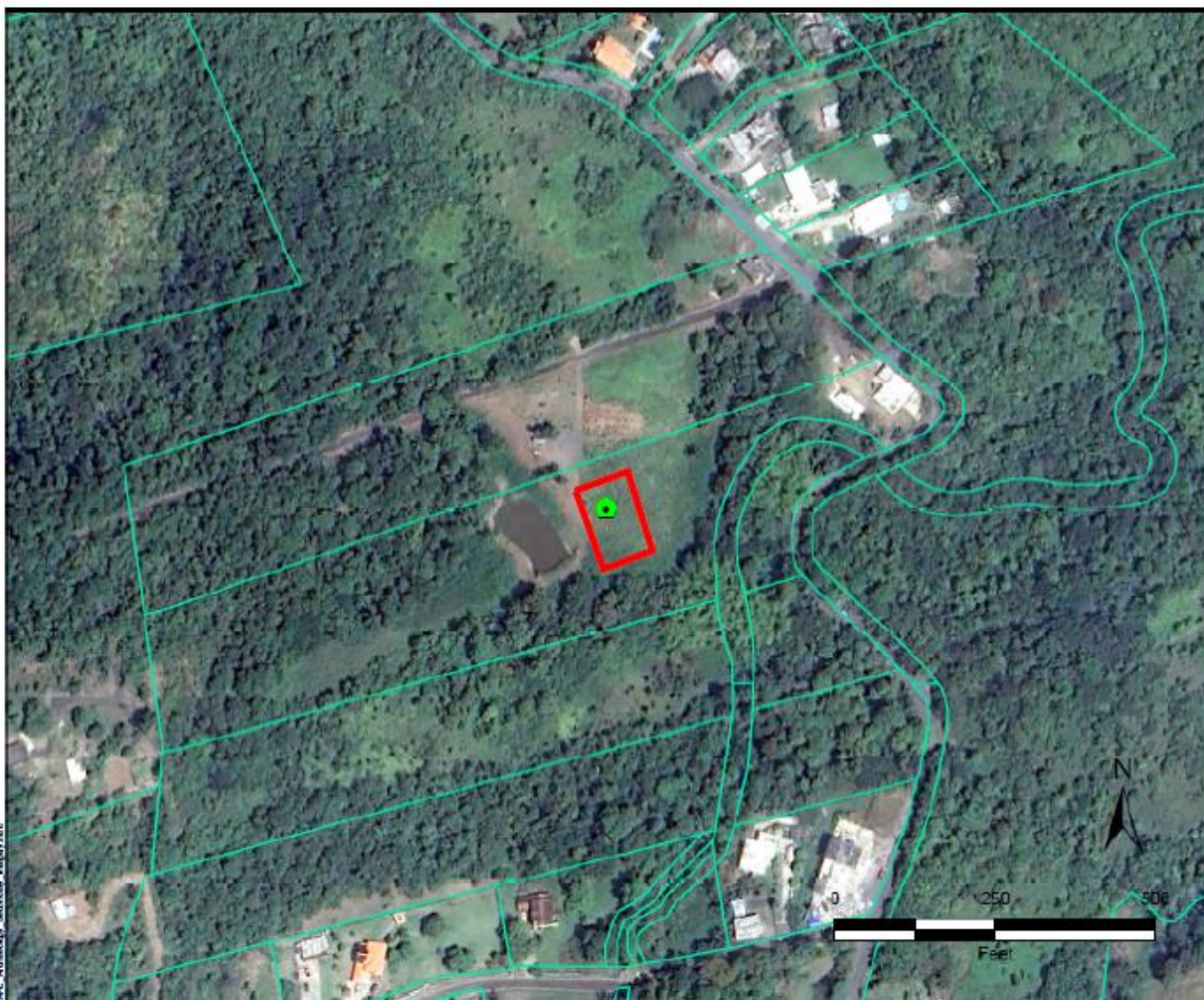
The Puerto Rico State Historic Preservation Office has reviewed the above information and:	
<input type="checkbox"/> <b>Concurs</b> with the information provided. <input type="checkbox"/> <b>Does not concur</b> with the information provided.	
<b>Comments:</b>   	
Carlos Rubio-Cancela State Historic Preservation Officer	<b>Date:</b>

Applicant: Hacienda Yuquiyú, Inc.

Case ID: PR-RGRW-01214

City: Carolina

### Project (Parcel) Location – Area of Potential Effect Map (Aerial)



File Path: I:\GIS\106\106-01214\106-01214-2\AP\Andres\Map\_Screening\_106-01214.aprx






**TETRA TECH**

Source: CRIM

Author: TG

Date: 10/7/2022

#### Legend

-  Tier 2 Site
-  Area of Potential Effect
-  Parcelario

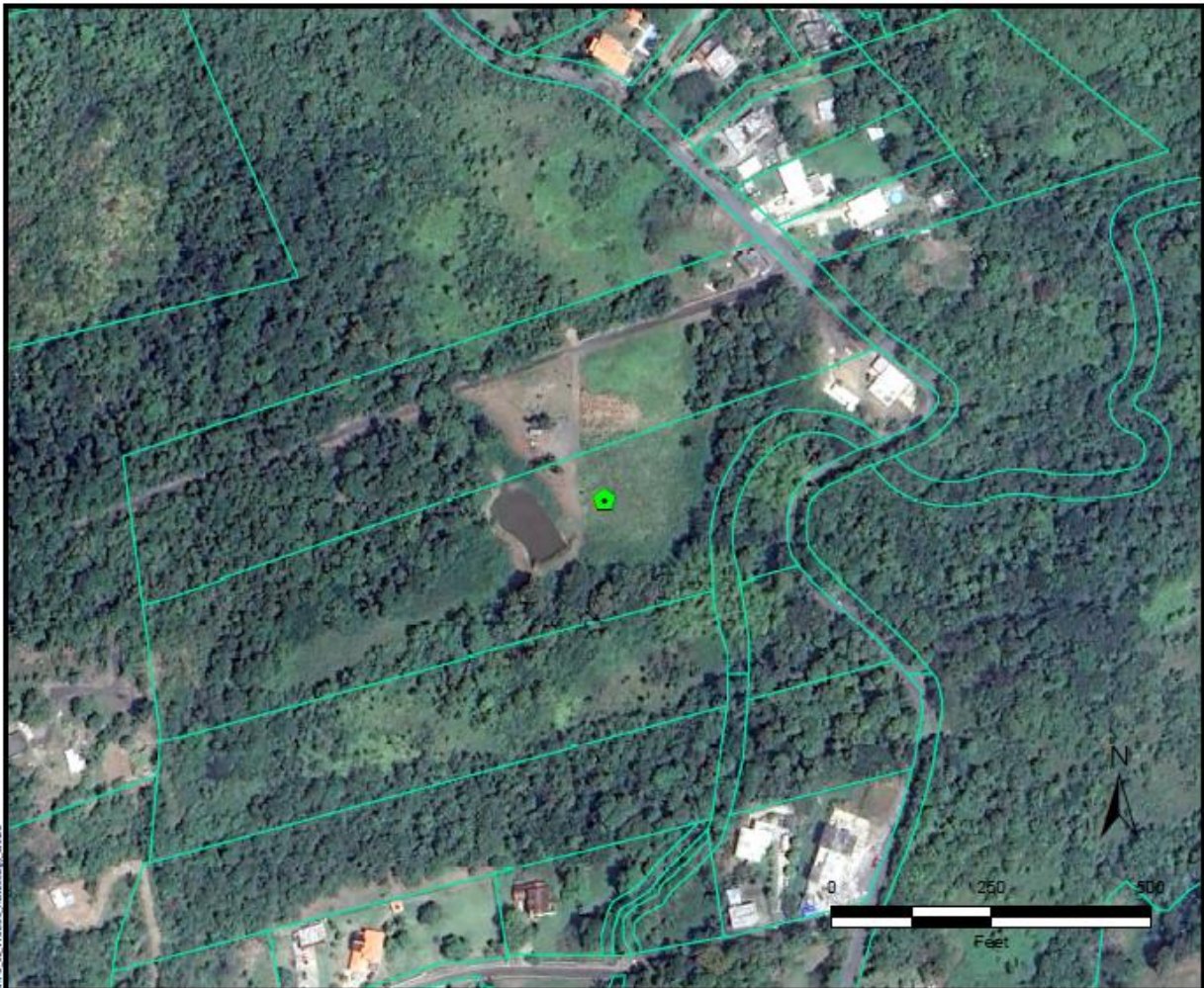


Applicant: Hacienda Yuquiyú, Inc.

Case ID: PR-RGRW-01214




City: Carolina

**Project (Parcel) Location - Aerial Map**




**TETRA TECH**  
Source: CRIM  
Author: TG Date: 1/23/2023

**Legend**

-  Tier 2 Site
-  Historic Comunidades
-  Traditional Urban Centers
-  Cultural Resource District Polygon
-  Parcelario



Applicant: Hacienda Yuquiyú, Inc.

Case ID: PR-RGRW-01214

City: Carolina

### Project (Parcel) Location - USGS Topographic Map



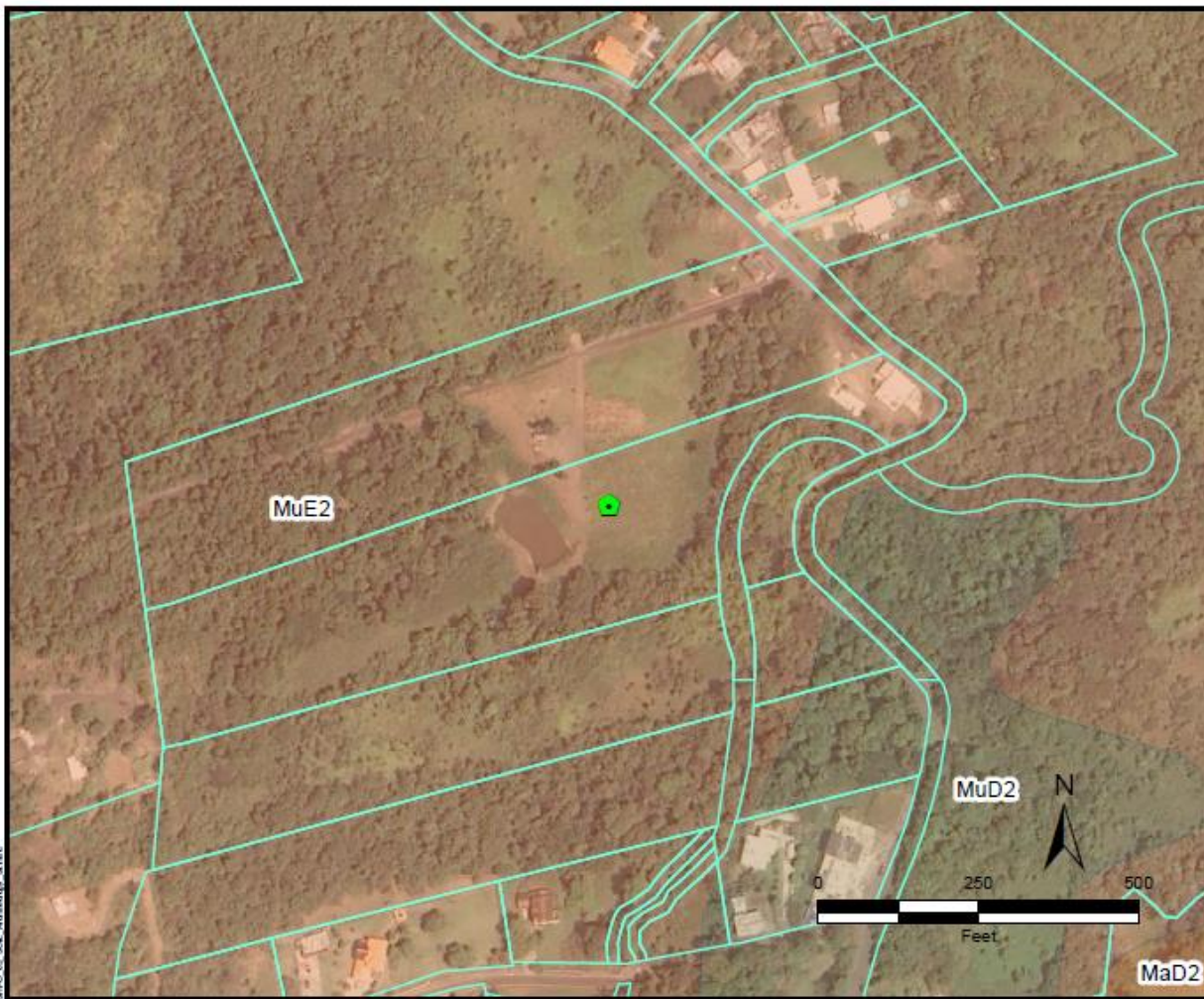
 <p><b>TETRA TECH</b></p> <p>Source: USGS</p> <p>Author: TG      Date: 9/29/2022</p>	<p><b>Legend</b></p> <ul style="list-style-type: none"><li> Tier 2 Site</li><li> Historic Comunidades</li><li> Traditional Urban Centers</li><li> Cultural Resource District Polygon</li></ul>	
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**Applicant:** Hacienda Yuquiyú, Inc.

**Case ID:** PR-RGRW-01214

**City:** Carolina






**Project (Parcel) Location – Soils Map**



Source:USDA

Author: TG

Date: 9/30/2022

- Legend**
-  Tier 2 Site
  -  Parcelario
- Soil Type**
-  MaD2: Mabi clay, 12 to 20 percent slopes, eroded
  -  MuD2: Mucara silty clay loam, 12 to 20 percent slopes, eroded
  -  MuE2: Mucara silty clay loam, 20 to 40 percent slopes, eroded



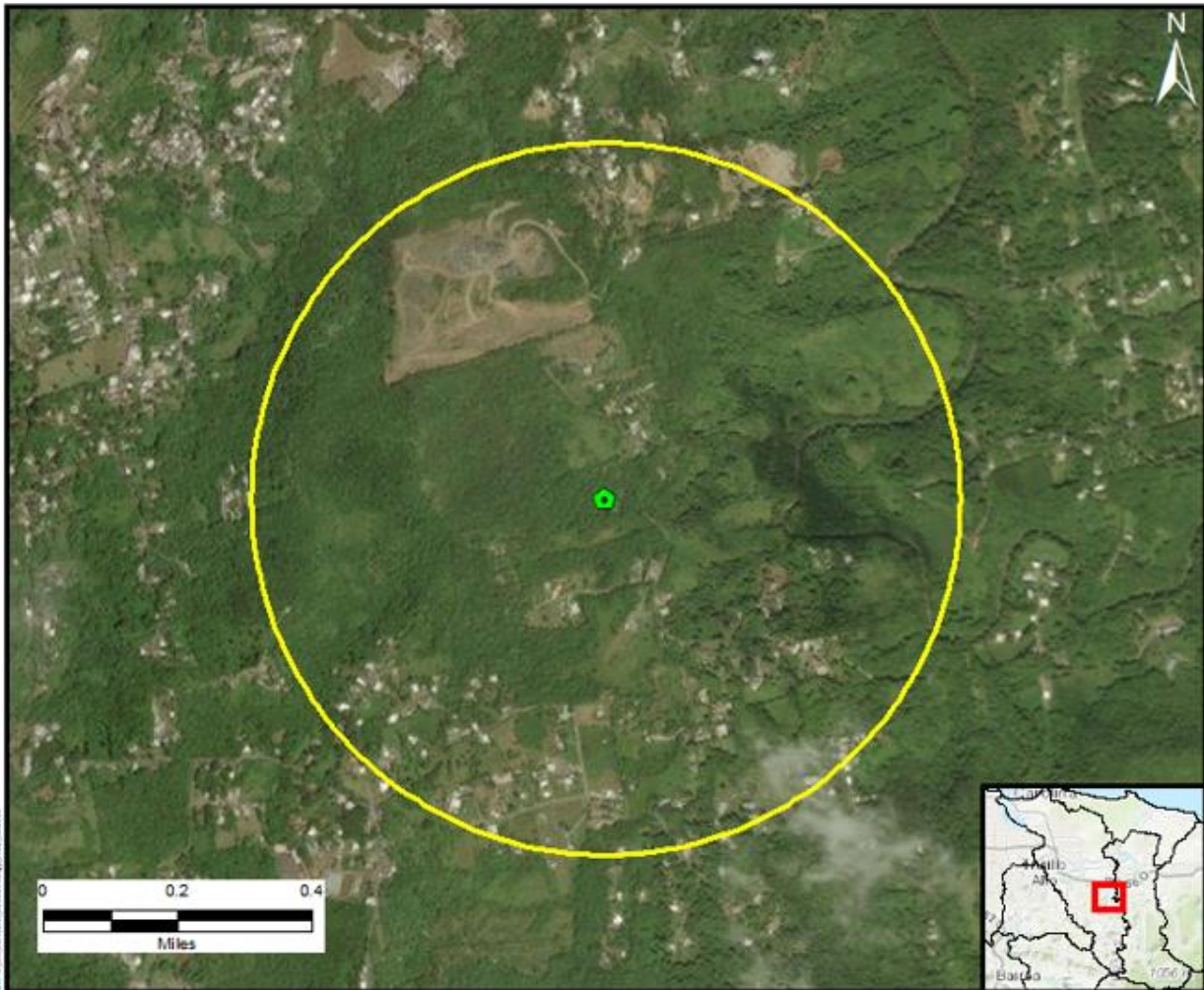


Applicant: Hacienda Yuquiyú, Inc.

Case ID: PR-RGRW-01214

City: Carolina

### Project (Parcel) Location with Previous Investigations - Aerial Map



Map data © OpenStreetMap contributors, Imagery © Mapbox




Source: National Park Service

Author: TG

Date: 9/29/2022

Legend

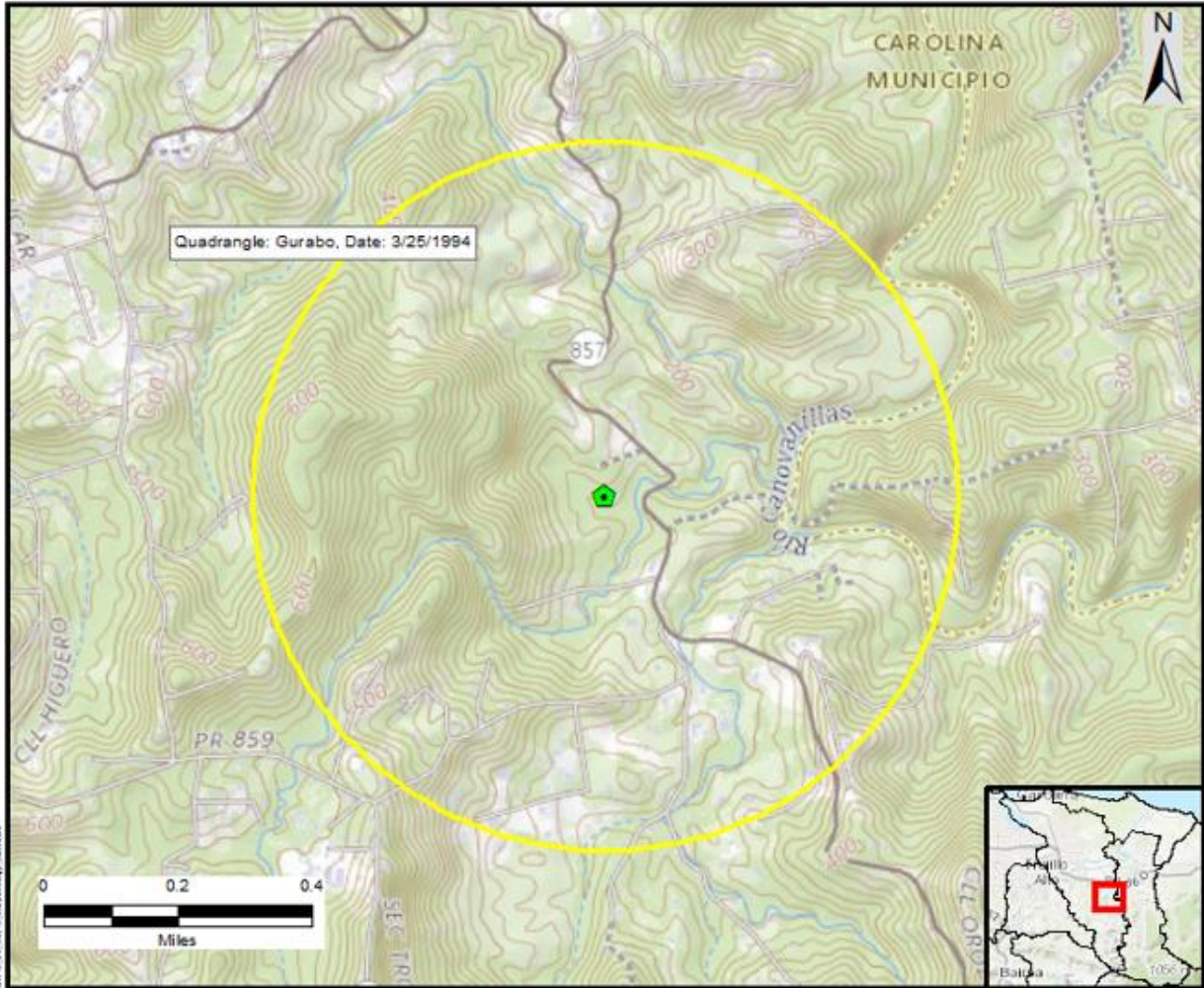
-  Tier 2 Site
-  Half Mile Buffer
-  Historic Comunidades
-  Traditional Urban Centers
-  Cultural Resource District Polygon

Applicant: Hacienda Yuquiyú, Inc.

Case ID: PR-RGRW-01214

City: Carolina






### Project (Parcel) Location with Previously Recorded Cultural Resources USGS Topographic Map



Source: National Park Service

Author: TG

Date: 9/29/2022

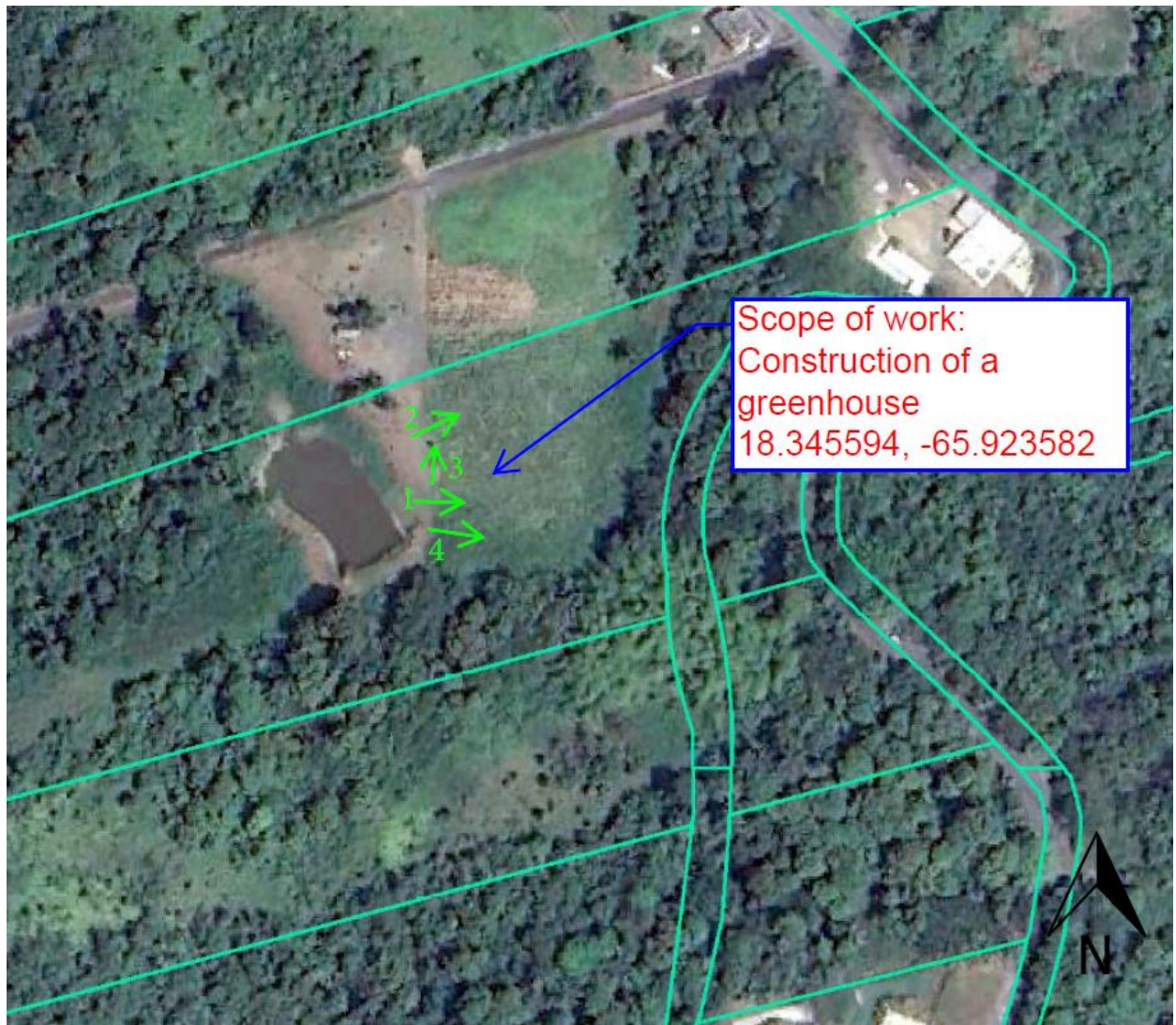
- Legend
-  Tier 2 Site
  -  Half Mile Buffer
  -  Historic Comunidades
  -  Traditional Urban Centers
  -  Cultural Resource District Polygon

Applicant: Hacienda Yuquiyú, Inc.

Case ID: PR-RGRW-01214

City: Carolina

### Photograph Key



**Applicant:** Hacienda Yuquiyú, Inc.

**Case ID:** PR-RGRW-01214

**City:** Carolina



**Photo #: 1**

**Description (include direction):** View to the East

**Date:** 5/18/2023

Scope Of Work: Construction of a greenhouse



**Photo #: 2**

**Description (include direction):** View to the Northeast

**Date:** 5/18/2023

Scope Of Work: Construction of a greenhouse

**Applicant:** Hacienda Yuquiyú, Inc.

**Case ID:** PR-RGRW-01214

**City:** Carolina



**Photo #: 3**

**Description (include direction):** View to the North

**Date:** 5/18/2023

Scope Of Work: Construction of a greenhouse



**Photo #: 4**

**Description (include direction):** View to the Southeast

**Date:** 5/18/2023

Scope Of Work: Construction of a greenhouse



October 20, 2022

**Arch. Carlos A. Rubio Cancela**

Executive Director

State Historic Preservation Officer

Cuartel de Ballajá Bldg.

San Juan, Puerto Rico

**Re: Authorization to Submit Documents**

Dear Arch. Rubio Cancela:

The U.S. Department of Housing (HUD) approved the allocations of Community Development Block Grant (CDBG-DR) funds on February 9, 2018. It also approved the allocation of Community Development Block Grant Mitigation (CDBG-MIT) funds on January 27, 2020. The purpose of these allocations is to address unsatisfied needs as a result of Hurricanes Irma and Maria in September 2017; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses.

To comply with the environmental requirements established by HUD, the Department of Housing of Puerto Rico (PRDOH) contracted Horne Federal LLC to provide environmental registry review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

In line to expedite the processes, Horne Federal LLC, is authorized to submit to the State Historic Preservation Officer, documentation of projects related to both the CDBG-DR and CDBG-MIT on behalf of PRDOH.

Cordially,

Juan C. Pérez Bofill, P.E. M.Eng

Director of Disaster Recovery

CDBG DR-MIT