

# Rideout Point Nature Preserve & Observation Tower

## What is Rideout Point?

- Rideout Point is a 578 acre nature preserve.
- It is located within North Florida Land Trust's Black Creek Preservation area in Clay County, Florida.
- The finished preserve will feature walking trails, kayak launches, picnic spaces, and a three-story observation tower, as shown in the project map below.
- The observation tower rests on a hill that overlooks a beautiful cypress swamp in the northern portion of the preserve.

## Scope of Project

The Osprey Engineering Team has been asked to generate design plans for a 3-story observation tower that meets the following requirements:

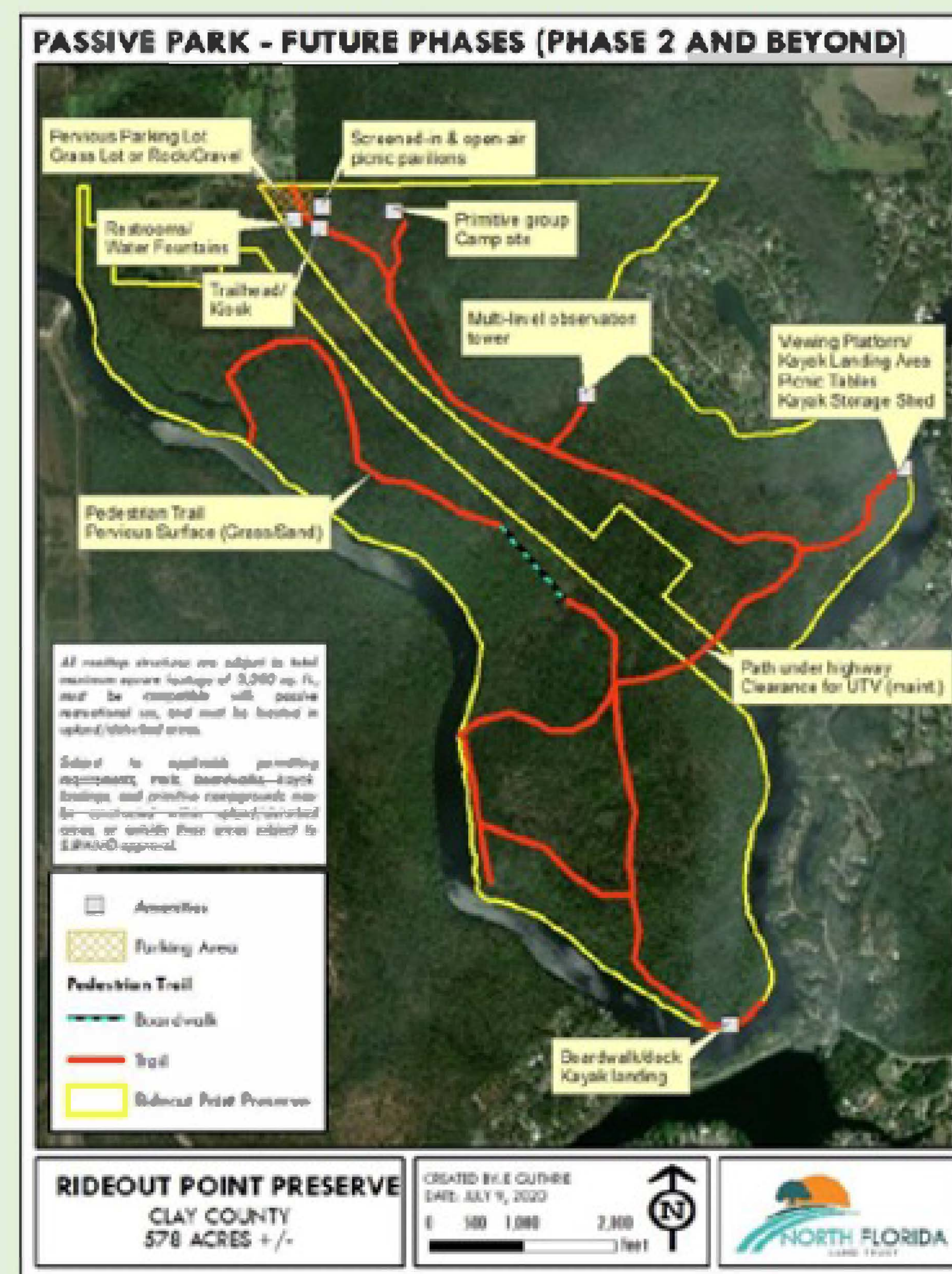
- ADA compliant on first floor.
- Will fit within an approximate terrain area of 400 ft<sup>2</sup>.
- Minimized disruption to natural flora and fauna.

The team is to include more than one design alternative for NFLT to choose from, and to produce detailed CAD files of the selected alternative to be used for future construction.

## Project Goals

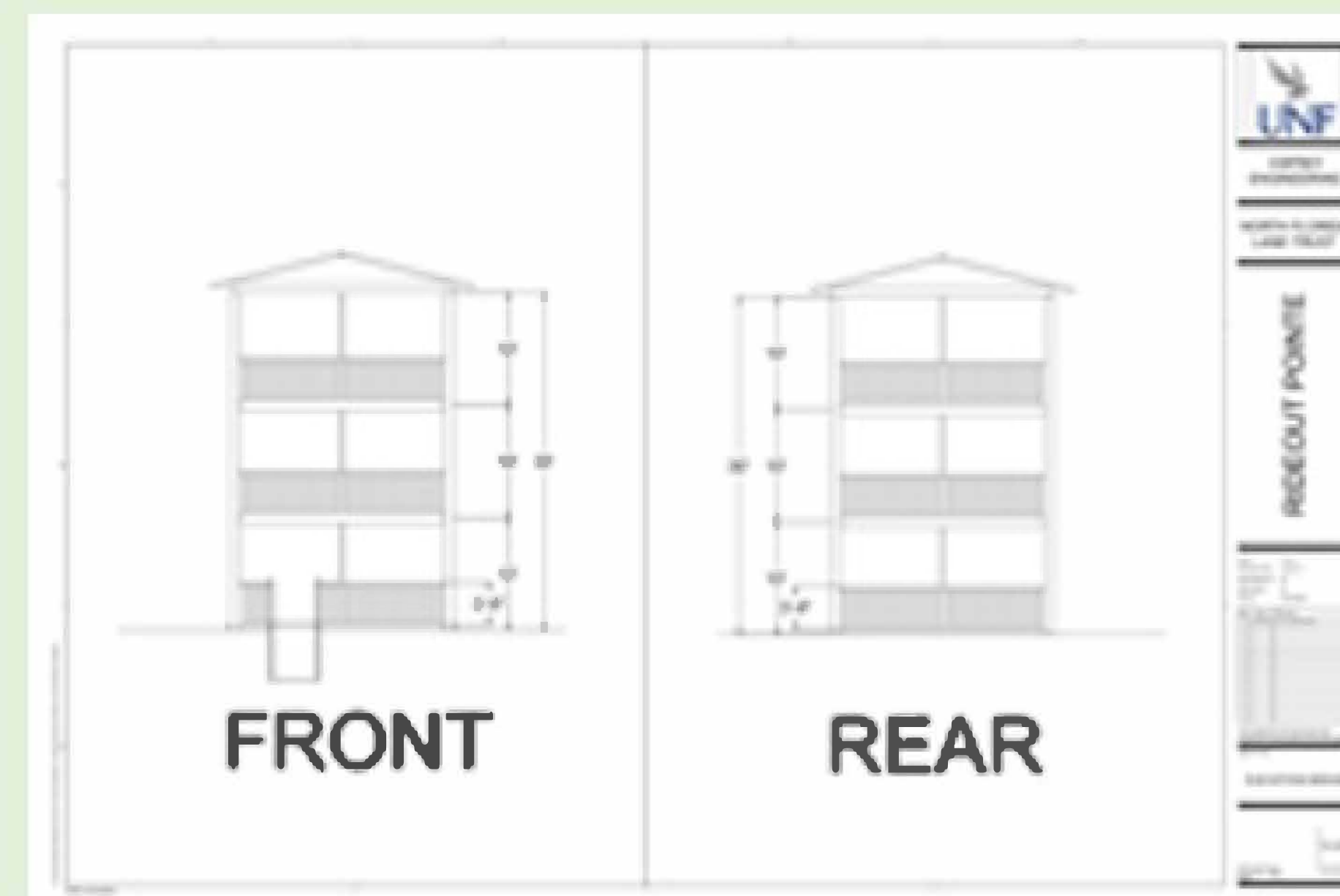
The NFLT's goal for the preserve as stated in the plan document provided is to "manage natural communities for ecological benefits and biodiversity," and "Provide opportunities for recreation and public access."

The goal for the Osprey Engineering team is to design a tower that is aesthetically pleasing, safe, and accessible, with multiple features that will attract nature lovers and make their visit enjoyable in an increasingly rare natural environment.



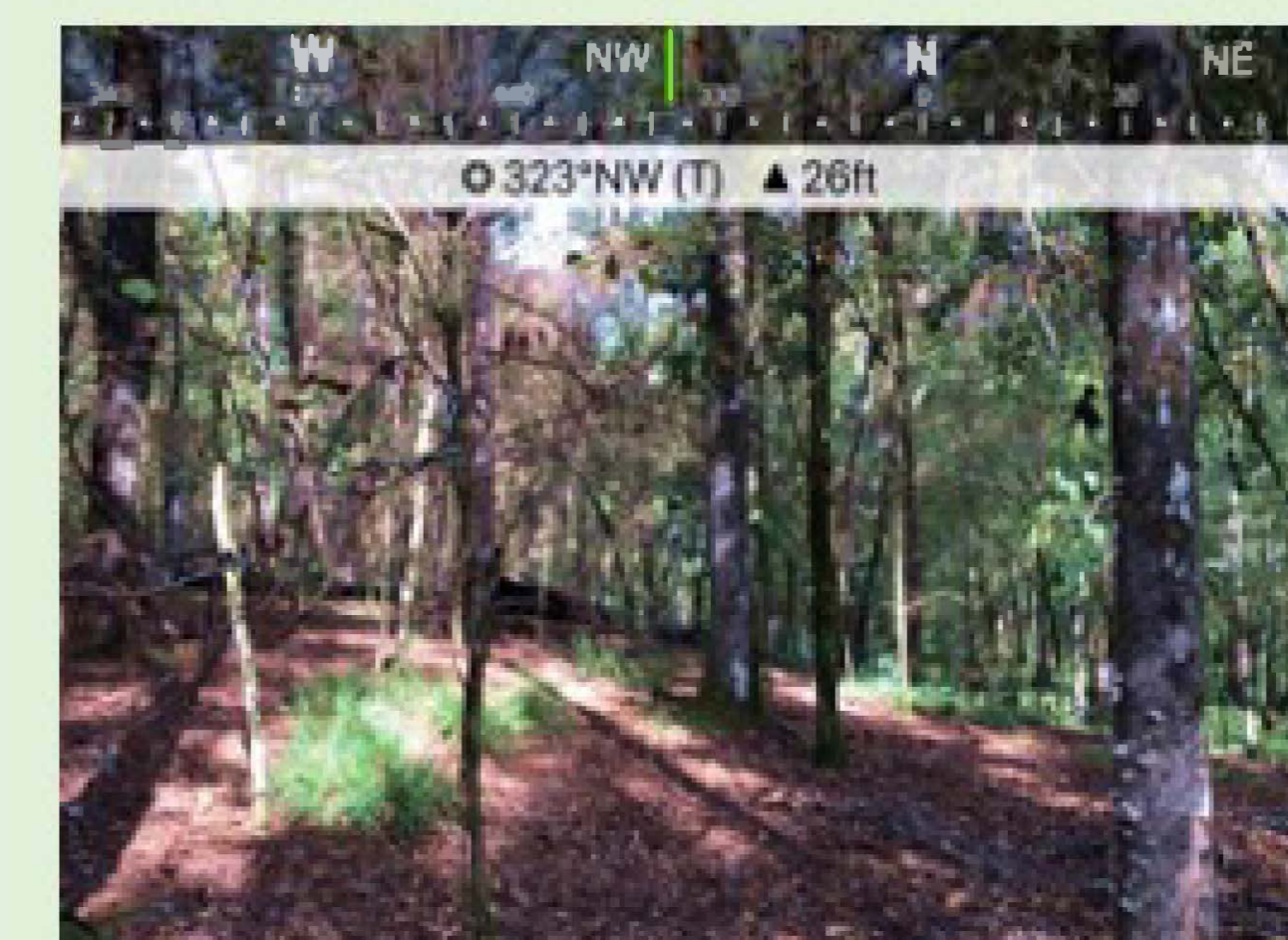
## Project Outcomes

- 5 UNF Civil Engineering volunteers.
- Contributing an estimated \$ 214,490.00 worth of engineering design.
- Volunteering roughly 260 hours over a 8 month span.
- Full engineering workup of the proposed tower including loading calculations and construction details.

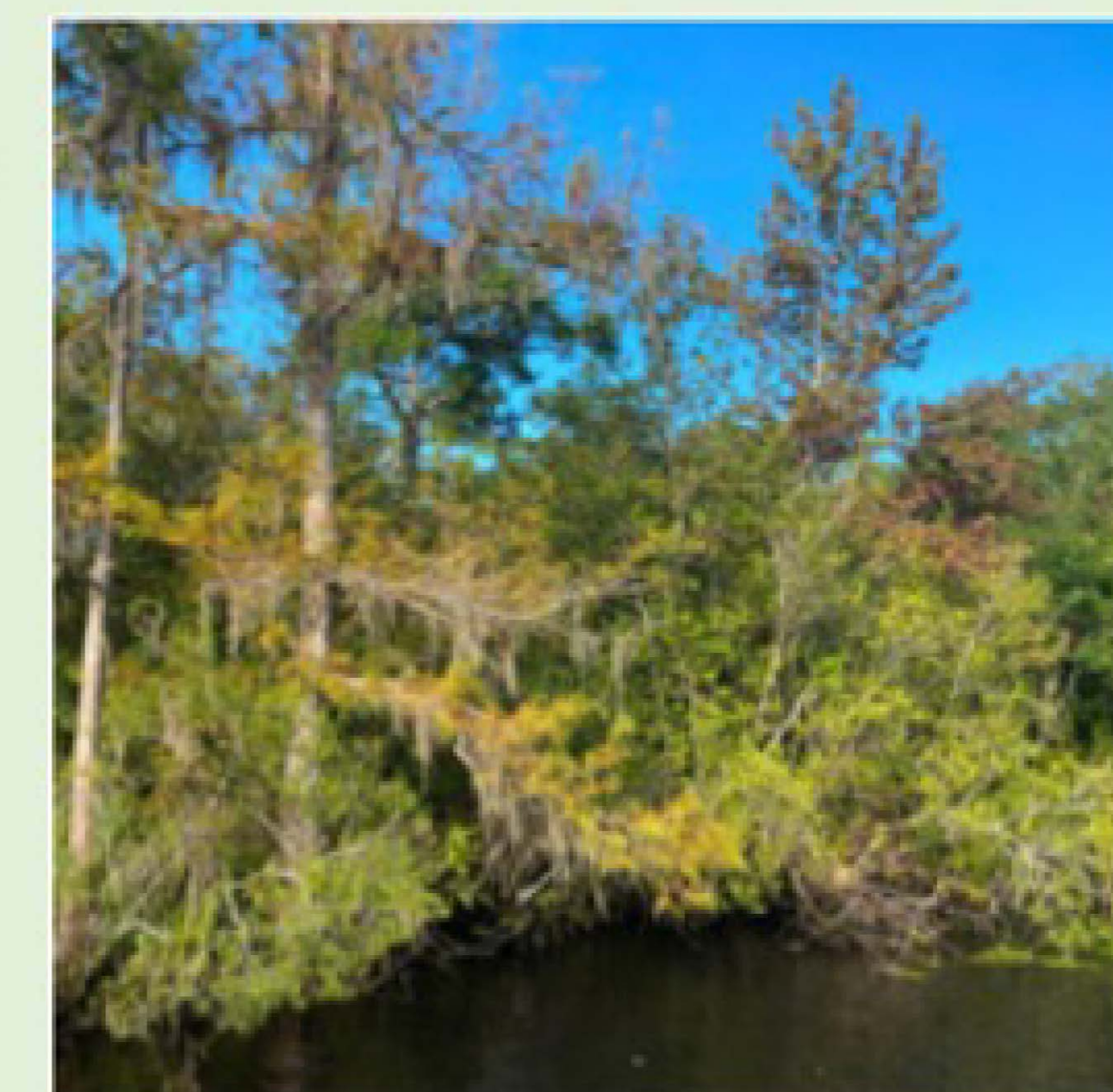


## Team Involvement

The team conducted a site visit which involved surveying the intended tower location and exploring the entire preserve. Information gathered helped with the design process of the tower.

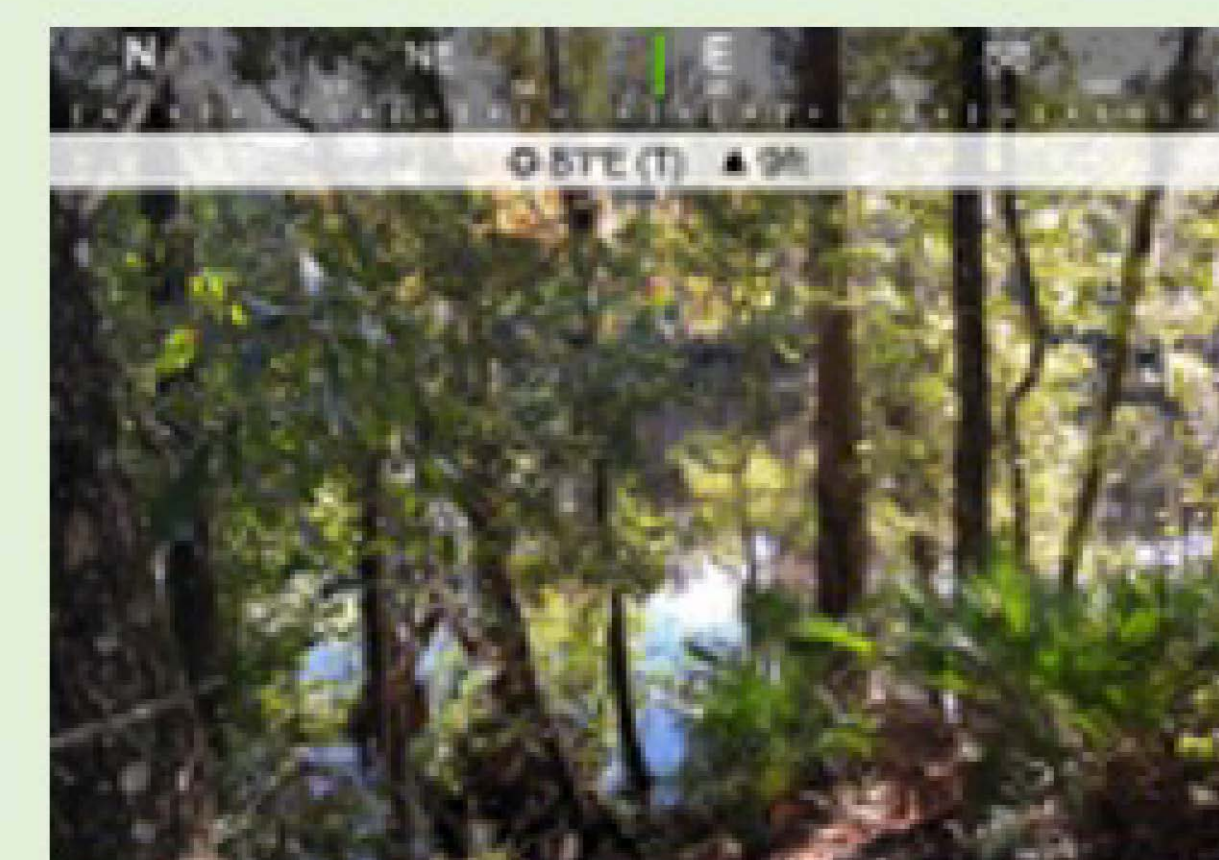


Tower location (above)  
& creek bank (below).



## Acknowledgments

Appreciation is extended to the NFLT for providing information and access to the site, to Dr. Brown and Dr. Shabanpour of the UNF Civil Engineering department for reviewing engineering documents, and to the members of the Osprey engineering team for their hard work.



"I am excited to help design something that will enhance visitors experience with Florida's natural environment for years to come" – Ryan Kasbeer, team volunteer.