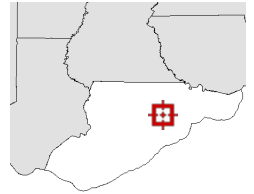


Overview



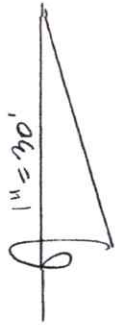
Legend

- Parcels
- Roads
- City Labels

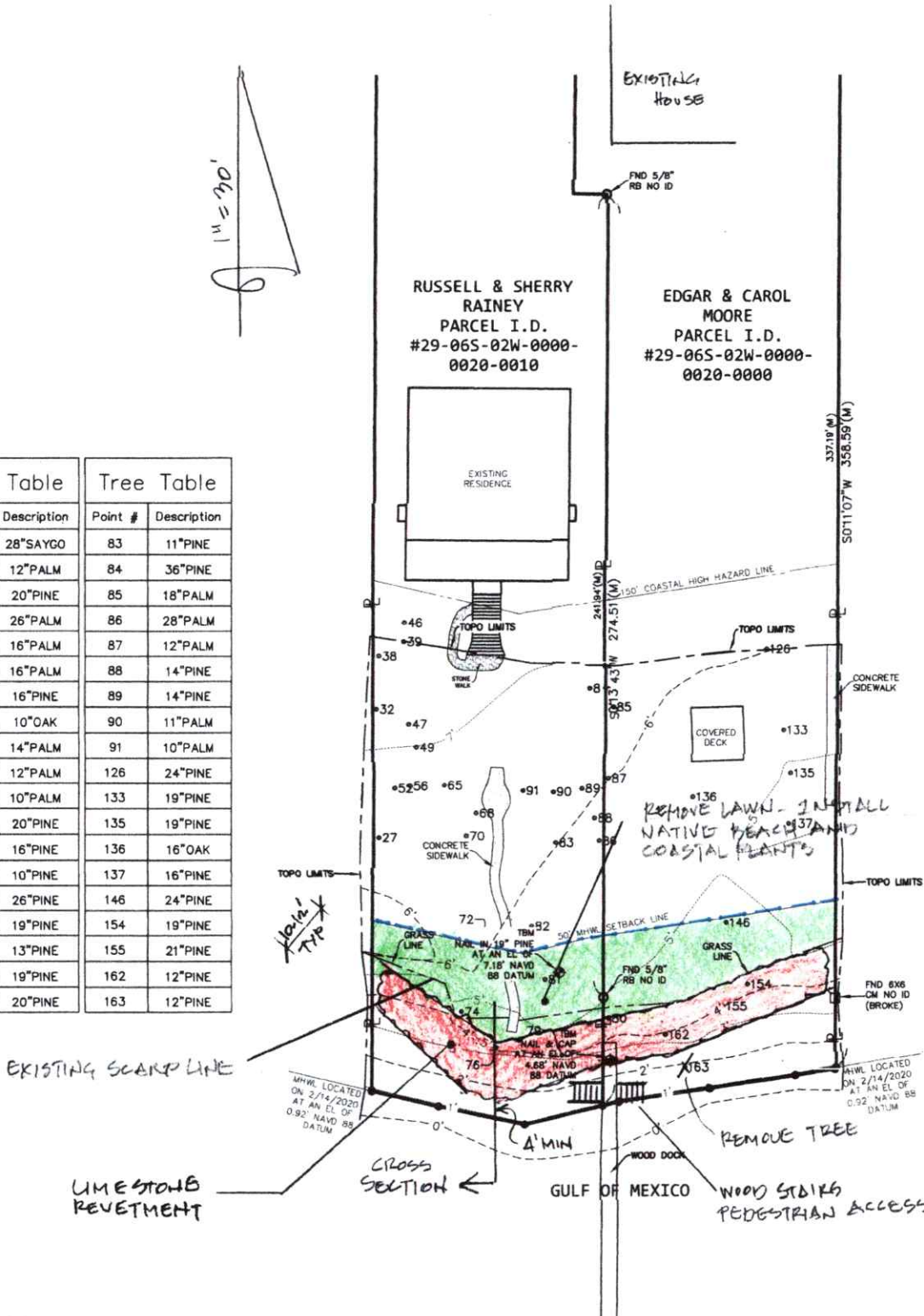
Parcel ID	29-06S-02W-0000-0020-0010	Alternate ID	02W06S29000000200010	Owner Address	RAINEY RUSSELL B & SHERRY C
Sec/Twp/Rng	29-6S-2W	Class	SINGLE FAM		4374 ST TERESA AVE
Property Address	4374 ST TEREASA AVE	Acreage	2.8		ST TERESA, FL 32346
District	1				
Brief Tax Description	A PARCEL FROM ROSE HOFFMAN				
	<i>(Note: Not to be used on legal documents)</i>				

Date created: 3/12/2020
 Last Data Uploaded: 3/12/2020 7:40:48 AM

Developed by  **Schneider**
 GEOSPATIAL

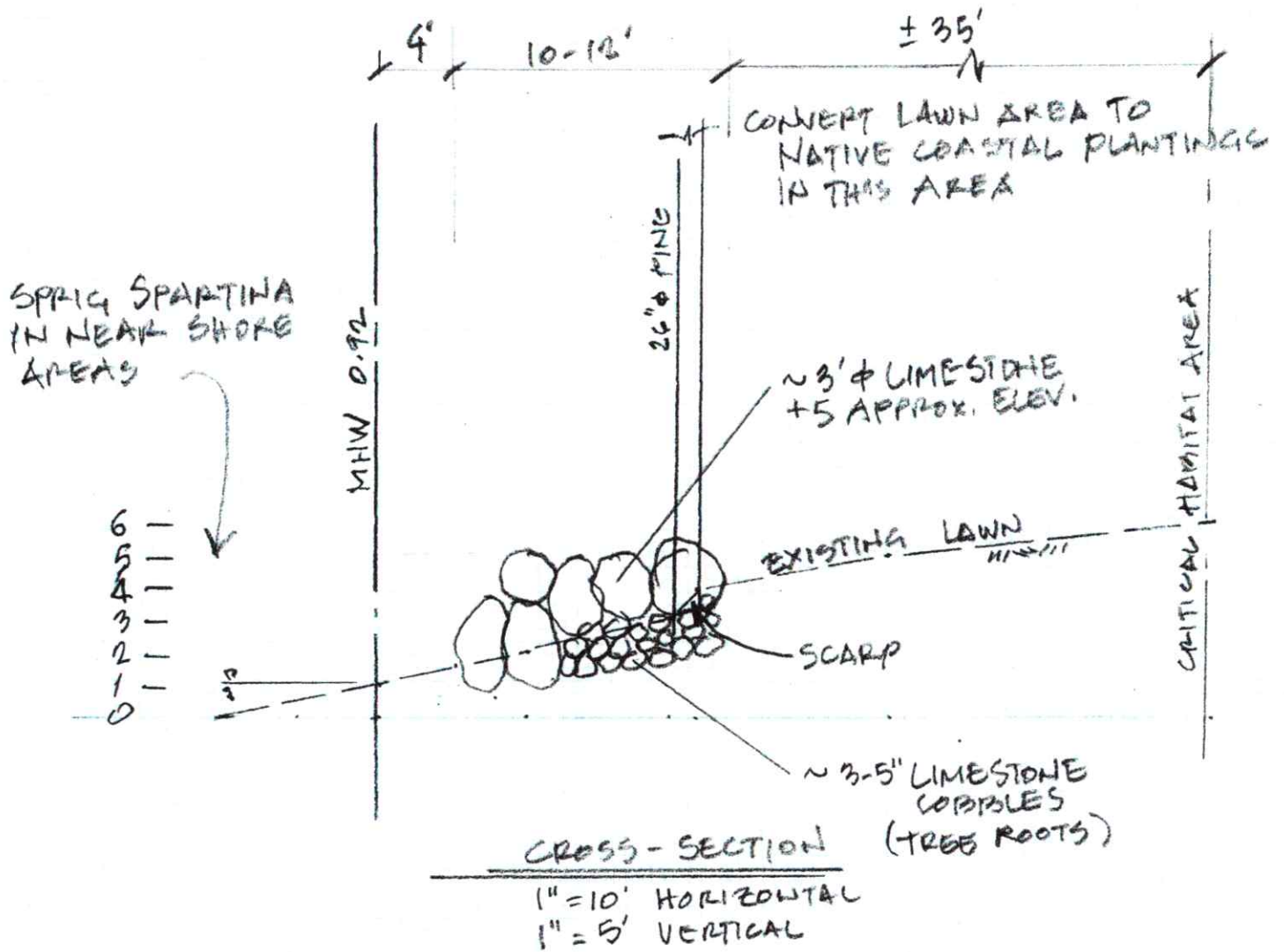


Tree Table		Tree Table	
Point #	Description	Point #	Description
27	28" SAYGO	83	11" PINE
32	12" PALM	84	36" PINE
38	20" PINE	85	18" PALM
39	26" PALM	86	28" PALM
46	16" PALM	87	12" PALM
47	16" PALM	88	14" PINE
49	16" PINE	89	14" PINE
52	10" OAK	90	11" PALM
56	14" PALM	91	10" PALM
65	12" PALM	126	24" PINE
68	10" PALM	133	19" PINE
70	20" PINE	135	19" PINE
72	16" PINE	136	16" OAK
74	10" PINE	137	16" PINE
76	26" PINE	146	24" PINE
79	19" PINE	154	19" PINE
80	13" PINE	155	21" PINE
81	19" PINE	162	12" PINE
82	20" PINE	163	12" PINE



Notes:

1. Survey conducted 2/14/20 by Edwin Brown and Associates
2. Construction to be conducted on both lots by the same contractor at the same time
3. No sand will be removed from the beach
4. Minimal sand will be provided for fill behind the revetment and will be compatible with the local sands



NOTES.

PROFILE FROM SURVEYED DATA

COBBLES TO BE USED AROUND TREE ROOTS.

BOULDERS TO BE FULL DEPTH EVERYWHERE ELSE

Rhumblin Consultants PLLC

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1700 N. Monroe St Ste 11-285
Tallahassee, FL 32303

William K. Jones PE
FL Registration No. 39523

Rhumblin
Consultants

Request:

The property owners, Dr. Rainey and Mr. Moore request the approval of the Franklin County Planning and Zoning Board of Adjustment and Appeals to construct a low-elevation limerock stone revetment above the mean high water line and within the Critical Habitat Zone on their properties. In addition, the owners will include the planting of appropriate beach appropriate vegetation replacing the existing St. Augustine lawn within the remainder of the 50-foot habitat conservation zone to restore this area with native vegetation. These planting will improve the habitat quality of this areas as well as add additional erosion protection. The owners will plant *Spartina* (Sp) sprigs within the inter-tidal zone (see graphics to follow).

Existing Condition:

Stingray Point is a prominent geographical feature of the St. Teresa waterfront. This headland is offset by Grassey Point to the east (Figure 1). These two points form the eastern and western bounds of the long crescent beach inside Alligator Harbor. Stingray Point is also the eastern headland bounded by Turkey Point which forms the crescent

beach of St. Teresa. As the headland, Stingray Point has anchored the two crescent shaped beaches for the recordable time frame.

Stingray Point is situated across the terminus of Alligator Point. Over the last few decades Alligator Point has continually extended and narrowed the opening between Stingray Point at the entrance of Alligator Harbor.

This area is particularly vulnerable to winds from the southwest. The shoreline is open to the Gulf here.

Dog Island reef provides some general protection from large waves however that feature is miles to the south. This part of the beach is or could be impacted by the closing of Alligator Harbor channel and increasing marginal currents created by tides running into and out of this embayment. Under certain wind and tide conditions these currents could increase dramatically, potentially causing greater beach erosion. As the tip of Alligator Point grows towards the north the northermost tip is migrating to the west of the point where these parcels are located. The aerial photograph shows the underwater bar. Sand moving north along the point is apparently being directed to the beaches to the west and not to the point as in the past. This may be part of the changing geomorphology that impacts a long-term sand supply to the beach around the Rainey parcel.



Figure 1 : Stingray point geomorpholgy

The result is the documented increased erosion of Stingray Point causing a loss of trees and submerged aquatic vegetation in the inter-tidal zone which has created a scarp above the mean high water mark at the tree line.

Proposed Solution:

The construction of a stone structure set above the mean high water and on the waterside of the large, mature trees will increase the ability of this point to continue to act as a headland reduce the potential for erosion at this location as well as in the near reaches either side of this point (Figure 3). The proposed design includes a row of larger guard stone (approximately 3-foot diameter stone) set to hold smaller (3-inch diameter cobbles) which will be placed within and among the root system pines. The smaller rock would then be covered with the larger guard stone. In areas where there are no tree roots the large stone will extend the full depth of the revetment, about 10'. The height of the stone revetment would be approximately one foot above the existing scarp or about 5' (see plan and profile sketches provided).

The critical habitat zone, behind the rock revetment would be reworked to transition the existing lawn to a zone planted with plants more associated with those that are typically found in the coastal habitat zone. Transitional plantings of *Spartina* (Sp) will be incorporated into the inter-tidal zone in front of the two properties to re-establish the protective vegetative buffer waterward of the stone structure.



Figure 2 Coastal impacts at Stingray Point

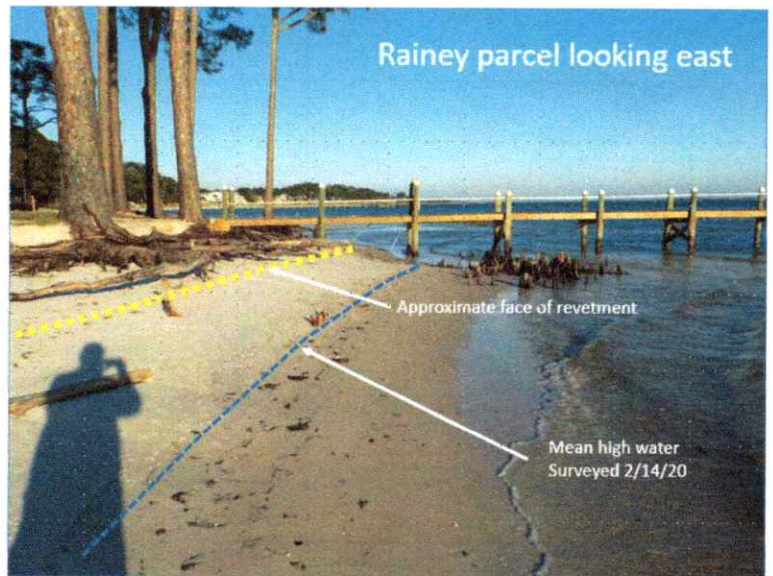


Figure 3 Proposed face of revetment and mean high water line