

November 8, 2018

Mr. John Neal Border Road Investments, LLC 5800 Lakewood Ranch Blvd. North Sarasota, FL 34240

Email: JNeal@neallandventures.com

Re: Environmental Narrative

Gulf Coast Community Foundation

Dear Mr. Neal:

On behalf of Border Road Investments, LLC, E Co Consultants, Inc. (E Co) is pleased to submit this Environmental Narrative to the City of Venice in support of development review.

This environmental Narrative provides an assessment of the Gulf Coast Community Foundation (GCCF) project. The project is located at S 34 T 38S R 19E, northeast of the intersection of Border Road and I-75. This report is information in support of a planned single family residential development.

The property is in active agriculture and requires coordination for access. We would like to coordinate any site visit sought by the City of Venice, as well as address any questions regarding the accompanying report, at your first opportunity. Please contact Dr. Gregory White or Alec Hoffner at our office 941/722-0901-to schedule.

Sincerely,

E Co Consultants, Inc.

Gregory J. White, D.Sc., MLA, GISP, CA

Senior Scientist

gwhite@ecoconsultants.net



ENVIRONMENTAL NARRATIVE GULF COAST COMMUNITY FOUNDATION CITY OF VENICE, SARASOTA COUNTY, FLORIDA S 34 T 38S R 19E

Prepared for:

Border Road Investments, LLC

Prepared by:

E Co Consultants, Inc.

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Environmental Narrative for City of Venice

1.0 Introduction

1.1. Project lands

Border Road Investments, LLC is planning to develop a ± 300 -acre property (Site) south of Laurel Road, North of Boarder road, and southeast of Interstate 75 (**Location Map**). The project is composed of Sarasota County Property Appraiser parcels: 0390003040, 0390003041, 0390003030, 0390003031, 0389002005, 0389002006, 0389001010, 0389001010, and 0390003030. The parcels are a mix of improved pasture, inclusive of ditching (since <1969) to manage soil moisture content, flatwoods patches, small ponds, and degraded patches of non-forested herbaceous wetlands. There are two radio-towers, which include radio antennas and cell phone microwave transceivers, associated buildings, and associated supporting systems of guy wires and concrete guy foundations. The "antenna complex" sits on ± 11.5 acres. The property is crossed by paired Florida Power and Light, Inc. Transmission Lines.

There are degraded remnants of non-forested herbaceous wetlands, fringe wetlands with pioneer plants around ponds and excavated waterbodies. The ponds are often associated with land scars from past extraction and drainage activities. These extraction activities and drainage impacts are observable in 1969 imagery as are a matrix of ditches draining wetland areas. There are patches of flatwoods, with the pine density having increased dramatically in the last 50+ years, with densification flattening out in the last twenty years.

There is a random scattering of sabal palms (*Sabal palmetto*) throughout most of the improved pasture and hayed fields. There are mixes of oaks (*Quercus virginiana*), cabbage palms, slash pine (*Pinus elliottii*) along historic fence rows, and primitive roads.

The Site is flat with grades <3%. Topographic variations are most profound in natural berms associated with pond edges, spill areas next to ponds, areas built up for primitive roads, and pads associated with the communications complex.

1.2. Surroundings

The project property is within a region of highly anthropogenic lands experiencing rapid residential growth during the last 10-years. The southwest edge of the project is directly bordered by I-75, I-75 in its current layout having been completed in the early 1980s. The central western portion of the Site abuts the City of Venice's East Side Advanced Wastewater Treatment Facility, which includes complete suite of waste removal operational facilities as well as water reclamation facilities, which include a lake filtration system. To the west of the northern tine of the property is a small agricultural operation raising cattle. The northern boundary is Laurel Road, across which are platted and built to partially built single-family residential developments on ± 0.065 -acre parcels. To the east of the property there are small patches of flatwoods; but

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this dominated by ponds, remains of borrow pits where materials were extracted for the construction of I-75. The southern edge of the property is Border Road. Across Boarder Road are limitedly impacted lands, with some drainage and ground materials extraction, with I-75 250-500-750 feet south. The landscape complex can be seen in **Regional Aerial Map**.

1.3. Property history

The Site has been in field agriculture for hay or cattle grazing for more than 50 years. The aerial photograph history, back to the 1960s, shows no lumbering of trees from the property. There appears to have been no harvesting of sabal palms (*Sabal palmetto*) from the pastures nor forest patches, as the canopies show a consistent growth. The property has had an extend duration of ditches and swales being cut to drain wetlands, lower waters in ponds, and decrease moisture levels in pastures. The pasture areas have had extensive management in both ditching and cutting, with signatures well established and seen throughout aerial images.

2.0 SITE CONDITIONS

2.1. Geology

The Site is underlaid by unconsolidated calcareous and fossiliferous limestone as calcite and aragonite mixed with indurated quartz and clayey sands and sandy clays. Geology is derived from marine deposits.

Major geological features can be seen in the USGS Quad Map.

2.2. Soils

The Site is composed of a matrix of soil types. The land has been under extensive management since before the 1960s. Soils have been managed with shallow ditching, including into wetlands.

NRCS Florida Soil Group Map Unit Name Suitable for Acres Hydric² Agriculture¹ Suitable for 8 Y 16.5 Delray fine sand, depressional forage Suitable for 10 N 150 EauGallie and Myakka fine sands forage Felda fine sand, frequently Y 12 Flatwoods 1.4 ponded, 0 to 1 percent slopes

Table 1 Soils Composing the Site

¹ Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database for Sarasota County, Florida

² Hydric Soils of Florida Handbook ed. 2, 1995, Victor Carlisle, Florida Association of Environmental Soil Scientists

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Soil Group	Map Unit Name	NRCS Suitable for Agriculture ¹	Florida Hydric ²	Acres
22	Holopaw fine sand, frequently ponded, 0 to 1 percent slopes	Flood plains	Y	73.4
31	Pineda-Pineda, wet, fine sand, 0 to 2 percent slopes	Suitable for forage	N	18.2
36	Pople fine sand	Flatwoods	Yes	34.5
99	Water		N/A	7.0

The matrix configuration of soils across the Site can be reviewed in NRCS Soils Map. The soils, as expected, reflect the land cover composition reported by SWFWMD, reviewed in aerials, and observed onsite. Marine clays are patchy.

2.3. Current land cover matrix

The Site's land cover composition as field mapped by E Co staff using Florida Land Use Cover and Classification System (FLUCCS, Handbook Florida Department of Transportation 3rd, 1999) can be considered as being two halves of the property split north-to-south, with the northern portion of the western half dominated by an infilling Oak – Coniferous Mixed Forest (FLUCCS 434) patch, with a central wetland complex comprised of Freshwater Marsh (FLUCCS 641) and Wetland Forest Mixed (FLUCCS 630). The southern portion of the western half of the Site is composed of four small ponds less than 10-acres in size (FLUCCS 534). Extraction and drainage activities have modified these. The southern half of the western side of the Site is dominated by Woodland Pastures (FLUCCS 213) surrounding the ponds. The tree densities have been increasing at a relatively constant trajectory for the last 30-years. There is a ± 3.5 -acre patch of Brazilian pepper (Schinus terebinthifolius) dominated system. This could serve as a source for infestation across the property and beyond, if not controlled. [Note: As part of the development process, if permitted, this patch would be eradicated.] The eastern half of the project is dominated by large contiguous area of Improved Pasture (FLUCCS 211) that has a system of ditches crisscrossing much of the area that has drawn down historic wetlands starting before 1969 leading to some ecosystem conversions from this anthropomorphic ecological trajectory (Historical Aerial Map, 1969). There is a well-established primitive roadway (FLUCCS 8146) that splits the property along a north-south meridian, accessing a radio and cell tower (2 towers) complex with associated buildings, pads, and guying systems (FLUCCS 820). This communication complex abuts the southern edge of the valley between the two northern tines of the property shape. FLUCCS land cover can be reviewed in the FLUCCS Map.

2.3.1. *Uplands*

2.3.1.1. Improved Pastureland (FLUCCS 211)

These areas are improved pasture. The lands show signs in aerial photography of being hayed in some years, as well as having cattle actively grazing in these areas. The lands have been managed with shallow

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soil ditches, <36-inches deep and without standing waters. The are no current irrigation systems, and historic imagery have no indications of any irrigation systems having been used at an annual scale. These areas have fence rows, and some broader ditches that are associated wetlands, crossing them.

There are randomly scattered sabal palms scattered across the fields. Management activities have no shrubs within these areas. Cover has been enhanced in agriculture value by introduction of forage species.

2.3.1.2. Woodland Pasture (FLUCCS 213)

This area has open spaces of suitable forage, actively used by cattle, interspersed by scattered sabal palms, dense patches of slash pine (*Pinus elliottii*), and occasional live oak (*Quercus virginiana*). Cattle activity remains, with trails and paths meandering through this area. The understories are predominantly open. There are extensive portions that are in pasture.

2.3.1.3. <u>Hardwood – Coniferous Mix (FLUCCS 434)</u>

This area does not show sign of having been planted, e.g. rows, nor the uniformity of age classes from aerial seeding historically used in some parts of Florida. The cover is dominated by slash pine, scattered sabal palms, and occasional live oaks. The age classes suggest these areas have been unmanaged, unharvest for 50+ years. Shallow ditches run through these areas.

2.3.1.4. Communications (8200)

These areas have a pair of radio towers that have been supplemented with cell phone microwave transceivers. There associated buildings, guy stations, power backup facilities. There are primitive roads accessing, running through, these areas, as well as areas that scarred.

2.3.1.5. <u>Utilities (8300)</u>

This maps a Florida Power and Light, Inc. power transmission corridor. This corridor traverses the property in an east-west direction. There are a pair of transmission towers. The corridor is managed to maintain it being free of trees and maintain a shallow cut of herbaceous plants. There is no evidence of this corridor serving as a vector for exotics or being utilized as a wildlife corridor.

2.3.2. Wetlands and Waterbodies

2.3.2.1. Reservoirs less than 10-acres (FLUCCS 534)

This FLUCCS classification is a default value for waterbodies. On this Site the water bodies are historic ponds that have been modified with some extraction. The edges of these ponds show anthropogenic activities that have denuded historic vegetation, as well as some have signs of access and use by cattle. These ponds do not show aquatic submerged nor floating aquatic vegetation. The ponds have significant water level fluctuations, as observed in variations observed in historic aerials. This fluctuation has established natural rim edges. The ponds are not operating as part of a floodplain matrix.

The ponds have small fish such as mosquito fish (Gambusia holbrooki) and blue gill (Lepomis macrochirus).

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There are no rookeries associated with these ponds, and no nesting by wading birds was observed.

2.3.2.2. Streams and Lakes Swamps, Bottomlands (FLUCCS 615)

This area is a small island (<0.50 acres) in the largest pond in the southwestern corner of the Site. The island has sable palms and live oaks, as well as a shrub layer of native plants. It is not ecologically a true bottomland area. Historic aerials do not show the island ever connected to other uplands.

2.3.2.3. Wetland Forest Mixed (FLUCCS 630)

This area shows a relatively consistent forest canopy for the last 30+ years, except for historic open areas in its southern portion have been invaded by trees and some shrubs in the last decade-plus. There is a primitive road that runs through this area to access the western portion of the communications area. There are some outlaw trails from ATVs or trucks.

2.3.2.4. <u>Vegetated Non-Forested Wetlands (FLUCCS 640)</u>

All areas mapped as Vegetated Non-Forested Wetlands are in low pockets areas of pasture. These areas do not have a cover of wetland shrubs, nor tall wetland herbaceous vegetation. These areas show trails of cattle crossing, accessing the areas. The highly variant hydrologic patterns observed in aerial photography suggest that perhaps prior to anthropogenic activities, land management, these areas may have had more classic marsh vegetation. These mapped areas should not be confused unimpacted, native marshes. They have lost a tremendous degree of wetland functions, in some cases absolute losses. There is invasion by torpedo grass (*Panicum repens*).

2.3.3. Jurisdictional Wetlands and Other Surface Waters

The environmental assessment first reviewed information on topography, soils, mapped wetlands, mapped floodplains, and drainage ways. This information was obtained from: National Wetlands Inventory (NWI) map, the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey, US Geological Survey (USGS) produced topographic quadrangle map, current and historical aerial photography, Sarasota County and Southwest Florida Water Management District (SWFWMD) reports and GIS data sets. The Site was evaluated in general accordance with the State Unified Wetland Delineation Methodology (Chapter 62-340 F.A.C.), the United States Army Corps of Engineers (USACE) Wetland Delineation Manual (1987) applying the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2.0 (November 2010). From these data sources, site visits the wetland boundaries have been set publicly available aerial imagery.

To date, no formal wetland lines have been set in the field, collected with GPS, or surveyed.

2.4. Wildlife

The potential of protected wildlife species using the Site was initially assessed by desktop survey. A search for recorded observations of protected species on-site and reviewing areas mapped by oversight agencies as critical habitat, focal, or consultation areas for protected species. This information was collected in the

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form of publications and publicly available geographic information system (GIS) data, sources including those of the Florida Natural Areas Inventory (FNAI), Florida Fish and Wildlife Conservation Commission (FWC) and the US Fish and Wildlife Service (USFWS).

Field investigations followed the desktop survey. E Co staff walked the property in daylight and through civilian twilight into early evening. Wildlife observation including identifying wildlife signs, such as nests, markings, tracks, fur, feathers, scat, carcasses, calls, and other as identified. No species listed as threatened, endangered, or species of special concern were observed.

2.4.1. Non-listed species

The Site has common wildlife such as song birds and small mammals. Wildlife sign investigated include nests, calls, tracks, dens, feathers, scatt, fur tufts and skins.

Song birds and wading birds where observed in small numbers using the Site.

2.4.2. Listed species

The Site is outside of any mapped critical habitats, consultation areas, or focal zones, of federally listed species. The Site lacks qualities to attract state or federally listed species for use in critical migratory forage or as primary breeding habitat. During more than 24 hours of contact time onsite, no observations of any listed species have been made by E Co staff.

The Site may have gopher tortoises (*Gopherus polyphemus*). A Site survey for gopher tortoises, 100% area survey of all suitable habitats, following accepted and stabled protocols by all oversight agencies, will be performed by E Co prior to construction, i.e., within 90-days of construction initiation. E Co will ensure all appropriate permitting and as appropriate relocation of gopher tortoises.

These lands are not in proper composition for crested caracara (*Polyborus plancus audubonii*). Half of the site is west of the general occurrence polygon published by USFWS.

3.0 PLANNED DEVELOPMENT

3.1. City of Venice Comprehensive Plan Intent (Goals) and Strategies (Objectives)

The planning and ultimate layout of the community will follow the Intents set forth in the City of Venice Comprehensive Plan³ (Comp Plan), with the Intents implemented through Strategies. This includes described densities of housing, percent of parcel area on which buildings and impervious surfaces are constructed, availability of pedestrian modes of transportation, meeting neighborhood functionality of

³ City of Venice Comprehensive Plan (https://www.venicegov.com/government/planning-and-zoning/comprehensive-plan-update), accessed 2 November 2018

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adjoining developments. Specifically, as noted in the Comp Plan the following pertain to natural areas, open space, wildlife, wetlands, water bodies, and flood plains.

3.1.1. Master Planning Considerations

Note: When items are quoted directly from the City of Venice Comprehensive Plan the text is *italicized*.

Strategy LU 1.3.5 - Natural Features

The City shall respect natural features through designs that recognize the natural and environmental features of the area and incorporates the protection, preservation and enhancement of these features as a resource to the Neighborhood as a whole.

Additionally, remaining wetland areas will be managed in a manner to prevent, and limit, invasion by damaging plant species as recognized by Florida Exotic Pest Plant Council (FLEPPC) and University of Florida Institute of Food and Agricultural Sciences (IFAS) as well as damaging foreign or nuisance species as identified by State of Florida Department of Agriculture & Consumer Services (FDACS). Wetlands will be surrounded by buffer plantings averaging 25-feet in width and having a minimum width of 15-feet.⁴

Strategy LU 1.4.1-1.4.6 - Historic Preservation through Archeological and Historical Resources

These speak to the protection of valuable historical resources that may be found structures, remnants, artifacts, or be represented in past patterns of development. The Site has no historic structures. The Site is not located in an area of historic primary activities by aboriginal peoples. There is no evidence of historic use in A review of the State of Florida, Division of Historical Resources, Florida Master Site File. The history of land management activities over the last half-century is readily reviewed via historic aerial photography. These show the wetlands, ponds, and pastures have all been under significant and continuous management to control water levels, moisture levels, extents and conditions of these systems.

Section III – Elements – Open Space

The Master Plan will address open space as design criteria.

Intent OS 1.2 - Conservation Open Spaces

Strategy OS 1.2.2 - Environmental Impact Mitigation

The City shall utilize the Land Development Code and review processes to ensure that development projects evaluate potential environmental impacts and provide mitigation for negative impacts. Development shall not adversely impact any threatened or endangered species or species of special concern without appropriate permitting and/or mitigation.

The project does not envision any adverse impacts to threatened or endangered species. There may be gopher tortoise (*Gopherus polyphemus*) onsite. If they occur they will be addressed through State of Florida permitting for relocation, by E Co staff authorized gopher tortoise agents. Any other listed species disturbance will be permitted through State of Florida Freshwater Fish and Wildlife Consecration Commission (FWC) and/or the United States Fish and Wildlife Service (FWS).

⁴ Environmental Resource Permit Applicant's Handbook Volume I, SWFWMD et al. 1 June 2018, pp. 96.

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Intent OS 1.3 - Wetlands

The City shall implement strategies to protect its wetlands, wetland buffers, and aquifer recharge areas.

Strategy OS 1.3.1 - Wetland and Aquifer Recharge Areas Protection

Strategy OS 1.3.2 - Wetland Encroachments

All protections identified will be implemented according to the specifications in the Comprehensive Plan.

Native Habitats, Conservation Lands, and Natural Resources

Intent OS 1.4 - Native Habitats, Conservation Lands, and Natural Resources

The City recognizes the importance of its native lands and habitats and shall implement preservation strategies that protect native habitats, conserve environmental lands and natural resources, minimize environmental pollution, and increase public awareness of the harmful effects of non-native species.

The project seeks to allocate areas of native habitats as open space amenities. The specifics of layout and acreages are not yet established.

Strategy OS 1.4.3 - Endangered or Threatened Species

The City shall protect threatened or endangered native species by requiring that proposed new development and redevelopment (where applicable) be examined for location of Listed

The project will apply all scientifically appropriate, and agency accepted mythologies to perform necessary sampling methodologies to assess presence and critical habitat of listed species. If any listed species or critical habitat is identified all appropriate permitting and mitigation measures as established by oversight agencies will be implemented.

Strategy OS 1.4.4 - Non-Native Invasive Species

The City should prevent the spread of non-native invasive vegetation, wildlife, insects, and other species and protect the health and well-being of the native environment

The Project will remove and work for the control of all FLEPPC identified plant species and FWC listed wildlife species, as required by SWFWMD, Sarasota County, or the City of Venice. Where controls involve the use of controlled substances, E Co staff licensed for the application and use of controlled substances will perform the necessary work.

Strategy OS 1.4.5 – Floodplain and Flood prone areas

The City will not issue any development order which would permit unmitigated development in 100 year floodplains, as designated on Federal Emergency Management Agency Flood Insurance Rate Maps or adopted County flood studies, or on floodplain associated soils, defined as Soils of Coastal Islands, Soils of the Hammocks, Soils of Depressions and Sloughs, and Soils of the Floodplains that would adversely affect the function of the floodplains or that would degrade the water quality of water bodies associated with said floodplains in violation of any local, State, or federal regulation, including water quality regulations.

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The project will have all buildings approximately located as to meet FEMA guidelines and standards. Areas of raised elevations for flood protection will be balanced with appropriate detention areas sized as to meet onsite storage capacities, as well as address water quality standards, including any location relevant water quality standards established such as Total Maximum Daily Loads (TMDL) or Site Specific Alternative Criteria (SSAC).

Intent OS 1.5 - Unique Habitats

The Site has no unique habitats.

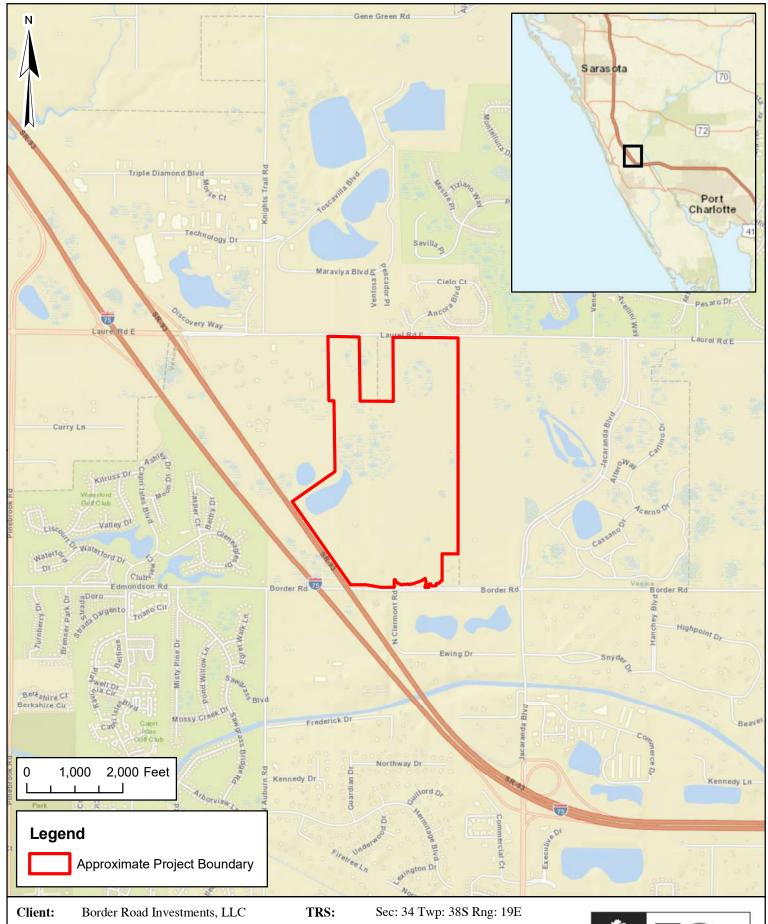
4.0 SUMMARY

The Site is composed of a matrix of upland forest and pasture surrounding a matrix of ponds and freshwater marsh. The Site has been in agricultural use for hay or cattle pastures for more than fifty years. The site has a limited crossing of primitive roads and contains a ± 9.75 -acre communications complex of radio towers and attached cell phone microwave transceivers. Patterns of mature trees reflect historic patches or growth along fence rows or primitive roads. The freshwater marshes onsite are degraded with a limited composition of native vegetation and include the highly invasive torpedo grass.

5.0 NEXT PLANNED ACTIONS

As planning and design continue more detailed planned impacts and appropriate environmental assessment updates will be provided to the City of Venice, along with other oversight agencies. The specifics of designs will determine if any wetland impact will take place as well the extent of such impacts. Given the history of land management of the site and the current conditions, final determinations of the finishing development team, the Site could have a dramatic improvement in net wetland functions and conditions as compared to current conditions. Wetland and wildlife permitting will be handled through appropriate agencies at the State and Federal levels. Any necessary tree protections and permitting will be addressed with Sarasota County.

Maps



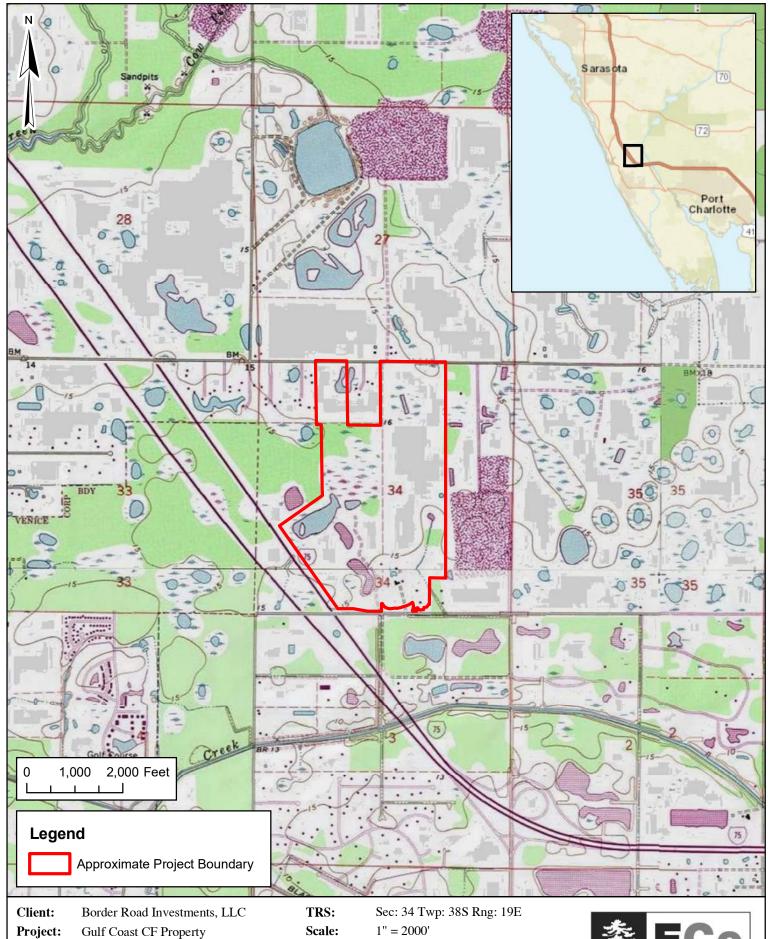
Project:Gulf Coast CF PropertyScale:1" = 2000'Location:Sarasota County, FloridaDate:11/8/2018

D:\1 Sarasota\Neal Communities of Southwest Florida\Gulf Coast Community\GIS\GulfCoast_Location_110218.mxd

Title: Location Map

Sheet: 1 Source: ESRI World Street Map

Drawn By: KS



Title: USGS Quad Map Sheet: 1

Sarasota County, Florida

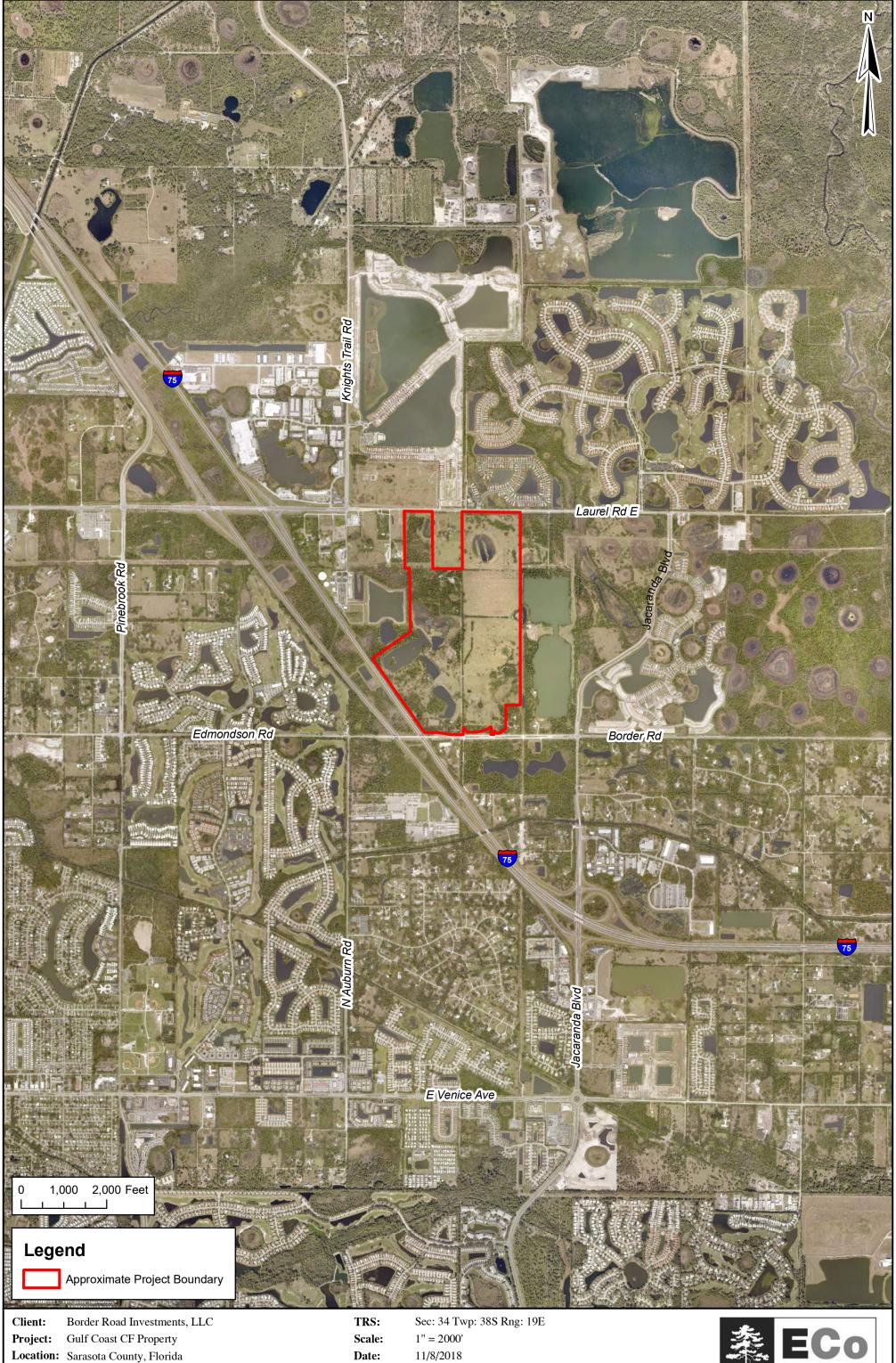
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Scale: 1'' = 2000''Date: 11/8/2018

Drawn By: KS

Source: USGS Topo & World Street Map





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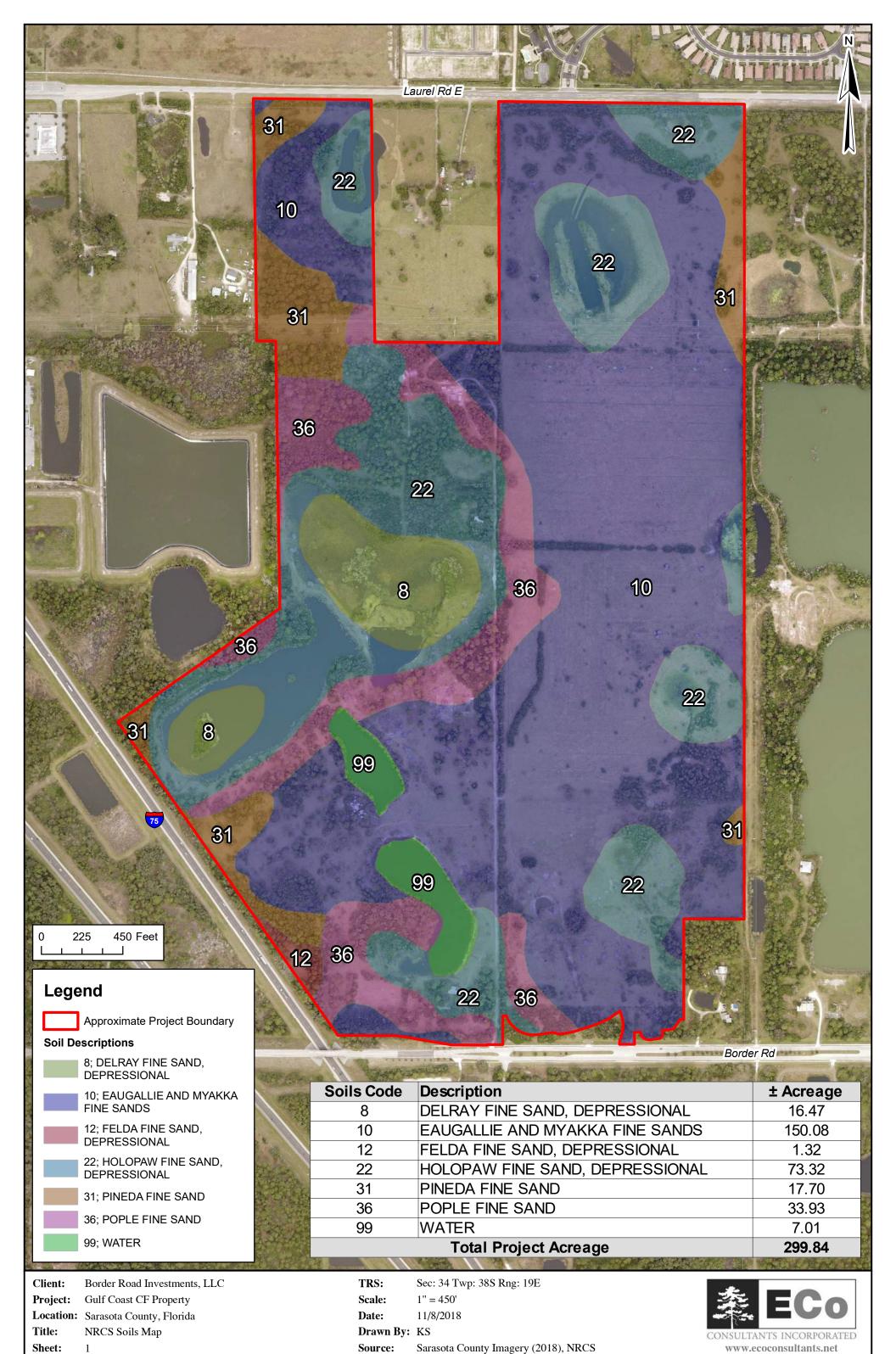
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Regional Aerial Map (2018)

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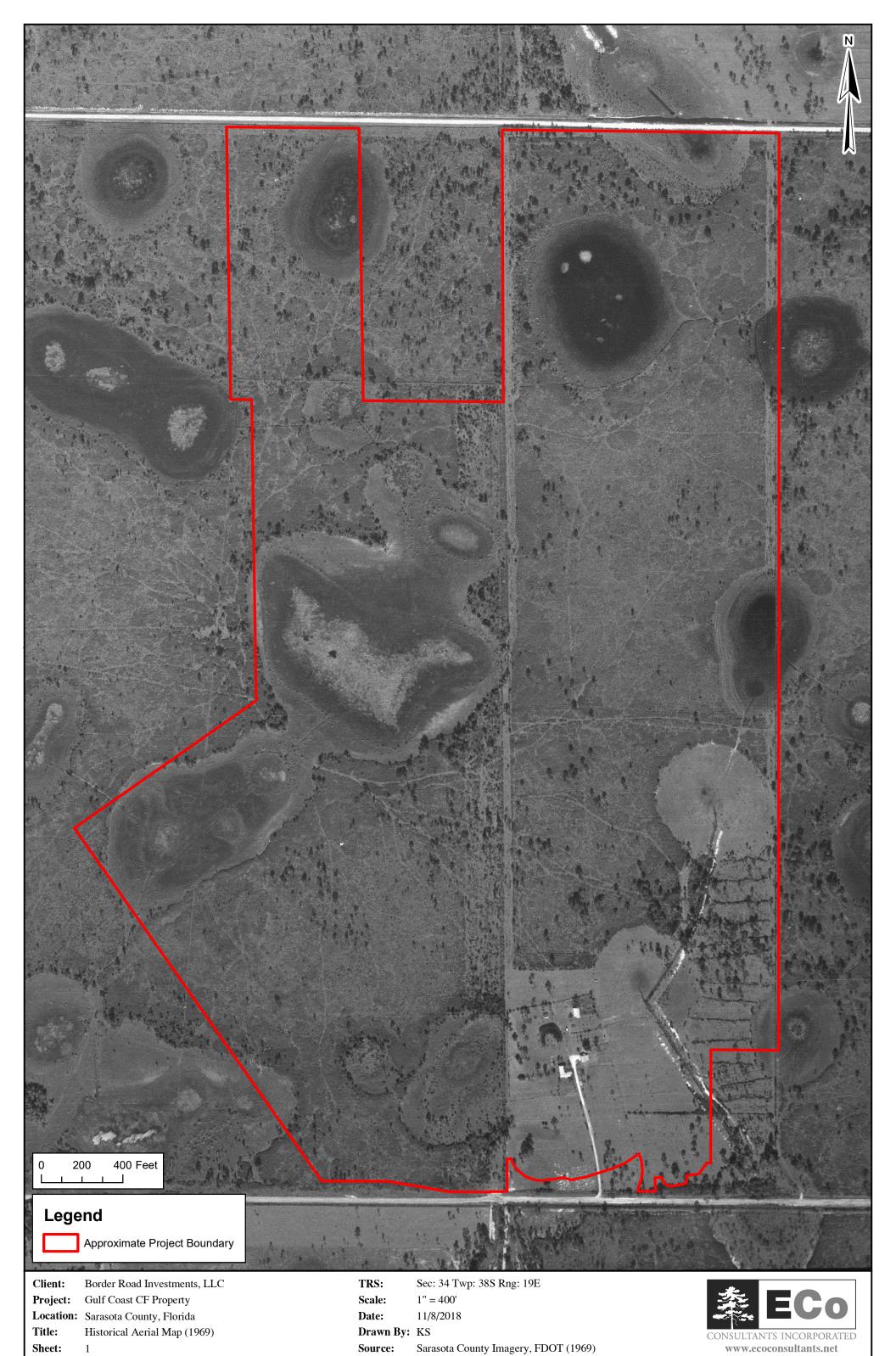


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