Kanter Real Estate, LLC Joint Application for Individual Environmental Resource Permit 3rd RAI Response

Submitted to: Florida Department of Environmental Protection

Prepared by:
The Carol Group, Inc.

THE CAROL GROUP
Professional Engineers and Surveyors

Century Oil, Inc. (Pollister)

Clementi Environmental Consulting, LLC

CLEMENTI ENVIRONMENTAL CONSULTING, LLC

For: Kanter Real Estate, LLC

2601 South Bayshore Drive, Suite 1450

Miami, Florida 33133

August 17, 2016

1. **The proposed mitigation plan describes a real property conveyance of other Kanter-owned lands within Water Conservation Area (WCA) 3A South. Although the information does not indicate to whom this property will be conveyed, staff is aware that the applicant proposes to convey the 186 acres of private lands to the SFWMD. As discussed with Carol Howard, these lands are part of the Florida Fish and Wildlife Conservation Commission's Everglades Wildlife Management Area and, among other management activities, are currently managed for invasive exotic vegetation. As part of this management area, active and passive recreational activities (e.g. hunting, airboating, camping, wildlife observation, etc) are authorized. Additionally, the area is also managed for some exotic vegetation by the SFWMD. Furthermore, the area is designated as "Conservation Use" in Broward County Land Use maps. Because of these described activities and designation, staff is unable to assess a development threat or calculate a functional lift for these lands as they are already protected and managed. As such, the proposed mitigation is not appropriate to offset the proposed adverse impacts associated with the project.**

   Staff acknowledges that you are exploring other mitigation options as a result of discussions with Ms. Howard. Please submit an appropriate mitigation plan that adequately offsets the proposed adverse impacts. If mitigation credits will be proposed, then please contact Monica Sovacool to verify the number of credits and submit a letter of reservation from an appropriate mitigation bank verifying that the sufficient amount of credits have been reserved.

   [62-330.301 & 62-330.302, F.A.C.; 10.2.8; 10.3 A.H. Volume I]

The applicant proposes two options for mitigation. Within one month of construction, the applicant will either purchase credits within the Hole in the Donut Mitigation Bank or, if state credits are not available at that time, execute a conservation easement to the Florida Department of Environmental Protection for parcel described in the attached proposal for mitigation by donation. Kanter's donation proposal, preservation adjustment factor analysis, and UMAM Worksheet Parts I and II for preservation are included as **Attachment 1**.

2. **The submitted information describes the use of four native grasses to stabilize the berm around the project area. In order provide assurance the vegetation is appropriate to stabilize the berm, please provide details for the planting plan, including location and number of plants per species and planting densities. A separate exhibit/drawing may be submitted or the submitted plans may be revised to show the plantings.**

   [62-330.301 & 62-330.302, F.A.C]

Please see **Attachment 2** for a drawing of the planting plan with the requested details.

3. **Please explain the specific water velocities generated by the calculated discharge and how these velocities compare with critical shear stress thresholds that entrain canal and marsh sediments.**

   [5.1 A.H. Vol II]

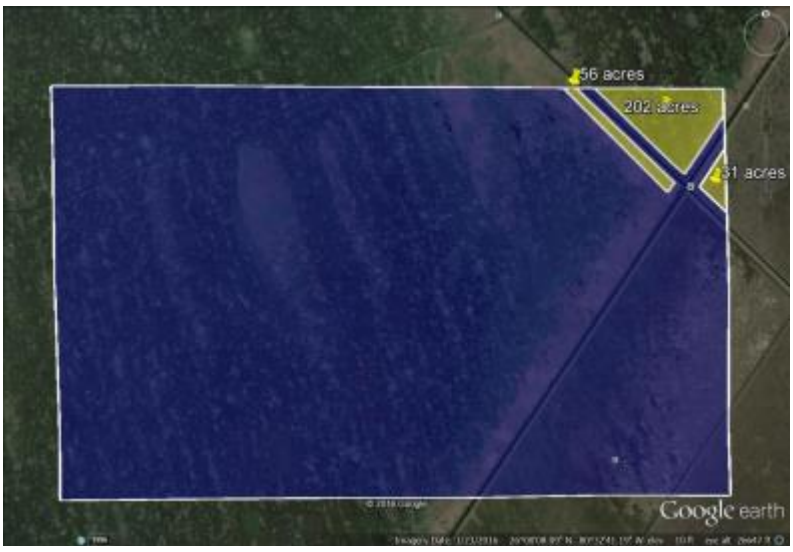
Please see the previously submitted Rip Rap Apron Design, included as **Attachment 3**. The applicant does not expect any sediment transport as the rip-rap apron has been designed to armor or reinforce the calculated scour hole due to the modeled discharge. Past the scour hole, the discharge will go into a large basin which will slow the velocity significantly. Using the flow rate and adjusted normal depth from these calculations yields a velocity of 6.0 ft/s. This would be the velocity going into the rip-rap apron which has been designed with a large enough pool to accommodate and stop any scour from occurring. Past this point no scour or sediment transport is expected.

Attachment 1: Preservation Mitigation Proposal

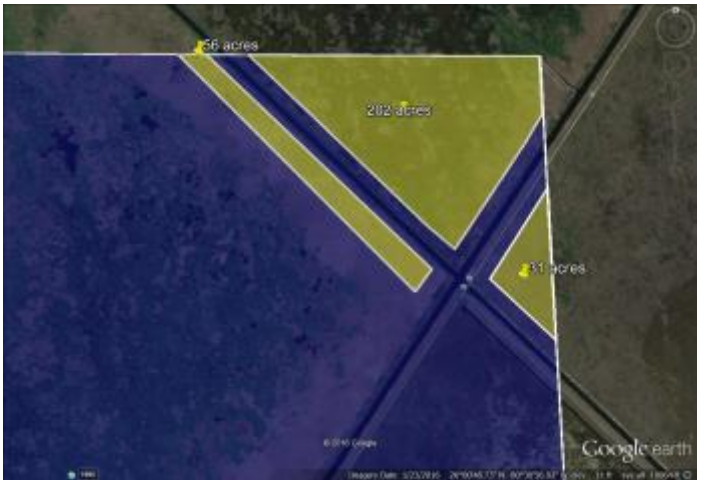
CLEMENTI ENVIRONMENTAL CONSULTING, LLC

Kanter Well Application Number 1366
FDEP ERP Application Number 06-0336409-001
Preservation as Compensation for Wetland Impacts

The property owner owns 9,000 acres of land in the area called Kanter South (See Attached Aerial). The owner has all mineral, gas and oil rights on this property. The owner has a legal document that describes the access that the District is obligated to provide. The property is designated in the Future Broward County Land Use Plan Map as "Conservation Use" and "Reserve Water Supply Areas". The following uses are permitted under this designation: fire towers, telecommunication facilities, active outdoor recreation uses such as hunting, fishing, boating, air boating and off road vehicles; camping facilities, boat ramps and docks; passive outdoor recreation such as wildlife sanctuaries and feeding stations, nature centers and trails, outdoor research stations and walkways. The owner has plans to create income from this property. There is ready access from Everglades Holiday Park for implementation of several recreational activities for profit. One such use could be airboat races or rallies. We completed the UMAM form to determine the amount of preservation that would be adequate to offset the 5.83 acres of impact. There is a benefit to preserving some of this property. We have chosen 289 acres of the property that it the northeastern portion of the property along the Miami Canal. The preservation provides a 50:1 ratio of compensation.



620 EAST TWIGGS STREET · SUITE 200 · TAMPA, FL 33602 · 813-227-8901 · WWW.CLEMENTI-EC.COM



289 acres

Attached are the UMAM forms for the preservation and our justification for our preservation adjustment factor. We do not intend to manage the property and therefore have diminished the preservation factor to reflect this. It is our intent that the state and federal agencies will maintain this area with their surrounding maintenance programs. However we have taken no credit for the management of the property. The applicant will have a legal description prepared for this area before the permit is issued.

The preservation adjustment factor shall be scored on a scale from 0 (no preservation value) to 1 (optimal preservation value), on one-tenth increments. The score shall be assigned based on the applicability and relative significance of the following considerations:

1. The extent to which proposed management activities within the preserve area promote natural ecological conditions such as fire patterns or the exclusion of invasive exotic species. We are not proposing to manage the preservation area-0 Ideally it would be managed by the FWS or SFWMD

2. The ecological and hydrological relationship between wetlands, other surface waters, and uplands to be preserved. Hydrolically contiguous with thousands of acres of District lands.-0.2

3. The scarcity of the habitat provided by the proposed preservation area and the degree to which listed species use the area. Not scarse in the area-0

4. The proximity of the area to be preserved to areas of national, state, or regional ecological significance, such as national or state parks, Outstanding Florida Waters, and other regionally significant ecological resources or habitats, such as lands acquired or to be acquired through governmental or non-profit land acquisition programs for environmental conservation, and whether the areas to be preserved include corridors between these habitats. Within the Everglades land holdings of the District and COE-.2

5. The extent and likelihood of potential adverse impacts if the assessment area were not preserved. If the area is not preserved the owner continues to have the rights to all minerals and oil under the property and could operate airboat and swamp buggy tournaments, allow various recreational activities including camping- 0

(b) The preservation adjustment factor is multiplied by the mitigation delta assigned to the preservation proposal to yield an adjusted mitigation delta for preservation.

0.4 adjustment factor

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Kanter Sunniland 23-2		WCA 3-Kanter South

FLUCCs code	Further classification (optional)	Mitigation	Assessment Area Size
641 - Freshwater Marsh		Preservation Area	289 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
WCA 3	Class III	OFW

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Everglades habitat on the east and west side of the Miami Canal.

Assessment area description

Wetland is a freshwater marsh dominated by Jamaica Sawgrass (*Cladium mariscus jamaicense*).

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Miami Canal	Historic Everglades (same as surrounding landscape)

Functions	Mitigation for previous permit/other historic use
Water quality improvements, sheet flow, wildlife habitat, carbon dioxide sequestration	No previous permit or mitigation requirements

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Florida Panther, Everglade Snail Kite, Cape Sable Seaside Sparrow, West Indian Manatee, Wood Stork, Eastern Indigo Snake, Everglades Mink, Southeastern Kestrel, Florida Sandhill Crane, Florida Black Bear, White Ibis, Snowy Egret, Little Blue Heron, Tricolored Heron, Limpkin, Roseate Spoonbill	Florida Panther (E), Everglade Snail Kite (E), Cape Sable Seaside Sparrow (E), West Indian Manatee (E), Wood Stork (E), Eastern Indigo Snake (T), Everglades Mink (T), Southeastern Kestrel (T), Florida Sandhill Crane (T), Florida Black Bear (T), White Ibis (SSC), Snowy Egret (SSC), Little Blue Heron (SSC), Tricolored Heron (SSC), Limpkin (SSC), Roseate Spoonbill (SSC). Non-intense use.

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Numerous wildlife studies of the area have been completed by others

Additional relevant factors:
The property owner owns 9,000 acres of land in the area called Kanter North. The land is not encumbered by a conservation easement. The owner has all mineral, gas and oil rights on this property. The property is designated in the Future Broward County Land Use Plan Map as "Conservation Use" and "Reserve Water Supply Areas". The following uses are permitted under this designation: fire towers, telecommunication facilities, active outdoor recreation uses such as hunting, fishing, boating, air boating and off road vehicles; camping facilities, boat ramps and docks; passive outdoor recreation such as wildlife sanctuaries and feeding stations, nature centers and trails, outdoor research stations and walkways. The owner has plans to create income from this property. There is ready access from the boat ramp on I-75 for implementation of several recreational activities for profit.

Assessment conducted by:	Assessment date(s):
The Carol Group, Inc.	Apr-16

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Kanter Sunniland 23-2		WCA 3 Kanter South
Preservation	**Assessment conducted by:**	**Assessment date:**
freshwater marsh on Kanter North	The Carol Group, Inc. and Rosanne Clementi	Apr-16

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Adjacent wildlife habitats outside the assessment area are the WCAs. These natural areas provide support for expected listed species. The wetland area is adjacent to the Miami Canal and levee that has introduced invasive species. The area is accessible by airboat and jon boat.	6	6
.500(6)(b)Water Environment (n/a for uplands)	Aquatic environment is appropriate for the freshwater marsh. Assessment area hydroperiod appropriate and minimally impacted by levees or ditches. Water inputs from groundwater rainfall. Water quality appears to berelatively unimpacted by surrounding land use.	7	7
.500(6)(c)Community structure	Removing airboat, camping and swamp buggy traffic will help the vegetation and sediment recover from these activities.	6	7

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.63333	0.66667

Delta = [with-current]
0.03333

If preservation as mitigation,
Preservation adjustment factor = 0.6
Adjusted mitigation delta =

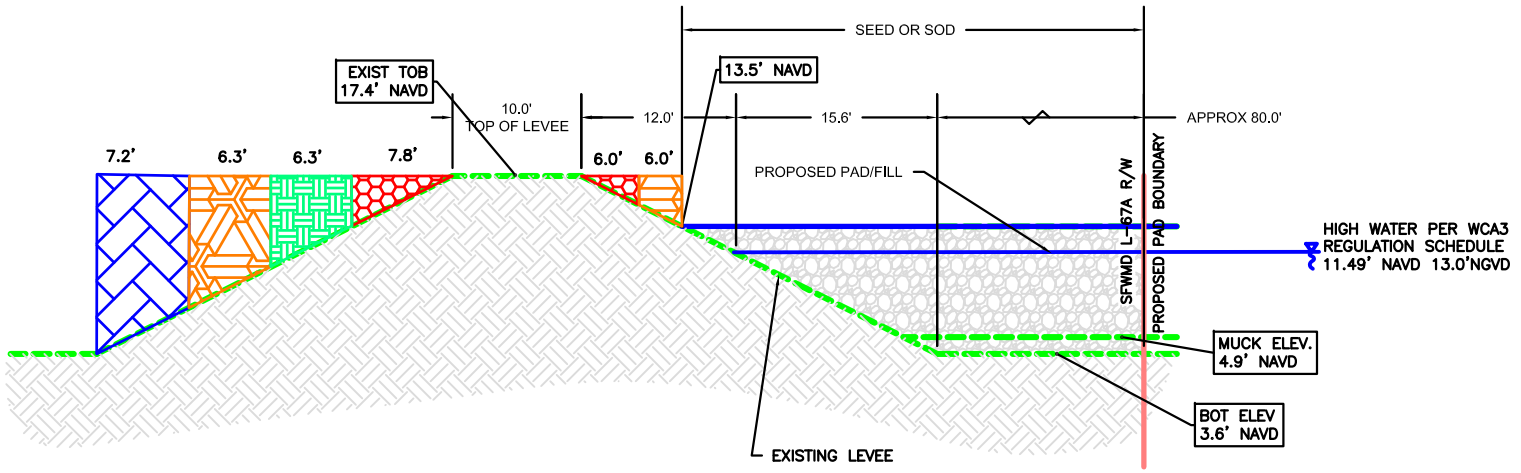
If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = 0.633 x 5.83=3.69

For mitigation assessment areas
RFG = delta*(pres adj factor) =0.033*.4=0.0132

279.5455 acres preservation factor 0.4

Attachment 2: Planting Plan



1 TYPICAL SECTION AT LEVEE SFWMD L-67A R/W

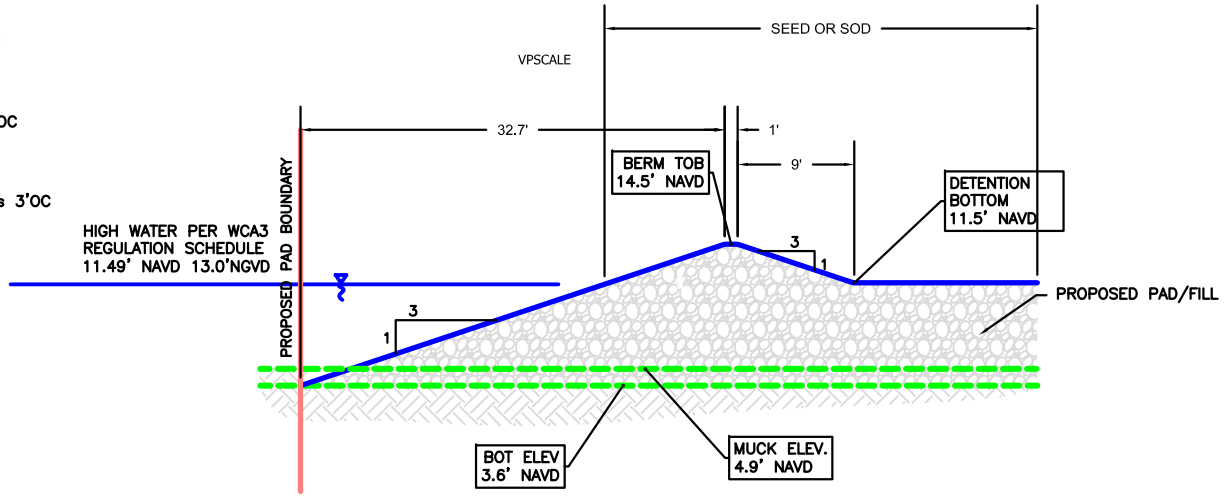
Scale: 1:10

1913 Bare root Spartina bakeri 3' OC

1120 Bareroot Cladium jamaicense 3'OC

2147 Bareroot Muhlenbergia capillaris 3'OC

980 Bareroot Erogrostis elliottii 3'OC



2 TYPICAL SECTION AT PAD BOUNDARY

Scale: 1:10

JOSEPH R. BARBER
FL CERT 73111

REVISIONS

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TYPICAL SECTIONS

KANTER 23-2

Broward County, Florida

TCG PROJECT: KA2014.03

CHECKED BY: WRH | DESIGNED BY: JRB

DATE: 01/26/2016

SHEET C-2.04

Attachment 3: Rip-Rap Apron Design

Kanter 23-2

12” Discharge Pipe Rip Rap Apron Design

Per FHWA publication FHWA-NHI-06-086

Known:

Q = 4.23.ft ^{3}/s modeled discharge

D = 1.0 ft

T = 0.4 D Tailwater <0.4D so use 0.4D

Y_n = 0.4 ft normal pipe depth see chart > supercritical flow

Compute Adjusted D for supercritical flow

Eq 10.5 $D' = \frac{D+Yn}{2} = \frac{1+0.4}{2} = 0.7'$

Compute minimum D_{50} Rip Rap size

Eq 10.4 $D_{50} = 0.2D' \left(\frac{Q}{\sqrt{g}D'^{2.5}}\right)^{4/3} \left(\frac{D}{TW}\right)$

$D_{50} = 0.2(0.7) \left(\frac{4.23}{\sqrt{32.2}(0.7)^{2.5}}\right)^{4/3} \left(\frac{0.7}{0.28}\right)$

D_{50} = 0.78 ft = 9.3 inches

Estimate Apron Dimensions

From Table 10.1

Class 3 Rip Rap D_{50} = 10 inches - width at end = 3D + 2/3L

- Apron Length = 5D

- Apron Depth = 2.4 D_{50}

Apron Length = 5(1) = 5 ft

Apron Depth = 2.4(10) = 24 inches = 2 ft

Width at apron end = 3(1) + 2/3(5) = 6.3 ft