# BELLEAIR COUNTRY CLUB WEST GOLF COURSE IMPROVEMENTS

# DRAINAGE REPORT

January 2020

# Prepared for:



# Belleair Country Club Belleair, Florida

# Prepared by:



1000 N. Ashley Drive, Suite 500, Tampa, Florida 33602 Phone: 813.228.0900 | | www.appliedfl.com

Community Based. Regionally Skilled.

# **TABLE OF CONTENTS**

- 1.0 Overview
- 2.0 Existing Conditions
- 3.0 Proposed Conditions
- 4.0 Summary Tables

# LIST OF APPENDICES

- Figure 1 Aerial Map
- Figure 2 USGS Quadrangle Map
- Figure 3 NRCS Soils Map
- Figure 4 FEMA FIRM Map
- Figure 5 Historical 1984 Aerial
- Figure 5A Historical 1974 SWFWMD Aerial
- Figure 6 Unfertilized Areas Map
- Figure 7 Existing Basin Map
- Figure 8 Proposed Basin Map
- A. Pre vs Post Basin Calculations
- B. SWFWMD Pre-Application Meeting Notes

Matthew Goolsby State of Florida, Professional Engineer, License No. 79321. This Item Has Been Electronically Signed And Sealed By Matthew Goolsby P.E. On January 20, 2020 Using A SHA-1 Authorization Code. Printed Copies Of This Document Are Not Considered Signed And Sealed And The SHA-1 Authorization Code Must Be Verified On The Electronic Copies.



#### 1.0 OVERVIEW

The Belleair Country Club West Golf Course project is a private golf course redesign that incorporates sustainable golf course practices such as xeriscaping, as well as the restoration of some portions of the course to match original existing conditions. The Golf courses on the site were originally designed and constructed prior to 1900. This project is located within Sections 20, 21, 28 and 29 of Township 29 South, Range 15 East of Pinellas County, Florida, bounded by Bayview Drive on the south and Indian Rocks Road on the east. This project consists of regrading and replanting of tees, greens, fairways and roughs, as well as changes to existing irrigation ponds and installation of a riverine system.

#### 2.0 EXISTING CONDITIONS

The project site drains to Clearwater Harbor (aka the Intracoastal Waterway, aka St. Joseph Sound) by three methods: direct runoff to the harbor, runoff into a tidal inlet from the harbor, and runoff into Rattlesnake Creek (aka Belleair Creek) to the north. After flowing through the project site, Rattlesnake Creek then discharges into a small reservoir called Harold's Lake, which then discharges directly into the harbor. Clearwater Harbor is designated as an Outstanding Florida Water (OFW).

The project site is not currently represented within a County-approved Watershed Model, or any other model to our knowledge at this time. The boundary of the McKay Creek Watershed Model is just to the south of the project site, and the boundary of the Stevensons Creek Watershed Model is just to the east of the project site.

In addition to the tidal inlet and Rattlesnake Creek drainage systems, there are four existing ponds on the project site, which are shown in the Existing Basin Map (Figure 7). None of these ponds are designed or permitted for treatment or attenuation, and they were constructed in the early 1990s for use in irrigation and as aesthetic water features for the golf course. A modification to Pond 4 was permitted and constructed in 2006 as part of the East Course Improvements (ERP No. 19267.001), but the permitting was concerned with maintaining wetland habitat, while not requiring any treatment or attenuation volume as no such calculations were included with the permit package. Out of the proposed ponds being modified, only Pond 2 has a discharge structure, with the initial discharge beginning right at the normal water level and out to the tidal inlet. Therefore, this pond does not provide water quality storage during rainfall events. The other ponds discharge by equalization with natural groundwater, and have minimal freeboard (6-12 inches) between the normal water level and the top of bank, verified by Aerials, LiDAR, and discussion with maintenance staff. These ponds are generally 4-7 feet deep and do not have significant vegetated areas to aid in nutrient uptake, assimilation, or habitat support. Current irrigation is mainly provided by reclaimed water



utilities from the County, and therefore the ponds function primarily as course water features.

Per discussion with SWFWMD personnel, the existing condition to be used as a comparison of onsite treatment storage capacity will be the site as it was in 1984, which is before the existing ponds were built and before major renovations were made to the course in the early 1990s. The attached Figure 5 shows an aerial of the site from 1984. At this date, there were two ponds on the site that totaled approximately 1.25 acres in area. It is uncertain exactly when these ponds were constructed, but it is estimated around 1980 for the pond near the location of existing Pond 2, and 1974 for the other pond near the site of existing Pond 4. These ponds functioned much as the current existing ponds, in that they were used only for irrigation and aesthetic features, and had approximately 6-12 inches of freeboard between normal water level and top of bank. For comparison, Figure 5A shows a SWFWMD Aerial map from 1974 that includes the pond to the north but does not include the pond in the south. Additionally, the 1974 SWFWMD aerial contours appears to show the tidal inlet extending farther south into the site, whereas the 1984 aerial showg some of this area graded to match the rest of the course. This would suggest that a part of the purpose of this pond may have been to provide fill for regrading of the lower-lying area adjacent to this pond.

The NRCS Soils Map, attached as Figure 3, shows that the soil types on the site are predominately Myakka (Type A/D), Immokalee (Type A/D) and Tavares (Type A), with less than 5% EauGallie (Type A/D), Matlacha (Type B), and St. Augustine (Type B) soils present. It is likely that these soil types differ slightly from actual conditions since extensive grading changes and turf enhancements were introduced with the golf course. The groundwater levels in the project site are approximately 1-5 feet below existing ground (based on existing pond levels), and the existing soils are generally well-drained.

Currently, all green areas on the site are irrigated and fertilized regularly. The only areas without fertilization are impervious surfaces and areas that are heavily wooded or brushed, including the wetland area surrounding the tidal inlet. Figure 6 shows the boundaries of areas assumed to be unfertilized, and Figure 7 shows the existing water bodies.

The site is located within FDEP WBID 1614, which is verified as impaired for Fecal Coliform, and WBID 1528, which is not impaired. Since neither WBID is impaired for nutrients, then net benefit water quality improvements will not need to be demonstrated.

Per guidance from SWFWMD personnel, runoff from the site will be required to contain equal or less nutrients than the current (2019) condition. The primary sources of nutrients within the project site are in runoff from areas that are fertilized and irrigated regularly, and in runoff from impervious areas such as golf carts. This runoff leaves the site

Belleair Country Club 2

through three pathways, but all of these pathways lead to Clearwater Harbor. Therefore, a demonstration that the total area of fertilized areas and impervious areas draining into Clearwater Harbor will be kept the same or decreased will be required.

#### 3.0 PROPOSED CONDITIONS

The proposed conditions includes a complete regrading of the site, which relocates the tees, greens and fairways for the 18-hole course into a different configuration. As part of this regrading, three of the existing ponds will be removed, and the fourth pond will be decreased in size. Added to the site will be a riverine system that will connect to the existing tidal inlet, and extensive xeriscaped areas that will reduce the need for irrigation and fertilizer on the site. Per guidance from SWFWMD personnel, since there are no existing ponds within the project site that have been permitted for treatment or attenuation volume, then no pond volumes need to be conserved for this use in the proposed condition. Figure 8 shows the proposed basin map for the site.

Table 1 in the Summary Tables shows a comparison of fertilized and impervious areas between the existing (2019) and proposed conditions. As shown in the table, the impervious area increases by 0.51 acres, and the fertilized area decreases by 17.26 acres. This change in characteristics results in a net positive for water quality benefits to the Clearwater Harbor.

Even though Table 1 shows a decrease in water from an existing (2019) area of 5.47 acres to a proposed area of 2.02 acres, the proposed area is still greater than the approximately 1.25 acres of water area that existed in 1984. Therefore, the proposed condition will decrease the amount of fertilized area by 20% from the 2019 existing condition, and will increase by 60% the amount of water body area from the 1984 existing condition.

Per guidance from SWFWMD personnel, only the discharge into Rattlesnake Creek has been calculated, as runoff from the remainder of the site discharges into Clearwater Harbor, which is a tidal system and whose water levels are independent of runoff from the site.

Table 2 in the Summary Tables shows a comparison of the calculated existing and proposed peak runoff discharge for the 25-Year storm event into Rattlesnake Creek. As seen in the table, the peak discharge in the proposed condition is reduced, along with the total basin acreage and the runoff coefficient.



Belleair Country Club 3

### **4.0 SUMMARY TABLES**

TABLE 1 - Comparisons of changes in runoff volume, composition and storage

	Golf Course Basin Area (ac)	Unfertilized Areas (ac)	Waterbody Area (ac)	Impervious Areas (ac)	Fertilized Areas (ac)
Existing (1984)			1.25		
Existing (2019)	99.83	9.31	5.47	2.05	83.00
Proposed	105.45	35.13	2.02	2.56	65.74
Added (Removed)	5.62	25.82	0.97	0.51	(17.26)

TABLE 2 - Comparisons of peak runoff quantity into Rattlesnake Creek

	Basin Area (ac)	Curve Number	Runoff Coefficient	Tc (min)	Q (cfs)
Existing	21.61	38.0	0.28	20.6	39.1
Proposed	18.65	34.4	0.25	15.2	33.4

## 5.0 CONCLUSION

The result of this project is expected to have a net benefit in the water quality to the Clearwater Harbor and Rattlesnake Creek for the reasons previously provided. The substantial reduction in fertilized areas associated with the propose project results in a net benefit in water quality to the Clearwater Harbor, which is an OFW. The water quantity impacts are not required for the portion drainage to Clearwater Harbor, since it is a tidal system. The water quantity analysis for Rattlesnake Creek suggest no adverse impacts for flows or stages.



Belleair Country Club 4

FIGURE 1 – AERIAL MAP

FIGURE 2 – USGS QUADRANGLE MAP

FIGURE 3 – NRCS SOILS MAP

FIGURE 4 – FEMA FIRM MAP

FIGURE 5 – HISTORICAL 1984 AERIAL

FIGURE 5A - HISTORICAL 1974 SWFWMD AERIAL

FIGURE 6 – UNFERTILIZED AREAS MAP

FIGURE 7 – EXISTING BASIN MAP

FIGURE 8 – PROPOSED BASIN MAP



# APPENDIX A PRE VS POST BASIN CALCULATIONS

# APPENDIX B SWFWMW PRE-APPLICATION MEETING NOTES

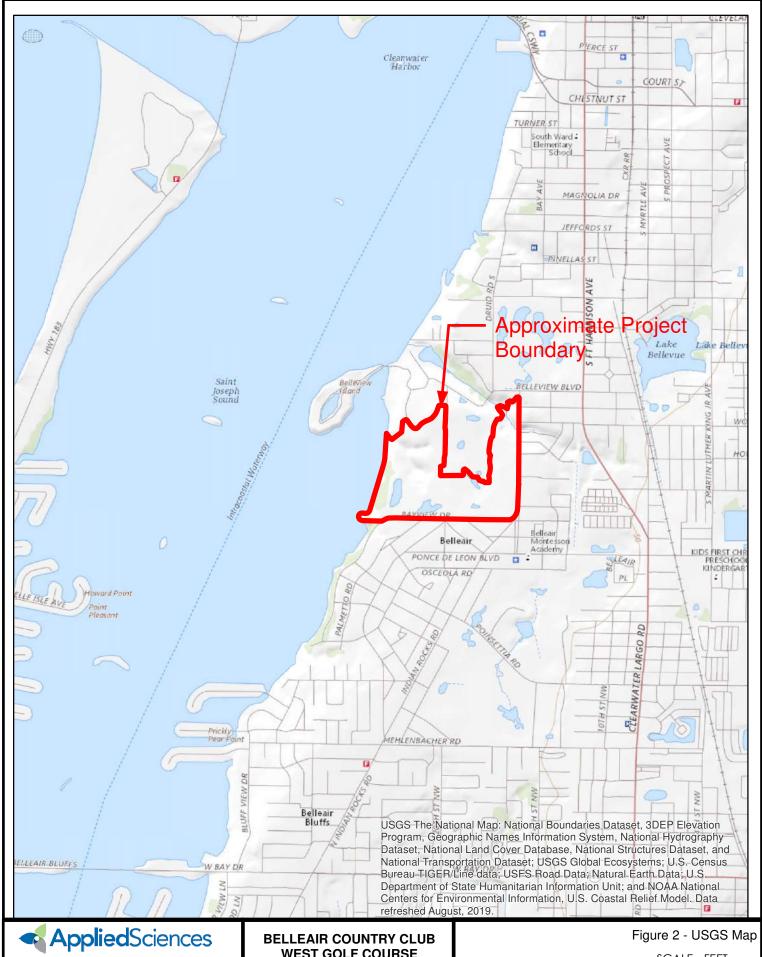


AppliedSciences

1000 N. Ashley Drive, Suite 500 Tampa, FL 33602 P: (813) 228-0900 F:(813) 434-2454 **BELLEAIR COUNTRY CLUB WEST GOLF COURSE** 

**BELLEAIR, FLORIDA** 

Map Date: 12-11-2019 Prepared By: AGM



1000 N. Ashley Drive, Suite 500 Tampa, FL 33602 P: (813) 228-0900 F:(813) 434-2454 **WEST GOLF COURSE** 

**BELLEAIR, FLORIDA** 

Map Date: 12-11-2019 Prepared By: AGM

SCALE - FEET 750 1,500



#### MAP LEGEND

# Area of Interest (AOI)

# Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Points

#### **Special Point Features**

Blowout

Borrow Pit 

36 Clay Spot

Closed Depression

Gravel Pit

**Gravelly Spot** 

Landfill ۵

Lava Flow Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot Sandy Spot

Severely Eroded Spot 0

Sinkhole

Slide or Slip

Sodic Spot

â Stony Spot

0 Very Stony Spot

Spoil Area

Wet Spot Other

Special Line Features

#### Water Features

Δ

Streams and Canals

#### Transportation

Rails ---

Interstate Highways

**US Routes** 

Major Roads

Local Roads

#### Background

Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Pinellas County, Florida Survey Area Data: Version 16, Sep 17, 2019

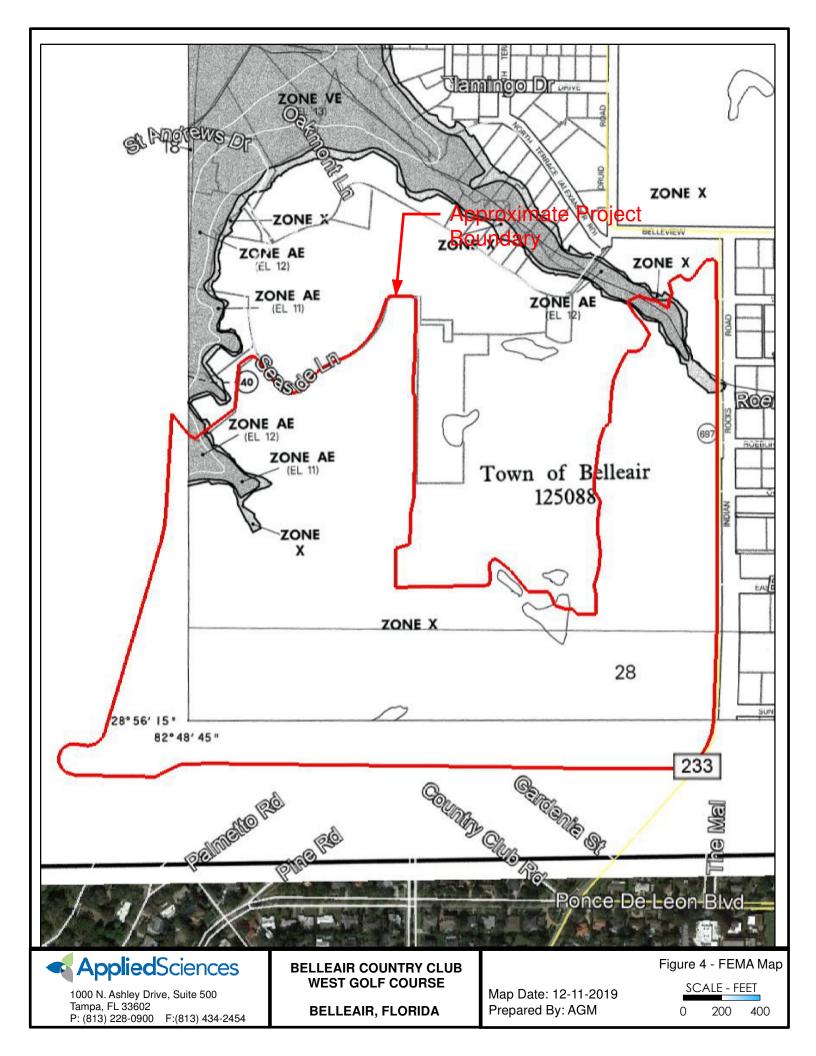
Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Dec 29, 2010—Feb 28. 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
10	EauGallie soils and Urban land	2.3	2.1%
13	Immokalee soils and Urban land	23.6	21.1%
16	Matlacha and St. Augustine soils and Urban land	1.3	1.1%
17	Myakka soils and Urban land	76.3	68.0%
29	Tavares fine sand-Urban land complex, 0 to 5 percent slopes	8.4	7.5%
100	Waters of the Gulf of Mexico	0.2	0.2%
Totals for Area of Interest		112.2	100.0%





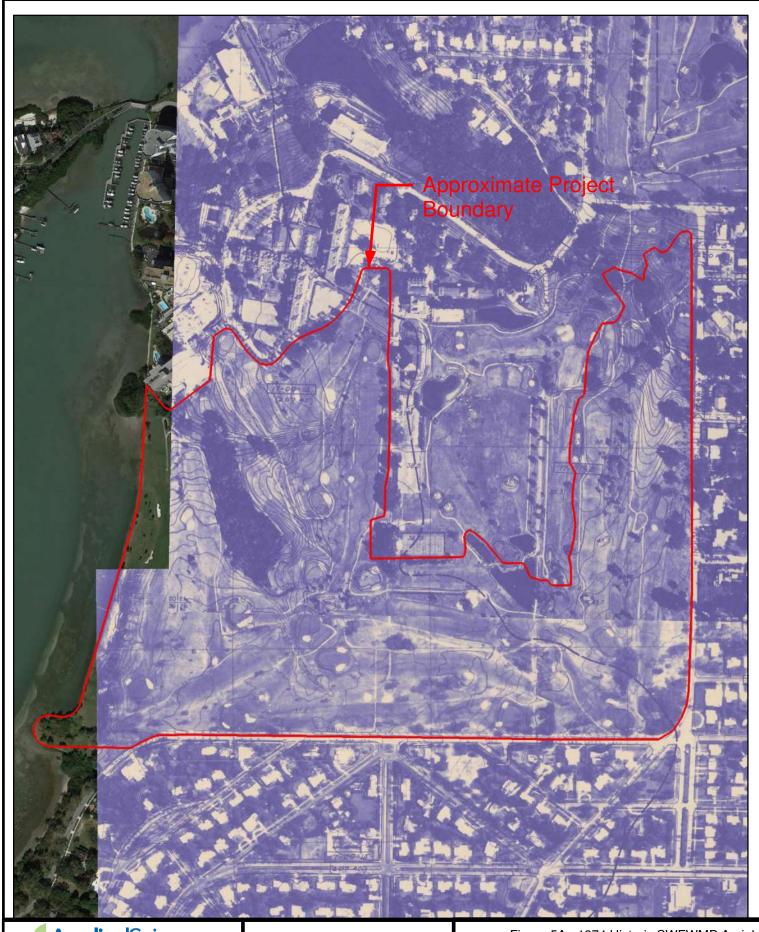
**Applied**Sciences

1000 N. Ashley Drive, Suite 500 Tampa, FL 33602 P: (813) 228-0900 F:(813) 434-2454 BELLEAIR COUNTRY CLUB WEST GOLF COURSE

BELLEAIR, FLORIDA

Figure 5 - 1984 Historic Aerial

Map Date: 12-11-2019 Prepared By: AGM SCALE - FEET 0 200 400



**▲ Applied**Sciences

1000 N. Ashley Drive, Suite 500 Tampa, FL 33602 P: (813) 228-0900 F:(813) 434-2454 BELLEAIR COUNTRY CLUB WEST GOLF COURSE

BELLEAIR, FLORIDA

Figure 5A - 1974 Historic SWFWMD Aerial

Map Date: 12-11-2019 Prepared By: AGM SCALE - FEET 0 200 400



AppliedSciences

1000 N. Ashley Drive, Suite 500 Tampa, FL 33602 P: (813) 228-0900 F:(813) 434-2454 BELLEAIR COUNTRY CLUB WEST GOLF COURSE

**BELLEAIR, FLORIDA** 

Map Date: 12-11-2019 Prepared By: AGM



1000 N. Ashley Drive, Suite 500 Tampa, FL 33602 P: (813) 228-0900 F:(813) 434-2454 BELLEAIR COUNTRY CLUB WEST GOLF COURSE

**BELLEAIR, FLORIDA** 

Map Date: 12-11-2019 Prepared By: AGM



**Applied**Sciences

1000 N. Ashley Drive, Suite 500 Tampa, FL 33602 P: (813) 228-0900 F:(813) 434-2454 BELLEAIR COUNTRY CLUB WEST GOLF COURSE

**BELLEAIR, FLORIDA** 

Map Date: 12-11-2019 Prepared By: AGM

# APPENDIX A PRE VS POST BASIN CALCULATIONS



1000 N. Ashley Drive, S1000 N. Ashley Drive, Suite 500 Tampa, Florida 33602 Tampa, Florida 33602

Computed By: AGM Checked By: MAG

Date: 12/12/2019 Job No.

Belleair Country Club Rattlesnake Creek - Existing Project: Basin: To Node:

#### Runoff Curve Number (CN) **Pre-Development**

Hydrologic Soil Group Type	Drainage Condition		Land Use Description		Cn	Area (Acres)	Product
A/D	Drained	•	Woods, Good	•	30	3.54	106.20
A/D	Drained	•	Open Space, Good	•	39	17.89	697.79
A/D	Undrained	•	Open Water	•	100	0.18	17.80
	Undrained	•	Choose a Cover Type	▼			
	Undrained	•	Choose a Cover Type	•			
	Undrained	•	Choose a Cover Type	•			
	Undrained	•	Choose a Cover Type	•			
	-				Totals	21.61	821.79

Cn (Weighted) = 38.0

#### Time of Concentration

#### Sheet Flow

Surface Description	Short Grass Prairie	
Manning's Roughness Coefficient ( n )	0.15	
Flow Length ( L )	110	ft
2yr - 24hr rainfall ( P <sub>2</sub> )	4.5	in/hr
Land Slope ( s )	0.018	ft/ft
$Tt = \frac{0.007 (n L)^{0.8}}{P_2^{0.5} s^{0.4}}$	. 9.26	min

#### **Shallow Concentrated Flow**

Surface Descript	ion	Unpaved	
Flow Length ( L )		1590	ft
Watercourse Slo	pe ( s )	0.021	ft/ft
Average Velocity	( V )	2.3420	ft/s
Tt =	L 60 V	. 11.32	min

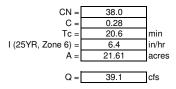
#### **Channel Flow**

Cross Sectional Flow Area ( a )	0.0	ft <sup>2</sup> ft
Hydraulic Radius ( r ) = $\frac{a}{P_W}$	0.000	ft
Channel Slope ( s )	0.000	ft/ft
Manning's Roughness Coefficient ( n )	0.000	
$V = \frac{1.49  r^{2/3}  s^{1/2}}{n}$	0.0	ft/s
n		
Flow Length ( L )	0	ft
Tt =	0.00	min

Total Tt = 20.6 min

### **Rational Method Runoff**

Per Rational Method Design Guide, Q = CIA





1000 N. Ashley Drive, S1000 N. Ashley Drive, Suite 500 Tampa, Florida 33602 Tampa, Florida 33602

Computed By: AGM Checked By: MAG

Date: 12/12/2019 Job No.

Belleair Country Club Rattlesnake Creek - Proposed Project: Basin: To Node:

#### Runoff Curve Number (CN) **Post-Development**

Hydrologic Soil Group Type	Drainage Condition		Land Use Description		Cn	Area (Acres)	Product
A/D	Drained	•	Woods, Good	•	30	10.67	320.10
A/D	Drained	•	Open Space, Good	•	39	7.80	304.28
A/D	Undrained	•	Open Water	•	100	0.18	17.80
	Undrained	•	Choose a Cover Type	•			
	Undrained	•	Choose a Cover Type	•			
	Undrained	•	Choose a Cover Type	•			
	Undrained	•	Choose a Cover Type	•			
					Totals	18.65	642.18

Cn (Weighted) = 34.4

#### Time of Concentration

#### Sheet Flow

Surface Description	Short Grass Prairie	•
Manning's Roughness Coefficient ( n )	0.15	1
Flow Length ( L )	120	ft
2yr - 24hr rainfall ( P2 )	4.5	in/hr
Land Slope ( s )	0.018	ft/ft
$Tt = \frac{0.007 (n L)^{0.8}}{P_2^{0.5} s^{0.4}}$	. 9.97	min

#### **Shallow Concentrated Flow**

Surface Description	Unpaved	
Flow Length ( L )	900	ft
Watercourse Slope ( s )	0.032	ft/ft
Average Velocity ( V )	2.8962	ft/s
Tt = L	5.18	min

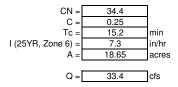
## **Channel Flow**

Cross Sectional Flow Area ( a )	0.0	ft <sup>2</sup>
Hydraulic Radius ( r ) = a Pw	0.000	ft
Manning's Roughness Coefficient ( n )	0.000	ft/ft
$V = \frac{1.49  r^{2/3}  s^{1/2}}{n}$	0.0	ft/s
Flow Length ( L )	0	ft
Tt = L 60 V	0.00	min

Total Tt = 15.2

# **Rational Method Runoff**

Per Rational Method Design Guide, Q = CIA



# APPENDIX B SWFWMW PRE-APPLICATION MEETING NOTES

THIS FORM IS INTENDED TO FACILITATE AND GUIDE THE DIALOGUE DURING A PRE-APPLICATION MEETING BY PROVIDING A PARTIAL "PROMPT LIST" OF DISCUSSION SUBJECTS. IT IS NOT A LIST OF REQUIREMENTS FOR SUBMITTAL BY THE APPLICANT.



# SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT RESOURCE REGULATION DIVISION PRE-APPLICATION MEETING NOTES

FILE NUMBER:

PA 407115

Date:	09/26/2019							
Time:	11:00	11:00						
Project Name:	Belleair Country Club							
District Engineer:	Buddy Wood	Buddy Wood						
District ES:	Joe Andress	Joe Andress						
Attendees:			Phil Locke, Tracey Webb (McKim der (Belleair Country Club), Owen					
County:	Pinellas	Sec/Twp/Rge:	21/29/15					
Total Land Acreage:	120 acres	Project Acreage:	acres					

# **Prior On-Site/Off-Site Permit Activity:**

• ERP 19267.000-.009 (Belleair Country Club)

### **Project Overview:**

Re-design of the West Course, within an existing golf course.

**Environmental Discussion:** (Wetlands On-Site, Wetlands on Adjacent Properties, Delineation, T&E species, Easements, Drawdown Issues, Setbacks, Justification, Elimination/Reduction, Permanent/Temporary Impacts, Secondary and Cumulative Impacts, Mitigation Options, SHWL, Upland Habitats, Site Visit, etc.)

- Provide the limits of jurisdictional wetlands and surface waters. Roadside ditches or other water conveyances, including permitted and constructed water conveyance features, can be claimed as surface waters per Chapter 62-340 F.A.C. if they do not meet the definition of a swale as stated under Rule 403.803 (14) F.S
- Provide appropriate mitigation using UMAM for impacts, if applicable.
- If the wetland mitigation is appropriate and the applicant is proposing to utilize mitigation bank credit as
  wetland mitigation, the following applies: Provide letter or credit availability or, if applicable, a letter of
  reservation from the wetland mitigation bank. The wetland mitigation bank service area and current ledgers
  can be found out the following link: <a href="https://www.swfwmd.state.fl.us/business/epermitting/environmental-resource-permit">https://www.swfwmd.state.fl.us/business/epermitting/environmental-resource-permit</a>, Goto "ERP Mitigation Bank Wetland Credit Ledgers"
- Demonstrate elimination and reduction of wetland impacts.
- Maintain minimum 15 foot, average 25 foot wetland conservation area setback or address secondary impacts.
- As of October 1, 2017, the District will no longer send a copy of an application that does not qualify for a
  State Programmatic General Permit (SPGP) to the U.S. Army Corps of Engineers. If a project does not
  qualify for a SPGP, you will need to apply separately to the Corps using the appropriate federal application
  form for activities under federal jurisdiction. Please see the Corps' Jacksonville District Regulatory Division
  Sourcebook for more information about federal permitting. Please call your local Corps office if you have
  questions about federal permitting. Link: <a href="http://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/">http://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/</a>

Site Information Discussion: (SHW Levels, Floodplain, Tailwater Conditions, Adjacent Off-Site Contributing Sources, Receiving Waterbody, etc.)

- Existing golf course.
- Watersheds- Rattlesnake Creek (WBID 1614)- does not appear to be impaired for nutrients, Clearwater Harbor South (WBID 1528)- does not appear to be impaired for nutrients.
- WBIDs need to be independently verified by the consultant
- Document/justify SHWE's at pond locations, wetlands, and OSWs.
- Determine normal pool elevations of wetlands.
- Determine 'pop-off' locations and elevations of wetlands.
- Provide documentation to support tailwater conditions for quality and quantity design
- Contamination issues need to be resolved with the FDEP. Check FDEP MapDirect layer for possible contamination points within/adjacent to the project area. FDEP Map Direct Contaminated Site Locator

- Underground petroleum storage tank FDEP Facility ID Nos. **8630963** located within or adjacent to site. Please verify with FDEP if any have current contamination issues. FDEP MapDirect appears to indicate **XXXXXX** has contamination issues.
- FDEP 'Other' Cleanup Site ID Nos. **XXXXXX and XXXXXX** located within or adjacent to site. Please verify with FDEP if any have current contamination issues. FDEP MapDirect appears to indicate **XXXXXX** has contamination issues.
- For known contamination within site or within 500' beyond the site: with the ERP Application please provide documentation from FDEP that the proposed construction will not result in adverse impacts to surface water/groundwater quality. This is required prior to the ERP Application being deemed complete.
- For known offsite contamination between 1500' and 500' beyond the site: it is the Permittee's responsibility to resolve contaminated site assessment concerns with the FDEP prior to beginning any construction activities. A permit condition will be used to reiterate this.
- FDEP Contacts:
- For projects located within Citrus, Hernando, Pasco, Hillsborough, Pinellas, Manatee, Polk and Hardee Counties: Yanisa Angulo Yanisa.angulo@dep.state.fl.us
- Any wells on site should be identified and their future use/abandonment must be designated.
- District GIS identifies existing Well Construction Permits (WCP) within the project area. Also, the project is covered by a Water Use Permit.
- District data collection site (Belleair Country Club 7 Fldn Site ID 21139) may be impacted by proposed construction. Contact the District's Data Steward at <a href="Data.Maps@watermatters.org">Data.Maps@watermatters.org</a> under the subject line "PRIORITY ERP Data Evaluation" to coordinate relocation of District data collection site.

## Water Quantity Discussions: (Basin Description, Storm Event, Pre/Post Volume, Pre/Post Discharge, etc.)

- It appears a large portion of the project (western side) discharges to a tidally-controlled waterbody. Formal water quantity attenuation is not required for these areas.
- For the areas that do not discharge to a tidally-controlled waterbody (eastern side), demonstrate that post development peak discharges from proposed project area will not cause an adverse impact for a 25-year, 24-hour storm event.
- Demonstrate that site will not impede the conveyance of contributing off-site flows.
- Demonstrate that the project will not increase flood stages up- or down-stream of the project area(s).

# Water Quality Discussions: (Type of Treatment, Technical Characteristics, Non-presumptive Alternatives, etc.)

- Provide water quality treatment for any increases in impervious areas, or increased areas subject to fertilizers for the golf course.
- Also, will need to replace any treatment volumes previously permitted within the project area.
- Will acknowledge compensatory treatment to offset pollutant loads associated with portions of the project area that cannot be physically treated.
- Provide additional 50% treatment for any direct discharges to OFW. Refer to ERP Applicant's Handbook Vol. II Subsection 4.1(f).

# **Sovereign Lands Discussion:** (Determining Location, Correct Form of Authorization, Content of Application, Assessment of Fees, Coordination with FDEP)

- The project may be located within state owned sovereign submerged lands (SSSL). Be advised that a title determination will be required from FDEP to verify the presence and/or location of SSSL.
- If use of SSSL is proposed, authorization will be required. Refer to Chapter 18-21, F.A.C. and Chapter 18-20, F.A.C. for guidance on projects that impact SSSL and Aquatic Preserves.

# **Operation and Maintenance/Legal Information:** (Ownership or Perpetual Control, O&M Entity, O&M Instructions, Homeowner Association Documents, Coastal Zone requirements, etc.)

- The permit must be issued to entity that owns or controls the property.
- Provide evidence of ownership or control by deed, easement, contract for purchase, etc. Evidence of ownership or control must include a legal description. A Property Appraiser summary of the legal description is NOT acceptable.

### **Application Type and Fee Required:**

- SWERP new Individual– Sections A, C, and E of the ERP Application.
- < 640 acres of project area and < 50 acre of wetland or surface water impacts \$3,105.75 Online Submittal</li>
- Consult the <u>fee schedule</u> for different thresholds.

## Other: