

# SEXTON ENGINEERING ASSOCIATES, INC.

Consulting Engineers and Surveyors

# DRAINAGE STATEMENT

for

### THE ESTATES

WELLINGTON, FLORIDA

## Prepared by

## SEXTON ENGINEERING ASSOCIATES, INC.

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**SEA PROJECT NO: 2242T16** 

April 7, 2023



THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY:

Michael F Sexton Date: 2023.04.07 11:09:20 -04'00'

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#### **DRAINAGE STATEMENT**

#### Introduction:

The 155.24-acre property is located at the northwest corner of South Shore Boulevard and Lake Worth Road and is currently vacant with the exception of polo fields. The property drains to the existing ACME canal system. An ACME Canal Easements identify as C-23B is located along a portion of the north boundary of the subject property and within the west limits of the adjoining park property. An existing canal is located within the project area along the northerly boundary with Malett Hill of Wellington Country Place PUD connecting the ACME C-23B Canal at the Park to the existing ACME C-4 Canal along the west boundary of the subject property.

#### Project Description:

The Estates is a proposed residential development that will incorporate 143 single-family residential units, with lots varying between one-quarter and one-half acre and 5 equestrian farm units varying in size between 4 and 5 acres each.

#### **Existing SFWMD Permit:**

SFWMD ERP Permit No. 50-00548-S-204 was issued for a surface water management system to serve 238.4 acres of residential development known as Parcel B, Pod E, and F, Wellington Country Place PUD. The residential development is partially developed in Pod F and has not been constructed within Pod E and Parcel B (Pod G). The permit includes equestrian/residential lots of various acreages, roadway improvements, and stormwater management lakes, and conservation areas. The permitted lake system provided water quality treatment and water quantity storage prior to discharging offsite to the adjacent ACME canal system.

### Drainage Methodology:

The surface water management design for the proposed project shall be based on the "Permit Criteria and Best Management Practices Manual for Works in the Village of Wellington" as revised in April 2010 and adopted by the Village of Wellington under Ordinance 2010-14 on June 8, 2010.

Based on the ACME Basin B Design Criteria for minimum flood protection, an applicant must demonstrate that the proposed project will provide a minimum of the established storage requirements as follows:

Storage at Elevation 16.0' NGVD 0.11 acre-feet/acre
Storage at Elevation 17.0' NGVD 0.86 acre-feet/acre

Any reduction in soil storage shall be compensated for by excess site storage in order to provide an overall storage in excess of the ACME Basin B requirements.

Per the Village of Wellington and SFWMD permit criteria, the project shall provide the greater of 1" of water quality treatment over the drainage area, or 2.5" of water quality treatment times the percentage of imperviousness. Projects within ACME Basin B shall provide for a 50% increase in water quality treatment volume.

The existing C-23B Canal along the north 100 feet of the subject property will remain and will be dedicated

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as a Drainage Easement to ACME Improvement District.

#### Conclusion:

The proposed stormwater management system for The Estates project will provide the water quality treatment and water quantity storage required by the SFWMD and the ACME Improvement District within the limits of the proposed project. It is anticipated that approximately 15 acres of wet detention lakes will be provided within the development to provide the required stormwater treatment and protection with an outfall to the existing ACME C-4 Canal at the southwest corner of the property. All open space and canal maintenance areas shall be graded away from the top of bank of the ACME existing canals and proposed lakes along the property line to avoid direct discharge and comply with the SFWMD and the ACME Improvement District design criteria.