



April 30, 2026

Residents of Hammock Creek Way
Verandah West Community Development District
c/o Wrathell, Hunt & Associates, LLC
9220 Bonita Beach Road, Suite 214
Bonita Springs, FL 34135

Re: Hammock Creek Stormwater/Flooding Summary

Dear Residents,

Following our meeting on Wednesday, March 25, 2026, Johnson Engineering performed additional review of the flooding concerns affecting the Hammock Creek neighborhood during heavy storm events and hurricanes. The goal is to educate the residents in flood contributing factors.

Johnson reviewed available records to confirm the intended elevations and configurations of key stormwater features, including control structures, roadway elevations, berms, and stormwater pipes (Attachment 1). The stormwater lake on Hammock Creek was designed to attenuate the 25-year, 3-day storm, which corresponds to a water elevation of 6.1 feet (NGVD29). For larger, less frequent events such as the 100-year, 3-day storm, the expected water elevation increases to 6.8 feet (NGVD29).

For home protection, FEMA establishes a Base Flood Elevation (BFE) in the early 2000s of 9.0 feet (NGVD29) in this area. As a result, the first-floor elevations in the community were required to be constructed at 9.0 feet (NGVD29) or higher, and the surrounding berms were built to a minimum elevation of 6.1 feet (NGVD29) to meet 25-year, 3-day storm design standards.

It is important to note that according to the residents, Hammock Creek does not experience flooding during normal daily or seasonal rains. Under typical conditions, the Orange River water level fluctuates throughout the year but generally remains below 2 feet (NAVD88), which is consistent with the elevation of the adjacent conservation area. At these normal levels, the stormwater lake can freely discharge into the river.

Flooding occurs when water levels exceed the stormwater system's design elevations or when the Orange River rises high enough to prevent the stormwater system from draining. Drainage is impeded when the river rises above the stormwater systems control elevation of 3.5 feet (NGVD29).

Elevated water levels above 3.5 feet (NGVD29) occurred during major tropical storm events. According to the data from the USGS monitoring station 02293055 on the Orange River near Buckingham (Attachments 2–4), the recorded water levels from the three storms are shown in the table below in both NGVD29 and NAVD88. The dual-datum presentation is necessary because FEMA transitioned to NAVD88 in 2012, while the community’s original design elevations were established in NGVD29.

Name	Elevation in NGVD29 (ft)	Elevation in NAVD88 (ft)
Hurricane Ian Water Level (2022)	8.3	7.1
Hurricane Milton Water Level (2024)	7.2	6.0
Hurricane Helene Water Level (2024)	6.7	5.5
Minimum First Floor (2000 FEMA)	9.0	7.8
Base Flood Elevation (2022 FEMA)	10.2	9.0
Perimeter Berm	6.1	4.9
Minimum Road	5.5	4.3
Control Elevation	3.5	2.3
100 year, 3-day Storm Design	6.8	5.6
25 year, 3-day Storm Design	6.1	4.9

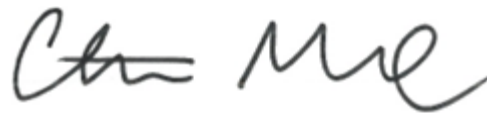
During these events, the Orange River was above the stormwater system’s discharge elevation. As a result, stormwater within Hammock Creek could not completely discharge until the river levels receded. Once river levels returned to normal, the stormwater system resumed draining as designed.

While the flooding observed during these storms was driven by high elevations in the Orange River rather than a failure of the Hammock Creek stormwater system, maintenance issues, or blockages can worsen flooding impacts. For this reason, Johnson recommends inspecting the stormwater pipes to verify their condition and confirm whether sediment, vegetation, or debris may be restricting flow. Cleaning may be necessary to restore full capacity. Ensuring the berms are properly maintained and restored to their intended elevations is essential for maintaining the stormwater systems’ design.

Thank you for reviewing this summary. We hope this helps explain why the flooding occurred and confirms that the stormwater system operated as intended.

Sincerely,

JOHNSON ENGINEERING, LLC



Christian J. Mumme, P.E.
Project Engineer

ATTACHMENTS

1. Hammock Creek Way Resident Presentation - Verandah West
2. USGS Water Level Data Orange River Hurricane Ian
3. USGS Water Level Data Orange River Hurricane Milton
4. USGS Water Level Data Orange River Hurricane Helene

ATTACHMENT 1

Hammock Creek Way Resident Presentation - Verandah West



March 5, 2026

**Verandah West Community Development District Stormwater Management System
Summary for Basin F:**

Dear Residents,

The stormwater management system for Verandah West CDD is a simple, efficient design to collect runoff from the homes and roadways into the ponds/lakes throughout the community. These waterbodies serve as both storage and treatment areas, helping manage rainfall and protect downstream waterways.

Most of the lakes within the community are interconnected, allowing water to move gradually through the system. However, Lake F is not interconnected (as shown in Exhibit A), and is isolated from the other lakes to form its own drainage area, known as Basin F.

The system was designed to include a perimeter berm which acts like a rim around a bathtub to detain water for flood attenuation and water quality treatment purposes. As a safeguard, the finished floor elevations of all homes in the Basin F community are above the perimeter berm.

The water collected in Basin F is then slowly released into Orange River to the south through water control structure CS-F. From there, the water continues its natural path to the Caloosahatchee River.

Permitted Elevations for Basin F are the following:

- Lake Control Elevation = 3.5
- Perimeter Berm Elevation = 6.1
- Minimum Road Elevation = 5.5
- Minimum First Floor Elevation = 9.0
- Water Control Structure CS – F
 1. Water Control Elevation = 3.5
 2. Weir Crest Elevation = 4.1
 3. Grate Elevation = 6.3

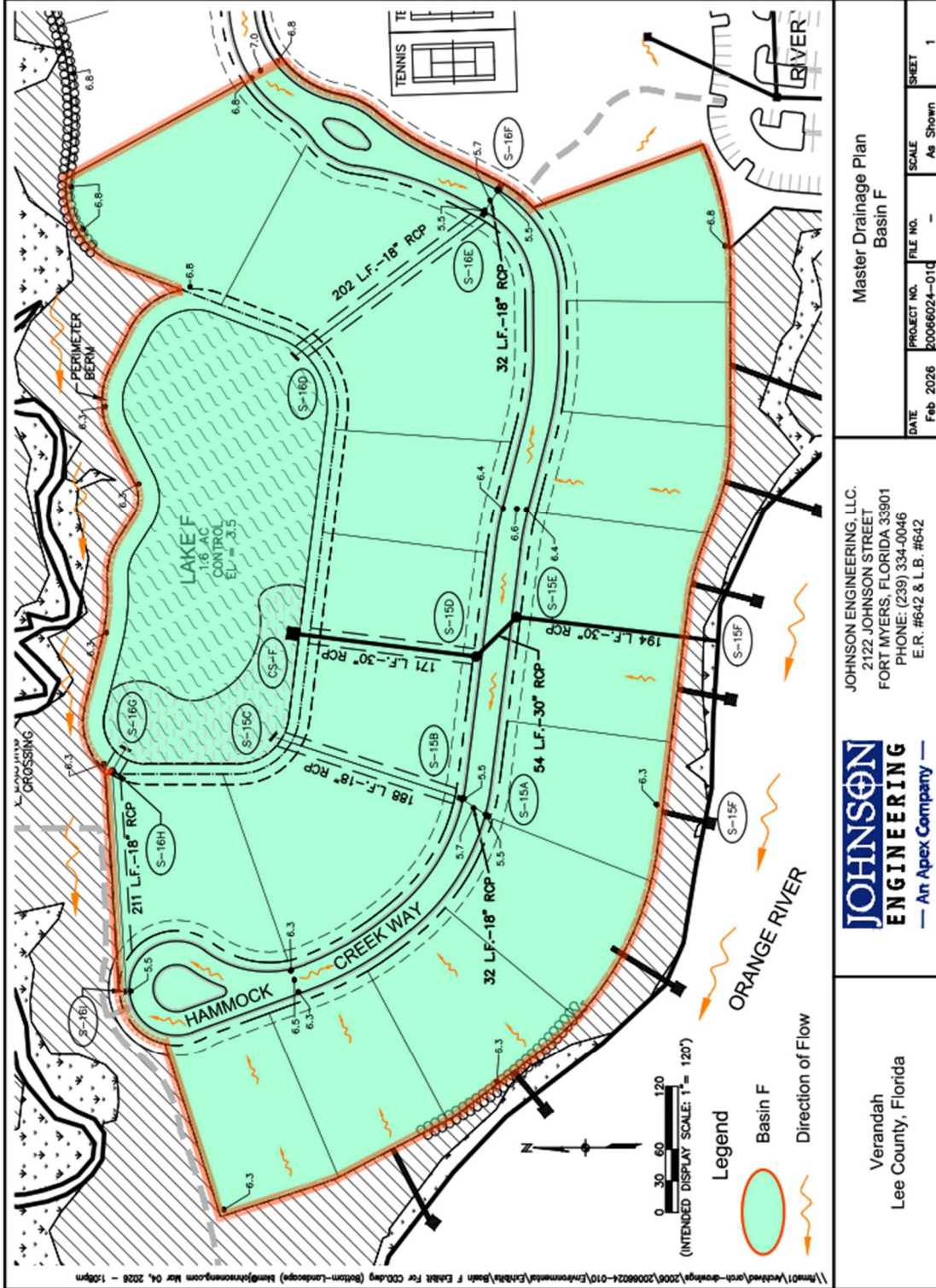
Please see Exhibit A showing Master Drainage Plan for Basin F.

Sincerely,

Christian Mumme
Johnson Engineering, LLC.
An Apex Company

EXHIBIT A

MASTER DRAINAGE PLAN BASIN F



JOHNSON ENGINEERING, LLC.
 2122 JOHNSON STREET
 FORT MYERS, FLORIDA 33901
 PHONE: (239) 334-0046
 E.R. #642 & L.B. #642



Verandah
 Lee County, Florida

Master Drainage Plan Basin F			
DATE	PROJECT NO.	FILE NO.	SCALE
Feb 2026	20066024-010	-	As Shown
			SHEET
			1

ATTACHMENT 2

USGS Water Level Data Orange River Hurricane Ian

Monitoring location

Orange River Near Buckingham, FL - USGS-02293055

IMPORTANT [Legacy real-time page](#) ⓘ

DID YOU KNOW You can see all water data collected at this monitoring location in the *Available data* section of the page. Learn more about [centralized water data delivery](#) in WDFN.

7 days 30 days 1 year

Scale Linear

Log

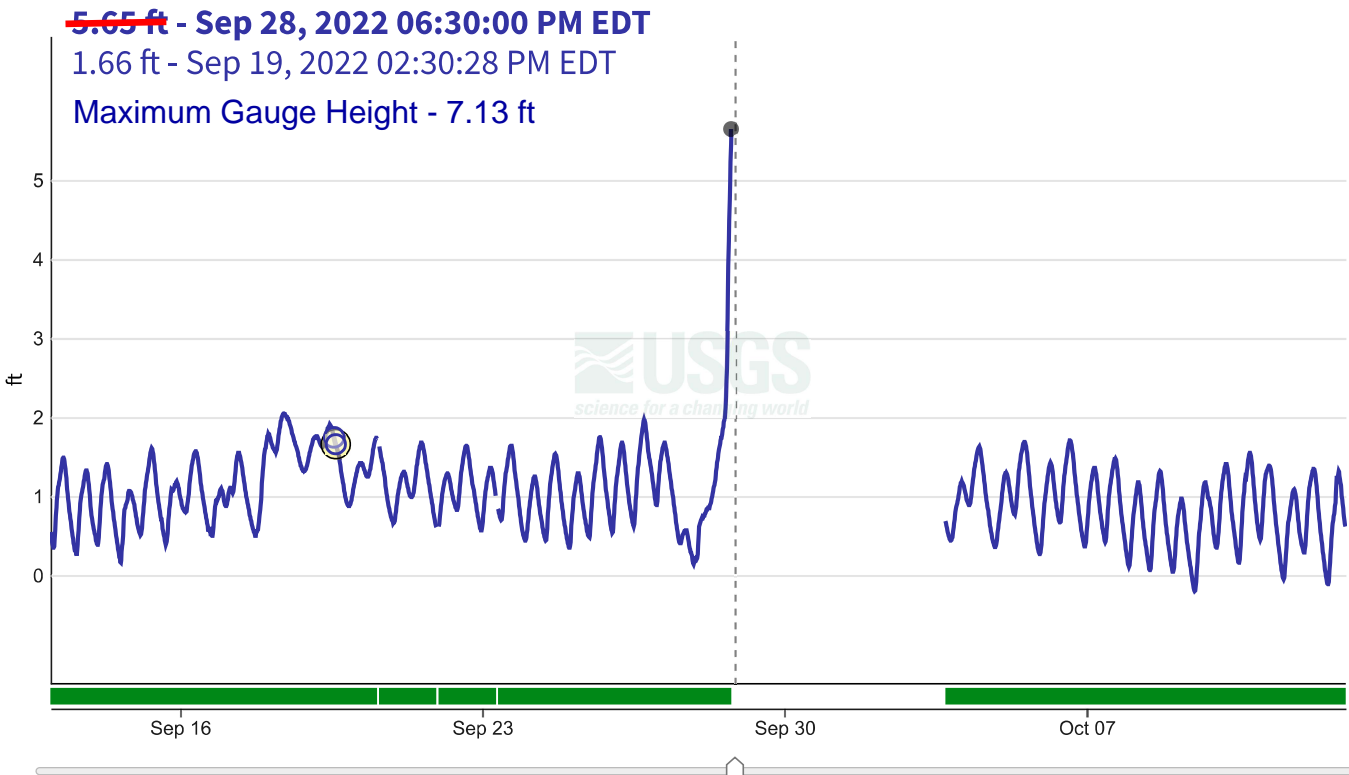
Continuous data

Orange River Near Buckingham, FL - USGS-02293055

[Subscribe to WaterAlert](#)

- using custom time span -
September 13, 2022 - October 12, 2022

Gage height, feet



IMPORTANT Data may be [provisional](#)

ATTACHMENT 3

USGS Water Level Data Orange River Hurricane Milton

Monitoring location

Orange River Near Buckingham, FL - USGS-02293055

IMPORTANT [Legacy real-time page](#) ⓘ

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7 days 30 days 1 year

Scale Linear

Log

Continuous data

Orange River Near Buckingham, FL - USGS-02293055

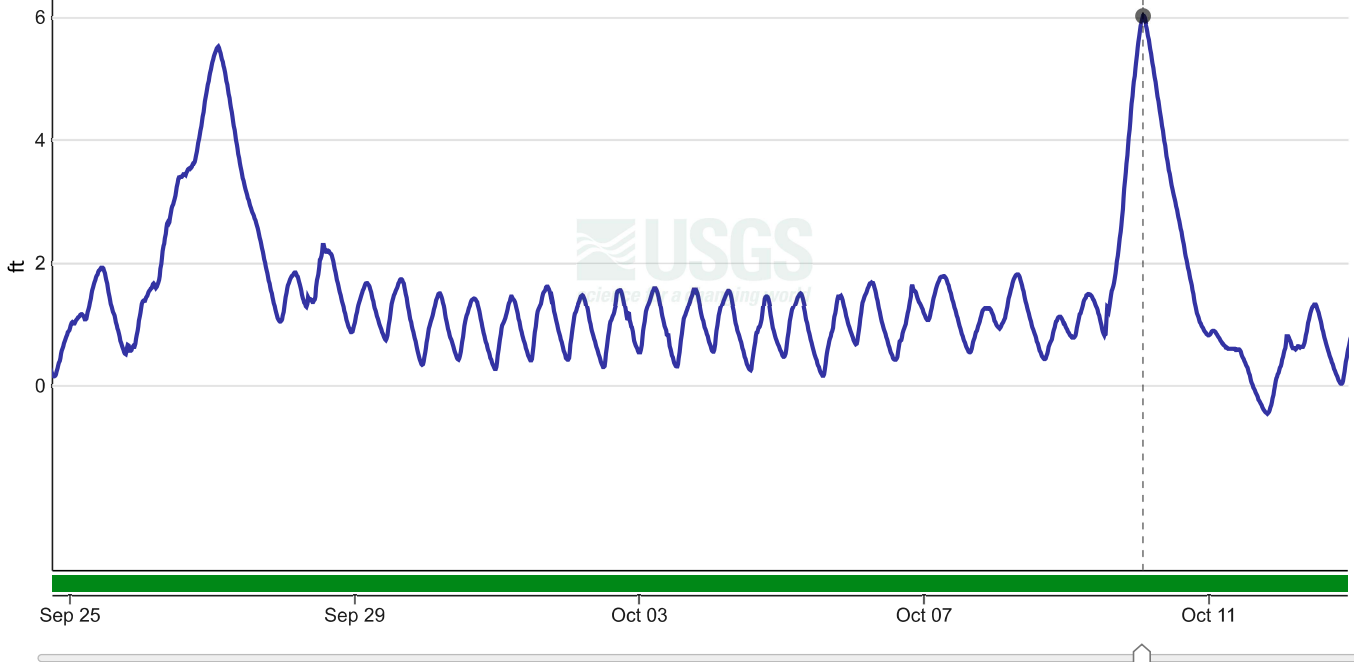
[Subscribe to WaterAlert](#)

- using custom time span -
- using graph zoom -
January 1, 2024 - December 29, 2024

Gage height, feet

6.03 ft - Oct 10, 2024 01:45:00 AM EDT

0.20 ft - Oct 24, 2024 02:55:52 PM EDT



ATTACHMENT 4

USGS Water Level Data Orange River Hurricane Helene

Monitoring location

Orange River Near Buckingham, FL - USGS-02293055

IMPORTANT [Legacy real-time page](#) ⓘ

DID YOU KNOW You can see all water data collected at this monitoring location in the *Available data* section of the page. Learn more about [centralized water data delivery](#) in WDFN.

7 days 30 days 1 year

Scale Linear

Log

Continuous data

Orange River Near Buckingham, FL - USGS-02293055

[Subscribe to WaterAlert](#)

- using custom time span -
- using graph zoom -
January 1, 2024 - December 29, 2024

Gage height, feet

5.53 ft - Sep 27, 2024 02:00:00 AM EDT

0.20 ft - Oct 24, 2024 02:55:52 PM EDT

