Maximum Potential 100-Yr Floodplain Volume Waiver Calculation				
	Hammock Shores	Offsite 1	Offsite 2	Offsite 3
Developable Area (DA) (ac)	60.07	14.44	1.88	14.39
Average Existing Grade (ft)	3.60	1.33	0.83	2.03
Normal Water Elevation (ft)	1.70	0.50	0.50	0.50
FEMA 10-Year Elevation (ft)	3.70			
FEMA 100-Year Elevation (ft)	6.40			
Waiver Requested (cy)	84,035			
Waiver Requested (ac-ft)	52.09			
Calculation of Potential 100-Yr Waiver while Meeting 10-Yr Cut-Fill (Off-Site Areas)				
Fill Depth (FEMA 100-Yr) (ft)		5.08	5.57	4.37
Max Fill Volume (FEMA 100-Yr) (ac-ft)*(Assume 70% Site is Filled		51.35	7.33	44.02

102.7

* AN ASSUMPTION THAT 70% OF SITE WILL BE FILLED TO 100-YR ELEV. WE CONSIDER THIS A VERY CONSERVATIVE ESTIMATE. ASSUMING THE OFF-SITE AREAS WERE REQUIRED TO BALANCE THE 10-YR FLOODPLAIN, THE ACTUAL FILLED AREA WOULD BE LESS THAN 50% OF THE SITES DUE TO EXISTING VERY LOW TOPOGRAPHY.

Maximum Potential 100-Yr Floodplain Volume Waiver Calculation	
Assumed Floodway Area (ac)	480 ac
Hammock Shores' Requested 100-Yr Floodplain Waiver (ac-ft)	52.09 ac-ft
Floodway Rise per Hammock Shores' 100-yr Floodplain Volume Displacement (ft)	0.11 ft
Total Maximum Potential 100-Yr Floodplain Waiver (ac-ft) - Potential Off-Site Development Sites	102.7 ac-ft
Floodway Rise for Offsite (Future) Potential 100-yr Floodplain Volume Displacement (ft)	0.21 ft
Total Maximum Potential 100-Yr Floodplain Waiver (ac-ft) - Hammock Shores & Offsite	154.79 ac-ft
Floodway Rise for Hammock Shores & Offsite (Future) Potential 100-yr Floodplain Volume Displacement (ft)	**0.32 ft**

0.32' < 1.0'

HATCH LEGEND

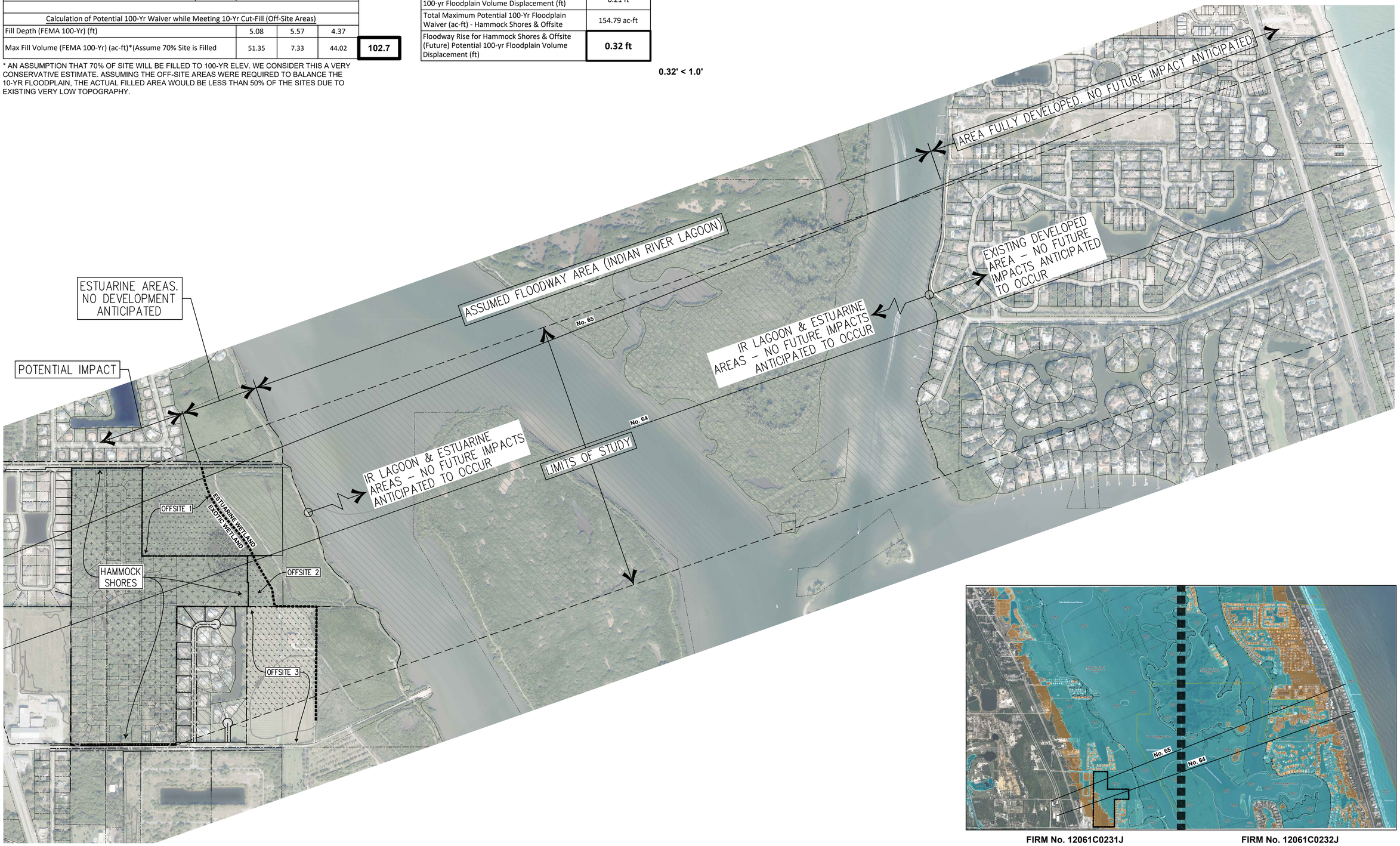
- HAMMOCK SHORES (40.6 AC)
- OFF-SITE DEVELOPABLE AREAS (30.71 AC)
- ASSUMED FLOODWAY (480 AC)

N

GRAPHIC SCALE

400 0 400 800 1600

(IN FEET)
1 INCH = 400 FEET



FIRM No. 12061C0231J

FIRM No. 12061C0232J

MARK	REVISION	DATE

DESIGNED BY JWS
DRAWN BY JT
CHECKED BY JWS
SCALE AS NOTED
DATE 05/12/22

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100-YR FLOODWAY RISE CALCULATION & EXHIBIT

GHO HAMMOCK SHORES
SUBDIVISION
VERO BEACH, FLORIDA
INDIAN RIVER COUNTY

ENGINEER CERTIFICATION
- ☐ JOSEPH W. SCHULKE FL. REG. NO. 47048
- ☐ JODAH B. BITTLE FL. REG. NO. 57396
- ☐ WILLIAM P. STODDARD FL. REG. NO. 57605

DATE:

SHEET
EXHIBIT G

PROJECT NO.
21-077

LAST SAVED: 11/13/2023 9:58:42 AM; SAVED BY: JOHN T; DRAWING: J:\2021\21-077 GHO HAMMOCK SHORES CSD\PRODUCTION DRAWINGS\PRELIMINARY PLAT\21-077 100-YR FLOODWAY RISE EXHIBIT.DWG; PLOT DATE: 11/13/2023 9:59:06 AM; PLOTTED BY: JOHN T