JOSEPH W. SCHULKE, P.E. JODAH B. BITTLE, P.E. WILLIAM P. STODDARD, Ph.D., P.E.

# Schulke, Bittle & Stoddard, L.L.C.

CIVIL & STRUCTURAL ENGINEERING . LAND PLANNING . ENVIRONMENTAL PERMITTING

August 23, 2022

Rich Szpyrka, Director Public Works Indian River County 1801 27<sup>th</sup> Street Vero Beach, FL 32960

Re:

Providence Pointe

Waiver Request - 15' SMA

Dear Mr. Szpyrka:

The Providence Pointe PD is currently under review for a modification to the approved site plan. Concurrent with the site plan application, the applicant is hereby requesting that the public works director approve a waiver or recommendation for a waiver from the 15' Stormwater maintenance area (SMA) typically provided around the perimeter of the stormwater management tract (IRC code section 930.07 (1)(m)(2) and (4)). This change is applicable to a portion of the development within Phase 2 that will be located at the SE corner of the site development, adjacent to 58<sup>th</sup> Ave/ 41<sup>st</sup> street.

The proposal includes a new residential concept, aptly named "East Lake BoatHouse" homes. These homes are proposed to be built adjacent to a 3 acre+- stormwater tract (pond) that is connected to an existing very large on-site 32-acre lake. The connection will be made via a Con-Span culvert or equivalent, that is large enough to permit the passage of small boats (i.e. kayaks, canoes, row boats, paddle boards, etc.). This land plan proposes a unique boating and recreational lifestyle for the community, providing direct access to the 32-acre lake and recreation amenity, and provides a unique home design with a traditional waterfront lifestyle.

I have included several exhibits (attached), which illustrate this proposal and the alternate maintenance provisions as described below.

The design of the stormwater tracts and lots for the Providence Pointe East Lake Boat House – Phase 2, propose the following:

#### Stormwater Tract:

- The stormwater tract (Tract 10) will be a manmade pond (approx. 3 acres) designed to operate as a standard wet detention system, and will be interconnected with an existing 32-acre lake, and two other manmade ponds, that together will provide approximately 51 acres of surface water serving the entire Providence Pointe TND PD.
- The pond will have a seawall at the stormwater tract / rear lot line boundary (pond perimeter). Top of wall (el. 20.25') will be set above the 25 yr. peak stage (el. 20.1' estimated)
- The submerged lake bottom is designed to have a flat 15' wide maintenance shelf at el. 15.0', which is approx. 3' below normal water level (NWL = 18.0 ft.). This flat shelf will extend from the seawall 15' waterward then the lake bottom slopes at 4:1 to el. 12.0 ft., then 2:1 or flatter to the proposed lake bottom.

- There will be six (6) openings in the seawall at common area tracts where access to the water body and maintenance shelf can be made via 6:1 or flatter slopes.
- The pond depth is shallow (2' to 3') at either end of the Con-Span culvert connection between the pond and the 32-acre recreation lake. This location is accessible for equipment and designed to provide a location to construct a temporary cofferdam in the event that the pond needs to be drawn down for any future major lake bottom or seawall maintenance. Design draw down elevation is 13.5 ft.

### Stormwater Tract/ lot interface:

- Adjacent homes would be subject to a min. 6' rear primary building setback
- Decks/ docks may extend into the setback, and over the seawall and water body into the tract as much as 5'.
- Decks may be supported by pilings installed waterward of seawall.

### POA regulations will include:

- Lot owners are permitted to encroach into stormwater tract for construction, use and maintenance of decks/ pilings, and access to the pond for recreation.
- POA or its designated agent will be the sole maintenance entity for all properties/ all lots.
- All lots are subject to a general access and maintenance easement for maintenance of the grounds, including drainage, irrigation, landscape, seawall and adjacent pond.
- POA retains rights to maintain the seawall and lake bottom and may remove decks/ pilings as needed. (POA rights to the construct and maintain the seawall supersede lot owners' rights to the deck structure).
- All rear lots adjacent to the stormwater tract are subject to a 5' construction and maintenance easement for POA.
- The building foundation for all homesites shall provide design considerations that permit long term viability of the residential structure, and the design shall consider possible future seawall repair, reconstruction or replacement. Foundations will be designed to a depth and location that would not be undermined or compromised in the event of the removal, replacement or repair of the seawall.

### Maintenance provisions:

- The seawall will provide a hardened edge of the water body and should minimize common maintenance issues that would otherwise occur at standard SMA's (erosion of lake bank and regrading/ sodding needed).
- POA, as the singular maintenance entity, will annually inspect the seawall and adjacent grading and stability of earth, and make repairs as needed.
- POA will, when necessary, draw down lake and access the lake and seawall via the maintenance shelf for inspections, repairs, reconstruction, or replacement of seawall, and provide any required regrading and stabilization of the lake bottom or areas landward of the seawall.

We believe that a waiver from the required stormwater maintenance area should be approved with the condition that the above outlined design, operation and maintenance provisions are incorporated within the land development permit engineering design, individual home site design, and within the development's covenants and deed restrictions.

### Page 3 of 3

Upon your review, please let me know if you have any questions or would like to meet and further discuss. Your support for this request for a waiver would be greatly appreciated.

Sincerely,

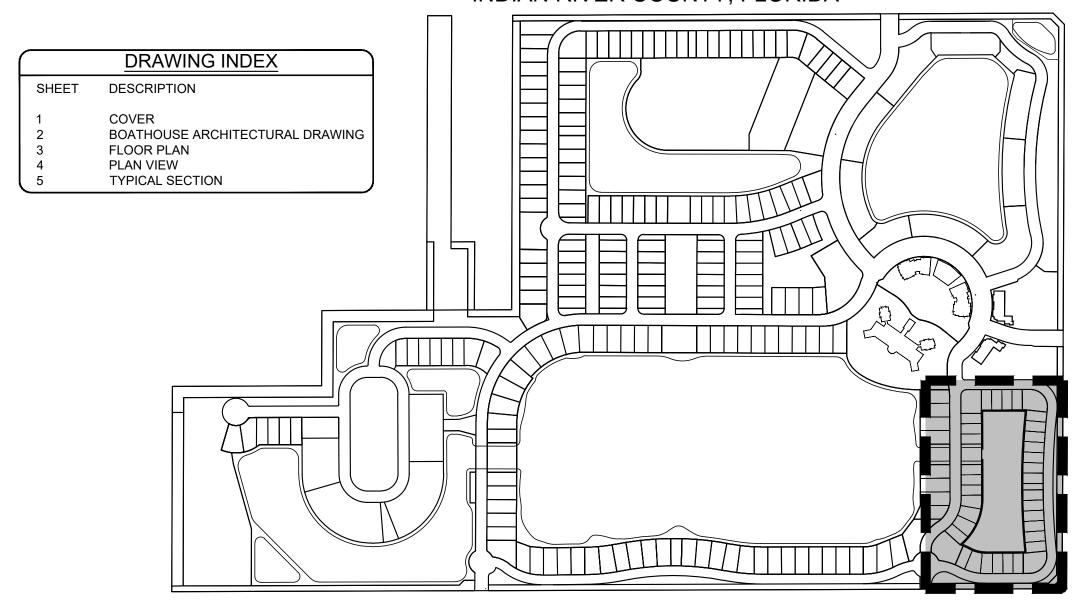
Joseph W. Schulke, P.E.

# DETAILED EXHIBITS OF BOATHOUSES

**FOR** 

# PROVIDENCE POINTE

A TRADITIONAL NEIGHBORHOOD DESIGN COMMUNITY SECTION 20, TOWNSHIP 32 SOUTH, RANGE 39 EAST INDIAN RIVER COUNTY, FLORIDA



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CERTIFIC-TION OF -UTHORIZ-TION NO.: 00008668

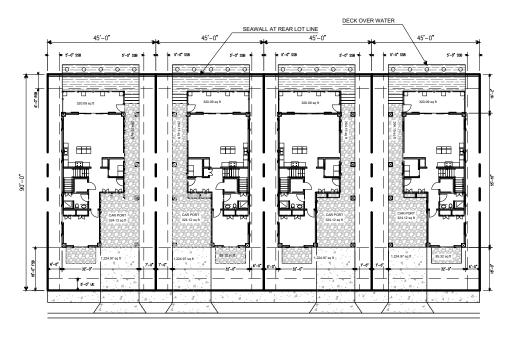
1717 INDIAN RIVER BLVD., SUITE 201 VERO BEACH, FLORIDA 32960 TEL 772 / 770-9622 FAX 772 / 770-9496 EMAIL info@sbsengineers.com

# BOATHOUSE WITH COVERED PARKING

3,0 BEDROOM + 3,0 BATHROOM

# 45' X 90' LOT





LIVING SPACE:

BOATHOUSE COVERED PARKING: 325 SQ:FT

PORCHES:

2,075 SQ:FT.

450 SQ.FT.



"BIRDS EYE "VIEW



STREETSIDEVIEWOI



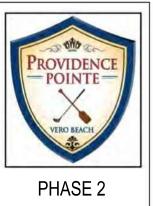




STREET SIDE VIEW 02



REAR SIDE VIEW 02



# ARCHITECTURAL DRAWINGS -FLOOR PLANS AND RENDERINGS FOR PROPOSED RESIDENTIAL STRUCTURES

PF DATE: 01.25.2020
DESIGN + DWGS BY NANAB POLLOCK
OPYRICH!

SHEEL HILE

PP -BOATHOUSES
45'X100'

OF7

SHEELI

2ND FLOOR PLAN

15TFLOOR PLAN

TYPICAL

REAR SIDE VIEW OI

