

CIVIL ENGINEERING CONSULTING, INC.

FONTAINE SUBDIVISION RIVIERA BEACH COUNTY, FLORIDA

MAY, 2021

A. <u>SURFACE WATER MANAGEMENT 1NFORMATION</u>

The surface water management system serving the subject parcel of land was previously designed and constructed to satisfy drainage requirements of South Florida Water Management District (SFWMD), Palm Beach County, and other regulatory agencies. This system will be reconfigured and permitted for the new site plan layout per City of Riviera Beach Requirements,.

Essential elements of the improvements required for implementation of the water managementsystem for this project are as follows:

- 1. Storm inlets, piping, exfiltration trenches, etc. will collect and transmit storm runoff with allowable overflow discharge to the street swale and drainage.
- 2. The project site will be limited to a peak discharge rate utilizing allowable runoff criteria asestablished by the City of Rivera Beach and SFWMD.
- 3. Any off-site lands that contribute runoff to the project site will be recognized during stormevent analysis as off-site discharges which must be handled by the project's water management system. Based on data reviewed to date, there are <u>no</u> off-site lands affectingthis project's drainage plan.
- 4. "Best management practice" and any other "state of the art" techniques which are needed will be incorporated into the development of construction plans for the project for water quality enhancement. In addition, applicable SFWMD criteria for retention/detention will be utilized for runoff storage prior to major discharges from the project site. Dry retention areas and exfiltration trenches may be sized for retention/percolation as well for water quality enhancement. The site has sandy soils and substantial "depth to water table" which are factors well suited for percolation which should not affect the groundwater.
- 5. The land owner will be the entity responsible for operation andmaintenance of the on-site surface water management system serving the project development.



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- 6. Flood Protection:
 - a) Adequate protection from the 100-year storm event will be provided by establishing aminimum finished floor elevation above the estimated 100-year flood stage.
 - b) All elements in the water management plan, including, culverts and storm drainage piping systems will be sized during detail design of the facilities, using standard engineering practice for hydraulic design, based on the storm discharges for major elements of the system.

Sincerely,

Andre M. Webster, P.E. Florida License #87358

