

April 14, 2022

Re: **Drainage Report for 9819 S. State Road 7**
9819 S. State Road 7, Boynton Beach, Florida 33472
PCN: 00-42-43-27-05-052-0370 / Section 24, Township 45S, Range 41E

1. SITE DESCRIPTION

The project site contains approximately 3.39 acres and is generally located at the southwest corner of 97th Place South and State Road 7 (US 441) in unincorporated Palm Beach County, Florida.

2. LEGAL, POSITIVE OUTFALL

Legal, positive outfall is available via an existing 48 inch diameter culvert located near the northeast corner of the property which travels east under State Road 7 and outfalls into the E-1 canal. The E-1 Canal flows north to the C Stanley Weaver Canal (SFWMD C-16). The C-16 Canal flows east and discharges to the intracoastal waterway from the LWDD Control Structure No. 9 and ultimately from the SFWMD S-41 control structure.

3. BASIN / ALLOWABLE DISCHARGE / MINIMUM FINISHED FLOOR

The property is located within the SFWMD's C-51 Drainage Basin (Sub Basin 21B). Per Figure 41-8 of the C-51 Basin Design Criteria dated June 2015, the maximum allowable discharge is twenty-seven (27) cubic feet per second per square mile (CSM) for the 10-year, 3-day design storm with a minimum required finished floor and compensating storage elevation of 16.7 NAVD (18.2 NGVD '29).

4. FEMA / FLOOD DESIGNATION

Per the Federal Emergency Management Agency's (FEMA) flood insurance rate map (FIRM) Community Panel Number 120192 0100B, the project appears to lie in Zone AE (BFE = 16.7 NAVD '88).

5. MINIMUM LEVELS OF SERVICE

The minimum required levels of service include:

1. The parking lot elevations at or above the projected 5-year, 1-day storm event;
2. The perimeter elevations at or above the projected 25-year, 3-day storm event; and
3. The finished floors elevations at or above the projected 100-year, 3-day storm event as well as the required SFWMD and FEMA flood zone parameters for the proposed facility (16.7 NAVD).

6. SYSTEM DESIGN

The site will comply with the required levels of service for pavement, perimeter and building floor elevations. The system will be designed to provide water quality treatment based on 150% of the required volume determined by the greater of 1" over the site or 2.5" over the proposed impervious area (less buildings and lakes). Additionally, the site is located within the SFWMD C-51 Basin and will provide compensating storage for flood plain encroachment and loss of soil storage.

7. ADJACENT PARCELS & OFF-SITE FLOWS

a. NORTH

The property is bounded to the north by 97th Place South, a private roadway. Based on our site visit, a review of the survey and available topography, there does not appear to be any offsite flow entering onto or through the property from the north. The property elevations are higher than the adjacent roadway elevations.

b. SOUTH

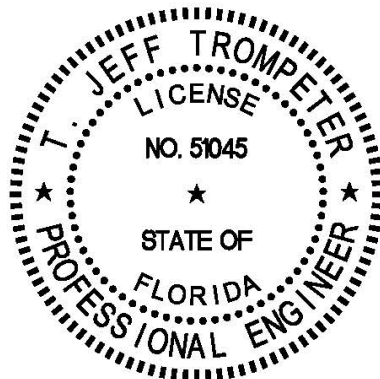
There is an existing landscape services project (Dezerata) to the south that was designed and permitted with its own onsite drainage system. There is an existing concrete wall and chain link fence separating the two properties. Based on our site visit, a review of the survey and available topography, there does not appear to be any offsite flow entering onto or through the property from the south.

c. EAST

State Road 7 borders the east property line and has its own roadside swale drainage system. Based on our site visit, a review of the survey and available topography, there does not appear to be any offsite flow entering onto or through the property from the east. The property elevations are higher than the adjacent roadway, sidewalk and/or swale elevations of SR 7.

d. WEST

The property to the west is a trash hauler parking and repair facility (FCC Environmental) with its own drainage system. Based on our site visit, a review of the survey and available topography, there does not appear to be any offsite flow entering onto or through the property from the west.



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY T. JEFF TROMPETER, P.E. ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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