

## Exhibit “A” – General Study Area

### Study Area Characteristics

The Pasco County Board of County Commissioners (BOCC) and the City of New Port Richey (NPR) are working in collaboration to develop flood resilient designs, adaptation projects, and to prepare a conceptual planning level drainage study for the drainage improvements to the Green Key Neighborhood.

The Green Key neighborhood experiences frequent flooding due to both tidal conditions and stormwater events. Tide overtopping onto the roads and sustained flooding during rain events have been identified in this area, which does not always appear to dissipate with the tide. Tidal information pulled from the Cedar Key tide gauge on the National Oceanic and Atmospheric Administration’s (NOAA) website, the Green Key study area experiences flooding on its streets as many as 79 days on the year based on the tidal conditions alone, some of these events overtop into the study area by as much as 12”.

This application is requesting the technical engineering analysis/design services to assist in identifying strategies for vulnerable critical assets in the selected study area as follows:

(Refer to Exhibit A for the general Study Area)

- Green Key Road (from 4800 BLK to 5200 BLK of Green Key RD) – In 2020, the “Green Key Neighborhood Drainage Analysis and Concept Plan” study was performed to prepare a conceptual planning level drainage study for the drainage improvements in Greek Key Estates Subdivision within the Green Key Neighborhood. The study called to raise some of the roads within the subdivision by almost 1.5’ above existing road grade. While the entire stretch of Green Key Road from US Hwy 19 to Robert K. Rees Memorial Park is approximately 1.79 miles (or 9,500 LF approx.), and since the nature of the area is relatively flat (considered over the entire span length of the road from US Hwy 19 westward to the Green Key area), the concern is whether these improvements will impact the rest of the Green Key Neighborhood, south of Green Key Road.
- Green Key Road (from 3500 BLK to 4200 BLK of Green Key RD) – This span of Green Key Road is the main stretch and connection of the Waterfront Area of the Green Key Neighborhood to the Gulf of Mexico. This is an area of ecological importance, mangroves, and living shorelines. While the Robert K. Rees Memorial Park is an important and protected ecosystem, the fact is that Green Key Road is frequently flooded, and there exists a need to protect the inlet storm run-off from the storm water discharge coming from the East.



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While it is important to provide stormwater conveyance from the Green Key Neighborhood, in order to provide protection to the neighborhood, it is equally important to protect these ecological areas from the debris, oils, solvents, and other contaminants within the stormwater runoff. In addition, protection of these ecological areas will also facilitate the construction of living shorelines and natural and nature-based features (NNBFs), that provide defense against tidal flooding, enhance water quality, and improve natural resource benefits. One possible solution can be taking an approach to using bioswales or a similar treatment as the one found on Sea Forest Drive and Main Street.



- Protect the New Port Richey reclaimed Wastewater Treatment Plant (WWTP) – Although this WWTP facility is resilient by nature, since it holds and processes water, the concern exists that the employees requiring to run the plant 24/7 may be at risk due to storm events and sustained flooding. According to locals, during the “No Name storm” event of 1993, heavy rain and flooding turned streets into rivers. People at the WWTP had to be evacuated utilizing front loader tractor equipment. During less severe storms, employees are required to utilize alternate routes to reach their destination at the WWTP, since Green Key Road and Main Street (see below) may be underwater during some of these lower intensity events.
- Main Street (from US Hwy 19 to W. Sea Forest Drive – 2,850 LF approx.) – This area has been identified by locals to have some flooding issues, but it has been improved within the recent couple of years. Nonetheless, the area is still a concern to the locals due to potential flooding.



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### Describe the study area's existing land use(s), zoning, and future land use(s):

The area is composed of various land uses as follows:

#### On Green Key Road:

- The Future Land Use (FLU) designation are Retail / Office Residential, Residential -9, -1, and Major Recreation /Open Space FLU designations.
- Their respective zoning designations within the area such as General Commercial (C2, NPR-HWY COM), Residential (ER, AR1, R2, R4, R3, NPR-PDD, R1MH, RMH, MF2) and Agricultural (AC) zoning districts.

#### On Main Street:

- The Future Land Use (FLU) designation are Residential -9, -6, and City of New Port Richey FLU designations.
- Their respective zoning designations within the area such as General Commercial (NPR-HWY COM), Residential (R-1, R4, R1MH, MF-1, NPR-MF30, NPR- MF10, NPR-R1) and Government (NPR-GOVT) zoning districts.

### Identify relevant Parcel Number(s):

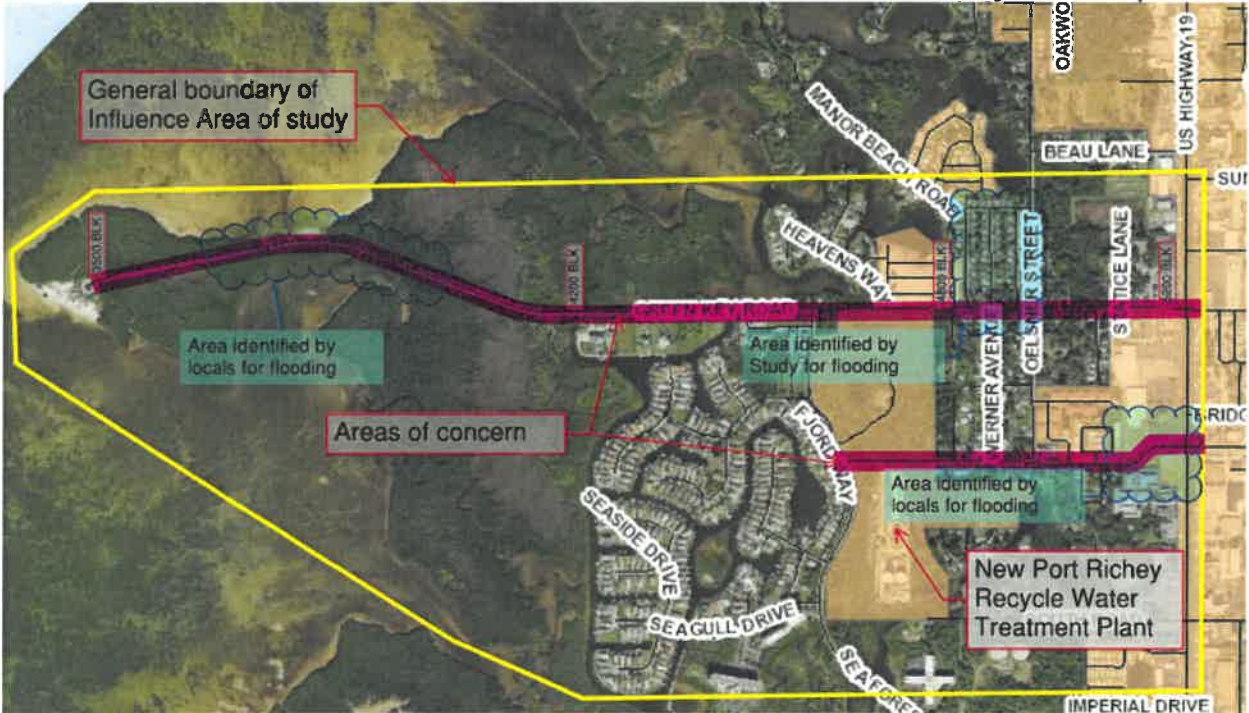
Parcel numbers are identified to be Pasco County and New Port Richey right-of-way areas depicted on Exhibit "A" below.

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**Approximate size of study area (acres):**

- Green Key Road from US Hwy 19 to Robert K. Rees Memorial Park is approximately 1.79 miles (or 9,500 LF approx.), and
- Main Street (from US Hwy 19 to W. Sea Forest Drive – 2,850 LF approx.)

Exhibit "A" - General Study Area Map



Date Printed: Jan. 14, 2022