

# TAMPA CIVIL DESIGN

## SITE DESIGN AND CIVIL ENGINEERING

February 25, 2021

### *Drainage Narrative*

The proposed Washington Avenue Apartments is a 173 unit multi-family development within the Clearwater CRA. The project site is 3.36 acres MOL and is currently cleared and vacant. The project is within the drainage basin for Prospect Lake Park, AKA Town Pond.

Town Pond is an existing wet detention pond that serves an approximately 101-acre basin in the downtown area, including the subject property. Town Pond was recently improved to add volume by expansion (west bank) and littoral shelf creation which were permitted under SWFWMD permit 44-22515-000, 44-22515-007, and 44-22515-008 modifications.

Town Pond was designed for treatment and attenuation for a CN of 98.1 from the contributing basin. This ensures that any project contributing to town pond will not exceed the allowable CN and therefore does not need to inventory impervious coverage (understanding that 100% impervious coverage is reported as CN 98). The development will enter into the use agreement and pay the calculated fee.

Conveyance to Town pond will occur by underground storm sewer construction and sized in accordance with City of Clearwater Stormwater Drainage Criteria Manual. Runoff from the project will be generated using the rational post development c value, 1 hour TC and 10 year event. RCP will be used within the R/W for conveyance at an N value of 0.13 as stated in the drainage criteria manual.

#### *Wetlands/Habitat*

There are no wetlands within the project area.

#### *Historic Flow Patterns*

The site historically drains from southeast to northwest. Most of the site contained warehouse buildings and other impervious improvements until 2006. In 2017 the site was used as a materials storage yard.

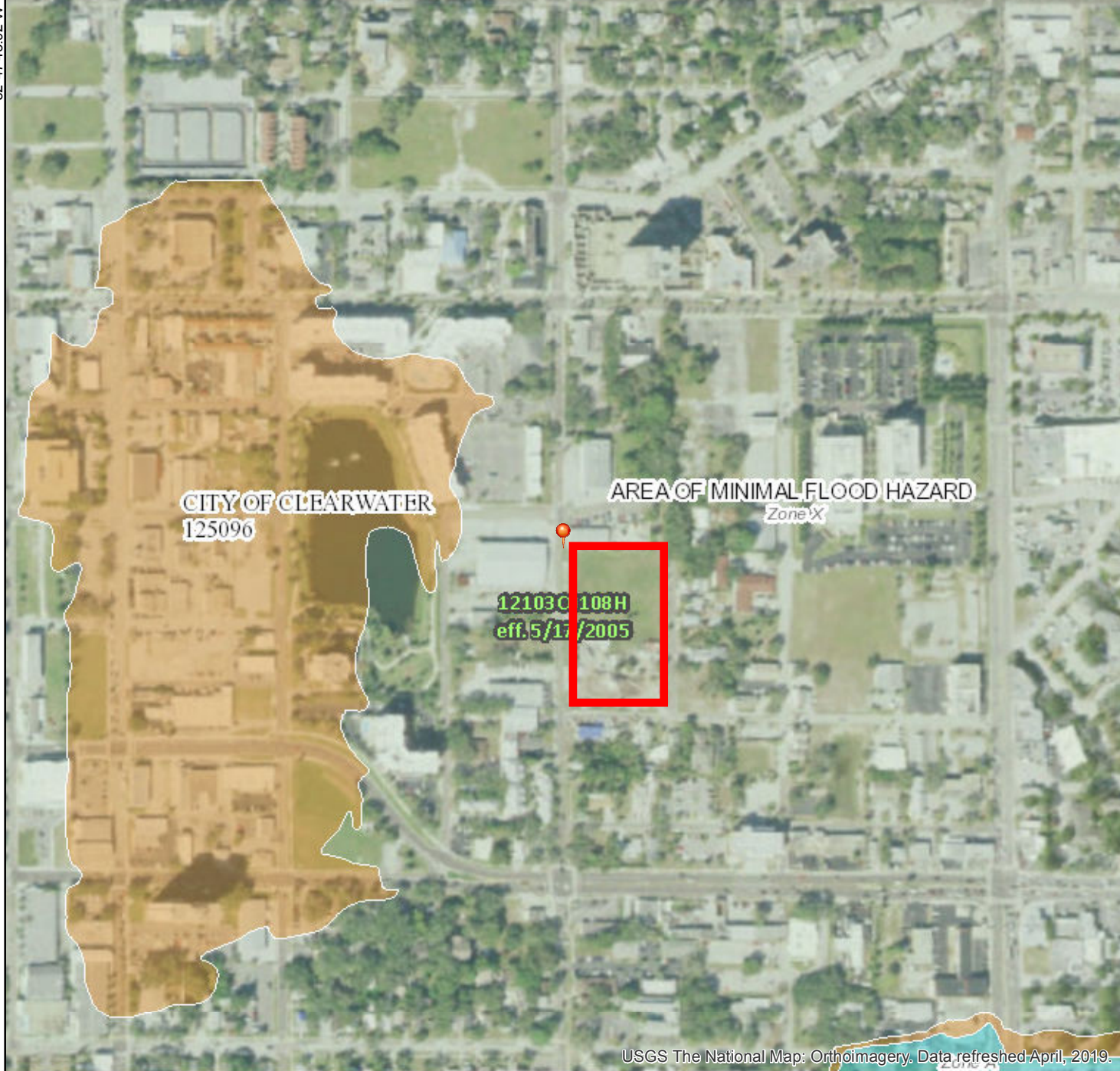
#### *Groundwater*

A geotechnical investigation, performed by ECS, Inc, seasonal high groundwater is 1-2 feet below the existing surface.

# National Flood Hazard Layer FIRMette



27°58'5.25"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/10/2019 at 2:04:00 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

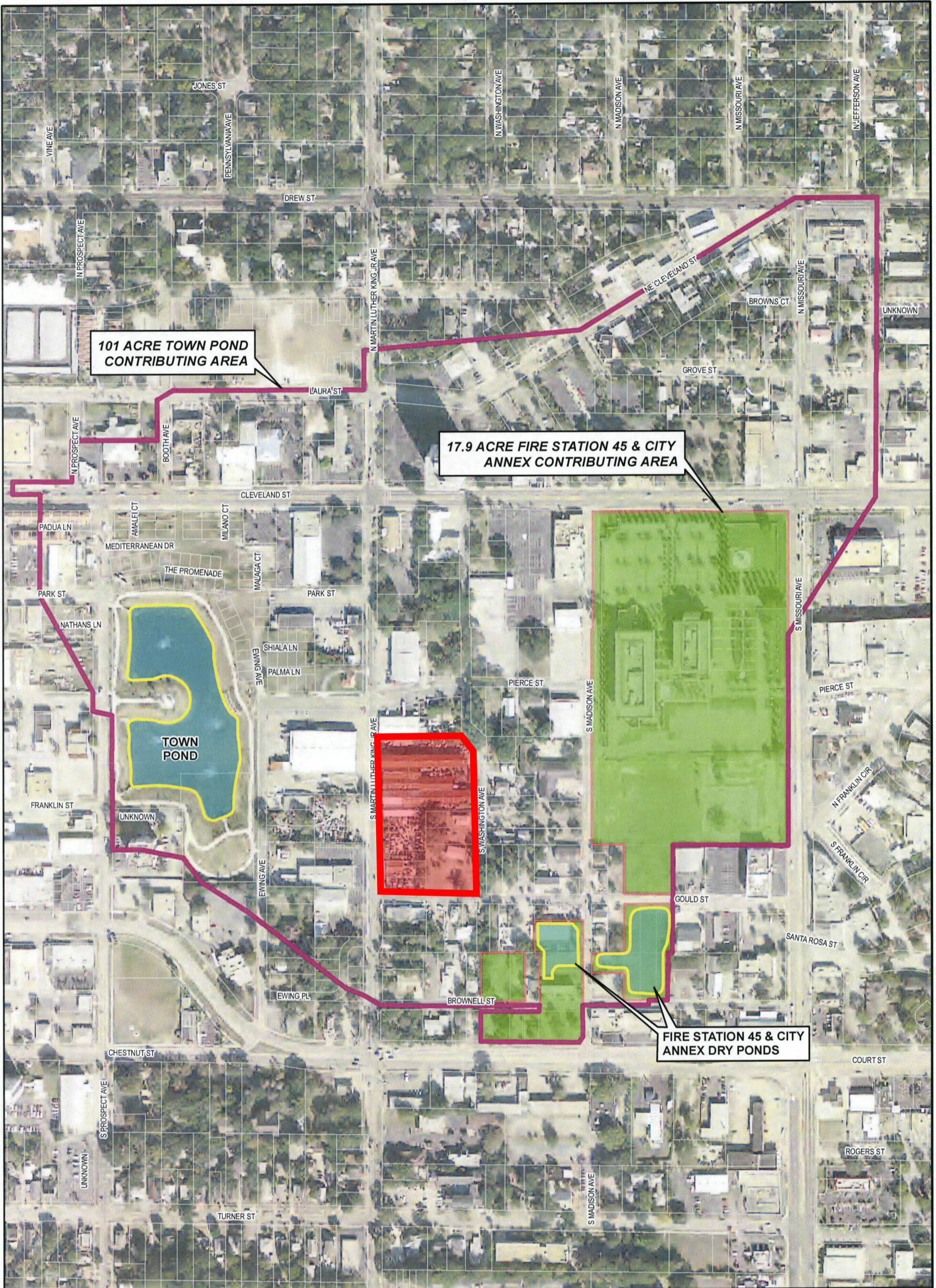
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

USGS The National Map: Orthoimagery. Data refreshed April, 2019.

0 250 500 1,000 1,500 2,000 Feet 1:6,000

27°57'33.47"N

82°47'11.46"W

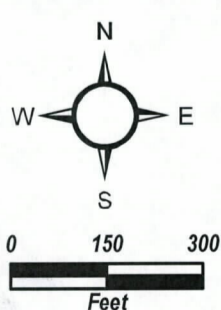


**101 ACRE TOWN POND CONTRIBUTING AREA**

**17.9 ACRE FIRE STATION 45 & CITY ANNEX CONTRIBUTING AREA**

**TOWN POND**

**FIRE STATION 45 & CITY ANNEX DRY PONDS**



- LEGEND**
- Existing Stormwater Ponds
  - Town Pond Contributing Area
  - Fire Station 45 & City Annex Contributing Area



**CITY OF CLEARWATER  
TOWN POND MODIFICATIONS  
REVISED TOWN POND CONTRIBUTING AREA**

REVISED  
5/20/2013

**CLEARWATER TOWN POND MODIFICATIONS  
POST-DEVELOPMENT STORMWATER ANALYSIS  
Basin Area, Curve Number, and Tc Summary**

BASIN #	AREA (ac)	CN	TC (min)
TownPond	83.10	98.1	60
TOTAL	83.10		

