

Nassau Bay Flood Protection Projects

Elevated Boardwalk

Approximately 1,000 liner feet of elevated boardwalk by means of bulkhead construction along Upper Bay Blvd prevents storm surge from entering the city Upper Bay roadway from Clear Lake. The boardwalk is at 6 feet elevation and protects potential street washout to include city utilities. Drainage lines and red valves are located along the boardwalk, which provide proper drainage along Upper Bay Blvd.



Upper Bay Blvd. and Sea Cove Berm and Bulkheads

Berms were constructed at a higher elevation along Upper Bay Blvd and Sea Cove, which prevents storm surge entering the City by way of Upper Bay Blvd. The berms are supported by bulkhead construction along the canals and are checked on regular routine maintenance. Annual Budget for Storm Lines is \$6,000.00 if needed.





Drainage Improvements at David Braun Park

In 2018, drainage improvements began in the southwest portion of David Braun Park. Due to low elevation of the park, this area would hold water during high tides and rain events. Proper drainage flow was installed. During the installation of the park trail, staff worked with contractors to design concrete drainage structures with pipe insertion. This allows proper drainage with minimum maintenance from open cut drainage. All work was performed with existing piping and city staff. Proper field drainage was excavated.



Floodproofing of Public Works Facilities

The installation of 8 Flood Smart Vents was completed at the Public Works Maintenance Facility and the Wastewater Plant, both located at 18900 Upper Bay. This will allow flood water to enter the facilities and exit when the water resides. Contents are moved out of these facilities when a flood is eminent. This will prevent exterior metal wall damage and structural damage to the building. The work was completed in August of 2019.



Lake Nassau Dredging

In 2016, Phase 1 of the Lake Nassau Dredging Project was completed. Approximately 1,900 cubic yards of dredge material was removed from Lake Nassau at a cost of \$ 49,610.00. The scope of the project was to increase drainage capacity in the 33.3 acre Lake Nassau during rain events. The average depth of the lake is 3 feet.

In 2018, Phase 2 of the Lake Nassau Dredging Project was completed. Approximately 1,900 cubic yards of dredge material was removed from the inlet of Lake Nassau at a cost of \$ 48,700.00. The scope of the project was to increase drainage flow at the inlet of the lake. The average depth of the inlet was 1 foot. One foot of dredge material was removed, which allowed a faster run off, due to less head pressure of the lake. Additional benefit of the dredge project was to improve oxygen levels at the inlet for aquatic life. An aerator was also installed to increase oxygen levels for aquatic life and prevent the inlet from stagnant water.

