MIAMIBEACH

OFFICE OF THE CITY MANAGER

NO. LTC # **219-2018**

LETTER TO COMMISSION

TO: Mayor Dan Gelber and Members of the City Commission

FROM: Jimmy L. Morales, City Manager

DATE: April 23, 2018

SUBJECT: Generators at Stormwater Pump Stations

The purpose of this Letter to Commission is to provide information to the Mayor and City Commission regarding generators at stormwater pump stations.

As you are aware, the Urban Land Institute Advisory Services Panel reviewed the process of the City of Miami Beach's Stormwater Management Program last week and provided advice on a wide variety of elements associated with our program and our approach to mitigating flooding caused by tidal and rain events. Included in their preliminary finding was the issue of a reliable source of power to the pumps.

We realize that residents and property owners have concerns as to the availability of auxiliary electrical power to stormwater pump stations, in the event of power interruption. The City is actively addressing their concerns.

All design criteria for future projects, including those currently in the procurement process, include the provision of permanent generators at each pump station location. Projects included are La Gorce and Indian Creek. For projects that are currently under contract, City Administration has requested proposals for the provision of permanent generators. These include Palm & Hibiscus Islands, West Avenue, Sunset Islands 3 & 4, Central Bayshore South and Venetian Islands (San Marino, DiLido and Rivo Alto). In addition, the Administration is considering retrofitting existing stormwater pumping stations.

There are numerous challenges to consider in the installation of permanent generators. A significant component is the cost associated with the installation. Depending on the size and capacity of each pump station, these installations can range from $400,000 to $800,000. Another limiting factor is the placement of this large industrial piece of equipment. The size of the permanent generators is considerable. Diesel powered generators are about the size of an automobile for the smaller pump stations, and the size of a shipping container for the larger stations (see attached). Accessibility for maintenance and fueling is another factor to consider in the location. Elevation for flood protection must also be taken into account. Permanently mounted generators must be located two (2) feet above the base flood elevation which is often five (5), or more, feet aboveground. Aesthetics is another factor that must be taken into consideration. In some locations, landscaping could be used to reduce the view of the equipment, and in other locations space limitations would only allow for minimum type of screening.

In the interim, the City has been and will continue to place temporary portable generators at existing pump station locations, as warranted. Recently installed pump stations are equipped with generator receptacles to allow for operations with portable generators.

Should you have any questions, please contact Eric Carpenter at 305-673-7080.

Attachments:
Permanent Generator

JLM/EC/DM

Permanent Generator