SITE INSPECTION MITIGATION REPORT FIRST UNITED METHODIST CHURCH OF PORT ST. JOE

Type: WO# 38351

Applicant: First United Methodist Church of Port St. Joe FIPS#: 045-12767-00

County: Gulf

Site: Historic Triangle Park

Date: 05/28/2019

Location: 1001 Constitution Drive, Port St. Joe, FL 32456

Lat/Long: Refer to Site Inspection Report

Attendees: Refer to PA Grants Manager for list of attendees

DI# 248755 Category: G 0 % work complete

Known dimensions, damages, and current conditions:

This DI consists of both aboveground and subsurface damages at Triangle Park. Aboveground damages include a dislodged (leaning) flagpole, the complete loss of numerous mature pine trees, corrosion and other impacts to the historic bell tower monument, loss of benches, and ground surface erosion. Subsurface damages include destruction to all components of the irrigation system network (buried 1½" PVC pipe, distribution appurtenances, pump and motor in base of bell tower monument) and the drainage system network (~4" diameter corrugated plastic drain piping and both metal and plastic drain grates).

Cause of Damage:

High winds from Hurricane Michael and the associated storm surge from St. Joseph Bay that rolled over the FUMC campus were the cause of all the lost and damaged items associated with this DI. The storm surge variously damaged, washed away, corroded, or contaminated specific components of this DI. In some instances, falling trees and uplifted root systems may have exacerbated damage impacts to certain components such as the drainage and irrigation system networks.

Repair to pre-disaster condition:

The nature of the damages incurred in Triangle Park make it difficult to repair most of the damaged items to pre-disaster conditions.

- It is impractical to restore the lost mature trees in a timely manner.
- Given the changed vegetative characteristics of Triangle Park because of Hurricane Michael, a
 different irrigation system is probably warranted, but any redesign would not have a mitigation
 component that could be prescribed.
- The most complex damage at Triangle Park, both physically and administratively, is the drainage system. Formerly a modest drainage system coupled with numerous mature pines functioned to adequately address drainage and erosion concerns at Triangle Park. With the loss of trees and ground cover due to Hurricane Michael winds and storm surge, coupled with the complete destruction of the drainage system due to uprooted trees, an entirely new approach must be developed that will most likely require significant FEMA EHP involvement and an engineered solution. Applicant envisions that such a solution could entail regrading Triangle Park, constructing new drainage structures and conveyance pipes, and installing a pump to transfer collected drainage to the water retention pond; damage issues associated with the water retention pond are being documented under DI# 248732, but the additional flows that may be received in the future from Triangle Park could require enlarging the existing retention pond. Until the myriad

of administrative and logistical issues associated with the foregoing concept are better defined and resolved, it is premature to determine if or how mitigation would fit into the envisioned solution.

Potential mitigation measures:

The Applicant would need to provide additional information regarding any proposed mitigation. However, potential mitigations included the following:

- Providing a more secure embedment system for the flagpole when it is reset.
- Repairing or replacing damaged ornamental and structural metal components at the historic bell tower monument with corrosion-resistant coatings and materials.
- To mitigate against a similar recurrence regarding any benches at Triangle Park that were lost due to the storm surge, consideration should be given to anchoring these benches to a concrete slab; given the proximity to St. Joseph Bay, stainless steel fasteners should be used.

Photos: See attached photo sheets.

FEMA HM Attendee: Anthony J. Tawa, Jr. (CCPRS)

Title: 406 Mitigation Specialist Phone number: 850-567-5211

FEDERAL EMERGENCY MANAGEMENT AGENCY Photo Sheet						
DECLARATION NO. FEMA DR 4399		FIPS#: 045-12767-00	DATE: 05/28/2019	CATEGORY: G		
APPLICANT: First United Methodist		COUNTY: Gulf	_			

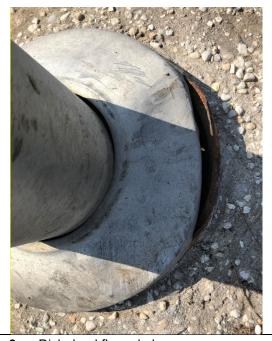
Church of Port St. Joe





Photo 1: Trees and landscaping at Triangle Park (pre-Hurricane Michael). Refer to SIR for Lat/Long (typ).

Photo 2: Condition of Triangle Park at time of site inspection.



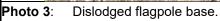




Photo 4: Historic bell tower monument.

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Photo Sheet							
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Photo 5: Corrosion severely exacerbated by Hurricane Michael.

Photo 6: Additional example of corrosion at bell tower monument.



Photo 7: Remnant of destroyed irrigation system.



Photo 8: Destroyed irrigation system pump and motor.

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Photo Sheet							
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Photo 9: Portion of damaged drainage and irrigation systems.

Photo 10: Plastic drain grate.



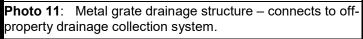




Photo 12: Google Maps satellite view of selected FUMC campus features (see red ovals and arrows).