

## **TBTA Design Services for Marine Parkway Mechanical/Electrical Flood Mitigation**

AG's scope involved Mechanical & Fire Alarm Engineering Design services to develop 30% and 100% Design/Build (DB) contract documents for the Marine Parkway Flood Mitigation Project. Project scope was the reconfiguration of the electrical distribution system and to bringing new natural gas lines to the service building for new burners, removing existing oils burners and removing the oil storage tank. The goal of this reconfiguration was to remove any single point of failure in the electrical distribution system. Also included was design and installation of a new 5KV service equipment north of the facility service building, removal of existing equipment in the north abutment, consolidating the existing 4 utility meters into 2 totalized type meters, replacing existing Con Edison step down transformers to feed the existing service building, annex building and toll plaza, upgrading the existing emergency generator. The new 5KV service equipment is housed in a prefabricated hut.

AG's scope of work includes:

- Provide 100% heating and ventilation performance specifications, estimated construction schedule and cost estimate for the new electrical hut.
- The system HVAC will comply with the latest industry codes and standards. Review existing drawings as required and investigate at site for the type of boilers and capacity.
- Provide ventilation of gas booster rooms and ventilation/heating for the new prefab building.
- Provide a fill terminal for the outdoor type diesel oil generator.
- Review existing drawings as required and investigate at site for the existing FA of the service building.
- Determine the compatibility of the existing FA of the service building to the new FA to be proved in the prefab switch gear building.
- Extend the existing FA to the new prefab building or provide new.
- Performance specifications for the tie in of the two fire alarm systems.



A.G. CONSULTING ENGINEERING, PC

**Location:** Queens, NY

**Owner:** TBTA

Services Provided: Mechanical Fire Protection

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