



Civil / Structural /
Transportation Engineers

Construction
Inspectors/Managers

Bridge Condition
Inspectors

*New Jersey
New York
Pennsylvania*

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Hurricane Sandy Repairs for Electrical Substation and Related Equipment at Hoboken, MMC and Bay Head, Contract No. 13-006A

Various Locations, NJ

PROJECT TYPE

Design

PROJECT OWNER/CLIENT

New Jersey Transit

CONTRACT AMOUNT

\$847,000 fee

START & END DATES

05/2013 – Ongoing

ROLE

Subconsultant to Gannett Fleming, Inc.
Structural Engineering

REFERENCES

Renzo Sosa, NJ Transit
(973) 491-7612

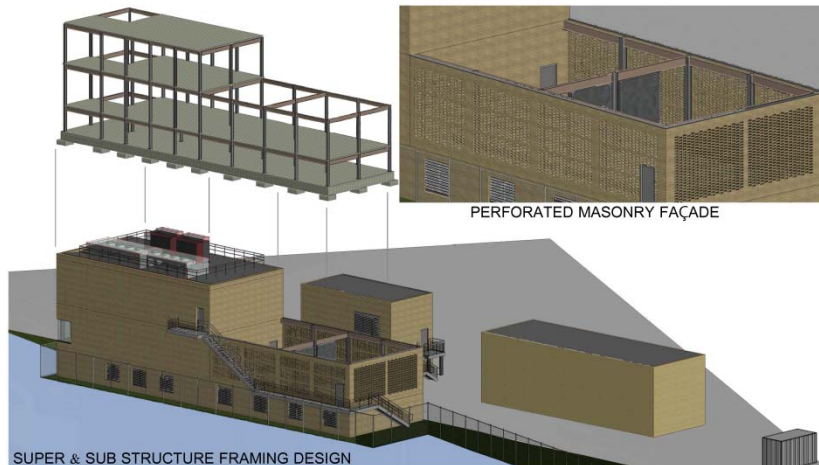
PROJECT DESCRIPTION

SJH is providing structural design, engineering and construction assistance services for the \$200 million repair, reconstruction and replacement of electrical substations and related equipment at Hoboken, MMC and Bay Head rail yards for New Jersey Transit. In collaboration with Gannett Fleming, SJH is providing assessments, evaluation, calculations and design for bridges, station platforms, walls and buildings. We are using REVIT software (BIM) to model the entire buildings including HVAC/mechanical/plumbing components.

New Substation Building at Bay Head: After the initial site visit, in order to meet the new flood elevation, SJH proposed that the new substation building is elevated above grade and supported by cost effective steel or concrete piles.

Henderson Substation Building: SJH is considering two options: retaining the existing building and raising the equipment, or demolishing the existing building, installing a new slab at the required elevation and providing a new modular or tilt up building. Based on this analysis, it was decided to install new floor slab to support the electrical equipment live load of 250 psf. The existing steel columns were confirmed to be adequate to support the heavy load.

Pullman and Immigration Building: SJH is proposing strengthening the floor and steel framing in order to support heavier loads. To reduce the dead load on the steel framing, we will consider removing the concrete encasement or strengthen it by welding additional plates on the steel beams.



SJH Engineering, P.C.