

# New York Police Academy

28-11 28<sup>th</sup> Avenue, Queens, New York

Shawn Sidelinger - Construction Management

<http://www.engr.psu.edu/ae/thesis/portfolios/2011/sus264/index.html>

## Project Overview

**Owner:** NYC Department of Design and Construction, NYC Police Department

**Construction Manager:**  
Turner Construction

**Size:** 720,000 SF

**Occupancy:** B, Business

**Start/End:** 10/01/10 to 12/31/13



## Architecture

New York City Police Academy design is focused around the conjunction of the five current facilities into one. Exterior Façade is a combination of metal panels, precast concrete, and glazed glass.

## Structural

**Foundation:** Pile cap design ranging from 100 to 180 tons in capacity with piles being sixteen inches in diameter.

**Superstructure:** Steel system consisting of rigid and braced frame design, with composite decking for floor and roof support.

## Construction

The project is being constructed under a modified fast track construction style, due to local law requirements, with intentions to obtain a LEED Silver Rating as well. A portion of the site is on an old landfill, causing extra precautions in soil testing and foundation design. This however allows for onsite parking and storage, a rarity in New York.

## Mechanical

**Cooling:** Chilled water system containing four chillers, four cooling tower and up to eight pumps to supply the facility.

**Heating:** Traditional boiler system containing five industrial boilers that are supplied by eight fuel oil tanks.

Air handling units will be installed to ensure proper air quality.

## Electrical/Lighting

**Lighting:** Variety of light fixtures to accompany the architectural feel for the surrounding, all to be energy efficient.

**Electrical:** Administration is supplied by (1) 3000A/460V 3-Phase, and (1) 2500A/460V 3-Phase Switchboard. The Central Plant will be supplied by (2) 4000A/460V 3-Phase Switchboards, and (2) 2.5MW Diesel Generators for emergency power.

