THE KATHLEEN GRIMM SCHOOL

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Categories: Energy and sustainability, High Density, Middle Density, Project, SOM, Urban Paradigms

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The Kathleen Grimm School for Leadership and Sustainability at Sandy Ground is the first net zero energy school in New York City and one of the first of its kind worldwide. The 68,000-square-foot, two-story school serves 444 pre-kindergarten through fifth grade students. The cutting-edge building harvests as much energy from renewable on-site sources as it uses on an annual basis.

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Designed to comply with the SCA Green Schools Guide in lieu of LEED®certification, the project is the NYC School Construction Authority's first "sustainability lab." This exploration into ultimate sustainability will provide substantial benefits to the City's School Design Program and help achieve PlaNYC goals for significant reductions in global warming emissions. SOM's design offers an energy-use reduction of 50% over a SCA standard public school.

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Site Plan

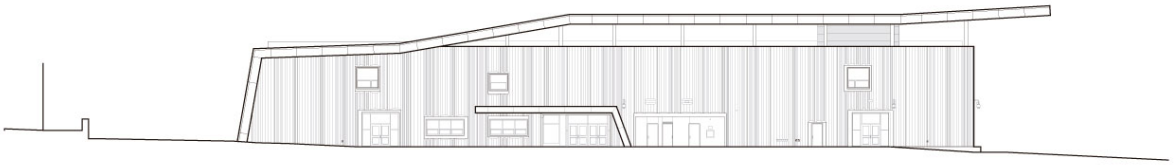
Plans

North South Section

PROJECT NAME
P.S.62 NET ZERO
ENERGY SCHOOL

DRAWING NAME
EAST ELEVATION

PHASE SUBMITTED
COMPLETED 2015



0 5 10 20 40

East Elevation

Precast Diagram

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Wall Sections

SOM optimized the orientation and massing of the courtyard-shaped building to take advantage of sunlight for both ample daylighting and photovoltaic arrays on the roof and south facade. Other sustainable and low-energy features incorporated in the design include an ultra-tight high-performance building envelope, daylit offset corridors, energy-efficient lighting fixtures, low-energy kitchen equipment, a greenhouse and vegetable garden, a geo-exchange system, energy recovery ventilators and demand-control ventilation, and a solar thermal system for hot water.

Daylight Section

Sustainability Section

Energy Data Chart

Comparative Energy Use

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