• 101 Unit affordable units and small commercial space
• $32.7 million construction cost
• Construction Completed Summer 2017
• HPD/Enterprise project
• Passive House/NYSERDA standards
Sustainability Goals

RESILIENCY
Protect against flooding during storm events and future sea-level rise

REDUCE CARBON FOOTPRINT
Utilizing Passive House modeling and guidelines to building a highly efficient building

- Site: Far Rockaway, Queens
- Located in Flood Zone
Resiliency: Building in the Flood Zone

- Raising habitable space above flood plane
- Raising utilities above the flood plane
- Providing emergency power and natural light
- Providing gathering space & egress above the flood plane
- Provide flood relief elements like flood vents and flood barriers
- Daylight corridor and stairwells provide light in case of power outage
- Passive house provides for weathering in place
- Elevator will have control to prevent cab descending into flood waters
Sustainability: Achieving Passive House

This building will be the single largest Passive House multi-family building in the country certified by PHIUS (Passive House Institute of America).

- Super insulated Building Envelope – ICF with 7” EPS – keeps a median temp 40-50 F
- uPVC window has better energy performance
- All LED fixtures
- Energy Star/Water sense fixtures
- Cogen that provide power and hot water
- PV that can provide for backup power
- Mini split heat pump system with air to air energy recovery system
Sandy Resiliency at Coney Island

Photo by J.H. Aronson
Coney Island, Brooklyn

- 10 miles to City Hall in Manhattan
- 1-mile to station

Coney Island Creek
Coney Island Channel
Coney Island Boardwalk
Amusement Parks
MTA
Coney Island Sites

Flood Vulnerability

KEY

ZONE X
ZONE AE (EL 11)
ZONE AE (EL 12)
ZONE VE

Coney Island Sites

Coney Island Boardwalk
Coney Island Creek
Coney Island Channel

ZONE VE
ZONE AE
ZONE X

ZONE AE EL 11
ZONE AE EL 12
ZONE AE (EL 12)
ZONE VE

BuildingEnergy NYC | Beyond Resiliency for NYC Public Housing

12 October, 2017
Existing Building Entries

Reinforced Ground Floor Facade

Entryway Self-Actuating Floodgates
Existing Building Entries

Reinforced Ground Floor Facade

Entryway Self-Actuating Floodgates
Floodproofing at New Buildings

Coney Island Sites

Photo by Smart Vent

BUILDING ENERGY NYC | BEYOND RESILIENCY FOR NYC PUBLIC HOUSING

12 October, 2017
Emergency Access During Flood Events
General Boiler Plant
Remote Service Buildings
Beyond Resiliency for NYC Public Housing