

# Alvah Kittredge AK House

Roxbury, MA



## PROJECT DATA

PROJECT TYPE:  
Renovation

OWNER:  
History Boston, Inc.

ARCHITECT:  
Amory Architects

PROJECT BUDGET:  
\$3,700,000

CONSTRUCTION COMPLETED:  
2015

## PROJECT DETAILS

The historic Boston mansion has been restored to its original exterior appearance and cleverly renovated to provide five beautiful modern apartments. Built to a LEED Silver standard and in compliance with Stretch Code and Green Communities, each separately metered apartment consumes only a modest amount of energy and water. Exterior mechanical equipment has been concealed carefully so as not to impact the appeal of the exteriors. Winner of the 2015 Boston Preservation Alliance Award.

# BARTLETT PLACE BUILDING B

Dudley Square, Roxbury, MA



## PROJECT DATA

PROJECT TYPE:  
New Construction

OWNER:  
Bartlett Place Land, Inc.

ARCHITECT:  
Davis Square Architects

PROJECT BUDGET:  
\$21,630,912

CONSTRUCTION COMPLETED:  
2018

## PROJECT DETAILS

NSE provided MEP and FP design services for this 60 dwelling unit, 5 story building. The building includes a two story parking garage plus large retail areas and common spaces. The building includes a central heating and cooling plant distributed to vertical fan coils in each dwelling unit. Ventilation is provided to each dwelling unit by individual energy recovery units which are integral to the vertical fan coils allowing greatly improved compartmentalization for apartments.

NSE also provided site planning and sustainable design assistance for the larger development, including study of district heating & cooling and cogeneration options. This project is LEED Gold Certified.

# PETER BULKELEY TERRACE

115 Stow Road, Concord, MA



## PROJECT DATA

PROJECT TYPE:  
Building Renovation

OWNER:  
Concord Housing Authority

ARCHITECT:  
Abacus Architects + Planners

PROJECT BUDGET:  
\$5,800,000

CONSTRUCTION COMPLETED:  
2017

AWARDS:  
AIA-NE Merit Award 2013

**PROJECT DETAILS** Norian/Siani Engineering provided mechanical, plumbing and fire protection design and construction administration services for a gut renovation of this formal three-story brick building originally constructed as a public school to 33 dwelling units for elderly and disabled occupants. The designs conform to stretch code and provide LEED Silver level performance. Gas fired high efficiency central systems provide space heat and domestic hot water. Energy recovery ventilators provide continuous supply of fresh air to each apartment and all common areas. Ductless mini-split air conditioning is provided for each apartment powered through individual electrical meters serving each apartment. Low flow plumbing fixtures exceed sustainable design performance criteria. Designs include MEP infrastructure that will allow additional apartments to be added at the ground level in the future.

# DANIEL F. BURNS APARTMENTS

30-50 Churchill Avenue, Cambridge, MA



## PROJECT DATA

PROJECT TYPE:  
Building Revitalization

OWNER:  
Cambridge Housing Authority

ARCHITECT:  
BH+A

PROJECT BUDGET:  
\$70,000,000

CONSTRUCTION COMPLETED:  
2022

**PROJECT DETAILS** Daniel F. Burns Apartments is a federally-assisted housing development located in North Cambridge, Massachusetts. The building, originally occupied in 1972, consists of two pre-cast concrete mid-rise wings. One four-story wing and one six-story wing with a total of 198 dwelling units for elderly/disabled occupants. Norian/Siani Engineering provided mechanical, plumbing, and fire protection design and construction administration services for renovations to the building. The project was a multiphase project and the building was renovated while partially occupied. The renovation consisted of complete renovation of the building including installations of a 4-pipe hydronic system to provide heating and cooling to the building with vertical fan coils and individual ERV units for each dwelling unit. A gas fired co-gen unit was specified to provide heat and domestic hot water to the building and to offset electrical consumption.

# JEFFERSON PARK APARTMENTS

1 Jackson Place, Cambridge, MA



## PROJECT DATA

PROJECT TYPE:  
New Construction

OWNER:  
Cambridge Housing Authority

ARCHITECT:  
BWA ARCHITECTURE

PROJECT BUDGET:  
\$210,000,000

CONSTRUCTION COMPLETED:  
2026 (Estimated)

## PROJECT DETAILS

The revitalization of Jefferson Park Federal Site is construction of six new publicly funded residential buildings consisting of 268 family dwelling units in Cambridge MA. Norian/Siani Engineering provided mechanical, plumbing and fire protection design and construction administration services. Each building is designed and constructed to achieve Passive House Certification. Heating/colling systems are provided by 100% electric air source heat pumps and ventilation is provided via high-efficiency, energy recovery ventilators throughout each building. The HVAC system will utilize modern site wide DDC control systems to manage HVAC equipment and ensure modeled energy targets are achieved post-construction.

# LYNDON B. JOHNSON APARTMENTS



150 Erie Street, Cambridge, MA



## PROJECT DATA

PROJECT TYPE:

Building Modernization

OWNER:

Cambridge Housing Authority

ARCHITECT:

Tise Design Associates

PROJECT BUDGET:

\$33,000,000

CONSTRUCTION COMPLETED:

2013

AWARDS:

BSA/AIA Annual Design Award 2015

BSA/AIA Sustainable Design Award 2016

## PROJECT DETAILS

Lyndon B. Johnson Apartments is a federally assisted housing development located in Cambridge, Massachusetts. The building, originally occupied in 1973, is a 177-dwelling unit, 12-story, precast concrete high rise building for elderly/disabled occupants. Norian/Siani Engineering provided mechanical, electrical, plumbing, and fire protection design and construction administration services for renovations to the building. The project consisted of a complete systems replacement for mechanical and most of electrical and plumbing; Project included new façade, kitchen and bath renovations, new 2-pipe changeover heating and cooling system with vertical fan coils. The mechanical systems include high efficiency gas boiler plant with two gas fired cogeneration units that provide thermal energy for building heating and generate electricity for building use. Energy recovery ventilators provide 24/7 ventilation and are integrated with a 10-story tall solar thermal, aspirating, collector used to warm incoming fresh air when appropriate. A solar PV electric system contributes to energy cost reduction and fills the top roof area. A complete integrated building automation system controls system elements and documents performance.

# SIMES HOUSE

Plymouth, MA

**NSE**  
Norian/Siani Engineering



## PROJECT DATA

PROJECT TYPE:

Restoration and Renovations

OWNER:

Town of Plymouth

ARCHITECT:

Red Hawk Studio Architects

PROJECT BUDGET:

\$2,000,000

CONSTRUCTION COMPLETED:

2014

## PROJECT DETAILS

NSE provided the MEP & FP for this historic mansion from 1863 on the Manomet Bluffs of modern-day Plymouth, Massachusetts has been restored to its original exterior appearance and renovated to provide first floor museum, meeting space and kitchen facilities, five offices and large conference space for businesses on the second floor, and two modern apartments on the 3<sup>rd</sup> floor. The project was overseen by the Simes House Foundation. Exterior mechanical equipment has been located carefully so as not to impact the appeal and historic character of the exteriors. First floor trim, detail and interior materials have remained true to original. The building has also been insulated within limits of the existing framing and meets the standards of LEED Silver certification for all plumbing and mechanical systems. Each of the buildings lessees' utilities are separately metered, and consume only a very modest amount of energy and water. This project is the recipient of the 2018 Massachusetts Historical Commission Preservation Award.

# SQUIRREL BRAND HOUSING

Cambridge, MA

**NSE**  
Norian/Siani Engineering



## PROJECT DATA

PROJECT TYPE:  
Renovation

OWNER:  
City of Cambridge

CONSTRUCTION COMPLETED:  
2002

## PROJECT DETAILS

This building re-use project involved conversion of the former Squirrel Brand Nut Company manufacturing building into affordable housing apartments. NSE Designed all new MEP & Fp systems for the gut renovation for this four-story brick and timber building including high efficiency gas fired central space heat and DHW systems. Numerous utility rebates were used to help reduce the cost for higher performance systems.



# HARRY S. TRUMAN APARTMENTS

25 Eighth Street, Cambridge, MA



## PROJECT DATA

PROJECT TYPE:

Building Modernization

OWNER:

Cambridge Housing Authority

ARCHITECT:

BWA Architecture

PROJECT BUDGET:

\$17,750,000

CONSTRUCTION COMPLETED:

2022

**PROJECT DETAILS** Harry S. Truman Apartments is a federally assisted housing development located in East Cambridge, Massachusetts. The building, originally occupied in 1969, is a 59-dwelling unit, eight-story, steel, and concrete high rise building for elderly/disabled occupants. Norian/Siani Engineering provided mechanical, plumbing, and fire protection design and construction administration services for renovations to the building. The renovation consisted of complete renovation of the building including installations of a 4-pipe hydronic system to provide heating and cooling to the building with vertical fan coils and individual ERV units for each dwelling unit.