

75 AMES STREET

Cambridge, Massachusetts

NATHANIEL MOONEY
ARCHITECTURAL ENGINEERING
MECHANICAL OPTION

Building Type - Science and Technology

Construction Dates - January 2012-Early 2014

Cost - \$188,000,000

Project Team

Owner : The Broad Institute

Project Manager : Boston Properties

Architect : ELKUS|MANFREDI ARCHITECTS

MEP Engineers : Bard, Rao + Athanas

Construction Manager : Suffolk Construction



Architecture

- 15 story, 25000 SF, \$188,000,000, high-rise in Kendall Square, Cambridge, MA.
- Consolidates all of the Broad Institute's offices into one location
- Completes the frontage of Ames Street while interacting with the street life
- Areas include labs, offices, vivarium, and 4,000 SF of retail and restaurant space on the street level
- Facade is a mixture of stone, terra cotta, spandrel and vision glass



Mechanical

- Four 115,000 CFM 100% outside air AHU's mounted in the mechanical penthouses
- Two 230,000 CFM dedicated exhaust air handling units on the roof exhausting through 8 air induction nozzles
- Non-lab zone uses constant or variable volume box with hot water heating coils
- Labs supplied with supply air valves using hot water reheat coils

Heating Plant

- Two 500 BHP preheat fire tube boilers
- Four 120 BHP Reheats with one standby
- Two 215 BHP MPS boilers

Chiller Plant

- Three 1000 ton centrifugal chillers
- Two 450 ton centrifugal chillers
- Five cooling towers on the roof

Electrical

- Two 2000KW/2500KVA Generators
- NSTAR 13.8KV Switchgear
- One Generator Paralleling Switchgear
- Twelve switchboards & 43 Distribution panels
- Recessed linear T5 florescent fixtures in labs
- Suspended linear T5 fluorescent in offices



Structural

- 48" to 60" diameter caissons
- High capacity drilled mini piles have minimum of 12" diameter with a high capacity of 280 tons
- Concrete floor slabs on metal deck
- Lateral loads resisted with HSS, concentric braced frame design
- Typical floor construction is 3/4" cover over varying concrete depth on composite decking