

EMD Serono Research Center -- existing | billerica, MA



Project Info

Building Characteristics

- size: 56,700 sf
- story: 2 story+basement+penthouse
- occupancy: pharmaceutical lab
- cost: \$15 million
- delivery: fast-track
- duration: Nov, 1999 - March 2002

Project Team

- owner: EMD Serono
- architect: Ellenzweig Associate
- landscape architect: John G. Crowe Associate
- MEP engineer: Bard, Rao+Athanas Consulting Engineers
- structural engineer: LeMessurier Consulting Engineers
- contrator: Linbeck/Kennedy & Rossi

Architectural

- In 2002, the site accomodated both the EMD Serono Research Center existing lab building and a Biotech Center.
- Mechanical rooms are located on the basement and penthouse; animal facilities, re-search lab rooms, support rooms are located on the 1st and 2nd floor.
- The building facade is a combination of metal, brick, and glass. Aluminum sunshade is provided on north west corner of the bldg.
- The building emphasis on the use of daylight for the labs and offices and maximize the views to the wooded countryside.

Construction

- The EMD Serono Research Center is a multi-phased pharmaceutical project, anticipated to total approximately 318,000sf.
- Phase 1 consists of the 56,700 sf Research Center existing lab building and a 17,000 sf Biotech Center.
- Subsequent phase will include 3 additional research and development building and an 80,000 sf processing facility. In addition, 600 parking spaces will be accommodated on site in a phased structure parking facility.
- The expansion of the existing lab building is currently under construction as of 2010.

Structural

- The main structure of the building consists of structural steel columns, beams, decks, and concrete slab.
- The lateral force resisting system is a combination of diagonally braced frames and moment resisting connections.
- Typical office floor beam size is W18x35 on the east and west bays and W18x65 on the center bay.
- Typical girder size is W16x26.
- Typical column size ranging from W8x28 to W8x67 and W10x60 to W10x6.

Mechanical

- The building has 3 air handling units (AHU).
- AHU-1 supplies conditioned air to the research and development portion of the bldg.
- AHU-2 supplies conditioned air to offices.
- AHU-3 supplies conditioned air to mechanical rooms in the basement and animal rooms.
- One 350 ton centrifugal chiller is located in the basement.
- Two steam boilers and boiler feed water pump in the penthouse.
- A 350 ton cooling tower and a 60 ton air cooled chiller are located on the roof adjacent to the penthouse.

Electrical Lighting

Electrical

The primary electrical service is owned and maintained by Massachusetts Electric Co.

The primary transformer distributes 480/277 volt service to the building. The switchboard is 480/277V, 3phase, 4 wire, and 2400 amps.

The emergency electric power is provided by the indoor diesel driven engine generator.

Lighting

The primary lighting system is recessed mounted fluorescent fixture with size of 1'x4' and 2'x2'. In the area where recessed fixtures are not used, pendant mounted fixtures are used.