Maryland Public Health Laboratories

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Construction Management

BALTIMORE, MD

[General Building Information]

Owner:	Maryland Dept. of Public Health Mental Hygiene
CM & GC:	Jacobs Engineering & Turner
Delivery:	Design-Bid-Build
Con. Dates:	12/19/11 — 4/19/14
Gross Size:	234,040 S.F.
Floors:	4 + Penthouse
Cost:	$174.3 M

[Architecutre]

The Maryland Public Health Laboratories (MPHL) are Designed to Promote Community Revival & Health Industry Progression. The Building Exterior Uses Intricate Curtain Wall Systems, Metal Side Paneling & a Brick Veneer to Express These Aspects. The new addition to the Johns Hopkins Medical Campus Provides state of the art Laboratory Spaces, as Well as Highly Functional Offices Space.

[Structural]

A Concrete Structural System was implemented within the MPHL as vibration control was a major concern with the design. Base columns and 16" Foundation Walls will Act as the Base Structure of the building, While the Superstructure consists of Two-way Flat Slabs with Drop Panels. The Two-Way Flat Slab will be Reinforced & 10" in Depth at Each Floor & the Drop Panels, Located at Each Column, will be 8" in Depth.

[Mechanical]

The Mechanical System of the MPHL is Design to Meet the Extensive Requirements Needed for Experimental and Laboratory Procedures. Two Separate Air Handling Unit Systems are Used to Condition the laboratory & Office Spaces. A Single AHU Provides Approx. 31,000 CFM to Office Spaces & Four AHU Provide 83,000 CFM Each to Lab Spaces. The Building is Designed to Contain a Three Water Cooled Chiller Cooling System supplying these AHU by 12" Chilled Water Mains. Flexible Water tube Steamboilers are Used to Heat the Spaces of the Building. These will Operate using a Dual Fuel Consisting of Natural gas & No. 2 Diesel Fuels.

[Electrical]

The MPHL Building Distributes Electrical Power Using a 480Y/277Y, 300A Switchgear Located in the Roof Penthouse. Power is Distributed to switchboards and panelboards on each Floor. Two Generators are implemented in the Design to Provide Emergency Power, Both Controlled by a Automatic Transfer Switch.