



Central Indiana Reg

The 52,200 square foot laboratory addition is a five-story essential service building including the following: administrative office space, conference rooms, restrooms, laboratories, computer room, stock rooms, library/reference room, training room, instrument rooms, prep rooms, walk-in coolers, walk-in freezers, records room, centrifuge room, and cafeteria.

The design team was involved with all mechanical, electrical and structural design services.

Critical service areas for mechanical, electrical design were laboratories, computer areas and laboratory equipment. The building includes an uninterruptible power supply for emergency power backup.

The award winning five-story cast-in-place concrete structure was designed and constructed within budget and on schedule. The use of cast-in-place concrete for the structural frame required excellent coordination between the structural engineer and the architect along with the experience and expertise of the general contractor.

Due to the 125 psf live load and the limited structural depth, a wide module beam and slab forming system was selected for the concrete framing. To optimize formwork economy, a total structure of 21 ½ inches was maintained for the beams and girders with the member width varying as required.

Since the addition was located adjacent to the existing facility, approximately 80 feet of existing wall foundation required underpinning. A distribution beam foundation was utilized for the support of three of the new building columns on the north side of the addition. All five floors experience a 6'-6" cantilever on the north side adjacent to the existing building.

The Indiana Chapter of the American Concrete Institute recognized this innovative use of concrete and awarded it with an outstanding achievement award.

Structural Engineer:

Fink Roberts & Petrie, Inc.

