THE SCRIPPS RESEARCH INSTITUTE



GENERAL BUILDING INFORMATION

- •Location: Jupiter, Florida, FAU Campus
- •CONSTRUCTION COST: \$47.53 M GMP
- •NUMBER OF STORIES: 4
- •SIZE: 132,675 SF
 - •□WNER: SCRIPPS
 - •CONSTRUCTION MANAGER: FLUOR
 - •DELIVERY METHOD: Construction Management Design Build
 - •ARCHITECT: Zeidler Partnership Ltd. & Bohlin Cywinski Jackson

STRUCTURAL

- •Cast in place concrete structure consisting of a two-way 10" flat slab with 14" drop panels
- •24"x 24" perimeter beams
- •24" Square columns bearing on 12' Square spread footings at a depth of 2' below grade
- •Concrete moment frames created by the columns and flat slab create the lateral system
- •The penthouse level consists of steel joists on 12" masonry
- Vibroflotation to increase the bearing capacity of the soil for spread footings

MECHANICAL & PLUMBING

- •Two 1050 Ton Chillers supply chilled water at 1575 GPM
- Two main Boilers with de aeration tank supply 100psi steam at a rate of 6500 lb/Hr
- •Four 500 Ton Cooling Towers are located in the mechanical yard
- Four AHU's are located at the penthouse level with a combined capacity of 202,000 CFM, 1510 Ton
- •The Pre-Action Fire Protection system is supplied by a 40HP 500 GPM Main Fire Pump has a backup jockey pump

ELECTRICAL

BUILDING SYSTEMS

- •Primary power to the building is supplied by the utility at 25,000V and comes in at 23,000V and power is distributed throughout the building at 480/277 Y
- •Transformers are located throughout the building to step the power down to 120V for receptacles and incandescent lighting
- •A 2.25 Megawatt 6,200HP Diesel backup generator supplies power at 480/277Y
- •Two 4,500 lb. capacity elevators each powered by 50HP-480V-3Phase Motors

ARCHITECTURAL FEATURES

- •The main entrance is home to a dramatic 3 story atrium staggering back at each level on the way up
- •This building houses unique research areas which drive the materials selection in each laboratory area
- •Level one is home to the Vivarium, BSL-3 laboratories, mechanical rooms, and a telecommunications room
- •Offices and BSL-2 laboratories located on the second and third floors with a common area at the central stairway on both levels
- •An outdoor area on the back side of the building looks across one of the sites retention ponds which is used for landscape irrigation
- •The exterior is a combination of two coat stucco with EIFS finishing, corrugated metal panels, and curtain wall in other places
- •The roofing is an SBS modified bitumen system on concrete roof deck



ADAM HOUCK

CONSTRUCTION MANAGEMENT

http://www.engr.psu.edu/ae/thesis/portfolios/2009/abh5003