

Administration Building

Pennsylvania



Statistics:

- Size: 311,905 S.F.
- Number of Stories: 5
- Cost: \$70-75 Million
- Construction Dates: 10/01-9/03
- Project Delivery Method: Design-Bid-Build

Project Team:

- Owner: Confidential Client
- CM: Skanska
- Architect: KlingStubbins
- Engineer: KlingStubbins

Structural:

- Reinforced concrete spread footings
- 3-1/4" concrete slab on a 3", 20 gauge composite metal deck supported by wide-flange beams
- 1-1/2", 20 gauge metal roof deck supported by open-web joists
- Braced frame lateral load resisting system that utilizes HSS diagonal braces between each story

Electrical:

- 2-15kV distributed by 480/277V and 208/120V system.
- Lineup of 5kV Medium Voltage Load Interrupter switches and two 500KVA substations
- 500kW, 480V, 3PH, 3W engine driven generator

Mechanical:

- Roof-top AHU's supply air to a number of terminal VAV boxes at each floor with electric and hot-water reheat
- Heating load demand is provided by two dual-fuel heating hot water boilers

Lighting:

- T5/T8 linear fluorescent lamps or "biax" long compact fluorescent lamps
- Metal halide sources used for areas over 25' in height

Justin Purcell

Structural Option

<http://www.engr.psu.edu/ae/thesis/portfolios/2008/jjp265/>