Mechanical

Six new air handling units shall be installed in the penthouse of the patient tower along with the new heating hot water plant. The building will be served by variable air volume terminal units with hot water reheat and the return system will be a variable volume system with return air terminal units.

Lighting + Electrical

Normal power to the hospital is supplied by two 13.2 KV underground feeders that terminate in a 15 KV class switchgear rated at 1200 amperes. Emergency power to the hospital is supplied by two 480Y/277 volt, diesel engine generator sets. T8 luminaires with electronic ballasts will be utilized wherever possible due to their energy efficiency.

Structural

The building foundation sits on caskets with a shaft diameter ranging from 1'-6" to 5'-0". Typical concrete column sizes are 22x22 and 21x21 with vertical bars 8#9 and 8#11 respectively. W-shape steel column sizes vary and sit on concrete pier footings. Composite and concrete beams are used throughout the addition.

Architectural

Medical institutions are shaped for function rather than aesthetics. The rigid geometric shape of the hospital allows for a new adult emergency, pediatric emergency and fast track departments on the first level with a nurse’s station located in the center of each. The patient tower allows for 291 private patient rooms each with a window, private bath and ample space for visitors and belongings. The main visitor’s lobby enters into an inviting three-story open atrium space.