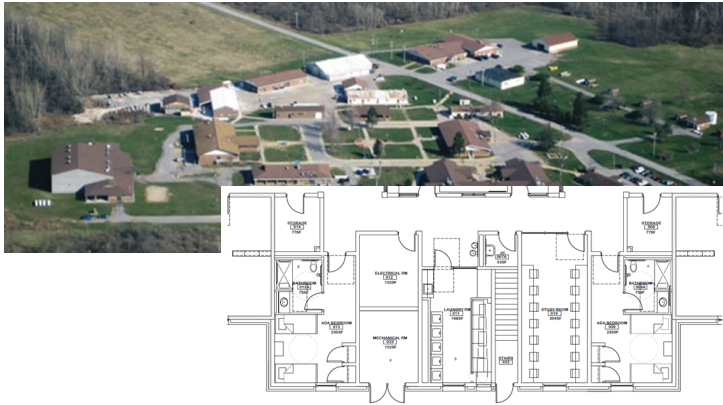


IROQUOIS JOB CORPS CENTER (DOL)

NEW DORMITORY



ROLE

Full-service architecture and engineering design

PROJECT ACHIEVEMENTS

- To achieve 30% energy savings relative to ASHRAE 90.1-2013
- Project Value: \$4 million

Pathfinder is providing full-service design for a new single-story, 68-bed dormitory totaling 14,600 sq. ft. After the new dormitory is completed an existing dormitory will be demolished and the site converted to green space. The project is currently in the schematic design phase.

Entry to the lobby leads to a common area for residents, gatherings and family visits. Secured entries from the lobby lead to resident rooms and auxiliary support spaces (lounges, a study room, laundry room). The I-shaped floor plan allows eight bedrooms with four residents each per wing and two double-occupancy ADA bedrooms in the central core. Each bedroom includes private bathroom facilities. Circulation flows around the Resident Advisor office, which has visual access to public and common areas, entries/exits and residential corridors.

Interior elements of the building are durable yet aesthetically pleasing. Cost, maintenance and durability have been considered in material selection. A combination of building elements such as projections at each bedroom module, gabled and hip roof lines and veneer materials serve to create architectural interest.

The building is designed to achieve 30% energy savings relative to an ASHRAE 90.1-2013 baseline design. Energy modeling is provided for each design phase to evaluate alternatives. The preliminary heating and cooling loads are: 460,000 BTH for heating and 210,000 BTH (17.5 tons) for cooling.

A variable refrigerant flow system for heating and cooling consists of two 16-ton outdoor units capable of operating in low ambient conditions, featuring 27 indoor units. Ventilation is provided by energy recovery equipment.

The hot water system provides 44 gpm of domestic hot water from 40°F entering water temperature to 140°F leaving water temperature. A redundant water heating package is included to ensure continuous hot water service. Plumbing design reduces water consumption by at least 20% than required by the Energy Policy Act of 1992, featuring low- or ultra-low-flow equipment. The building is fully sprinklered for fire protection.

LED lighting with daylighting is included.

Commissioning will be provided for HVAC and domestic hot water systems, and controls. The dormitory will have building level meters to record and post energy performance.



PATHFINDER
ENGINEERS & ARCHITECTS

134 South Fitzhugh Street, Rochester, NY 14608-2268 585-325-6004 www.pathfinder-ea.com