

# BUILDING BRIEFS

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## University Of New Haven Completes New Dormitory

Cramped for space and growing steadily, the University of New Haven found itself in a dilemma. Additional dormitory space was needed, but the University was not in a position to fund such a large project via traditional methods. The solution unfolded through Acorn Group. Acorn, which typically acquires, develops and manages corporate real estate, proposed a build/lease back strategy to UNH. This approach of working with developers is a growing trend among universities that do not have access to massive endowments or State funding. What's more, many universities are finding that they achieve better results. Working with developers, the buildings are often more unique and functionally designed. What's more, universities usually obtain cost and schedule advantages by working with developers such as Acorn.

The UNH dormitory was designed by The Kagan Company. Acorn selected Petra Construction as the builder for the dormitory construction, combining Acorn's niche concept and funding strategy with Petra's building expertise, to ensure a successful project. The work was undertaken in June of 2003 with a completion date of July 2004. With a tight 13 month turnaround, Petra went to work immediately. UNH specified an aggressive schedule, leaving time to furnish the



Photo Credit  
Esto Photographics/David Sundberg

*University of New Haven Dormitory*

dormitory for the fall semester. The project's challenges included unsuitable soils in some areas, as well as steep slopes. Approximately one third of the building's footprint covered an area that had been filled in prior years. The soil issues this caused would normally call for installation of piles or caissons to support the concrete foundation. However, in order to overcome the soil unsuitability with a faster, more cost effective solution, Geopiers were utilized.

Geopiers are an excellent alternative to deep piles, caissons or over-excavation and installation of structural fill. A Geopier is a dense aggregate pier, constructed in a pre-excavated cavity, utilizing equipment that imposes significant lateral pre-stress into the undisturbed soils surrounding the pier. The system is superb for controlling foundation

settlement in soft soils. The Geopiers provided the required load bearing capacity to hold the massive building weight, while doing so at a lower cost than other systems.

The foundation work then proceeded promptly, including high walls on one side where major cuts were made in the slope. The dormitory is a large building, five stories tall with 67,000 square feet of steel framed structure. It houses 160 students, holds many bonus amenities for them and will surely be a place they will enjoy. The new residence hall features a 5,000 square foot food court that provides a 110 person capacity, a game room and a 14,000 square feet of retail space.

The dorm rooms are spacious suite style rooms. Each room is double occupancy and is connected to another room by a bathroom facility. The

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added retail space provides additional income. The entire residence hall was constructed for an astonishing low budget of approximately \$110.00 per square foot.

Work on the project continued through the winter, requiring substantial winter protection. Petra's project management and supervision teams monitored all schedule items very carefully and methodically. There are often unforeseen issues that arise during the construction of a project of this magnitude, especially in areas of coordination. This is magnified when a building this large must be completed in 13 months, leaving no room for errors. Petra brings a wealth of experience to such projects and was able to meet the expectations of all parties throughout the project.

"The ability to create a real sense of team among all parties is absolutely vital to complex, high pressure projects such as this," said Noel Petra, Project Manager for Petra. "At the peak of the project there were craft personnel working in nearly every space within the building. Suppliers and contractors demonstrated an outstanding level of cooperation with Petra's project team," added Noel. By mid July of 2004 the project reached substantial completion and the owner, architect and contractor were all proud to have achieved their significant and common goal.

The building design is clean and conveys strength and stability. The architect utilized a combination of



University of New Haven Food Service Center

Photo Credit Esto Photographics/David Sundberg

brick, tinted glass, geometric patterns and projected wall sections to add visual interest and appeal to the large structure. Large sections of window panels are both recessed and protruding, adding unique architectural lines to the building's presence.

The structure is a solution of functional beauty and style. The success of the project, on time and on budget, confirms that creative owners with tal-

ented architects and a dedicated contractor, working as a team, can, and still do, deliver outstanding quality.

There is no reason why your next project should not enjoy these kinds of benefits. To discuss your project simply call Guido Petra, President or Terry Wooding, Executive Vice President today at 203-865-6043. Make your building project the success it deserves to be.

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