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Office to Laboratory in Record Time

The word “laboratory” connotes a spotless, restricted space, where highly controlled experiments take place using rigorous standards. Not exactly the milieu of the offices where most of us work. Yet, Mueller Associates recently helped convert a shell destined for office space to a laboratory environment rivaling the most modern labs built from the ground up. What’s more, the conversion was made within a ten-month period.

Wake Forest University School of Medicine, in Winston-Salem, N.C. contacted Mueller in March 2001, asking the firm to

Mueller conducted a comprehensive mechanical/electrical infrastructure feasibility study, which reinforced the medical school’s decision to proceed. Since time was an important factor, design and construction proceeded under a “design/build” approach where “the design team and contractors are selected at the outset and work in concert,” says Director of Operations and Manager for the project, Robert Marino.

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handling equipment costing approximately \$1 million, and which took about 16 weeks to construct, was designed and built at the outset of the process.

On the fast track

The design/build method presents challenges to the design team—challenges where prior experience and relationships with the owner and contractors are invaluable. “We had completed several projects over the years with the M&E subcontractors, A.C. Corporation and Salem Electric,” says Marino. “So the project came together quickly through the collaborative efforts of the building owner, the design team and the construction team,” Marino reports, “with the fit-out, including utility infrastructure upgrades, costing over \$6 million. In the beginning, it seemed like an impossible task—to pull such a complex project together in less than one year, but the results prove it was not only possible, but very successful.”

Wake Forest’s Chief Engineer Steve Holladay attests, “We enjoy our relationship with Mueller, and we know we can count on them to design and manage difficult projects that often have very short schedules.” Holladay adds that “Mueller has been involved in several large projects at the Wake Forest School of Medicine over the past 10 years. They have always provided very pragmatic and efficient services for our institution.”

The architect for the Wake Forest project was O’Brien Atkins Associates of Research Triangle Park in North Carolina.



L to R: Lee Shore, Wake Forest University School of Medicine, Bob Marino, Mueller Associates, and Steve Holladay of Wake Forest School of Medicine, inspect the 80,000 CFM penthouse Air Unit for the new laboratory.

assess the suitability of the top two floors—43,000 square feet—of a 1999 four-story structure for use as research laboratory space. The property, at One Technology Place (where the lower two floors house corporate office space) was favorably close to the medical school, but could it be fitted out properly to support the research requirements?

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One strategy to reduce construction time employed the fast tracking of major equipment items. In this instance, custom rooftop air

A Banner Year for Mueller

—from Gene Nerf, President

Mueller Welcomes New VIP Clients

- Kennedy Center
- Smithsonian
- National Gallery of Art
- National Holocaust Museum
- Walter Reed Medical Center
- Swarthmore College

The year 2001 was an exceptional one for our firm. Revenues and profits increased for the fourth consecutive year to record levels as we worked from a strong backlog base of nearly \$3 million beginning the year.

Furthermore, Mueller welcomed new VIP clients during the course of the year and early into 2002—among them the Kennedy Center, the Smithsonian, the National Gallery of Art, the National Holocaust Museum, Walter Reed Medical Center, and Swarthmore College. These institutions join the list of cultural facilities, hospitals, and universities that Mueller can count among its strong institutional client base.

We also continued to benefit from the success and growth of our largest industry client, Northrop

Grumman Electronic Systems Sector, as a member of their design/build team for a 100,000-square-foot expansion at their BWI facility.

We expanded our resources and added AutoCAD 2002 through the training of staff and the fitout of workstations. This will enhance our capability to work more fluidly with many of our architectural clients who do not utilize the Microstation CAD platform.

Our staff reached the 40-level threshold; we recognized two new stockholders, Steve Gillis and Todd Garing; and our registered professional engineers grew to 16, with newly minted Doug Barnhart and Ken Custodio joining the list. Additionally, Associate Darren Anderson became certified as a LEED™ Accredited Professional,

attesting to his knowledge and expertise in green building design.

In summary, 2001 was a great year for Mueller. Our continued success is a direct result of the efforts of everyone in our organization, our select group of architectural clients, and those owners who engaged Mueller to support them in their building programs. That said, 2002 will be equally as challenging for us in view of the economic downturn's impact on building and capital improvement programs, a mandated increase in the use of minority A/E firms by the local governments, and a much smaller backlog. However, with the continued dedication of our staff and the support of our clients, I look forward to another successful year for Mueller.

Momentum ■ Spring 2002

Mueller Helps House Students

The University of Maryland–Baltimore County has a large proportion of commuter students. But residential students are a growing part of its population, and the university is now building dormitories as fast as possible to accommodate them.

Recently, with two new dorms coming on line, and four older residential buildings with outdated heating and cooling systems, the university opted for installation of a central heating and cooling plant to serve all of its residence halls, plus a dining hall.

Time was of the essence, says George Alinsod, Manager of Construction Services at the campus, “When the new Erickson Dormitory opened last fall it had only a temporary heating and air conditioning system.”

The university selected John J. Kirlin, Inc. as the design/build contractor for construction of a new Satellite Utility Plant on the

southeast quadrant of the campus. The process demanded close coordination between the design/build team, with Steve Gillis, a UMBC alumnus, serving as project manager for Mueller who served as the prime A/E.

Heat in a hurry

In less than 11 months from the “notice to proceed,” the plant, constructed of a pre-engineered slab on grade building with grade mounted cooling towers, was producing heating water to the recently constructed Phase III Erickson Dormitory.

The new plant is capable of generating chilled water, and includes two 700-ton electric centrifugal chillers, in addition to the two 500-boiler horsepower low temperature hot water generators, and a 100-horsepower summer boiler. Provisions were made for two 700-ton chillers and a 500-bhp boiler to be added in the future. A new 2500-kVA electric service and

substation were installed to serve the plant.

Work was recently completed to route utility pipes to the dining hall and Potomac Hall dormitory; this utility work will continue over the next few years as the existing dormitories are upgraded from all electric heating and cooling to being served from the new plant.

Alinsod pronounced himself “pleased” with the fast pace of design and construction. While Vernon Harris, Vice President of John J. Kirlin, Inc.’s Baltimore Division, says, “This was a very good project for everyone involved. Mueller did an excellent job.” Marshal Craft Associates was the architect, and WBCM provided structural and civil engineering for the project.



L to R: George Alinsod, UMBC and Steve Gillis, Mueller inspect the new central heating and cooling plant.

