

Bill Lefebvre

TECHNICAL ADVISOR

Battelle Memorial Institute, Center for Life Sciences Research,
West Jefferson, OH

New, 200,000 SF, research and development laboratory and office facility housing research spaces, three mechanical penthouses, administrative office space, a cafeteria, on-site parking for 200 vehicles, shipping and receiving docks, and room for future expansion.

The College of William & Mary, Integrated Science Center, Williamsburg, VA
New Integrated Science Center (ISC) totaling 117,000 SF includes a laboratory building and renovations of two existing laboratory buildings totaling 45,000 SF to serve chemistry, biology and psychology departments. The ISC will create a flexible unified science cluster that will foster interaction and interdisciplinary research among all science departments.

University of Arizona, Keating BIO5 Institute, Tucson, AZ

New, 180,000 SF Keating BIO5 Institute. The building shares an underground vivarium and block-wide development with the interconnected Medical Research Building. The Bio5 Institute also provides administration and educational space as well as wet and dry laboratory space.

Virginia Commonwealth University, School of Medicine, Richmond, VA

New, 200,000 SF administrative office, classroom, state-of-the-art, simulation-teaching laboratory and research laboratory space. Demolition of the A.D. Williams Building and connecting pedestrian bridges is included in this scope of work. Specifically required is abatement of asbestos, lead paint and other hazardous building materials.

Medical College of Wisconsin/Children's Research Institute, Milwaukee, WI

New, \$108 million building with 310,000 SF of research and support space with an option to construct up to 45,000 SF of additional space. Design included space for wet bench, offices, core research support, conference rooms, food/vending, telecommunications equipment, a lobby, and a secure loading dock.

Sterling Winthrop Pharmaceuticals Research Facility (Wyeth), Collegeville, PA

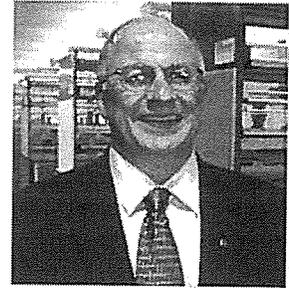
New, nine-building complex on 161-acre site totaling 954,000 SF with manufacturing areas, biology and chemistry R&D (BSL-2 and BSL-3) laboratories, office building, cGMP parenteral area w/Class 10/10K/100K cleanrooms, animal facility, central plant and extensive site work including utilities, roadways, and parking for 1,400 cars. Also included off-site road improvements including major highway ramps.

GlaxoSmithKline, Building 38 Renovation, Conshohocken, PA

Upgrade to an existing Clinical Actives Supply Center, Building 38, a biopharmaceutical clinical trial material production facility. The facility provides all the space needed for clinical trial manufacturing, quality assurance, support facilities, utilities, maintenance and warehousing functions required to support the clinical trial products for GSK needs.

Fort Belvoir Community Hospital, Ft. Belvoir, VA

New replacement hospital includes 1,200,000 SF of outpatient and 120-bed inpatient services, parking for 2,600 cars, helipad and a central utility plant. Project is targeting LEED Silver NC v2.2 Certification.



BILL BRINGS OSU

- ▶ Specialized knowledge of highly complex research laboratory facilities
- ▶ Best practices and lessons learned from extremely relevant laboratory construction projects
- ▶ Leader of Gilbane's Life Sciences Center of Excellence

Qualifications | Education

- ▶ MBA/Finance/
Nichols College
- ▶ BS/Business Administration/
Nichols College
- ▶ Joined Gilbane in 1978
- ▶ Began Construction Career
in 1978

Licenses | Certifications

- ▶ OSHA 30 Hour
Certification

Alice Dean

CHIEF MECHANICAL ESTIMATOR



The Ohio State University, Chemical and Biomolecular Engineering and Chemistry Building, Columbus, OH
 Preconstruction services for the new, 235,000 SF CBEC Building including estimating, cost studies for value engineering, cost management, constructability reviews, and schedule development. The CBEC building will feature laboratory space for chemical sciences and engineering research and will pursue LEED Silver certification.

Battelle Memorial Institute, Center for Life Sciences Research, West Jefferson, OH
 New, 200,000 SF, research and development laboratory and office facility housing research spaces, three mechanical penthouses, administrative office space, a cafeteria, on-site parking for 200 vehicles, shipping and receiving docks, and room for future expansion.

The Ohio State University, Ohio Agricultural Research & Development Center (OARDC), Wooster, OH
 New, \$15 million, 23,000 SF, BSL-3Ag research laboratory facility for the research of biological agents and pathogens in animals. The facility will serve the Food and Animal Research Department in the Ohio Agricultural Research and Development Center located at The Ohio State University Wooster Campus.

University of Kentucky, Biomedical/Biological Sciences Research Building, Lexington, KY
 New, \$97.2 million, five-story, 220,000 SF, state-of-the-art facility with multi-disciplinary laboratories, vivariums, and support spaces for the collaboration in research and graduate education in biological chemistry, genetics, molecular and cellular biology, neuroscience, and related fields. Also included a new, two-story, 11,000 SF central utility plant.

University of Louisville, Cardiovascular Innovation Research Institute, Louisville, KY
 New, \$29.1 million, five-level, 84,750 SF facility featuring biomedical research labs, bioengineering, fabrication facilities, operating and recovery rooms, training facilities, mock circulation labs, a surgical research facility, large-animal vivarium, wet and dry lab area, and medical imaging areas. Facility is a partnership between UL and the Jewish Hospital.

Battelle Memorial Institute, New Laboratory, Columbus, OH
 New, 135,000 SF laboratory building consisting of wet laboratories and office space. The lab portion of the building included structurally supported mechanical/electrical interstitial levels. Renovations to Building 7 consisted of 87,000 SF of mechanical and electrical systems, infrastructure, underground tunnel, and site improvements.

Franklin County, New Courthouse, Columbus, OH
 New, seven-story, 325,000 SF courthouse in downtown Columbus including 32 court sets, with 20 reserved for the common pleas courts; each includes a court room, jury box, judge's chamber, holding cell, bailiff's office, and jury deliberation rooms. Achieved LEED Gold certification and is the first "green" courthouse in Ohio.

ALICE BRINGS OSU

- ▶ Intimate knowledge of the local contracting community and market capacity
- ▶ Innovative problem solver and excels at communicating estimates
- ▶ Conceptual/schematic MEP budgeting expert

Qualifications | Education

- ▶ AS/Architecture/Columbus State Community College
- ▶ Joined Gilbane in 1998
- ▶ Began Construction Career in 1997

Affiliations

- ▶ The Builders Exchange of Central Ohio
- ▶ American Society of Heating, Refrigeration and Air Conditioning

Community Service

- ▶ ACE Mentor Program Columbus Chapter
- ▶ The Builders Exchange of Central Ohio

Awards

- ▶ *Greg Honzo Core Values Award*
- ▶ *Iver Johnson Builder of the Year Award*, Battelle Memorial Institute Laboratory

Jon Dawson, LEED AP

ESTIMATING EXECUTIVE

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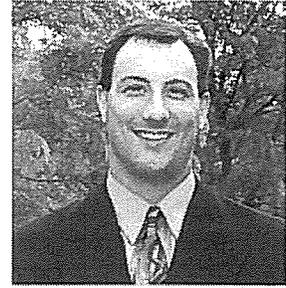
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Case Western University, Center for Structural Biology/Wright Fuel Cell Group (CCSB/WFCG), Cleveland, OH

New, 18,500 SF building housing two, major innovative research programs at Case Western Reserve University. The facility serves as a research center for fuel cell technology and includes five nuclear magnetic resonance devices, eight open laboratory spaces, and support space with a small wet laboratory and office space.

Franklin County, New Courthouse, Columbus, OH

New, seven-story, 325,000 SF courthouse in downtown Columbus including 32 court sets, with 20 reserved for the common pleas courts; each includes a court room, jury box, judge's chamber, holding cell, bailiff's office, and jury deliberation rooms. Achieved LEED Gold certification and is the first "green" courthouse in Ohio.



JON BRINGS OSU

- ▶ Excels in conceptual budgeting, cost modeling, value engineering, and constructability reviews
- ▶ Intimate knowledge of the local contracting community and market capacity

Qualifications | Education

- ▶ BS/Industrial Technology and Construction/ Morehead State University
- ▶ Joined Gilbane in 2002
- ▶ Began Construction Career in 1996

Licenses | Certifications

- ▶ LEED Accredited Professional
- ▶ Corps of Engineers, CQC Certified
- ▶ Certified in MC2 Estimating

Dave Pully, PMP

SCHEDULING MANAGER



The Ohio State University, Chemical and Biomolecular Engineering and Chemistry Building, Columbus, OH

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Ricerca Biosciences, LLC Comparative Medicine Expansion Project, Concord, OH

New, 16,000 SF animal vivarium addition to an existing, highly-sensitive research facility. Building included 10 animal holding rooms, auto-clave, cage washer, and a second story interstitial space to house the mechanical systems. The project was completed on an accelerated and compressed 145-day schedule.

Grange Mutual Insurance, Corporate Headquarters Expansion, Columbus, OH

\$100 million addition, expansion, and enhancement of the campus including a new, 10-story, 225,000 SF office building attached to two parking garages and two pedestrian bridges. Major upgrades to the existing building included integrating systems, renovating the elevator lobby and all restrooms, and replacing the curtainwall system and window shades.

Franklin County, New Courthouse, Columbus, OH

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Cleveland Clinic Foundation Data Center, Brecksville, OH

New, two-story, 116,000 SF data center for the Cleveland Clinic constructed on a greenfield site. The Tier III facility houses 40,000 SF of white space on a 36-inch raised floor with 150 W per SF power capacity. The data center was designed to LEED v3 Silver certification.

DAVE BRINGS OSU

- ▶ Guides project teams through intensive interactive planning sessions to create integrated master schedule
- ▶ Scheduled numerous similar laboratory and university projects and understands the complexity and detailed planning that is required to construct these buildings

Qualifications | Education

- ▶ BBA/Marketing/
Kent State University
- ▶ Joined Gilbane in 2007
- ▶ Began Construction Career in 1980

Licenses | Certifications

- ▶ Project Management Professional (PMP)
- ▶ OSHA 30 Hour Certification

Community Service

- ▶ ACE Mentor Program

Awards

- ▶ *Iver Johnson Builders of the Year Award*, Seneca East Schools New K-12 program

Pat McMillen, CHST

SAFETY MANAGER

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PAT BRINGS OSU

- ▶ Unwavering commitment to project safety
- ▶ Ensures all employees and trade contractors conduct work in a safe manner
- ▶ Understands working on tight, operational campuses

Qualifications | Education

- ▶ ASO/Data Processing/ Columbus Business School
- ▶ Joined Gilbane in 2002
- ▶ Began Construction Career in 1984

Licenses | Certifications

- ▶ Construction Health and Safety Technician (CHST) Certification
- ▶ OSHA 30 Hour Certification
- ▶ OSHA 500 Outreach Trainer, 40-Hour HAZWOPER, 8-Hour HAZWOPER Supervisor, 16-Hour Training, 10-Hour Refresher
- ▶ CPR/AED and First Aid Certified
- ▶ Hilti Certification

Affiliations

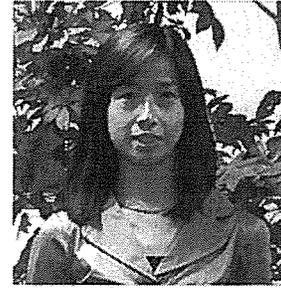
- ▶ The Builders Exchange of Central Ohio

Awards

- ▶ Hero Award, for devotion to safety and remarkable courage to save a friend

Amy Hwang, LEED AP

BIM MANAGER



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Cleveland Clinic, Arnold & Sydell Miller Family Pavilion, Cleveland, OH

A 985,000 SF, 10-story heart center with 300-plus patient beds, diagnostic and treatment suites, operating rooms, and imaging suites. The exterior is clad in glass, stone veneer, and metal siding. The project is a significant addition to the Cleveland Clinic campus.

Providence Park Hospital, Novi, MI

Designed for 268-private patient rooms, this 496,000 SF full service, tertiary-care center is over six stories tall. Building provides a new entry to the hospital campus and connects to the existing outpatient facility and cancer center at three different levels. Exterior is composite wood panels, stone panels, and glass and metal panels.

i21, Research and Development Project

i21 represents a prototype development of operating rooms and intervention rooms with advanced surgical and imaging techniques, blurring the traditional boundaries of medical specialties. The design is patented in the U.S. and in Europe. Project received the 2006 BE Award of Visualization for its creative use of interactive media.

Ohio School Facilities Commission, Vantage Career Center, Van Wert, OH

Renovations and additions to career center to house 485 students. Facility additions will add more than 69,000 SF and includes complete renovation of the entire center; relocating three training rooms into new space; and increasing over-crowded classrooms for a total of 190,000 SF.

Goodyear Tire & Rubber Company World Headquarters, Akron, OH

Joint venture with Welty Building Company LLC to provide construction management services for the redevelopment of Goodyear's new 636,000 SF, seven-story office headquarters. This project is targeting LEED NC Silver certification.

Cleveland Clinic Foundation, Data Center, Brecksville, OH

New, two-story, 116,000 SF data center for the Cleveland Clinic constructed on a greenfield site. The Tier III facility houses 40,000 SF of white space on a 36-inch raised floor with 150 W per SF power capacity. The data center was designed to LEED v3 Silver certification.

Moscow Medical Center, Moscow, Russia

A 75-bed, 27,900 SF M2 facility provides a full spectrum of healthcare services including in-patient services; diagnostic and operating services; emergency services; an outpatient clinic; pediatric services; and a dental clinic. The hospital promotes a distinct, western-style healthcare facility.

AMY BRINGS OSU

- ▶ Specialization in BIM implementation in large-scale programs
- ▶ Provides BIM leadership and creative problem solving

Qualifications | Education

- ▶ MS/Architecture/University of California, Berkeley
- ▶ BA/Architecture/Miami University
- ▶ Joined Gilbane in 2011
- ▶ Began Construction Career in 2004

Licenses | Certifications

- ▶ LEED Accredited Professional

Affiliations

- ▶ American Institute of Architects (AIA)

Publications

- ▶ Co-author of Operating Room/Intervention Room (i21) patent

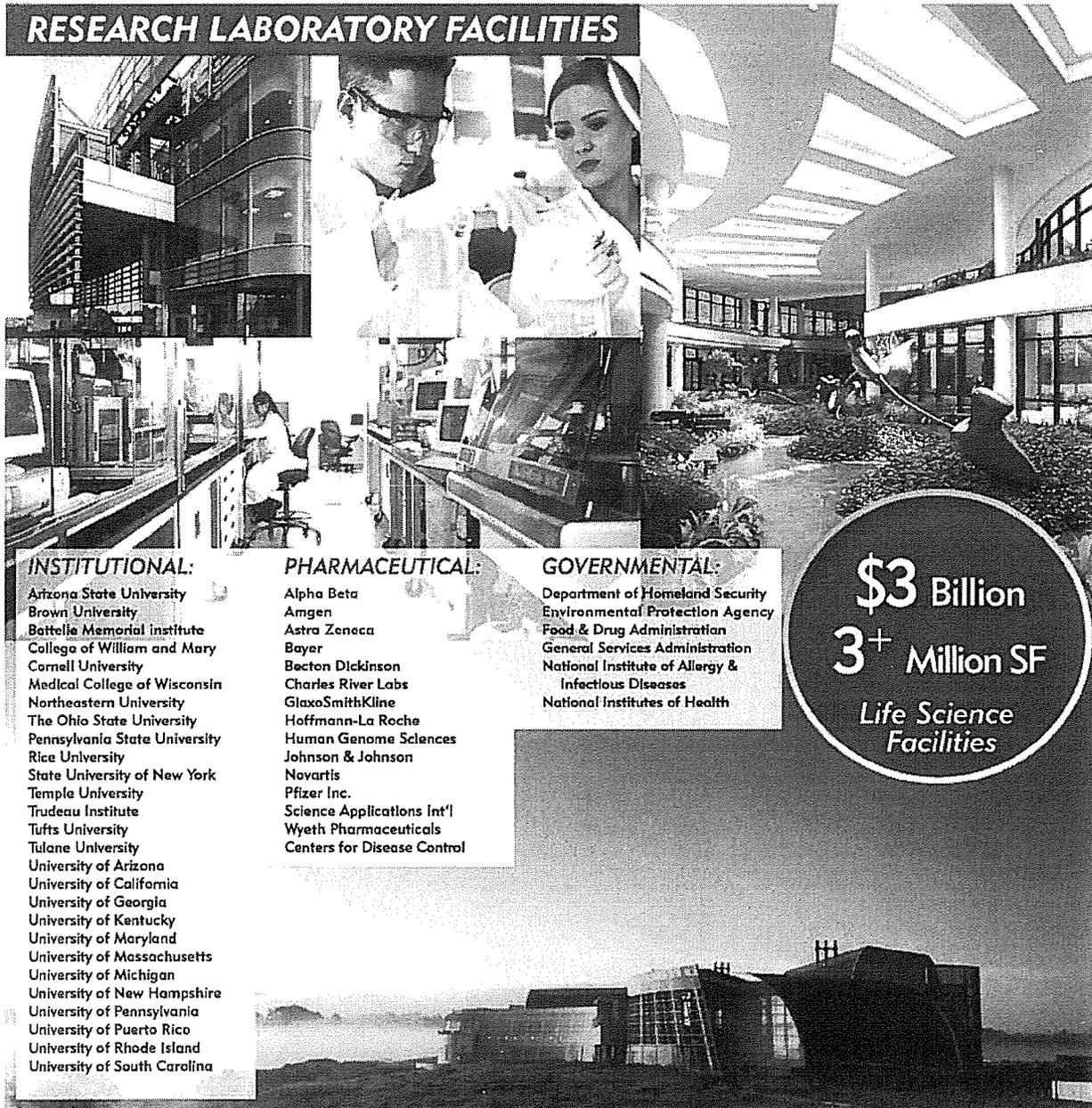
Awards

- ▶ BE Award in BIM for Architecture, Providence Park Hospital project
- ▶ BE Award in BIM for Architecture, Moscow Medical Center project
- ▶ BE Award of Visualization, i21 project
- ▶ AIA Henry Adams Certificate of Merit

4. EXPERIENCE

- a. Projects similar in size and type
- b. Completed projects in the last 5 years

RESEARCH LABORATORY FACILITIES



INSTITUTIONAL:

Arizona State University
 Brown University
 Battelle Memorial Institute
 College of William and Mary
 Cornell University
 Medical College of Wisconsin
 Northeastern University
 The Ohio State University
 Pennsylvania State University
 Rice University
 State University of New York
 Temple University
 Trudeau Institute
 Tufts University
 Tulane University
 University of Arizona
 University of California
 University of Georgia
 University of Kentucky
 University of Maryland
 University of Massachusetts
 University of Michigan
 University of New Hampshire
 University of Pennsylvania
 University of Puerto Rico
 University of Rhode Island
 University of South Carolina

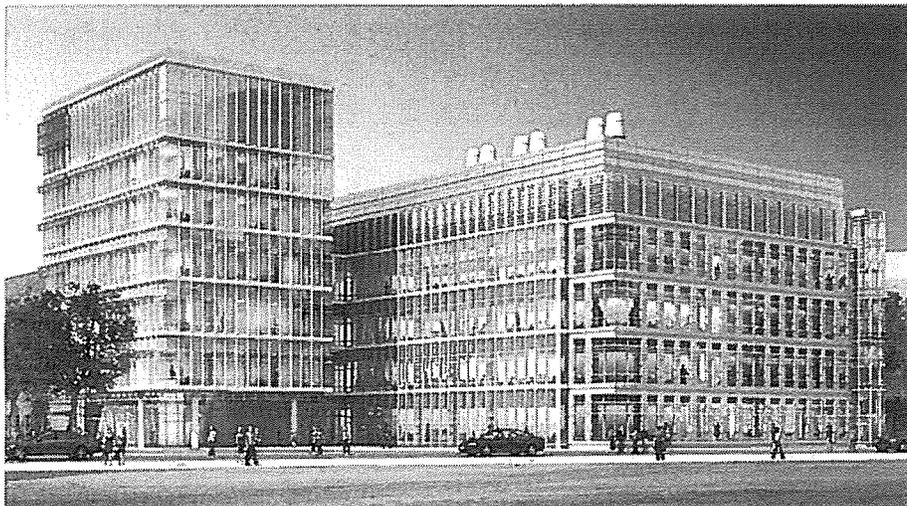
PHARMACEUTICAL:

Alpha Beta
 Amgen
 Astra Zeneca
 Bayer
 Becton Dickinson
 Charles River Labs
 GlaxoSmithKline
 Hoffmann-La Roche
 Human Genome Sciences
 Johnson & Johnson
 Novartis
 Pfizer Inc.
 Science Applications Int'l
 Wyeth Pharmaceuticals
 Centers for Disease Control

GOVERNMENTAL:

Department of Homeland Security
 Environmental Protection Agency
 Food & Drug Administration
 General Services Administration
 National Institute of Allergy &
 Infectious Diseases
 National Institutes of Health

\$3 Billion
3+ Million SF
Life Science Facilities



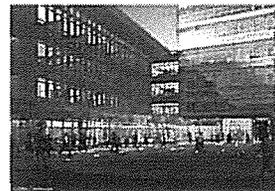
The Ohio State University, Chemical and Biomolecular Engineering and Chemistry Building

Columbus, Ohio

Gilbane was awarded the Construction Management contract for the new, 235,000 SF Chemical and Biomolecular Engineering and Chemistry (CBEC) Building in June 2010. The Gilbane team is currently performing the preconstruction phase of the project including estimating, cost studies for value engineering, cost management, constructability reviews, and schedule development. Our preconstruction team has worked closely with the University and the entire design team to ensure the design schedule and project budget are strictly adhered to throughout the preconstruction process.

The CBEC building is to be located in the Academic Core North, in the heart of the science and engineering neighborhood. The building will adopt the sustainable design practices by Labs 21 in addition to pursuing a LEED Silver certification. The new CBEC building is conceived as a community of scientists, engineers, postdoctoral fellows, graduate students, and technical staff working collaboratively in the areas of research strengths in Chemistry and Chemical Biomolecular Engineering (CBE). This includes nano/bioscience and technology, energy-related materials, energy and the environment, and theory, modeling, and simulations.

Once complete, faculty members and their research teams will enjoy modularly designed laboratories that form large, contiguous blocks of space with clear connectivity, and an openness that facilitates cooperation. The design is intended to promote a comprehensive, interdisciplinary research enterprise at the interface of chemical sciences and engineering, through the integration of basic science and engineering research strengths. In addition, the cohabitation of these two disciplines in a new research facility represents the growing emphasis placed on building interdisciplinary research programs across multiple departments and colleges within the University's "One Ohio State Framework."



PROJECT INFORMATION

Architect:
Stantec

Project Square Feet:
235,000 SF

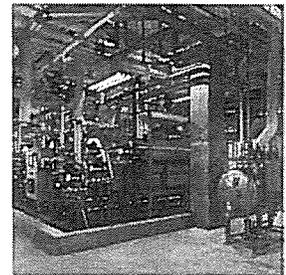
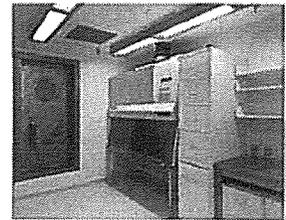
Construction Cost:
\$126,000,000

Completion Date:
November 2014

Delivery Method:
Construction Manager
Agency

SIMILARITIES TO OSU'S PROGRAM

- ▶ Gilbane actively performing preconstruction services: estimating, value engineering, constructability reviews, and scheduling
- ▶ Preconstruction team has included Brett Meyer, Steve Jarrells, Mike Giuliani, Alice Dean, Jon Dawson, Dave Pauly, Pat McMillen, and Amy Hwang
- ▶ No LEARNING CURVE and seamless transition to construction



The Ohio State University, Ohio Agricultural Research & Development Center (OARDC)

Wooster, Ohio

The new, secure biosafety/bio-containment laboratory is used to enhance its nationally and internationally recognized research programs on infectious diseases of plants and animals. The facility allows researchers to compete for new federal grants and continue to meet industry and state expectations, providing proactive solutions to impending disease problems facing our plant and animal industries, rather than being reactive once the problems occur.

In addition to three BSL-3 labs, the Plant and Animal Agrosecurity Research (PAAR) Facility includes two BSL-3 Ag isolation rooms, which are needed to work with large animals such as cows and pigs. PAAR is the only facility in Ohio and one of only five nationally with the capacity for both plant and animal research at these high safety levels. Under federal guidelines, all facilities handling potentially infectious agents must adhere to strict procedures to insure containment of these pathogens. Depending on the ease with which microorganisms can be transmitted, they are classified as BSL-1, BSL-2, BSL-3 or BSL-4, with BSL-4 carrying the highest risk of infection.

The building allows Ohio to be proactive in the development of new diagnostic tools, treatments, vaccines or genetically resistant animals and plants to reduce economic losses from diseases and pests. The building enhances OARDC's ability to attract highly competitive faculty and grants to the state. The BSL-3 facility complies with all federal, state, and institutional regulations governing BSL-3 and BSL-3 Ag labs. The building is physically isolated and continually monitored, and access to the area is limited and tightly controlled. The facility is airtight with outgoing air filtered to trap microorganisms and preventing them from spreading into other sections of the facility or out into the surrounding environment.

PROJECT INFORMATION

Architect:

Flad & Associates
Van Auken Akins Architects
LLC

Project Square Feet:

23,000 SF

Construction Cost:

\$15,000,000

Completion Date:

July 2011

Delivery Method:

Construction Manager
Agency

SIMILARITIES TO OSU'S PROGRAM

- ▶ Located on active research campus
- ▶ Research, laboratory, and offices
- ▶ Utility and infrastructure upgrades
- ▶ OSU research facility
- ▶ Program managed by Steve Jarrells and Todd Gerber
- ▶ Supported by Alice Dean, Jon Dawson, Dave Paulty, and Pat McMillen



Battelle Memorial Institute, Center for Life Sciences Research West Jefferson, Ohio

Gilbane and its joint venture partner served as construction manager for the new, 200,000 SF, greenfield toxicology laboratory on Battelle's West Jefferson campus. The new state-of-the-art facility includes modular vivarium space, vivarium support areas, chemistry and research support laboratories, administrative office space, limited cafeteria area, and space for building support, as well as on-site parking to accommodate approximately 500 cars, shipping and receiving docks, and room for future expansion.

Other key components include associated analytical laboratories, offices and 16 suites of paired, large-animal holding areas for both canines and non-human primates. The animal holding rooms are sized to incorporate adaptability for multiple species. The rodent module utilizes a standard micro-insulated, un-vented system and consists of three room sizes; single-interconnected rooms, medium, and large rooms. The large rooms are capable of housing large animals if there is a demand that exceeds the available canine and non-human primate rooms. Vivarium support components include: cage wash and storage, sterilizers, surgery suite, separate necropsy areas for both large and small animals, pharmacy, food preparation, food and bedding storage, laundry, and laboratory spaces for histology, pathology, formulations, and analytical chemistry.

The facility is supported by N+1 redundant mechanical and electrical systems to ensure safety of the researchers at all times. The standby power systems contain a UPS system, fuel oil system, and two 2MW generators with sufficient power to support the new facility as well as the entire campus. The mechanical systems are also 100% redundant utilizing dual air handling units, heat recovery units, exhaust fans, boilers, chillers, pumps and Phoenix control valves. The building control system is separated into two systems: building controls and laboratory controls; allowing the research staff to maintain flexibility and complete control of the lab management system.

Although not LEED certified, the project incorporated many sustainable design features including energy conservation through heat recovery and unoccupied setback modes, stormwater retention, environment friendly landscaping, extensive lighting control system and the use of natural light throughout the facility.



PROJECT INFORMATION

Architect:
Flad & Associates

Project Square Feet:
200,000 SF

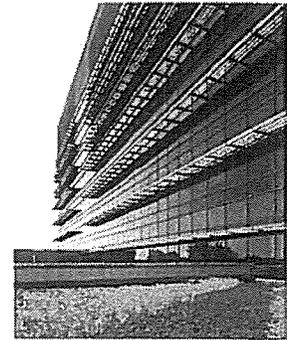
Construction Cost:
Confidential

Completion Date:
August 2011

Delivery Method:
Construction Manager at-Risk

SIMILARITIES TO OSU'S PROGRAM

- ▶ Located on active research campus; maintained no disruptions to ongoing research
- ▶ Research, laboratory, and offices
- ▶ Utility and infrastructure upgrades
- ▶ Building Information Modeling
- ▶ Incorporated many sustainable design features
- ▶ Construction team led by Brett Meyer and Steve Pawuk
- ▶ Supported by Bill Lefebvre, Alice Dean, Jon Dawson, Dave Pully, and Pat McMillen



Grange Mutual Insurance, Corporate Headquarters Columbus, Ohio

Gilbane provided program management and construction management services for the addition, expansion, and enhancement of the current corporate campus in downtown Columbus. The scope of work included a new, 10-story, 225,000 SF office building with support space, along with site improvements to a rear service plaza for deliveries and drop-offs. The office building attaches to a new, 1,000-car parking garage, including 22,000 SF of office/retail space, via a new pedestrian bridge spanning across Sycamore Street.

The exterior skin of the new office tower utilizes a custom designed and fabricated unitized curtain wall system, with horizontal sunscreens and high efficiency glass. Due to the fast-track nature of the project and aggressive enclosure schedule, the custom system was designed, tested, and fabricated in less than six months and was installed in four months. The project team also managed the replacement of the curtain wall system in the existing building, while maintaining full owner occupancy of the building. The curtain wall system features are almost identical to CBEC. The curtain wall took extensive, up-front planning and expertise from design through installation to ensure superior results.

Sustainable features consisted of high performance glass, external sunscreens, and interior shades that reduce electricity consumption, as well as 15,000 SF of rooftop gardens with portions accessible to employees. In addition, Gilbane led the waste management effort achieving more than 75% of construction waste recycling.

Employee amenities within the office building include a cafeteria with dining and an outdoor dining terrace; a 5,500 SF, in-house fitness center with wellness, aerobics, and locker rooms; a 16,000 SF training academy; a sub-dividable multi-purpose meeting room for "all hands" and public functions; and a large, landscaped plaza on the corner of Sycamore and High Streets featuring a water-skin fountain.

PROJECT INFORMATION

Architect:
NBBJ

Project Square Feet:
241,000 SF

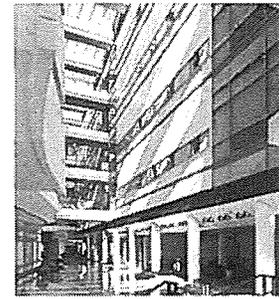
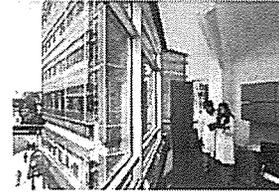
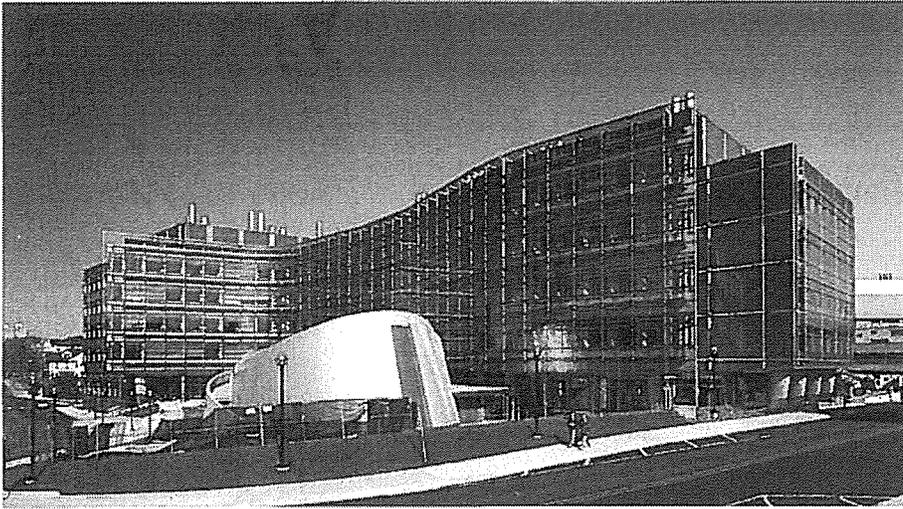
Construction Cost:
\$97,400,000

Completion Date:
April 2010

Delivery Method:
Construction Manager at-Risk

SIMILARITIES TO OSU'S PROGRAM

- ▶ Located on tight downtown site
- ▶ Maintained operations and coordinated activities with existing employees
- ▶ Curtain wall system similar to CBEC
- ▶ Green roof, sun screens, special glass and other LEED components
- ▶ Construction led by Brett Meyer
- ▶ Supported by Steve Jarrells, Alice Dean, Jon Dawson, Dave Pully, and Pat McMillen



University of Michigan, Biomedical Science Research Building Ann Arbor, Michigan

The University of Michigan selected Gilbane to provide construction management services for the largest and most prestigious, single, new project on campus. The \$205 million Biomedical Science Research Building (BSRB) houses faculty and scientists in a flexible environment to foster multi-disciplinary research, project collaboration, and intellectual innovation. The BSRB is a major new academic building with up-to-date, flexible, generic biomedical research space that serves the needs of the medical school for the foreseeable future. The six-level, 502,000 SF building is carefully sited between the main health system campus and the medical school, creating a new front door to the medical campus.

Five main structures make up the facility: the east tower, west tower, auditorium, vivarium, and office ribbon. Approximately 420,000 SF was designed for wet research laboratories, laboratory support spaces, principal investigator offices, interaction spaces, and conference/auditory facilities. One very visible aspect of this interaction space is the 300-seat auditorium, featured in front of the building. In addition, a 82,000 SF animal research facility located two levels below grade.

Its form responds to multiple site pressures through the use of full, wall glazing, terra cotta rain screen panels, and atrium entries. A rectilinear laboratory building is connected to the organically shaped office building by means of a five-story glass atrium. The atrium provides a centralized space, where a large number of researchers can interact with each other while passing through the building between labs and office areas. An undulating double-glass curtain wall, which defines the principal façade, assists in environmental controls. This wall creates a memorable image for the building as a laboratory facility for the 21st century, and provides a welcoming presence at this significant pedestrian connection between the main campus and medical school.

Gilbane effectively executed a massive excavation, while protecting existing utility tunnels with auger-driven earth retention systems, to eliminate noise and vibration to existing adjacent facilities. This project is currently the most recognizable on campus and was completed on schedule and budget. Special care by Gilbane was necessary to adhere to the substantial environmental challenges encountered in the execution of the construction plan.

PROJECT INFORMATION

Architect:
Ennead Architects (Fmr.
Polshek Partnership)

Project Square Feet:
508,261 SF

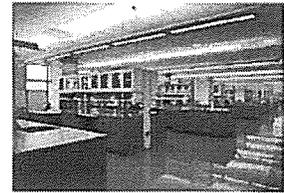
Construction Cost:
\$205,335,605

Completion Date:
January 2006

Delivery Method:
Construction Manager at-Risk

SIMILARITIES TO OSU'S PROGRAM

- ▶ Constructed on active, medical university campus
- ▶ Research, laboratory, teaching spaces, offices and administrative areas
- ▶ Collaboration in conjunction with University of Michigan Medical Center and UM Medical School
- ▶ Construction support by Juan Medina



University of Kentucky, Biomedical/Biological Sciences Research Building

Lexington, Kentucky

Gilbane served as construction manager for the University of Kentucky's Biomedical/Biological Sciences Research Building, and was instrumental in providing value engineering suggestions and reconciling budget/estimate issues for the project.

The new building serves as a state-of-the-art facility for collaboration in research and graduate education in biological chemistry, genetics, molecular and cellular biology, neuroscience, and other related fields. The design allows different faculty members of multiple disciplines to co-locate in adjoining laboratories. Each laboratory is designed to allow for varying and specific procedures in the research/investigative process, and is intended to produce the formation of a research community culture.

The five-story, 220,000 SF building houses wet laboratories and a vivarium with required support spaces and facilities. This includes not only wet laboratories, but workstations for technical staffs, office workstations, break areas, corridors, and elevators. Contemporary design standards were implemented throughout.

Shared equipment rooms included central autoclave facilities, centrifuge facilities, cold rooms, and tissue and cell culture facilities.

The 25,000 SF vivarium contains more than 20 animal rooms with support rooms including: procedure rooms, isolation and treatment rooms, operating rooms, morgue, necropsy, and aquatic rooms. Also included was a rack washer, a tunnel/cage washer, and a bedding disposal system. All animal rooms are equipped with an Edstrom animal watering system, as well as Edstrom's Watchdog monitoring system to control light levels, access, and monitoring. Construction of the vivarium is glazed block walls, resinous flooring, stainless steel doors, and an EIFS ceiling to ease the wash-down process.

The project also included a new, 12,000 SF Central Utility Plant (CUP) electrical substation. The CUP feeds the building with steam and chilled water for heating/cooling and is tied into the existing campus loops.

PROJECT INFORMATION

Architect:
A.M. Kinney Associates

Project Square Feet:
220,000 SF

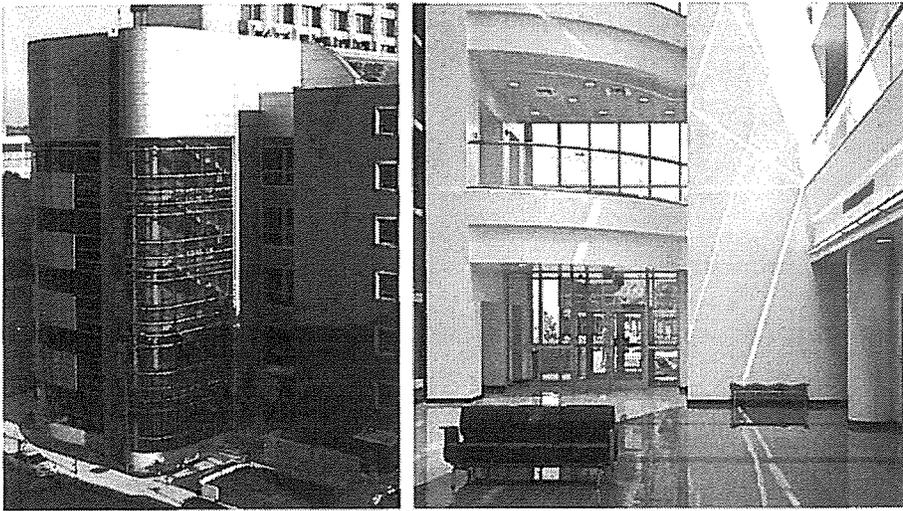
Construction Cost:
\$62,000,000

Completion Date:
November 2004

Delivery Method:
Construction Manager at-Risk

SIMILARITIES TO OSU'S PROGRAM

- ▶ Constructed on active, university campus
- ▶ Collaborative research laboratories, teaching facilities, offices and lab support areas
- ▶ Building fed by new central utility plant
- ▶ Site administration/supervision by general superintendent, Steve Jarrells
- ▶ Supported by Brett Meyer, Mike Giultani, Alice Dean, Jon Dawson, and Pat McMillen



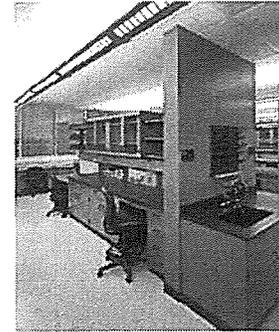
University of Louisville, Cardiovascular Innovation Institute

Louisville, Kentucky

University of Louisville's new Cardiovascular Innovation Research Institute (CII) is the result of a visionary partnership, ground-breaking research, and a commitment to improving the quality of life for heart failure patients. Building upon the internationally recognized work of Drs. Laman Gray and Rob Dowling, U of L physicians who implanted the world's first totally implantable artificial hearts, and in partnership with Jewish Hospital, the institute advances the study of heart assist devices that save and improve lives.

Gilbane provided construction management services for the CII located on the health sciences campus at the Louisville Medical Center. This five-story, 86,000 SF laboratory facility contains two "shell" floors designed to accommodate the most intensive biomedical research, while the upper two floors house biomedical research and a floor for bioengineering. Flexibility extends to the ground floor, where the institute resides, and additional shell space built in for future flexibility. The bioengineering research labs maintain an open lab module with movable casework and lab benches. The structure also includes fabrication facilities, operating and recovery rooms, diagnostic equipment, training facilities, mock circulation labs, administrative offices, conference rooms, atrium, a surgical research facility, and medical imaging areas.

The CII is an in-fill building that, together with five other facilities, creates a medical campus superblock. All structures are interconnected and the below grade vivarium is connected to the Research Resource Center, an adjacent existing vivarium. Such close proximity to a living campus created many opportunities for Gilbane managers to collaborate with doctors involved in medical research. Dr. Gray and others were frequent visitors to the site, inquiring and offering consult about construction. Maintaining a construction site with a small building footprint and tight physical constraints on an active campus required creative, flexible work schedules to minimize interruptions to learning while maintaining steady workflow. These same skills, coupled with persistent focus on value engineering, enabled Gilbane to help the university stay on budget despite a notable gap in the owner's initial funding.



PROJECT INFORMATION

Architect:
Arrasmith, Judd, Rapp,
Chovan Architects

Project Square Feet:
84,750 SF

Construction Cost:
\$22,872,000

Completion Date:
January 2007

Delivery Method:
Construction Manager at-Risk

SIMILARITIES TO OSU'S PROGRAM

- ▶ Infill tower constructed in between five operational medical and research facilities
- ▶ Constructed on active, medical university campus
- ▶ Research, laboratory, teaching spaces, and offices
- ▶ Site administration/supervision by general superintendent, Steve Jarrells
- ▶ Supported by Brett Meyer, Alice Dean, Jon Dawson, and Pat McMillen



PROJECT INFORMATION

Architect:
Design Group, Inc.

Project Square Feet:
325,000 SF

Construction Cost:
\$92,000,000

Completion Date:
December 2011

Delivery Method:
Construction Manager
Agency

Franklin County, New Courthouse Columbus, Ohio

The new, seven-story, 325,000 SF courthouse in downtown Columbus includes 32 court sets, with 20 of the court sets used for the common pleas courts. Each is a self-contained unit featuring a court room, jury box, judge's chamber, holding cell, bailiff's office, and jury deliberation rooms. Each court set contains extensive sound and vibration control to eliminate noise transmissions from adjacent court rooms and office spaces.

Gilbane implemented sustainable practices during construction which included the use of recycled and local materials, and assisted the architect with energy-efficient building elements such as climate control systems, high ceilings for natural lighting, and a "living" green roof to help cool the building and control runoff rainwater. The U.S. Green Building Council (USGBC) recently awarded the project LEED Gold certification and is the first "green" courthouse in Ohio.

The building's exterior consists of curtainwall, metal panels, and precast concrete. The curtainwall system includes 47,000 SF of custom-manufactured unitized panels and 35,000 SF of traditional, "stick built" curtainwall. The curtainwall structure was engineered to support the buildings sun shades and window cleaning tie backs. The Gilbane team worked closely with the design team, manufacturer, and contractors to coordinate the design, fabrication, and installation. The installation required an aggressive schedule to ensure that the courthouse's extensive finishes were conditioned and protected. This seven-story tall system was safely installed over the busy downtown streets of Columbus.

Gilbane was also awarded the planning, coordination, and activation services of the building. Gilbane developed a comprehensive transition schedule with multiple courthouse departments and prepared a Building Activation and Occupancy Schedule consistent with the Transition Schedule that detailed the time line and checklist of the move.

SIMILARITIES TO OSU'S PROGRAM

- ▶ Tight site in downtown Columbus
- ▶ Curtainwall system includes custom-manufactured unitized panels
- ▶ LEED Gold certification
- ▶ Construction team included John Gibson and John Lambert
- ▶ Supported by Alice Dean, Jon Dawson, Dave Pauly, and Pat McMillen



PROJECT INFORMATION

Architect:

Antoine Predock
Moody/Nolan Ltd.

Project Square Feet:
650,000 SF

Construction Cost:
\$152,000,000

Completion Date:
April 2007

Delivery Method:
Construction Manager
Agency

The Ohio State University, Recreation & Physical Activity Center Columbus, Ohio

In an effort to improve the out-of-classroom recreation experience for students and to assist in student recruitment efforts in Ohio, The Ohio State University replaced its on-campus recreation center, Larkins Hall, with a new, \$152 million complex.

The scope of work included a phased demolition of the existing building and construction was divided into three phases due to the project's enormous scale and complexity. Phase I included an Adventure Recreation Center on a separate site and a 1,000-car parking garage; Phase II included the Main Recreation Center/Natatorium; and Phase III included the Physical Activities & Education Services building.

The new, 650,000 SF recreation center houses an aquatic center for swim team practice, competition, and member use; basketball, volleyball, badminton, racquetball, and squash courts; fitness and conditioning space; and a student wellness center. The facility also contains sports and exercise laboratories, classrooms, and offices for the physical education department.

The Recreation & Physical Activity Center (RPAC) facility was located adjacent to considerable flows of vehicular and pedestrian traffic, just south of Ohio Stadium. The project team coordinated extensively with Traffic & Parking, the adjacent building occupants, and University personnel to ensure the safety of students at all times. Additional coordination efforts were implemented with Traffic & Parking prior to and during home football games, due to the project's close proximity to Ohio Stadium. The RPAC project also required the removal replacement and tie-in of numerous campus utilities, requiring the project team to coordinate closely with the University's facilities personnel.

SIMILARITIES TO OSU'S PROGRAM

- ▶ Located on active OSU campus with substantial flows of vehicular and pedestrian traffic
- ▶ Utility and infrastructure upgrades
- ▶ Construction team included Brett Meyer, John Gibson, Steve Pawuk, John Pearson, and John Lambert
- ▶ Supported by Mike Giuliani, Alice Dean, Jon Dawson, and Pat McMillen



PROJECT INFORMATION

Architect:
Payette Associates

Project Square Feet:
157,500 SF

Construction Cost:
\$94,438,723

Completion Date:
January 2009

Delivery Method:
Construction Manager at-Risk

University of Massachusetts, Integrated Science Building Amherst, Massachusetts

Gilbane provided construction management services for the new, \$94 million, 156,000 SF science facility to address the teaching and research needs of the Chemistry and Life Sciences Departments.

The Integrated Sciences Building (ISB) forges a new model for science teaching and research focused on the integration of the life, chemical, and physical sciences. This innovative concept brings together the teaching of basic and advanced courses in chemistry and life sciences, provides flexible research laboratories that supports interdisciplinary research teams and enhances the interaction between researchers and students, both graduate and undergraduate.

The ISB includes all undergraduate chemistry teaching labs, upper-division laboratories for molecular biology, cell biology, genetics, and physiology; wet and dry laboratories; vivarium space; laboratory preparation spaces; and veterinarian research. These offer specialized microscopes and access to advanced imaging technologies, lasers, and sophisticated tissue culture facilities.

In addition, the building houses classrooms, conference rooms, auditorium, storage areas, offices, and building support areas. The building's exterior features brick, curtain wall, and energy-saving terra cotta sunscreens at the atrium glass.

The project also included the development of a new chilled water plant and cooling tower and extensive remote utility piping from the chiller plant. Additional site work included walkways, vehicular drives, a replacement parking lot, site utilities, and landscaping.

Located in the University's science quad, the ISB is in close proximity to other campus buildings. It is a heavily trafficked area by students and faculty and as construction progressed, the Gilbane team developed and revised plans to re-route pedestrian walkways to ensure student safety and minimize any disruptions to normal daily activities.

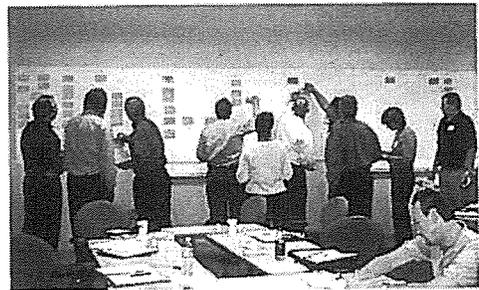
SIMILARITIES TO OSU'S PROGRAM

- ▶ Constructed on active university campus
- ▶ Science facility with teaching and research labs for the chemistry and life sciences departments
- ▶ Designed and built to LEED Silver standards
- ▶ Preconstruction support by Bill Lefebvre

5. PROJECT APPROACH

a. Project Schedule

Gilbane developed a preliminary project schedule which we have utilized throughout the preconstruction process to guide the project team with time critical decisions. Gilbane will further develop the schedule as the construction documents are completed and prior to trade contractor procurement. The project schedule will contain all critical schedule milestones, general arrangement and sequence of work, durations for work activities and will be included in each trade contract. As trade contracts are awarded, Gilbane will conduct multiple card trick sessions with the contractors, OSU and Pelli/Burt Hill to complete the necessary detail. At the conclusion of each planning session, Gilbane will input the results of the card trick into Primavera P6 to produce the CPM schedule. The progress schedule will be updated on a monthly basis, or more frequently as necessary, and will be used as a primary management tool to ensure the team achieves the schedule milestones and completion dates.



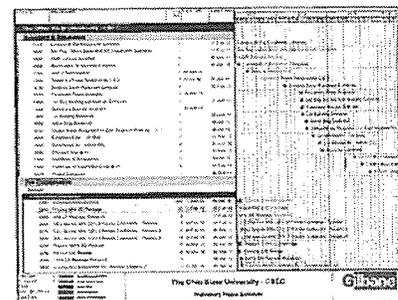
Based on our knowledge of the project, interaction with the CBEC project team and OSU personnel, we have identified the following schedule items critical to the successful completion of the project.

- ▶ Bid, award and procurement of the curtain wall system.
- ▶ Permanent power required June 2013 (requires new feeders by the East Regional Chilled Water Plant project through the existing 19th Ave. ductbank).
- ▶ Chilled water from the East Regional Chilled Water Plant project (we have already identified that temporary chillers will be required for temporary cooling of the CBEC project in the Fall 2013 as chilled water will not be available from the new ERCWP until 1st Quarter 2014).
- ▶ Removal and relocation of the existing Koffolt tunnel.
- ▶ Relocation of the existing equipment from the Koffolt and Evans Laboratories.
- ▶ Commissioning (the detail for the Cx activities will be thoroughly developed with the CxA).

OSU CBEC Preliminary Project Schedule

On the following pages, we have included the above items in the preliminary project schedule to demonstrate our understanding of how these activities fit into the overall schedule. If we are successful in continuing as your CM At-Risk, we will immediately meet with the team to develop detailed schedules regarding these items and validate the milestone dates.

The general work sequencing and proposed schedule logic is discussed in further detail in this section item c. Work Sequencing.



Activity ID	Activity Name	Orig Dur	Early Start	Early Finish
Bid & Award				
Construction Manager				
CM040	CMR Prepare RFP's & Submit	12	17-Feb-12	24-Feb-12
CM070	OSU Review RFP's	2	27-Feb-12	28-Feb-12
CM060	CMR Interviews	1	29-Feb-12	29-Feb-12
CM050	CMR Award	3	01-Mar-12	05-Mar-12
CM080	GMP Preparation	64	06-Mar-12	01-Jun-12
Early Bid Packages				
Curtainwall				
1040	A/E Issue Curtain Wall Bid Package Bid Set	0	09-Mar-12	09-Mar-12
1160	CMR Review CW Bid Package Documents	5	09-Mar-12	15-Mar-12
1710	CMR Prepare Bid Package and Issue RFP	10	16-Mar-12	29-Mar-12
1090	Bid Period Early Curtainwall Bid Package	20	30-Mar-12	26-Apr-12
1170	Review Bids & Award Early Curtain Wall Bid Package	5	27-Apr-12	03-May-12
1620	Complete CW Design / Initial Engineering	50	04-May-12	12-Jul-12
1600	CW Engineering / Shop Drawings	80	15-Jun-12	04-Oct-12
1630	Procure CW Materials for Mock-up	60	19-Jul-12	04-Oct-12
1660	Assemble CW Mock-up	20	05-Oct-12	01-Nov-12
1650	Procure CW Materials	110	19-Oct-12	21-Mar-13
1640	Test Curtain Wall Mock-up	10	02-Nov-12	15-Nov-12
1680	Fabricate CW Assemblies	90	25-Jan-13	30-May-13
Sitework / Concrete / Structural				
1080	Finalize Site Prep / Mass Exc / Conc Fdns Bid Package	10	03-Apr-12	16-Apr-12
1050	Bid Period Early Site Prep / Mass Exc / Conc Fdns Bid Pac...	20	17-Apr-12	14-May-12
1350	Review Bids & Award Early Site Prep / Mass Exc / Conc Fd...	10	15-May-12	28-May-12
Remaining Bid Packages				
Construction				
General				
1410	Setup CM Trailer Complex & Utilities	20	17-Apr-12	14-May-12
1200	Set Tower Crane	5	31-Aug-12	06-Sep-12
1850	Set Buck Hoist	10	07-Dec-12	20-Dec-12
1190	Remove Tower Crane	10	18-Mar-13	29-Mar-13
1950	Remove Buck Hoist	10	04-Oct-13	17-Oct-13
Sitework				
1570	Mobilization	5	01-Jun-12	07-Jun-12

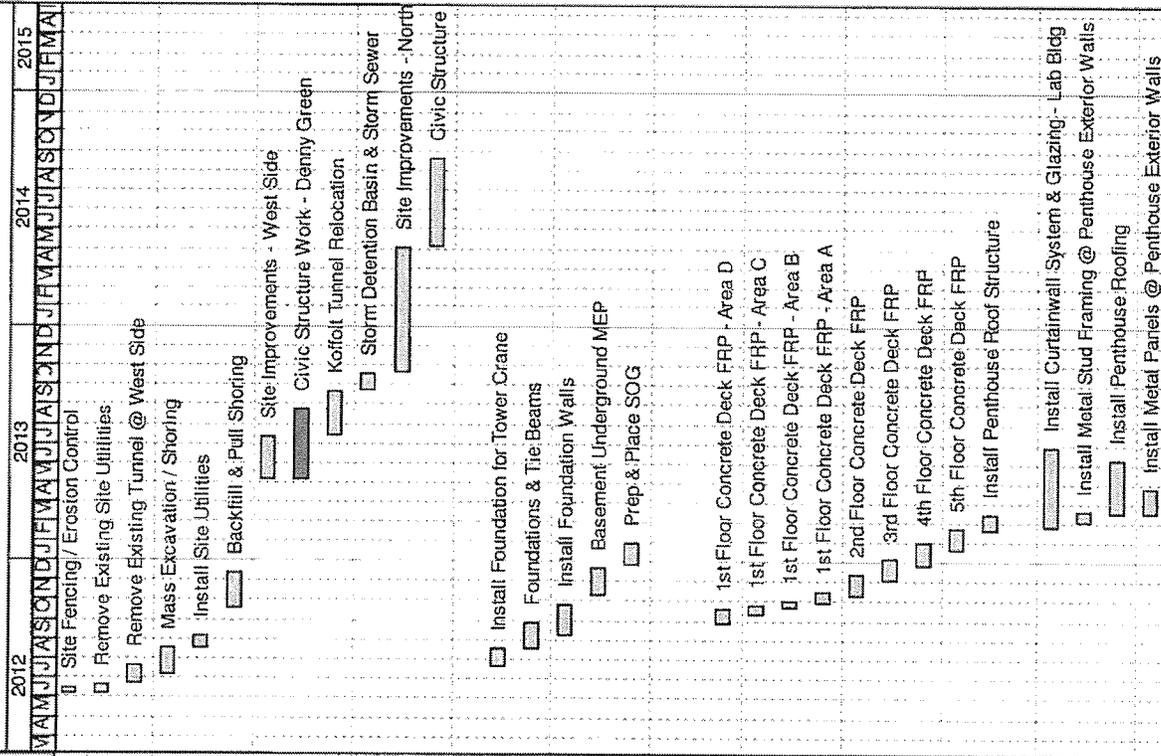
Start Date: 01-Jan-04
Finish Date: 30-Oct-14
Data Date:

Remaining Level of Effort
 Actual Level of Effort
 Remaining Work
 Critical Remaining Work

The Ohio State University - CBEC
 Preliminary Project Schedule



Activity ID	Activity Name	Orig Dur	Early Start	Early Finish
1400	Site Fencing / Erosion Control	5	08-Jun-12	14-Jun-12
1780	Remove Existing Site Utilities	10	08-Jun-12	21-Jun-12
1880	Remove Existing Tunnel @ West Side	20	22-Jun-12	19-Jul-12
1110	Mass Excavation / Shoring	30	06-Jul-12	16-Aug-12
1120	Install Site Utilities	15	17-Aug-12	06-Sep-12
1360	Backfill & Pull Shoring	40	19-Oct-12	13-Dec-12
1340	Site Improvements - West Side	50	06-May-13	12-Jul-13
1700	Civic Structure Work - Denny Green	80	06-May-13	23-Aug-13
1440	Koffort Tunnel Relocation	50	15-Jul-13	20-Sep-13
2800	Storm Detention Basin & Storm Sewer	20	23-Sep-13	18-Oct-13
1690	Site Improvements - North, East, South	140	21-Oct-13	02-May-14
1790	Civic Structure Work - Smith Green	100	05-May-14	19-Sep-14
Foundations / Underground Utilities				
1720	Install Foundation for Tower Crane	20	20-Jul-12	16-Aug-12
1140	Foundations & Tie Beams	30	17-Aug-12	27-Sep-12
1150	Install Foundation Walls	35	07-Sep-12	25-Oct-12
1430	Basement Underground MEP	30	09-Nov-12	20-Dec-12
1890	Prep & Place SOG	25	25-Dec-12	28-Jan-13
Lab Building				
Structure				
1180	1st Floor Concrete Deck FRP - Area D	15	28-Sep-12	18-Oct-12
1370	1st Floor Concrete Deck FRP - Area C	10	12-Oct-12	25-Oct-12
2010	1st Floor Concrete Deck FRP - Area B	10	22-Oct-12	02-Nov-12
2020	1st Floor Concrete Deck FRP - Area A	12	30-Oct-12	14-Nov-12
1210	2nd Floor Concrete Deck FRP	25	09-Nov-12	13-Dec-12
1220	3rd Floor Concrete Deck FRP	25	04-Dec-12	07-Jan-13
1770	4th Floor Concrete Deck FRP	25	27-Dec-12	30-Jan-13
1850	5th Floor Concrete Deck FRP	25	21-Jan-13	22-Feb-13
1210	Install Penthouse Roof Structure	20	18-Feb-13	15-Mar-13
Exterior Enclosure				
1380	Install Curtainwall System & Glazing - Lab Bldg	90	25-Feb-13	28-Jun-13
2050	Install Metal Stud Framing @ Penthouse Exterior Walls	15	04-Mar-13	22-Mar-13
1730	Install Penthouse Roofing	60	18-Mar-13	07-Jun-13
2060	Install Metal Panels @ Penthouse Exterior Walls	30	18-Mar-13	26-Apr-13



The Ohio State University - CBEC
Preliminary Project Schedule

Start Date: 01-Jan-04
Finish Date: 30-Oct-14
Data Date:

Remaining Level of Effort (white bar)

 Actual Level of Effort (black bar)

 Actual Work (grey bar)

 Remaining Work (light grey bar)

 Critical Remaining Work (dark grey bar)

Gilbane

Activity ID	Activity Name	Orig Dur	Early Start	Early Finish	2012	2013	2014	2015
1460	Install Rooftop Mechanical Equipment	20	15-Apr-13	10-May-13	M	A	J	A
1800	Install Low Roofing @ Penthouse Perimeter	40	29-Apr-13	21-Jun-13	M	A	J	A
1930	Install Glass Wave Wall	40	28-Jun-13	22-Aug-13	M	A	J	A
Interior Construction								
All Floors								
1420	Install Freight Elevator	40	29-Apr-13	21-Jun-13	M	A	J	A
Basement								
1910	MEP Overhead R/I's	100	15-Jan-13	09-Jun-13	M	A	J	A
1900	Install Electrical Gear in Basement	40	12-Mar-13	06-May-13	M	A	J	A
1920	Install Basement Mechanical & Plumbing Equipment	40	09-Apr-13	03-Jun-13	M	A	J	A
2100	Connections to Mechanical & Plumbing Equipment	60	30-Apr-13	22-Jul-13	M	A	J	A
2090	Terminate & Energize Electrical Gear	30	07-May-13	17-Jun-13	M	A	J	A
2070	Install Interior Walls	80	31-May-13	19-Sep-13	M	A	J	A
2080	Wall Finishes	50	13-Sep-13	21-Nov-13	M	A	J	A
2130	Ceiling Finishes	40	25-Oct-13	19-Dec-13	M	A	J	A
2200	Install Flooring	30	22-Nov-13	02-Jan-14	M	A	J	A
2210	Install Lab Casework & Equipment	50	13-Dec-13	20-Feb-14	M	A	J	A
2480	Lab Casework & Equipment Connections	40	24-Jan-14	20-Mar-14	M	A	J	A
2670	Owner Furnished Equipment Relocation	60	01-Jul-14	22-Sep-14	M	A	J	A
Level 1								
2110	MEP Overhead R/I's - Mains	60	21-Dec-12	14-Mar-13	M	A	J	A
2510	MEP Vertical Risers	15	21-Dec-12	10-Jan-13	M	A	J	A
2490	Install Interior Core Walls	20	11-Jan-13	07-Feb-13	M	A	J	A
2500	MEP Overhead R/I's - Branches & Insulation	80	15-Mar-13	04-Jul-13	M	A	J	A
2120	Install Interior Walls	80	14-Jun-13	03-Oct-13	M	A	J	A
2150	Wall Finishes	60	13-Sep-13	05-Dec-13	M	A	J	A
2160	Install Ceilings	60	11-Oct-13	02-Jan-14	M	A	J	A
2170	Install Flooring	40	06-Dec-13	30-Jan-14	M	A	J	A
2180	Install Lab Casework & Equipment	30	03-Jan-14	13-Feb-14	M	A	J	A
2190	Lab Casework & Equipment Connections	25	31-Jan-14	06-Mar-14	M	A	J	A
Level 2								
2530	MEP Vertical Risers	15	15-Jan-13	04-Feb-13	M	A	J	A
2270	MEP Overhead R/I's - Mains	60	18-Jan-13	11-Apr-13	M	A	J	A
2540	Install Interior Core Walls	20	08-Feb-13	07-Mar-13	M	A	J	A
2550	MEP Overhead R/I's - Branches & Insulation	80	12-Apr-13	01-Aug-13	M	A	J	A

Start Date: 01-Jan-04
 Finish Date: 30-Oct-14
 Data Date:

The Ohio State University - CBEC

Preliminary Project Schedule

Remaining Level of Effort
 Actual Level of Effort
 Actual Work
 Remaining Work
 Critical Remaining Work

b. Approach to work; including any anticipated self-performed work in which the CMR intends to list themselves on the prequalified submission and procurement

Gilbane does not typically self-perform any trade work, allowing for the competitive bidding of all construction trade work. We believe that only a non self-performing construction manager can truly act on the Owner's behalf, looking out for the Owner's best interest and not their own. An owner who hires a self-performing construction manager risks:

- ▶ Not receiving the best competitive bidding;
- ▶ Paying too much for change orders;
- ▶ Not seeing all costs open-book;
- ▶ Losing the benefit of the construction manager's independent oversight of quality, safety and schedule.

A professional construction management approach allows for the competitive bidding of all construction trade work. If the competitive bidding marketplace knows that the construction manager will be allowed to self-perform, then many of the best and most competitive trade contractors may choose not to participate in the bidding process, feeling that they will not receive a fair chance. Alternatively, they may bid but not spend the time in order to provide their best and lowest price knowing that the construction manager will get a "second look". The best way to ensure the lowest costs is by competitively bidding all construction trade work. In today's business climate, the Owner has to be sure the entire procurement process can stand up to scrutiny. As such, it is imperative the process be above questioning and all work be done open-book. This can only happen with complete bidding of all portions of the work.

Subcontracting Plan

Consistent with the approach above, our proposed Subcontracting Plan for the CBEC project is on the following page.

As indicated on the plan, we have organized the trade construction into approximately 35 Bid Packages, ranging in value from \$58,000 to \$13,000,000. Packaging the trade construction work in this manner accomplishes numerous benefits for OSU and the project:

- ▶ Considerable cost savings due to limited 2nd and 3rd tier subcontractor mark-ups.
- ▶ Increased bidder interest resulting in more competitive bids from quality subcontractors.
- ▶ Flexibility with work packaging and the opportunity for subcontractors to bid on multiple packages resulting in cost savings to OSU.
- ▶ Increased control by the CM in lieu of managing through prime contractors.
- ▶ Improves project quality due to tighter CM control.

In addition to organizing the trade construction work into numerous bid packages, Gilbane will procure and manage the majority of the General Condition work directly, rather than purchasing through the trade contractors. This will:

- ▶ Further reduce 2nd and 3rd tier subcontractor mark-ups on the GC work.
- ▶ Promote EDGE participation as Gilbane will procure these services directly from the individual vendors.
- ▶ Allow Gilbane to utilize our national agreements with vendors to provide these services at a lower cost.
- ▶ Pass along the savings to OSU, rather than increase the profits of the subcontractors.



The best way to ensure the lowest costs is by competitively bidding all construction trade work.

Bidder Prequalification

The new General Conditions for CM At-Risk work outline a comprehensive process for prequalifying bidders, soliciting subcontractor bids and awarding subcontracts. Gilbane has thoroughly reviewed this process, understands the timelines and will lead the project team through the procurement effort.

The first step in the bidder prequalification process is for the CM to establish the prequalification criteria. While each bid package or subcontract will have some unique prequalification requirements, much of the criteria is uniform across all subcontracts. In an effort to expedite the subcontracting procurement process, we have enclosed our proposed bidder prequalification criteria and checklist for OSU's review and approval.



**The Ohio State University - Chemical & Biomolecular Engineering &
Chemistry Building (CBEC)**

SUBCONTRACTING PLAN

Bid Packages based on 65% CD Documents	Trade Construction
<u>Design Release 1</u>	
02A Mass Excavation / Utilities	\$2,604,143
02B Site Hardscapes / Paving	\$634,101
02C Landscape / Irrigation	\$106,750
02D Pavers	\$354,750
03A Concrete Foundations / Elev Slabs / Tunnel At lab bldg	\$7,620,653
03C Koffolt Tunnel Allowance	\$429,449
04A Masonry	\$141,748
05A Structural Steel	\$1,204,852
05B Misc Metals	\$635,975
06A General Trades/ Rough & Finish Carpentry	\$2,320,944
06B Millwork / Casework - (non lab)	\$584,932
07A Roofing	\$577,869
07B Metal Panels	\$680,635
07C Spray Fireproofing	\$177,825
08A Exterior Glass & Glazing	\$8,521,744
08B Exterior Wave Wall Glass System	\$1,058,750
08C Int Drs / Frames/ HDWR / Glass & Glazing	\$2,051,102
09A Ext & Int Mtl Stud/ Drywall / Acoustics	\$2,822,762
09B Acoustical Ceilings	\$899,825
09C Carpet / Resilient / Vinyl Flooring	\$724,367
09D Ceramic Tile / Terrazzo	\$348,709
09E Painting / Wall Covering / Epoxy Flooring	\$812,036
11A Lab Equipment / Lab Casework / Fume Hoods	\$8,455,933
11B OFE Relocation	\$350,000
12A Blinds	\$626,180
14A Elevators	\$765,000
15A HVAC Piping & Equipment	\$10,609,720
15B Plumbing Systems	\$6,288,712
15C Fire Protection Systems	\$906,044
15D BMS Controls	\$955,300
15E LAB Controls	\$1,981,400
15F Sheet Metal	\$8,879,146
16A Electrical / Technology / FA / Security	\$12,764,151
17A Final Cleaning	\$58,800
18A Civic Structures	\$1,740,480
Totals	\$89,694,787

Bidder Prequalification Process

Selection of bidders shall be based upon experience, competence, available resources, and financial capability. Identification of bidders shall be reviewed by the Construction Manager to assure solicitation of bids from the most competent suppliers or contractors. Limitation of bidding to less than three (3) bidders, or sole source for material procurements, shall be avoided when possible.

Contractor Qualification

Contractor Qualification Forms will be solicited and evaluated for all select bid sources prior to issuing an invitation to bid to the selected sources. The pertinent information requested on the Contractor Qualification Form is to be used as one means for evaluating and establishing suitable bid and procurement sources. Verification of vendor financial stability shall be secured through review of annual reports, Dun & Bradstreet Reports, and other appropriate sources. If an otherwise desirable vendor appears to be of questionable financial strength, an audited and certified financial statement will be obtained.

Approved Subcontractor List

The Construction Manager will maintain a list of bid sources which have proved satisfactory. This list will be updated with new firms after proper qualification. Firms that perform unsatisfactorily will be so noted.

Affirmative Action Programs

Every reasonable effort possible will be made to solicit quotations and bids from qualified minority business, small business, women business enterprises, and Certified EDGE firms to meet established goals.

Appropriate bid items should be made known to such public and private agencies concerned with promoting MBE/WBE, and EDGE interests.

Bidder Prequalification Criteria

The goal of the pre-qualification is to ensure that the bidders are qualified to perform the work and have demonstrated themselves to be responsible contractors.

Criteria:

- A. Relevant Experience – Contractor must demonstrate experience successfully completing projects of similar size, scope, budget and complexity.
- B. Financial Strength
- C. Performance on previous projects
- D. Capacity of shop fabrication facilities
- E. Management Skills – Key Personnel
 - a. Safety Plan
 - b. EMR
- F. Ability to execute the specific scope of the bid package
- G. Compliance with Equal Opportunity, DBE and EDGE Programs.
- H. No Affirmative Action violations last 5 years
 - a. Valid Certificate of Compliance
- I. Proof of Current Licenses as required for the scope

Contractor Qualification Criteria Checklist

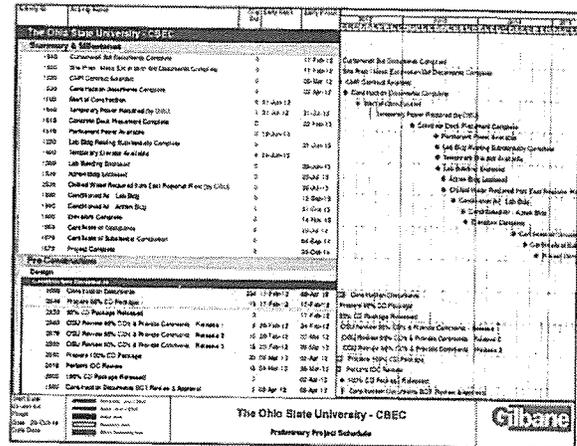
1. Previous Gilbane Experience (Evaluation Score)
2. EMR (Experience Modification Rating)
3. Financial Capacity:
 - A. Average Annual Volume $\geq 3 \times$ OME (order of magnitude estimate)
 - B. Current Ratio 1.5 - 2.0
 - C. Acid Test 1.0 - 1.5
 - D. Debt-to-Equity < 2.5
 - E. Payment Record
4. Bondable:
 - A. Capacity for OME
 - B. Strength of Surety
5. Insurance:
 - A. Limits
 - B. Terms
6. Check References
 - A. Conformance to Schedule
 - B. Conformance to Scope and Specification
 - C. Management Plan:
 - D. Safety Plan
 - E. Price (total cost)
7. Similar Project Experience:
 - A. Market Type
 - B. Project of same size
 - C. A/E Experience
 - D. Owner Experience
8. Firm's present workload
9. Work performed in-house vs. sub-out.
10. Litigation history
11. Selection criteria used for subs (see attached)
12. Time in Business
13. Proximity

c. Work Sequencing

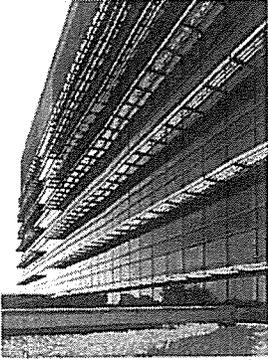
Our preliminary project schedule is based on our extensive knowledge of the project obtained during the preconstruction process. We will use this knowledge to properly sequence the work to minimize disruption to OSU and the students, adjacent building occupants and expedite the construction in the safest possible manner. Through our collaborative card trick scheduling sessions, LEAN scheduling techniques and ability to utilize BIM for construction planning, we will continuously evaluate options to ensure the work is sequenced efficiently.

Several specific considerations that we have already incorporated into our Project Schedule and work sequence are as follows:

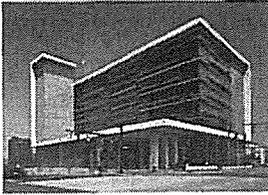
- ▶ Relocation of the Koffolt tunnel during the Summer 2013 to minimize impacting steam to Koffolt Laboratory.
- ▶ Temporary shoring will be installed during the mass excavation stage along the west, north and south elevations to minimize impacts to the adjacent Physical Sciences building and to maximize laydown space within the CBEC project limits.
- ▶ Since the chilled water service for CBEC will not be available from the new East Regional Chiller Plant (ERCWP) until 1st Quarter 2014, we will implement alternative plans to flush the chilled water system in CBEC and utilize temporary chillers to provide temporary cooling for interior finishes during the Fall 2013.
- ▶ The functional commissioning of the chilled water system will be scheduled for Summer 2014 after the ERCHWP is fully commissioned.
- ▶ The procurement of the curtain wall system drives the schedule critical path due to the extensive engineering, fabrication and mock-up requirements. Since the curtain wall system is the primary element of the entire exterior skin, installation must be expedited to achieve building enclosure prior to starting interior finishes. The scope of work will include a specific work plan, sequence and manpower requirements to expedite the enclosure date.
- ▶ The Civic Structure work in the Denny Green and Smith Green will be scheduled during the Summers of 2013 and 2014 to capitalize on favorable weather and to minimize disruption to the students.
- ▶ We will utilize our BIM capabilities to construct virtual mock-ups of the lab neighborhoods, Unit Ops area, mechanical and electrical rooms and any other areas where the work may be congested. The virtual mock-ups will allow us to review proper work sequencing with the contractors during the coordination and schedule development phase, thus drastically improving the efficiency in the field.



d. Approach to performance specification



Grange Mutual Insurance
Corporate Headquarters



Franklin County Courthouse

Gilbane has extensive experience procuring and managing the execution of performance based specifications with our vast network of competent trade contractors. Performance based specifications are often utilized with design-build or design-assist delivery methods and are sometimes included for specific components of work within a construction management delivery method. The primary advantage of performance based specifications is that it allows the true experts in their fields, the trade contractors, the flexibility to complete the design and engineering of their work in the most cost effective manner while still achieving the intent of the design. The challenge with these types of specifications is that they must be carefully managed to ensure the full value and intended performance is delivered to the Owner. Our project team possesses the skills to manage this work.

Based on our review of the construction documents provided, there appears to be several components that will require our expertise in managing performance based specifications:

- ▶ Temporary shoring to facilitate excavation of the basement (no specification but Gilbane will procure engineering services through the Mass Excavation contractor)
- ▶ Fire protection system
- ▶ Controlled environmental rooms
- ▶ Elevators
- ▶ Unitized curtain wall system and the Lobby "Wave Wall"

Our approach to each of the above systems will be to solicit bids only from those trade contractors capable of meeting the performance specification and with a proven track record for success.

We recognize the expansive curtainwall system designed by Pelli/Burt Hill is critical to the success of this project and will tap our past project experience with similar systems to bring best practices to OSU. Our recent experience includes the curtainwall installation on the Grange Mutual Insurance Corporate Headquarters and Franklin County Courthouse. Both projects feature substantial custom, unitized curtainwall systems with exterior sunscreens and other design features almost identical to CBEC.

e. Plan for meeting goals for EDGE as further described in Section F hereof



Gilbane has already begun to implement a plan for quality EDGE participation. We have engaged McGuinessUnlimited, Inc., an EDGE-certified firm, to our construction management team and have been working with them during preconstruction. In addition, we have committed McGuinessUnlimited to contribute approximately 5 percent of the on-site construction management on this project. McGuinessUnlimited will provide one of the project engineering positions during the construction phase. Our plan has been discussed and agreed to by McGuinessUnlimited and our plan shows we are intensely committed and have an integrated quality and diverse team.

McGuiness Unlimited, Inc. | EDGE Partner

McGuiness Unlimited, Inc., is a Cleveland-based, engineering and construction consulting firm specializing in the areas of cost estimating, scheduling, and construction management services. In addition, McGuiness Unlimited provides project management, construction administration, construction phasing, and constructability reviews on education, airport, and transit-related facility projects.

McGuiness Unlimited is owned and managed by Erin McGuiness, PE. Erin has a diverse background in the engineering and construction industry with more than 20 years of experience in design and construction of public and private projects. She is a licensed Professional Engineer and has a BS and MS in Civil Engineering. Prior to forming McGuiness Unlimited, Inc., she was the Chief Engineer at Cleveland Hopkins Airport during the \$1.3 billion dollar expansion program.

McGuiness Unlimited is dedicated to delivering exceptional service to public and private partners. McGuiness Unlimited is committed to completing each project on time and within budget; and strive to make our reputation with our clients identical with dedication, commitment, and reliability.

More information as it relates to EDGE participation within the trade contracting community can be found in Section 7.1.

f. Project Team, including any design-assist contractor who may perform work for the Project under contract with your firm

Gilbane intends to subcontract the unitized curtain wall system and Lobby Wave Wall to design-assist contractors. We initially suggested this strategy to the team early in the preconstruction phase to expedite the procurement of both systems. If we are successful in continuing as the CM At-Risk, we will immediately begin the procurement process for this work, regardless of the completion level of the construction documents. Due to the considerable lead time for both systems, it is critical to the project schedule that the final design and engineering of these components be expedited. We have already met with several of the qualified subcontractors to discuss the project and they are prepared to assist our team in expediting the procurement of this work.

Due to the critical nature of the curtain wall system and other exterior building components, we have also included costs for our own independent building envelope consultant. Our consultant will perform the following services to ensure the integrity of the entire building envelope and make certain we deliver a weathertight building, free from defects.

- ▶ Perform a design review of the entire envelope to ensure compatibility of systems and details.
- ▶ Perform review of subcontractor shop drawings for curtain wall systems.
- ▶ Attend the offsite 3rd party testing of the curtain wall mock-up.
- ▶ Perform periodic shop inspections during assembly of the curtain wall units.
- ▶ Perform onsite inspections during the installation of the curtain wall, metal panel and roofing systems.
- ▶ Lead onsite meetings with the project team to establish expectations and review procedures.

**MCGUINNESS UNLIMITED
AT A GLANCE**

- ▶ EDGE-certified consulting firm specializing in cost estimating, scheduling, and construction management services
- ▶ Specializes in educational buildings, as well as airport and transit facilities
- ▶ Dedicated to delivering exceptional service and committed to completing projects on time and within budget

g. Prevailing Wage

Gilbane has utilized prevailing wage on contracts throughout Ohio and across the country wherever required. For example, we have utilized prevailing wage on more than \$1 billion of projects for the Ohio School Facilities Commission. We are very familiar with the reporting and tracking requirements for prevailing wage and have staffed the project appropriately to implement prevailing wage.

h. Additional Considerations

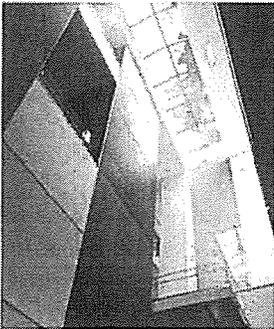
LEED/High Performance Buildings

Gilbane's experience with the U.S. Green Building Council (USGBC), Leadership in Energy and Environmental Design (LEED), or sustainable projects spans several years and many building types. We have completed or are currently involved with approximately 250 projects that are seeking or have already achieved LEED certification. These projects range from educational schools to government facilities and healthcare facilities to corporate campuses and headquarters.

Our Regulatory Services group leads our green building efforts, with peer group support from nearly 500 employees who are LEED Accredited Professionals. In total, more than 25 percent of our employees are either LEED Accredited Professionals or are participating on sustainable facility projects. We have been proactive in this area, providing employee training on green building/sustainable design, as well as implementation of environmentally-friendly construction methods for urban sites. The Regulatory Services group is also our team's liaison to the USGBC and maintains an active membership status participating in many USGBC sponsored programs. Our experience allows us to help owners understand their options and approaches, evaluate cost effective systems and technologies, develop strategies toward targeted project LEED certification levels, register their projects, develop complete scopes of work, document LEED/green building information, and submit certification applications.

Our LEED effort onsite will be led by Steve Pawuk, LEED AP and John Gibson. The team understands the tracking and documentation and Indoor Air Quality requirements to successfully manage a LEED project. Members of our proposed team have recently worked on these local examples of our award winning LEED projects:

- ▶ Franklin County Courthouse – LEED Gold Certified
- ▶ Nationwide Children's Hospital Central Energy Plant – LEED Gold Certified



LEED Gold Certified
Franklin County Courthouse



LEED Gold Certified
Nationwide Children's Hospital,
Central Energy Plant



Gilbane is certified
through Columbus Mayor
Michael Coleman's
GreenSpot initiative

GreenSpot certification is given to companies that have committed time, effort, and resources to reducing the carbon footprint of their business operations.

Sustainable practices regularly implemented in our office include paper and aluminum can recycling, adopting the federal guidelines on temperature control in the office, annual window checks for insulation, utilizing energy efficient lights, waste audits, volunteer work, carpooling opportunities, purchasing and/or renting fuel efficient vehicles for company-related travel, and webinar and teleconferencing utilization.

6. RISK MANAGEMENT

What is the plan to minimize risk and which risk factors present the most significant threat and/or influence to the project. Describe potential risks involved with this project and their potential impact. Such risk may include, but are not limited to, the following.

a. Material cost increase

Material cost increases are already accelerating. Material cost increases in 2011 measured 8%-9%. However, building costs increased by only 3%-4%. Contractors were unable to pass most of the material increases along to owners in their bids. A large portion of the increases were absorbed by a reduction in producer/supplier/subcontractor margins. What will change in 2012 is that there is little to no room left to reduce margins any further and we have seen numerous instances where subcontractors are already showing reluctance to absorb any further cost increases. Therefore, through a combination of pass-thru material costs and increasing margins, we are already anticipating 4%-5% cost growth in 2012, and we expect margins to begin to increase more rapidly by year end. 2012 and 2013 will be a timeframe when the "rate of change" in final cost to the owner accelerates from as little as 3%-4% annual growth rate now to 4%-5% by the end of 2012, and potentially 5%-7% thru 2013. These increases were taken into consideration during the preparation of our last estimate.

We provided our Subcontracting Plan in Section 5. Gilbane is prepared to implement our plan immediately and proceed with procurement to capitalize on the historically low subcontractor margins, thus passing these savings on to OSU.

b. Material availability

Based on our own market research, there does not appear to be any significant material availability issues. Demand is still low and production has been ramped down accordingly. We expect only a moderate increase in demand this year and there is significant idle production capacity available to ramp up in step with increasing demand.

Although materials are readily available, the CBEC project does include some materials and equipment that require extended lead times. We have already identified the following "long lead" items and will work with our trade contractors to develop procurement strategies to ensure these materials are onsite when required:

- ▶ Lobby "Wave Wall" glass system
- ▶ Terra cotta components of the unitized curtain wall system
- ▶ Laboratory casework and fume hoods (due to quantity)
- ▶ Emergency generator
- ▶ Electrical switchgear
- ▶ Custom air handling units
- ▶ High purity water system

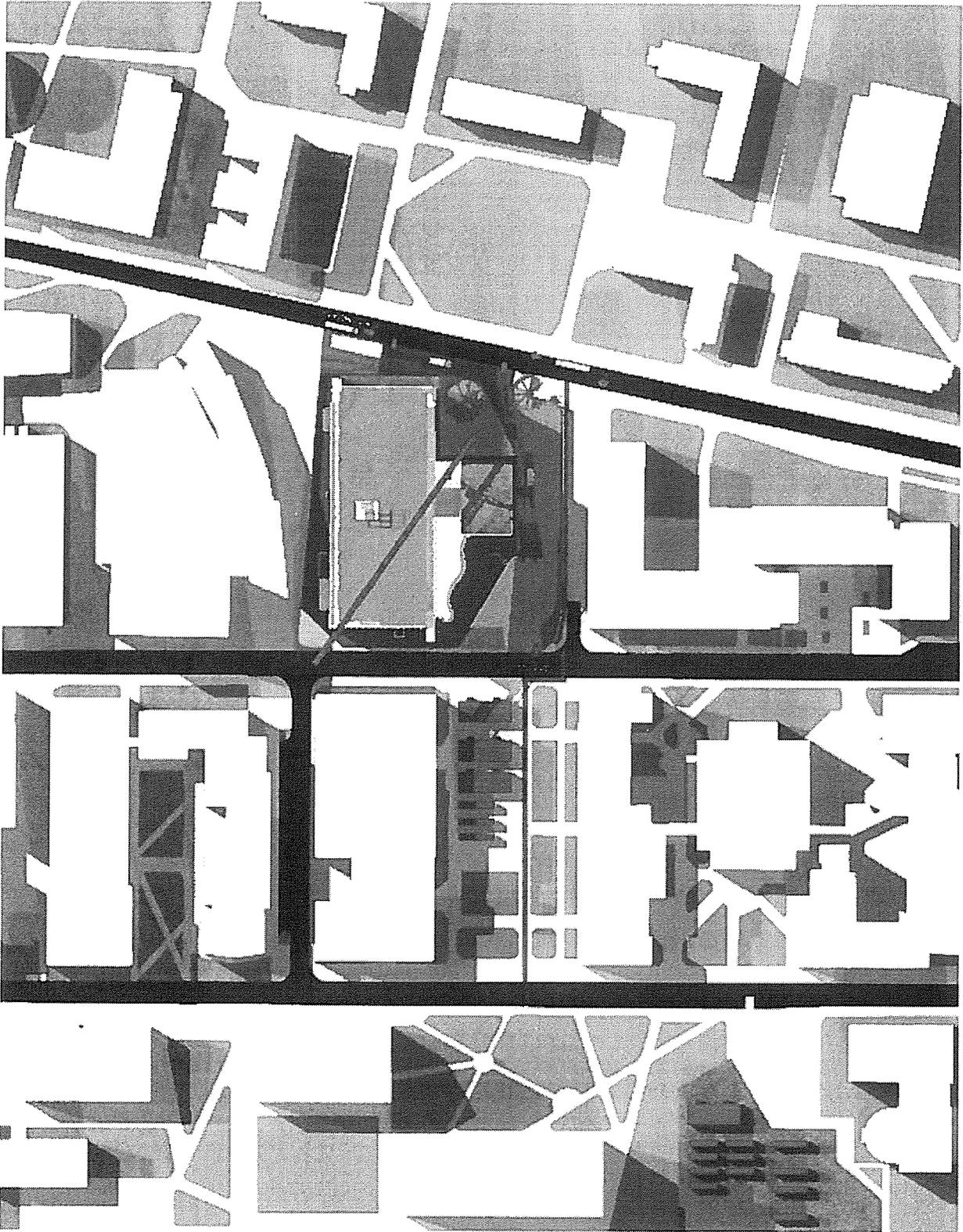


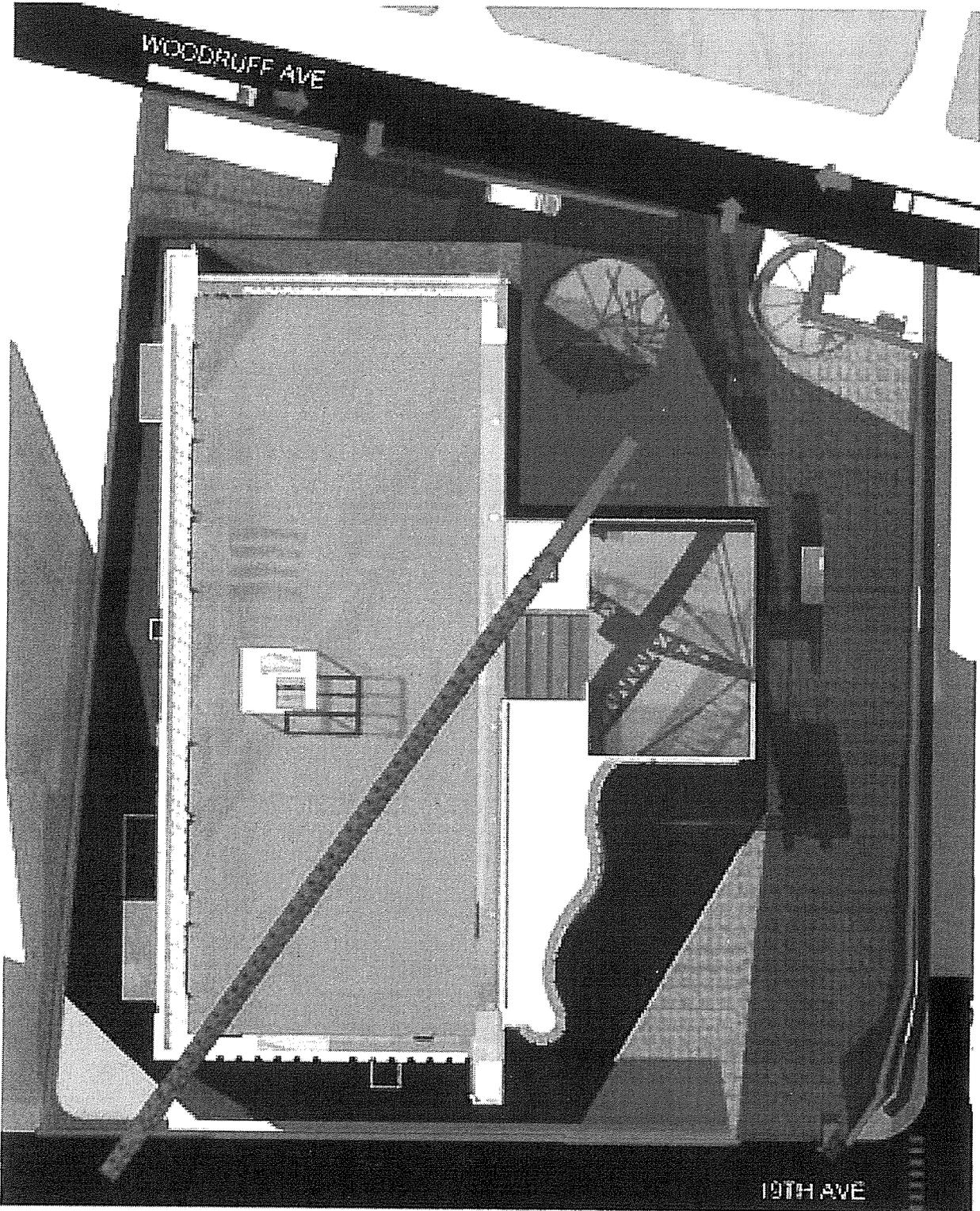
c. Site logistics

Considering CBEC's location in the busy Academic Core North, site logistics and timely communication with OSU Traffic & Parking, students, faculty and other appropriate OSU personnel will be a pivotal factor in the project's success. The enclosed aerial views of the CBEC project site and adjacent areas, provide an overview of our site logistics plan. We have worked directly with OSU Traffic & Parking and the Academic Core North team to plan the logistics for the CBEC project. The following considerations have been incorporated into our plan:

- ▶ The sidewalk on the south side of Woodruff Ave. and on the north side of 19th Ave. will be closed throughout construction to minimize pedestrian traffic around the construction entrances. We will maintain access to the bus stop at the northeast corner of the site.
- ▶ North-south pedestrian access will be maintained at all times. We will maintain access on the existing sidewalk east of the CBEC site during the first half of the project. As the curtain wall is completed on the west elevation, the new sidewalk and hardscapes will be installed, restoring pedestrian access west of CBEC. Once access is restored on the west side, the east side access will be closed to facilitate the relocation of the Koffolt tunnel.
- ▶ Construction traffic will be routed down Woodruff Ave. from the start of construction through the Fall 2013. This provides the easiest access into and out of the site and minimizes construction traffic on campus roads.
- ▶ As the new loading dock in the CBEC building is completed and the freight elevator operational in Fall 2013, the majority of the construction traffic will be redirected to 19th Ave. This will become the primary access to the site for the remainder of the project. Deliveries for exterior work will continue to utilize the Woodruff Ave. entrances.
- ▶ Construction traffic patterns have been coordinated with the ERCWP project lane and road closures and we will work directly with the CM and OSU project manager for this project.
- ▶ Shoring along the entire west, north and south elevations will be installed during initial excavation activities to minimize encroachment on the Physical Sciences building and to maximize available space within the CBEC site.
- ▶ Protection barriers will be placed around the two existing trees to remain at the north side of the site.
- ▶ A tower crane will be utilized during the construction of the concrete structure.
- ▶ A mobile crane will be used to erect the structural steel for the Administration building to allow erection concurrent with the Lab Bar concrete structure.
- ▶ The CM field office will be located in the Smith Green and contractor field offices and storage located in the Lord Hall site to maximize material storage space on the CBEC site.

We understand the intricacies of constructing a major project in the center of a busy college campus and have the experience and relationships with OSU personnel to guarantee the site logistics will be properly coordinated.







d. Craft availability | e. Subcontractor availability

Considering the construction climate in the central Ohio market, we do not foresee any shortfalls for craft or subcontractor availability during the course of the CBEC project. The three large projects currently under construction in the Columbus area will progress on schedules unparalleled with CBEC. Several upcoming significant projects in the Columbus market will coincide with CBEC, but not in a manner that will produce a labor shortage.

During the bidder prequalification process, we will review the available labor for each prospective bidder to ensure they possess adequate personnel to perform the work. If we have concerns, we will discuss these concerns with the prospective bidders prior to soliciting their bids.

It is also important to note that early to mid 2012 still presents a tremendous opportunity to purchase construction at a discount to historical market indices. As the buyout of other major projects in the area are either complete or nearing completion, we will have the luxury of bidding the majority of the subcontracts with little competition from other projects. This will effectively increase competition among the bidders as they determine how to keep their workforce busy into 2013 and 2014.

f. Other projects within close proximity to location

We recognize that other projects on campus will be constructed concurrently with CBEC, especially in the Academic Core North. As mentioned in our Site Logistics discussion, we have participated in the Academic Core North internal OSU coordination meetings since last fall and have provided input regarding construction and pedestrian traffic, utility tie-ins, road closures, parking impacts and utility service milestone dates required from adjacent projects. We are aware of the multiple projects within close proximity to CBEC that will be constructed concurrently and will continue to participate in the discussions to ensure all of these projects are properly coordinated.

g. Pedestrian safety

Dedication to Campus Safety

Gilbane understands the challenges and requirements of working in an operational campus environment. We have communication systems and project websites that are focused on the students and faculty during construction. We have recent experience on 65 campuses nationwide, including major projects for Kent State University, The Ohio State University, Bowling Green State University, Penn State University, University of Kentucky, University of Louisville, University of Michigan, and many more.

Safety will be our No. 1 priority. The new CBEC site is located in the heart of campus and in an active area of the science and engineering neighborhood where parking is already at a premium and main student thoroughfares are nearby. Our experience on the OSU campus, as well as higher education work nationally, provides valuable lessons learned and ensures best practices are implemented throughout to minimize disruption on the campus and maintain a safe learning environment. Gilbane is sensitive to the active campus operations and will schedule construction activities in order to accommodate the academic calendar and other special events.

As indicated on our site logistics plan, we have organized the CBEC site to minimize pedestrian traffic near the construction entrances and have maintained the critical north-south corridor throughout construction. We will communicate frequently with OSU personnel and Traffic & Parking to ensure proper and safe pedestrian access is maintained throughout construction.



The Gilbane team's top priority is to coordinate with campus operations to ensure a safe and successful construction project for all with minimal disruption to campus life.

h. Other Issues – Managing Risk

Our Stability Reduces Risk for our Clients

A construction firm that possesses stability and financial strength greatly reduces risk for owners involved in a building project.

Family-Owned Firm with National Resources and a Local Presence

Unlike the external shareholder pressure that many of our publicly-owned competitors face, Gilbane has been family owned and managed for more than 139 years and we're focused on maintaining a culture of client advocacy and exceeding our clients' expectations. In addition, while each Gilbane regional operation is led by a team of experienced professionals who know their local market, clients and subcontractors, it is reassuring that, at the root of our organization, Gilbane family executives are continuing the family legacy.

Foreign acquisitions of many of the nation's largest builders, and the resultant changes in culture, operating procedures and financial focus have combined to create an unsettling environment in our industry. Gilbane is one of the few remaining privately-held, domestic firms with solid financial footing and long-term stable management.

Moving forward, Gilbane has made a long-term commitment to staying family owned and operated. Members of the fifth and sixth generations of the Gilbane family, in fact, have joined the firm and are learning the skills that will allow them to one day lead the company.

Unlimited Bonding Capacity

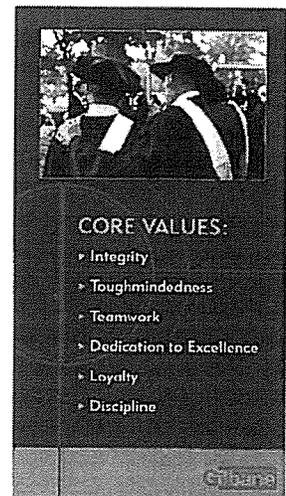
The financial underpinnings of the construction industry, bonding and insurance have come under considerable pressure and undergone difficult changes and consolidation. At Gilbane we have been able to maintain an unlimited bonding capacity with our long-term partner Travelers Casualty & Surety Co. of America, the largest construction bonding company in the U.S. As its third oldest surety client, Gilbane's bonding requirements have been handled by Travelers Casualty and Surety Company for over 85 years, and we are one of only five companies they do not require a co-surety. Recently, Travelers has executed bonds on behalf of Gilbane in amounts up to \$350,000,000 and corresponding backlogs approaching \$2,500,000,000. In 139 years of operation Gilbane has never needed to use our surety to finish a job. Similarly, we have been able to keep our insurance costs under control through prudent risk management and sound financial results.

A Firm Leading with Core Values of Integrity, Teamwork and Dedication to Excellence

Gilbane's core values play a significant role in our success. Gilbane strives to be the employer of choice in the industry. In fact, Gilbane has been a proud member of Fortune's "Great Places to Work" in 2009, 2010, and 2011. As a result, we have many employees who spend their entire careers with us. We also work hard to give our employees room to advance and grow throughout their careers. Gilbane's overall turnover rate is just 6 percent, well below industry average. The average tenure of our 2,600 employees is more than 8 years, while our executive leadership team averages 24 years.

Investing in our Employees

One of the reasons our employees are loyal to Gilbane is that we are constantly investing in the future. We invest more than \$5 million annually training our employees through Gilbane University. We are ranked as one of the top 100 training companies and #1 in our industry by Training Magazine. We are also consistently ranked as the #1 user of technology in our industry by Information Week magazine. At Gilbane, we understand that investing a portion of our income results in better trained, better equipped and more motivated employees.



This exceptional record means a lower cost for Ohio State as our company commitment to safety means lower general and excess liability insurance rates, as well as lower bond rates for a project this size.

Commitment to Safety

For generations, Gilbane has taken great pride in ensuring the safety of all personnel on our projects. We have developed award-winning programs that protect workers and formed an alliance with the Occupational Safety and Health Administration (OSHA) to advance the cause. We have earned a reputation for being one of the safest contractors in America. As a result, Gilbane's Experience Modification Rate (EMR) is 0.42, which is less than half the industry average (the lower the better). This exceptional record means a lower cost for Ohio State as our company commitment to safety means lower general and excess liability insurance rates, as well as lower bond rates for a project this size. To protect workers, faculty, students and the general public, we will develop a customized Safety Plan to address the hazards unique to this project and active campus location.

In summary, Gilbane will work as OSU's advocate and we will communicate openly and share all information with you without exception. Our family-owned culture contributes to our transparent project approach and open-book policies. There will be no competing agendas and we will ensure that all cost, schedule and contract (subcontract) information is current, available and easily accessible to you through our on-line systems.

7. OTHER REQUIREMENTS

1. EDGE

The Owner is challenging itself to reach an Encouraging Diversity, Growth and Equity ("EDGE") participation goal of 5% of the contract award amount for the GMP Agreement. Provide your firm's plan for achieving the desired goal.

Gilbane has already begun to implement a plan for quality EDGE participation. We have engaged McGuinessUnlimited, Inc., an EDGE-certified firm, to our construction management team and have been working with them during preconstruction. In addition, we have committed McGuinessUnlimited to contribute approximately 5 percent of the on-site construction management on this project. McGuinessUnlimited will provide one of the project engineering positions during the construction phase. Our plan has been discussed and agreed to by McGuinessUnlimited and our plan shows we are intensely committed and have an integrated quality and diverse team.

In addition, to ensure that we optimize our participation, Gilbane will set goals that will create a diverse pool of subcontractors to meet and exceed OSU's EDGE goal:

- ▶ We work with our corporate Equal Employment Opportunity Department to enhance the diversity of the labor force associated with the project.
- ▶ We strive to increase project participation by certified EDGE firms.
- ▶ Gilbane is one of the most diverse organizations in the construction industry. We pride ourselves on hiring the best people based solely on their talent.
- ▶ Organize subcontracting plan to create smaller bid packages, allowing EDGE firms to compete directly for the work.

Our team will develop an EDGE program that will outline our expected goals in each of these areas of participation. The projected goals will be consistent with our firm's historical achievements in these programs for similar alliance projects.

We require trade contractors to submit certifications of EDGE classification as part of their bidding documents. We also require the receipt of a sworn statement from trade contractors and a waiver of lien from the minority subcontractor prior to rendering payment. These requirements are necessary to ensure that OSU, the design team, and Gilbane are working with firms which truly support our initiatives. Competitive circumstances for the award of contracts are created at a no-cost premium to the owner.

Gilbane MBE/EDGE Trade Contractor Inclusion Success

Our team understands the importance of maintaining an environment that promotes and improves the overall participation of a widely-diverse group of business enterprises. As previously mentioned, we will work closely with OSU to maximize the stated inclusion goals for this program. Our corporate policy towards local participation is much more than a written statement – it has real meaning in the execution of our projects.



MCGUINESS UNLIMITED AT A GLANCE

- ▶ EDGE-certified consulting firm specializing in cost estimating, scheduling, and construction management services
- ▶ Specializes in educational buildings, as well as airport and transit facilities
- ▶ Dedicated to delivering exceptional service and committed to completing projects on time and within budget



University of Kentucky BBSRB
Lexington, Kentucky

"You did a phenomenal job in ensuring minority inclusion with this project. I sincerely believe your efforts have made a difference in the economic fabric of our community."

*- Marlon Walker, AVP
Supplier Diversity KeyBank*

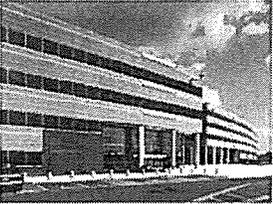
University of Kentucky, Biomedical/Biological Sciences Research Building (BBSRB) Gilbane and the University of Kentucky held contractor information meetings over two days to educate the construction community about the project. We also were successful with educating specific MBE/DBE firms that possessed specific skills and bonding capacity to be a prime contractor. In addition, we tracked MBE/DBE vendors in specific trades to ensure their awareness of who was bidding the project. Kentuckiana Minority Business Council had plans in their office during bidding to facilitate communications with their members.

MBE/DBE goal: None set
Actual: 23%

KeyBank, Operations Center

Gilbane partnered with KeyBank’s Supplier Diversity department to establish a successful diversity inclusion program which included outreach, mentoring, and education components. A contractor information meeting was held to educate the construction community about the project and we tracked MBE/DBE vendors in specific trades to ensure their awareness of who was bidding the project. Additionally, MBE/DBE firms were mentored on the use of the Building Information Model used in the coordination of the project.

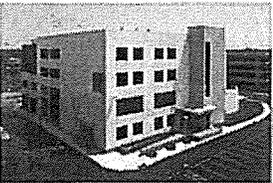
MBE/DBE goal: 20%
Actual: 46%



Ohio DAS
The Hilltop Project
Columbus, Ohio

Ohio Department of Administrative Services, The Hilltop Project Through successful outreach efforts, special meetings with M/W/DBE subcontractors, and specific set-aside bid packages, we far exceeded our M/W/DBE goals. In addition, Gilbane engaged the services of a local MBE firm and a local WBE firm as 40 percent of our construction management team. The results were:

M/W/DBE goal: 10%
State M/W/DBE goal: 7%
Actual: 30.8%



Nationwide Children’s Hospital
Central Energy Plant
Columbus, Ohio

Nationwide Children’s Hospital (NCH), Central Energy Plant NCH and Gilbane hosted a MBE/WBE/DBE Open House for this project. Each firm, along with FKP Architects gave presentations to all attendees. During the event, prime contractors, minority, and female businesses had the opportunity to meet and form alliances for the project. It also served as a forum to continue open communications with the local neighborhood community.

MBE/DBE goal: 10%
Actual: 14%

2. Similar Projects

Provide a brief description of the size and number of projects similar in overall scope to the Chemical and Biomolecular Engineering and Chemistry Building completed by your firm over the past five (5) years in the United States. Include the contact names/numbers for the owner, architect, and engineering representatives so they can be contacted.

Below are references for the 10 projects located in Section 4 within this proposal:

PROJECT	OWNER REFERENCE	ARCHITECT/ENGINEER REFERENCE
The Ohio State University, Chemical and Biomolecular Engineering and Chemistry Building, Columbus, OH	Ms. Faye Bodyke, Senior Project Manager, Facilities Design and Construction (614) 292-3185	Mr. Justin Fliegel, Architect Burt Hill-Stantec (216) 454-2150
The Ohio State University, Ohio Agricultural Research & Development Center (OARDC), Wooster, OH	Dr. David Benfield, Associate Director (330) 263-3703	Mr. Kevin Kennedy, Project Architect Van Auken Akins Architects, LLC (216) 241-2220
Battelle Memorial Institute, Center for Life Sciences Research, West Jefferson, OH	Mr. Brian Ogle, VP of Facility and Support Operations (614) 424-3955	Mr. Chris Kronser, Project Manager Flad & Associates (608) 232-1261
Grange Mutual Insurance, Corporate Headquarters, Columbus, OH	Mr. Mark Russell, VP/Chief Administrative Officer (614) 445-2730	Ms. Diane Vaillant, Sr. Associate NBBJ (614) 232-3139
University of Michigan, Biomedical Science Research Building, Ann Arbor, MI	Mr. Mike Marengi, Sr. Project Manager, CM Division (734) 764-2457	Mr. Charles Griffith, Associate Partner Ennead Architects (formerly Polshek Partnership) (212) 807-7171
University of Kentucky, Biomedical/Biological Sciences Research Building, Lexington, KY	Mr. Dall Clark, Director Capital Project Management Division (859) 257-5911 Ext. 234	Mr. George Nielson, Sr. Principal A.M. Kinney Associates (513) 421-2265
University of Louisville, Cardiovascular Innovation Research Institute, Louisville, KY	Mr. Stephen Cotton, Assistant Director (502) 852-6176	Mr. John Chovan, Principal in Charge Arrasmith, Judd, Rapp, Chovan Architects (502) 581-0042
Franklin County, New Courthouse, Columbus, Ohio	Mr. Michael Bird, Sr. VP of Project Management Advisory Services (Pizzuti Solutions LLC - Owner's Rep) (614) 280-4027	Mr. John Schilling, AIA Design Group, Inc. (614) 255-0515
The Ohio State University, Recreation & Physical Activity Center, Columbus, Ohio	Ms. Faye Bodyke, Senior Project Manager, Facilities Design and Construction (614) 292-3185	Mr. Robert Larrimer, AIA, Project Manager Moody/Nolan Ltd. (614) 461-4664
University of Massachusetts, Integrated Science Building, Amherst, MA	Mr. James Cahill, Vice Chancellor of Facilities (413) 545-1383	Mr. Gary Cabo, Associate Principal Payette Associates (617) 895-1000

3. Incomplete Projects

Provide a description of any projects or assignments on which your firm was terminated, for any reason, or on which your firm has been replaced as the General Contractor/CM in the past 5 years either during the Pre-Construction or Construction phases.

In February of 2008, the New Jersey Schools Development Authority terminated Gilbane's Program Management contract for convenience in connection with a dispute over responsibility for remediation of water infiltration on a public school construction project. Gilbane was the Program Manager on the job, and the State settled claims with the General Contractor and the Architect who built and designed the school.

4. Legal Actions

Please note if your firm is involved in ANY pending public or private legal action (including without limit mediation, arbitration, litigation, mechanics' liens, and bond claims) directly or indirectly, and your firm's role in the action.

As would be expected for a construction firm involved in almost \$4 billion per year in construction business, Gilbane Building Company has been involved in several claims and/or litigation cases. Most of these are inconsequential cases into which Gilbane is brought by a subcontractor or other party. In our judgment, there are no current outstanding legal cases which have potential to have any substantial adverse impact on Gilbane's overall financial position, nor have there been within the past seven years.

The following cases exceed \$500,000 in exposure and are not covered by insurance. Bankruptcy, personal injury, and workers compensation matters are excluded.

Current Cases

1. State of Connecticut v. Lombardo Brothers Mason Contractors, The S/L/A/M Collaborative, Inc., Gilbane Building Company, et als

State of Connecticut Superior Court District of Hartford at Hartford

Project: University of Connecticut Law Library Building

Location: Hartford, CT

Date of Service: February, 2008

Services: Project Management Services - Owner Held Subcontracts

Status: Pending

This was a claim for damages by the State of Connecticut for alleged water infiltration against numerous defendants including Gilbane who were involved in construction of the University of Connecticut Law Library Building which construction was substantially complete in 1996. Gilbane was the project manager, and the State directly held all trade contracts for the project. The suit was dismissed by the Court in February, 2009, and the State of Connecticut filed an appeal to the dismissal to the Connecticut Supreme Court. Pending.

2. Perkins Eastman Architects, P.C. v. Severud Associates Consulting Engineers, Gilbane Building Company, TDX Construction Corporation, Gilbane/TDX Construction Corporation, a Joint Venture, and Pile Foundation Construction Company, Inc.

Supreme Court of the State of New York, County of New York

Index No. 591133/2010 (Second Third-Party Suit)

Project: DASNY NYHHC Office of Chief Medical Examiner Forensics DNA Lab Bellevue Hospital #3117

Location: Brooklyn, New York

Date of Service: January 3, 2011

Services: Construction Management Services

Status: Pending

This is a third-party action by an architect bringing Gilbane and several other parties into an action filed by the Owner against the architect for property damage to areas surrounding the construction site. Gilbane was the Construction Manager for the project. This case has only recently been filed.

3. Harris County Sports and Convention Corporation V. Gilbane Building Company, Hermes Reed Architects, Wilson Architectural Group, Inc., Carter & Burgess, Inc., Control Air, Ltd. And its General Partner, Control Air Management, LLC, and FGH Fabricators, Inc.

157th Judicial District Harris County Texas

Case No. 201106058

Project: Reliant Park

Location: Houston, Texas

Date of Service: February 11, 2011

Services: Project Management Services

Status: Pending

This is a claim by the Owner against multiple parties for alleged defects in the design and construction of the insulation for the chilled water piping system for the project. This case has only recently been filed.

4. Gilbane Building Company v. Yard Works, Inc.

Court: Rhode Island Superior Court

Docket No. 2011-2037

Project: Waterplace Parcel 2

Location: Providence, Rhode Island

Date of Service: April 2011

Services: Construction Management Services

Status: Pending

In April 2011, Gilbane brought an action against its landscaping subcontractor on the Waterplace Parcel 2 project in Providence, Rhode Island, to recover the costs Gilbane incurred to replace multiple roofs on the project that were damaged as a result of defective workmanship by Yard Works, Inc. and its subcontractor in the performance of the landscaping and hardscaping work on the project.

5. Suggested Value-Added Ideas

Provide any cost savings or value-added suggestions (for example, design-assist and/or early equipment purchase). Probable construction cost reductions shall not reduce the project program requirements, reduce the quality of material or craftsmanship, increase life-cycle cost, negatively affect the Architectural aesthetics or design intent or adversely affect the project completion.

Our preconstruction team lead an extensive value-added / value engineering session in mid-January based on the 65% Construction Documents and our 65% CD Estimate. We spent several days with the core team developing the list of potential value-added items, preparing estimates for each item and reviewing the proposed items for incorporation into the project. As these items are not reflected in the documents provided with the RFP, we are including the proposed value-added / value engineering items in the following table:

Proposed Value-Added/Value Engineering Items

ITEM DESCRIPTION	ESTIMATED VALUE
Omit Fireproofing on steel structure at lab penthouse, allowed if 20' clear to underside of structure. (Will require structure/ parapet to be raised by approximately 16")	\$100,000
Use 2-coat Polycron coating on interior surfaces of curtain wall system.	\$150,000
Revise Terracotta specification to read "30 mm min, 40 mm max"	\$80,000
Utilize manufacturer standard sunshades with similar perforation pattern. (maintain outside thickness/ profile as per drawings)	TBD
Utilize standard profile vertical sunshades	TBD
Omit holes in Vertical Sunshades	TBD
Remove reveal at top of wave wall, as shown in 5/A624F	\$3,000
Change penthouse walls to Centria metal wrap system w/ multiple Profile panels to break up penthouse wall look.	\$80,000
Delete Skylight	\$55,000
Reduce area of 120 min glazing by using Water Curtain to allow for non rated glazing at Unit Ops.	\$200,000
Use less expensive clean room type ceiling (ACP-4) in Microscopy - based on replacing w/ Gyp brd ceiling / epoxy paint	\$25,000
Omit Elevator Lobby Wall coverings	\$59,000
Reduce Roller shade quantities	TBD
Reduce wood paneling at south wall of Rm 610	\$55,000
Use alternate accepted manufacturers for fume hoods (thermo fisher, etc.) in lieu of Waldner, which is currently carried in the estimate.	\$250,000
Use PVC or CPVC for vent piping, if allowed per code.	\$275,000
Allow pro-press pipe fittings on plumbing and lab water systems	\$150,000
Utilize pro-press piping where allowable for mechanical piping	\$100,000
Use Greenheck fans in lieu of Strobic	\$100,000
Use plenum return in offices	\$100,000
Evaluate less expensive light fixtures (F1, F4, F10A/B/C, F17, L11) - Reduce costs by 10%	\$112,780
Adjust the lighting fixtures specified in order to allow for multiple manufacturers. - Reduce costs by approx. 3%	\$82,000
Allow aluminum conductor material for all feeder #1/0 and above	\$150,000
Allow MC cable for all concealed line voltage wiring	\$60,000
Remove Tree irrigation	\$10,000
Use 5-1/2" thick concrete below pavers in lieu of 7-1/2"	\$20,000

If we are successful in continuing on the project as the CM At-Risk, we will meet with the team to confirm which items were incorporated into the final construction documents and verify the anticipated savings. If there is a need to evaluate further value-added / value engineering items for budgetary reasons, we will provide this service as required.

6. Qualifications

Provide any qualifications or objections to the contract documents. Any qualifications not noted on a separate sheet accompanying the Proposal shall not be considered later. The Owner's expectation is that the selected firm will enter into the Contract with only minor changes or modifications, unless otherwise specified.

We have reviewed your draft agreement and general conditions and they seem reasonable and fair. A couple areas appear open for clarification and discussion such as the liquidated and consequential damages clauses. We do not anticipate any items that could not be mutually agreed upon to both parties satisfaction.

7. Reporting

The CMR will be responsible for preparation of a monthly cash flow analysis for the project along with monthly progress reports and assist the Contracting Authority in presentations.

Cost Report

The cost report is the foundation of cost control, providing an up-to-date overview of actual and projected costs as compared to the budget. Drawing from Gilbane's financial accounting system, this report can be customized to meet CBEC's unique needs. In addition to tracking "bricks and mortar," the report can extend beyond construction costs to include soft costs such as architect's fees, permits and owner furnished equipment, as well as identifying anticipated costs to mitigate unwelcome surprises.

Cash Flow Projections

Cash Flow Projections are developed in conjunction with the Primavera Scheduling system at the onset of the project and the estimated value of the work components. By loading the schedule with the cost of individual trade packages, Gilbane projects the cost of construction by month. As the project progresses, the JD Edwards system tracks trade cost to date against the projected cost and the cash flow projection is updated.

Sample Reports

The following six pages are sample reports, including:

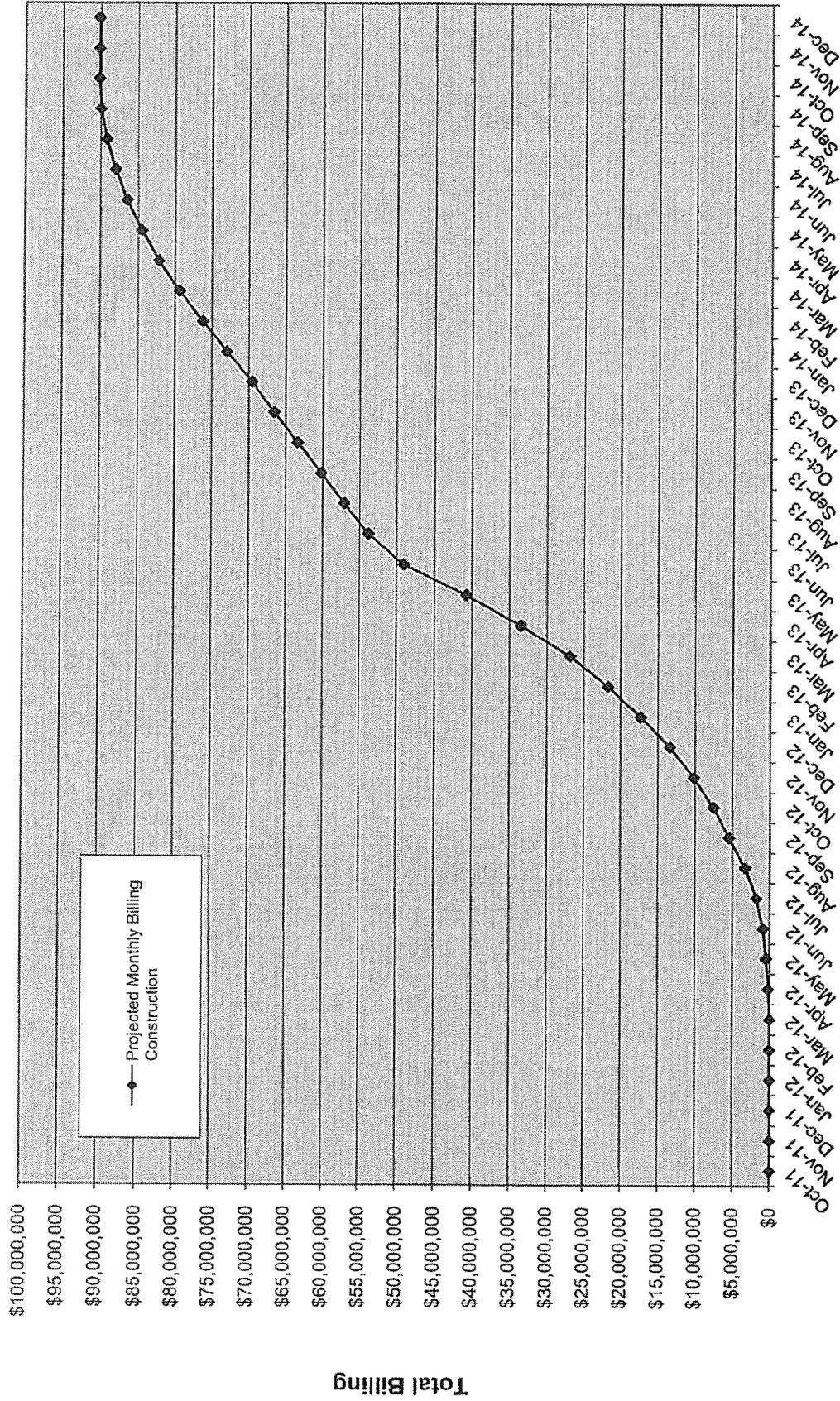
- ▶ Cash flow report
- ▶ Partial monthly progress report from The Ohio State University Ohio Agricultural Research and Development Center project in Wooster

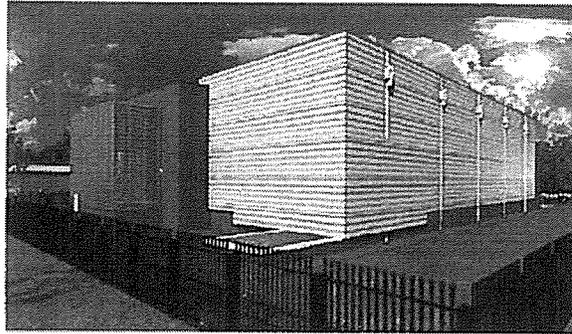
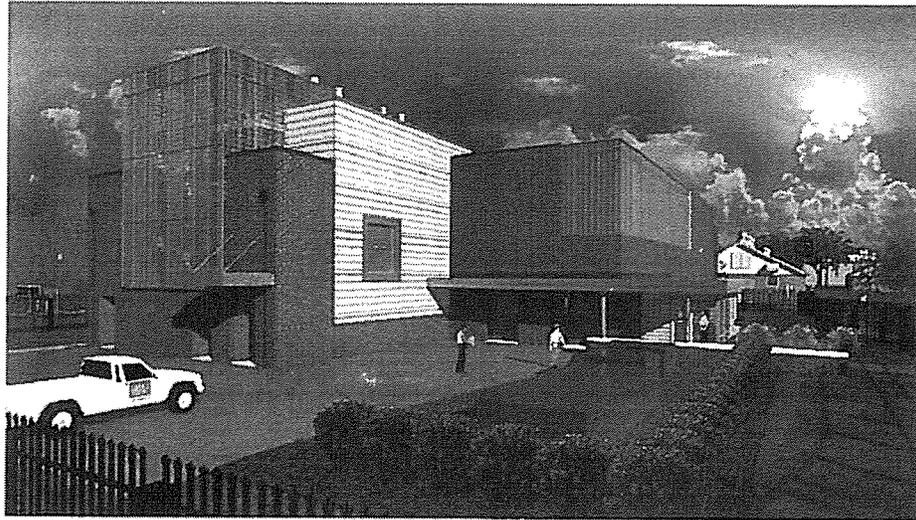


**Chemical & Biomolecular Engineering and Chemistry Building
Projected Cash Flow**

QW/CYC	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	Feb-28	Mar-28	Apr-28	May-28	Jun-28	Jul-28	Aug-28	Sep-28	Oct-28	Nov-28	Dec-28	Jan-29	Feb-29	Mar-29	Apr-29	May-29	Jun-29	Jul-29	Aug-29	Sep-29	Oct-29	Nov-29	Dec-29	Jan-30	Feb-30	Mar-30	Apr-30	May-30	Jun-30	Jul-30	Aug-30	Sep-30	Oct-30	Nov-30	Dec-30	Jan-31	Feb-31	Mar-31	Apr-31	May-31	Jun-31	Jul-31	Aug-31	Sep-31	Oct-31	Nov-31	Dec-31	Jan-32	Feb-32	Mar-32	Apr-32	May-32	Jun-32	Jul-32	Aug-32	Sep-32	Oct-32	Nov-32	Dec-32	Jan-33	Feb-33	Mar-33	Apr-33	May-33	Jun-33	Jul-33	Aug-33	Sep-33	Oct-33	Nov-33	Dec-33	Jan-34	Feb-34	Mar-34	Apr-34	May-34	Jun-34	Jul-34	Aug-34	Sep-34	Oct-34	Nov-34	Dec-34	Jan-35	Feb-35	Mar-35	Apr-35	May-35	Jun-35	Jul-35	Aug-35	Sep-35	Oct-35	Nov-35	Dec-35	Jan-36	Feb-36	Mar-36	Apr-36	May-36	Jun-36	Jul-36	Aug-36	Sep-36	Oct-36	Nov-36	Dec-36	Jan-37	Feb-37	Mar-37	Apr-37	May-37	Jun-37	Jul-37	Aug-37	Sep-37	Oct-37	Nov-37	Dec-37	Jan-38	Feb-38	Mar-38	Apr-38	May-38	Jun-38	Jul-38	Aug-38	Sep-38	Oct-38	Nov-38	Dec-38	Jan-39	Feb-39	Mar-39	Apr-39	May-39	Jun-39	Jul-39	Aug-39	Sep-39	Oct-39	Nov-39	Dec-39	Jan-40	Feb-40	Mar-40	Apr-40	May-40	Jun-40	Jul-40	Aug-40	Sep-40	Oct-40	Nov-40	Dec-40	Jan-41	Feb-41	Mar-41	Apr-41	May-41	Jun-41	Jul-41	Aug-41	Sep-41	Oct-41	Nov-41	Dec-41	Jan-42	Feb-42	Mar-42	Apr-42	May-42	Jun-42	Jul-42	Aug-42	Sep-42	Oct-42	Nov-42	Dec-42	Jan-43	Feb-43	Mar-43	Apr-43	May-43	Jun-43	Jul-43	Aug-43	Sep-43	Oct-43	Nov-43	Dec-43	Jan-44	Feb-44	Mar-44	Apr-44	May-44	Jun-44	Jul-44	Aug-44	Sep-44	Oct-44	Nov-44	Dec-44	Jan-45	Feb-45	Mar-45	Apr-45	May-45	Jun-45	Jul-45	Aug-45	Sep-45	Oct-45	Nov-45	Dec-45	Jan-46	Feb-46	Mar-46	Apr-46	May-46	Jun-46	Jul-46	Aug-46	Sep-46	Oct-46	Nov-46	Dec-46	Jan-47	Feb-47	Mar-47	Apr-47	May-47	Jun-47	Jul-47	Aug-47	Sep-47	Oct-47	Nov-47	Dec-47	Jan-48	Feb-48	Mar-48	Apr-48	May-48	Jun-48	Jul-48	Aug-48	Sep-48	Oct-48	Nov-48	Dec-48	Jan-49	Feb-49	Mar-49	Apr-49	May-49	Jun-49	Jul-49	Aug-49	Sep-49	Oct-49	Nov-49	Dec-49	Jan-50	Feb-50	Mar-50	Apr-50	May-50	Jun-50	Jul-50	Aug-50	Sep-50	Oct-50	Nov-50	Dec-50	Jan-51	Feb-51	Mar-51	Apr-51	May-51	Jun-51	Jul-51	Aug-51	Sep-51	Oct-51	Nov-51	Dec-51	Jan-52	Feb-52	Mar-52	Apr-52	May-52	Jun-52	Jul-52	Aug-52	Sep-52	Oct-52	Nov-52	Dec-52	Jan-53	Feb-53	Mar-53	Apr-53	May-53	Jun-53	Jul-53	Aug-53	Sep-53	Oct-53	Nov-53	Dec-53	Jan-54	Feb-54	Mar-54	Apr-54	May-54	Jun-54	Jul-54	Aug-54	Sep-54	Oct-54	Nov-54	Dec-54	Jan-55	Feb-55	Mar-55	Apr-55	May-55	Jun-55	Jul-55	Aug-55	Sep-55	Oct-55	Nov-55	Dec-55	Jan-56	Feb-56	Mar-56	Apr-56	May-56	Jun-56	Jul-56	Aug-56	Sep-56	Oct-56	Nov-56	Dec-56	Jan-57	Feb-57	Mar-57	Apr-57	May-57	Jun-57	Jul-57	Aug-57	Sep-57	Oct-57	Nov-57	Dec-57	Jan-58	Feb-58	Mar-58	Apr-58	May-58	Jun-58	Jul-58	Aug-58	Sep-58	Oct-58	Nov-58	Dec-58	Jan-59	Feb-59	Mar-59	Apr-59	May-59	Jun-59	Jul-59	Aug-59	Sep-59	Oct-59	Nov-59	Dec-59	Jan-60	Feb-60	Mar-60	Apr-60	May-60	Jun-60	Jul-60	Aug-60	Sep-60	Oct-60	Nov-60	Dec-60	Jan-61	Feb-61	Mar-61	Apr-61	May-61	Jun-61	Jul-61	Aug-61	Sep-61	Oct-61	Nov-61	Dec-61	Jan-62	Feb-62	Mar-62	Apr-62	May-62	Jun-62	Jul-62	Aug-62	Sep-62	Oct-62	Nov-62	Dec-62	Jan-63	Feb-63	Mar-63	Apr-63	May-63	Jun-63	Jul-63	Aug-63	Sep-63	Oct-63	Nov-63	Dec-63	Jan-64	Feb-64	Mar-64	Apr-64	May-64	Jun-64	Jul-64	Aug-64	Sep-64	Oct-64	Nov-64	Dec-64	Jan-65	Feb-65	Mar-65	Apr-65	May-65	Jun-65	Jul-65	Aug-65	Sep-65	Oct-65	Nov-65	Dec-65	Jan-66	Feb-66	Mar-66	Apr-66	May-66	Jun-66	Jul-66	Aug-66	Sep-66	Oct-66	Nov-66	Dec-66	Jan-67	Feb-67	Mar-67	Apr-67	May-67	Jun-67	Jul-67	Aug-67	Sep-67	Oct-67	Nov-67	Dec-67	Jan-68	Feb-68	Mar-68	Apr-68	May-68	Jun-68	Jul-68	Aug-68	Sep-68	Oct-68	Nov-68	Dec-68	Jan-69	Feb-69	Mar-69	Apr-69	May-69	Jun-69	Jul-69	Aug-69	Sep-69	Oct-69	Nov-69	Dec-69	Jan-70	Feb-70	Mar-70	Apr-70	May-70	Jun-70	Jul-70	Aug-70	Sep-70	Oct-70	Nov-70	Dec-70	Jan-71	Feb-71	Mar-71	Apr-71	May-71	Jun-71	Jul-71	Aug-71	Sep-71	Oct-71	Nov-71	Dec-71	Jan-72	Feb-72	Mar-72	Apr-72	May-72	Jun-72	Jul-72	Aug-72	Sep-72	Oct-72	Nov-72	Dec-72	Jan-73	Feb-73	Mar-73	Apr-73	May-73	Jun-73	Jul-73	Aug-73	Sep-73	Oct-73	Nov-73	Dec-73	Jan-74	Feb-74	Mar-74	Apr-74	May-74	Jun-74	Jul-74	Aug-74	Sep-74	Oct-74	Nov-74	Dec-74	Jan-75	Feb-75	Mar-75	Apr-75	May-75	Jun-75	Jul-75	Aug-75	Sep-75	Oct-75	Nov-75	Dec-75	Jan-76	Feb-76	Mar-76	Apr-76	May-76	Jun-76	Jul-76	Aug-76	Sep-76	Oct-76	Nov-76	Dec-76	Jan-77	Feb-77	Mar-77	Apr-77	May-77	Jun-77	Jul-77	Aug-77	Sep-77	Oct-77	Nov-77	Dec-77	Jan-78	Feb-78	Mar-78	Apr-78	May-78	Jun-78	Jul-78	Aug-78	Sep-78	Oct-78	Nov-78	Dec-78	Jan-79	Feb-79	Mar-79	Apr-79	May-79	Jun-79	Jul-79	Aug-79	Sep-79	Oct-79	Nov-79	Dec-79	Jan-80	Feb-80	Mar-80	Apr-80	May-80	Jun-80	Jul-80	Aug-80	Sep-80	Oct-80	Nov-80	Dec-80	Jan-81	Feb-81	Mar-81	Apr-81	May-81	Jun-81	Jul-81	Aug-81	Sep-81	Oct-81	Nov-81	Dec-81	Jan-82	Feb-82	Mar-82	Apr-82	May-82	Jun-82	Jul-82	Aug-82	Sep-82	Oct-82	Nov-82	Dec-82	Jan-83	Feb-83	Mar-83	Apr-83	May-83	Jun-83	Jul-83	Aug-83	Sep-83	Oct-83	Nov-83	Dec-83	Jan-84	Feb-84	Mar-84	Apr-84	May-84	Jun-84	Jul-84	Aug-84	Sep-84	Oct-84	Nov-84	Dec-84	Jan-85	Feb-85	Mar-85	Apr-85	May-85	Jun-85	Jul-85	Aug-85	Sep-85	Oct-85	Nov-85	Dec-85	Jan-86	Feb-86	Mar-86	Apr-86	May-86	Jun-86	Jul-86	Aug-86	Sep-86	Oct-86	Nov-86	Dec-86	Jan-87	Feb-87	Mar-87	Apr-87	May-87	Jun-87	Jul-87	Aug-87	Sep-87	Oct-87	Nov-87	Dec-87	Jan-88	Feb-88	Mar-88	Apr-88	May-88	Jun-88	Jul-88	Aug-88	Sep-88	Oct-88	Nov-88	Dec-88	Jan-89	Feb-89	Mar-89	Apr-89	May-89	Jun-89	Jul-89	Aug-89	Sep-89	Oct-89	Nov-89	Dec-89	Jan-90	Feb-90	Mar-90	Apr-90	May-90	Jun-90	Jul-90	Aug-90	Sep-90	Oct-90	Nov-90	Dec-90	Jan-91	Feb-91	Mar-91	Apr-91	May-91	Jun-91	Jul-91	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91	Jan-92	Feb-92	Mar-92	Apr-92	May-92	Jun-92	Jul-92	Aug-92	Sep-92	Oct-92	Nov-92	Dec-92	Jan-93	Feb-93	Mar-93	Apr-93	May-93	Jun-93	Jul-93	Aug-93	Sep-93	Oct-93	Nov-93	Dec-93	Jan-94	Feb-94	Mar-94	Apr-94	May-94	Jun-94	Jul-94	Aug-94	Sep-94	Oct-94	Nov-94	Dec-94	Jan-95	Feb-95	Mar-95	Apr-95	May-95	Jun-95	Jul-95	Aug-95	Sep-95	Oct-95	Nov-95	Dec-95	Jan-96	Feb-96	Mar-96	Apr-96	May-96	Jun-96	Jul-96	Aug-96	Sep-96	Oct-96	Nov-96	Dec-96	Jan-97	Feb-97	Mar-97	Apr-97	May-97	Jun-97	Jul-97	Aug-97	Sep-97	Oct-97	Nov-97	Dec-97	Jan-98	Feb-98	Mar-98	Apr-98	May-98	Jun-98	Jul-98	Aug-98	Sep-98	Oct-98	Nov-98	Dec-98	Jan-99	Feb-99	Mar-99	Apr-99	May-99	Jun-99	Jul-99	Aug-99	Sep-99	Oct-99	Nov-99	Dec-99	Jan-00	Feb-00	Mar-00	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01	Nov-01	Dec-01	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
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Chemical & Biomolecular Engineering & Chemistry Building Projected Cash Flow Curve





MAY MONTHLY REPORT

The Ohio Agricultural Research and Development Center

Animal & Plant Biology Level 3 Isolate Facility

Prepared for The Ohio State University 315-2000-125

Wooster, Ohio

Gilbane

MAY MONTHLY REPORT

Animal & Plant Biology Level 3 Isolate Facility

1. EXECUTIVE SUMMARY

The month of May 2011 completes 457 of the 504 contractual calendar days or 91% of the elapsed project time. BCMC, Comm Steel, Harold J Becker, Thomarios, Hoover Wells, Getinge, Speer Mechanical, SA Comunale, Siemens and McClintock Electric were on site the month of May completing their respective work activities. The final metal work is being installed on the Building Enclosure which will shortly be ready for punch list. The Finishes and equipment continue to be installed. The Mechanical, Plumbing, Fire Protection, Controls and Electrical contractors continue their finish work and start to bring the systems on line. The Commissioning Agent was on site conducting Field Verifications and Operational Performance Commissioning. The Trade Contractors have requested \$14,261,266 of the \$17,058,115 or 84% of the Committed Construction dollars through May 31, 2011. The May Progress Update indicates the trades will be required to compress 30 day punch list timeframe to achieve the baseline final completion of July 18, 2011.

2. SAFETY

The Trade Contractors worked an additional 20 consecutive days without a lost time incident for the month of May. Gilbane completed seven Safety Inspection's totaling 578 observations resulting in a 97.40% Safe rating to date.

DESCRIPTION	THIS MONTH	YEAR TO DATE	PROJECT TO DATE
TOTAL MANHOURS	12,303	51,186	108,516
RECORDABLE ACCIDENTS	0	2	4
LOST TIME ACCIDENTS	0	0	0
SAFE WORK DAYS WITHOUT LOST TIME	+ 20	80	350
OSHA INSPECTIONS	0	0	0

3. SCHEDULE UPDATE

The Week of May 2, 2011 Work Plan Accomplished:

BCMC continued the Finishes phase of the work by starting the Site grading and pavement work and started to layout and set fence posts [01]. BCMC also installed doors and hardware on the Basement, First Floor and Interstitial Levels. Thomarios continued the wall coatings [02] and Hoover & Wells continued the floor coatings [03]. Getinge continued the installation of the cooler [04].



[01] Layout Fence Post

[02] Wall Coatings

[03] Floor Coatings

[04] Cooler Installation

MAY MONTHLY REPORT

Animal & Plant Biology Level 3 Isolate Facility

The following is a summary of project scheduled milestones:

MILESTONE	BASELINE DATE	ACTUAL DATE
Start Construction	01-Mar-10	01-Mar-10
Containment Cap Complete (Corrected)	27-Oct-10	21-Oct-10
Building Enclosed	13-Jan-11	7-Jan-11
Building Conditioned	11-Feb-11	26-May-11
Permanent Power Available	22-Feb-11	15-Feb-11
Certificate of Occupancy	09-Jun-11	
Commissioning Complete	14-Jun-11	
Final Completion	18-Jul-11	

TIME EXTENSIONS REQUESTED	0	Days
TIME EXTENSIONS APPROVED	0	Days

4. QUALITY

May Quality Activities are summarized as follows:

ROLLING COMPLETION LIST	THIS MONTH	TOTALS TO DATE
NUMBER OF RCL ITEMS	+ 0	148
NUMBER OF OPEN RCL ITEMS	57	148

SUBMITTAL PACKAGES	THIS MONTH	TOTALS TO DATE
NUMBER OF SUBMITTAL PACKAGES	+ 18	491
NUMBER OF OPEN PACKAGES AT THE END OF THE MONTH	45	491

REQUESTS FOR INFORMATION	THIS MONTH	TOTALS TO DATE
NUMBER OF RFI's	+ 58	518
NUMBER OF OPEN RFI's AT THE END OF THE MONTH	4	518

BID PACKAGES	THIS MONTH	TOTALS TO DATE
NUMBER OF BID PACKAGES AWARDED	17	17
NUMBER OF BID PACKAGES CLOSED OUT	0	0

MAY MONTHLY REPORT

Animal & Plant Biology Level 3 Isolate Facility

5. COST/ FINANCIAL

Gilbane has been tracking the Construction portion of the overall project budget. \$16,728,603 is the Construction Budget and \$895,060 is the Construction Contingency. Payments Requests for \$1,180,874 have been requested as follows in May:

TRADE CONTRACTOR	PAYMENT REQUEST THIS PERIOD	PAYMENT REQUEST TO DATE	PAYMENT REQUEST TO COMPLETE
101/102/103 and 106- BCMC	\$448,251	\$3,311,316	\$727,600
104- Stanley Miller	\$0	\$265,500	\$9,500
105- Comm Steel	\$41,294	\$741,678	\$47,422
107- BCMC	\$56,475	\$119,221	\$261,579
108- Harold J Becker	\$51,874	\$346,092	\$63,909
109- Thomarios	**\$0	\$308,592	\$78,408
110- Hoover & Wells	***\$78,601	\$107,663	\$55,937
111- Julian Speer	\$92,457	\$1,484,233	\$207,767
112- Getinge	\$0	\$446,973	\$113,224
113/114- Julian Speer	\$227,711	\$5,043,315	\$512,685
115- SA Comunale	\$0	\$115,244	\$84,604
116-Siemens	\$112,690	\$525,493	\$219,387
117- McClintock	\$66,132	\$1,326,974	\$204,288
Construction Contingency	\$5,389	\$118,972	\$483,773

SCHEDULE/COST/TIME COMPARISON	
% Billed (Total Dollar Amount Billed/Total Commitment- Trades Only)	84%
% Time Elapsed (Calendar Days Complete/Total Calendar Days)	91%
% Activity Complete (P6 Scheduling Software)	92%

\$329,512 of the Construction Contingency dollars has been committed through Change Orders to the Trade Contractors. Gilbane's Potential Change Order Log has \$273,233 of pending commitments for a total Construction Contingency commitment of \$602,745. Gilbane forecasts 67% of Construction Contingency has been consumed through May 31, 2011 and remains concerned that inadequate contingency funds remain to cover potential claims and unforeseen conditions.

CONSTRUCTION CONTINGENCY	THIS MONTH		TOTALS TO DATE	
	Qty.	\$ Value	Qty.	\$ Value
CHANGE REQUESTS	+ 11	\$103,404	73	\$602,745

8. Equipment, Relocation, and Moving

Provide qualifications with experience with relocation packages. The CMR shall be responsible for the relocation of equipment and instrumentation set-ups from the existing buildings (Koffolt and Evans) that are to be located in the basement laboratory support areas. These pieces of equipment can include but are not limited to mechanical, electrical, and data disconnection and reconnection, rigging, coordination with vendors, maintenance contracts, and University Personnel.

Gilbane's Transition Planning and Management (TPM) group provides services in support of transition, activation, and occupancy for diverse markets from government to research, healthcare to education institutions. Our proven approach, process, and deliverables are designed to focus on the activation and start of operations in the new facility as well as the transition and close-out of the existing facility. Specializing in large, complex and multi-phased projects with ongoing activities, our transition professionals employ tested methods to deliver a logical plan and manage implementation with limited downtime and impact to our client's operations, project schedule and budget.

Over the last 18 years, we have assembled a talented team of professionals with expertise in project and transition management, logistics, engineering, interior design, construction and facility planning. Our goal is to organize and manage your transition costs, effectively mitigating financial and schedule risks and minimizing disruptions to the faculty, staff and student body.

Working collaboratively with your project team and the end-users, our TPM group will:

- ▶ Plan, coordinate and manage multiple technical/logistics vendors and services needed to relocate equipment and instrumentation.
- ▶ Review and validate floor/bench layouts, utility requirements and assess the timing of all supporting services essential to minimizing downtime and expense. Upon validation of the mechanical, electrical, and data disconnection and reconnections, Gilbane TPM will prepare a list of all vendor points of contacts and corresponding warranty and maintenance agreement information.
- ▶ Coordinate with OSU personnel related to timing and testing of equipment. We will work with OSU personnel to identify the length of time needed for each service discipline and coordinate these services for maximum efficiency.
- ▶ Manage the disassembly process needed to prepare the equipment for the hired rigging company.
- ▶ Gilbane TPM will report to the project team any discrepancies in utility requirements as information is uncovered.

Gilbane TPM's equipment planning process will fill the gaps that occur between the design, construction and relocation teams. We will validate the work completed during the design phase regarding significant equipment, supplement that to capture the requirements identified by the end users and our past experience with similar items, and create a comprehensive tracking tool that can be used to drive the development of bid documents for the supporting services.

TPM Success



FRANKLIN COUNTY COURTHOUSE

Gilbane TPM provided planning, coordination, and activation services of the new building. Gilbane developed a comprehensive transition schedule with multiple courthouse departments and prepared a Building Activation and Occupancy Schedule consistent with the Transition Schedule that detailed the time line and checklist of the move.



THE COLLEGE OF WILLIAM & MARY, INTEGRATED SCIENCE CENTER & ROGER'S HALL

Gilbane TPM provided full transition and procurement services for the Integrated Science Center and Roger's Hall renovation. Services included transition planning and occupancy of the Schools of Chemistry, Biology, Psychology and the Animal Facility. We provided comprehensive planning, procurement, and installation management of FF&E in classrooms, administrative spaces, and laboratories. Relocation activities included transition to the new center and backfill of the vacated and renovated Roger's Hall.

9. Duties by Others

The following items will be contracted by the Architect or Contracting Authority: (a) Testing and Inspections (b) Air and Water Balance (c) Commissioning Agent. The CM at Risk shall coordinate, schedule, review reports, recommend and manage the schedule related to these activities throughout the project, and inform the Contracting Authority on progress.

Our standard operating procedures on all projects where we serve as a CM At-Risk requires our team to collaborate with various vendors and consultants, in addition to our management of the trade contractors. During the preconstruction phase, we will lead a discussion with the project team to determine which services may be contracted directly by the Owner or A/E, and develop a plan to integrate these services into our work.

We are experienced in managing these consultants and are often requested by clients to include Testing and Inspections, Air and Water Balance, and Commissioning in our scope of services. We will work with the consultants mentioned above and will coordinate and schedule their work, incorporate their site activities into the project schedule, review any reports produced, and keep OSU informed regarding their overall progress.

10. Building Information Modeling

The Design Team is utilizing BIM along with other CAD tools for the production of Architectural, Structural, MEP, and Lab Equipment documents. The CMR should provide a brief description of your experience utilizing BIM and the approach to implementing BIM during construction. This includes your firm's use of BIM for cost validation, schedule simulation, reconciliation of design and construction models, and any requirements for Trade Contractors to use BIM for virtual coordination and shop drawing production. Explain your firm's expectations for access to, and modification of, design models prepared by the Design Team. The CMR shall include all related cost in your price proposal.

As stated previously in Section 5, Gilbane will develop a BIM Execution Plan early in the project. We will include key members from OSU, the construction teams and the design teams to establish project goals for usage of the models, responsibilities of each party, standards and protocols, required levels of detail, and any other pertinent items. We have already reviewed and agreed to the model exchange procedures and guides established by Burt Hill for the project and are ready to continue this process immediately.

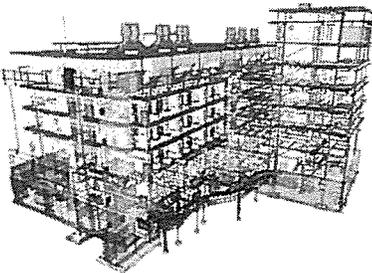
On the CBEC project, we will utilize BIM to provide the following services:

Visual Scheduling

We have the ability to integrate the schedule into the model, either in Navisworks or Synchro. Linkage will be maintained as the schedule is updated, allowing for accurate progress tracking and look-aheads at upcoming activities. These visual simulations can be incorporated into the regular project updates.

Site Logistics Model

Gilbane has established site logistic models to demonstrate our understanding of site access and construction on a restricted site. The model will be updated as the project progresses and will be used to communicate site logistics and impacts to surrounding projects. We can use the model to simulate "what if" scenarios if adjustments to the current plan are required.



The Ohio State University
CBEC BIM

Submittals

Gilbane will establish a project server or FTP site to allow for the electronic transfer of submittals, and will maintain archives and secure backups of all model versions submitted from the design team and subcontractors. This record of model development will be turned over to OSU at the completion of the project.

Construction Phase Virtual Coordination

Gilbane will require all major subcontractors to provide fabrication level models for use in the virtual trade coordination process as well as to provide an accurate as-built BIM deliverable to OSU upon completion of the project. Gilbane will qualify subcontractors early in the bidding and procurement process to ensure all selected subcontractors are capable of providing the required models and expertise required for a project of this complexity.

Gilbane will utilize our expertise with BIM to lead the MEP coordination process. This process is often passed down to the mechanical contractors with the requirement for the contractors to assemble and integrate their own models. However, with our local BIM Manager, Amy Hwang, Gilbane will manage this process internally and integrate the models of the contractors involved in the coordination process. This provides numerous benefits to the project:

- ▶ Reduces subcontractor costs for coordination.
- ▶ Improves efficiency of coordination process as Gilbane has dedicated resources to integrate the models.
- ▶ Allows Gilbane to run clash reports and identify conflicts and report these conflicts to the contractors, rather than waiting on the contractors to find the issues.
- ▶ Identifies conflicts in the preconstruction phase as opposed to finding issues in the field during construction.
- ▶ Provides a resource that can be utilized onsite to allow the project team to gain a better understanding of their work.
- ▶ Enhances collaboration and communication for the entire project team.
- ▶ Produces an accurate as-built model as a deliverable for OSU at project completion.

11. Pre-Construction Services

CMR should include services related to pre-construction at the opening point of article 5.7 in the General Conditions (CM at Risk).

Gilbane is exclusively qualified to complete the preconstruction services for the CBEC project due to our involvement in the project for the last 18 months. Our team is proud of the services provided to date and the relationships we have established to create a true partnership. If we are successful in continuing as the CM At-Risk, we will immediately re-engage to complete the preconstruction services below:

- ▶ Review the 95% Construction Documents and revise our detailed estimate
- ▶ Provide additional value engineering review if necessary
- ▶ Perform a formal Interdisciplinary Document Coordination (IDC) review
- ▶ Assist Burt Hill in developing the list of Bid Alternates
- ▶ Create the Front End and Project Manual in cooperation with Burt Hill
- ▶ Develop scopes of work and review with the project team
- ▶ Assist in permit procurement

12. Incentives

Provide any cost incentives suggestions.

Gilbane believes that the primary goal for the team is to act in the best interest of the project and to produce value for OSU every step of the way. The goal is to create a community among the participants, and acting for the benefit of that community, rather than for the best interest of a single party.

Therefore, as our commitment to OSU and the project team, we propose to structure language within the Agreement that incorporates shared goals. As indicated in Section 1, rather than place a percentage of our base fee at risk, we have reduced our base fixed fee percentage to reflect an immediate savings to OSU. We would like an opportunity to increase our total project fee by creating an incentive pool, funded entirely by the CM Contingency. We suggest establishing a mutually agreeable, performance-based rating system to coincide with major milestones on the project. A percentage-based or fixed incentive could be paid at the established intervals, only if earned and if the funds are available in the CM Contingency. All remaining contingency reverts back to OSU.

We look forward to discussing the specific details of our incentive suggestion and determining OSU's interest in such a program.