UNIVERSITY OF HOUSTON  
Campus Facilities Planning Committee  
Agenda Item Description Form

1. ITEM: Roy G. Cullen Fire Safety Renovations

2. REQUESTING DEPARTMENT: FM Projects

3. CONTACT NAMES & PHONE NUMBERS: Barry Simmons (713-743-9073)

4. PRESENTER: B. Simmons

5. RECOMMENDATION/ ACTION REQUESTED:

   a) Approve use of SHW Group, Inc. as the architect to ensure building retains its architectural features remain in keeping with those other buildings with historical significance to the University’s image.

   b) Present the latest rendering of the exterior and interior designs to exit the stairwells to the exterior of the building and discuss the design.

   c) Obtain approval to move forward with the exterior and interior design.

6. SUMMARY:

The State Fire Marshal issued a Life Safety and Code Violation on 1/22/13 for the Roy G. Cullen Building. The Fire Protection Violation states that the 1st and 2nd Floors are unprotected vertical opening and lack of separation from remainder of building and discharge to the exterior at the level of discharge. The recommended remedy is to provide separation by adding walls and doors to create exit enclosures. Renovations of the building must be completed by 9/30/13.

The open stairs in this building does not meet the current Life Safety Code requirements for smoke compartments. This project scope includes building rated walls and doors to enclose the stairs to meet this requirement. A new exit from the west stair will be created to exit directly to the exterior on the first floor. Openings between the 1st and 2nd floors will also be enclosed to create separation between floors.

At the June 2013 Campus Facility Planning Committee meeting, it was requested that an A/E with experience with historical significant building at higher education facilities be added to the Project Team to ensure that the architectural features at Roy Cullen were preserved and any renovations conducted be consistent with those architectural features.
7. **PROPOSED START DATE:** 9/30/13 or TBD

8. **SUPPORTING DOCUMENTATION:**
   - SHW Group, Inc. Qualifications and Experience (Q&E) as a A/E with experience with historical significant building at higher education facilities
   - Renderings of building exterior renovations
   - Draft interior and exterior design.
“Old Red” is a four-story building that was originally constructed in 1891 and is currently entered in the National Registry of Historic Places (1969). The original construction consisted of wood framing and load bearing brick and sand stone walls. The foundation as described in the Historic American Building Survey of 1967 (HABS No. Tx-292), was depicted as, “Large stone piers on isolated footings.”

On September 13, 2008, Hurricane Ike made its final landfall near Galveston as a strong Category 2 storm with Category 5 equivalent storm surge and hurricane force winds that extended 120 miles from the storm center. The water level from the storm surge surpassed 5’-0” above ground level throughout the entire facility. The standing salt water did not dissipate for two days. This resulted in severe damage to the architectural, HVAC and electrical systems located throughout the entire ground floor. High winds and flying debris damaged various windows, roof flashing and exterior finishes.

The scope of work included demolition and replacement of all existing elements that were damaged on the ground floor. Interior finishes were repaired including: new paint on walls; new carpet flooring along the main corridors, office areas, and statuary exhibit; and new acoustic panel ceilings in office areas. Asbestos abatement and decontamination work was conducted in select areas of the structure according to the requirements and specifications set forth by the Owner’s environmental consultant. On all levels of the building, existing mechanical ductwork was cleaned, new lighting and electrical systems, and window frames and sills were repaired and/or replaced.

General Historical Preservation Notes were incorporated into the construction documents that included the preservation of all distinctive materials, features, finishes and construction techniques. Great care was taken when restoration of the existing Historic main hallways began to ensure that the historical character of the property was retained and preserved.
Ashbel Smith Building “Old Red” Restoration
University of Texas Medical Branch
Galveston, Texas

Before Southwest Façade

After Southwest Façade

Before Window/Façade

After Window/Façade

Before Ground Floor Plaster

After Ground Floor Plaster

Before Corridor

After Corridor

Before Hall of Statues

After Hall of Statues

Before Ground Floor

After Ground Floor
This historically sensitive project includes complete interior renovation of all fifteen floors, approximately 285,000 square feet, originally constructed in 1927 and designed by Albert Kahn. Renovation brought the two-story grand lobby vaulted tile mosaic ceiling, marble walls and detailed marble floor back to their original splendor. Several major departments including records and registration occupy the fully-renovated newly furnished floors. Elevators and all mechanical, electrical and security systems were also completely updated.

The project also includes improvements and repairs to fire alarm and emergency lighting replacement, exit stair enclosure upgrades, pipe shaft penetrations, freight and passenger elevator upgrades, general repairs to the mechanical systems, roofing repair/ replacement and lobby upgrades.

Professional Services | Programming, Architecture, Interior Design, FF&E

Size | 285,150 SF
Start Date | October 2003
Completion | June 2005
Project Budget | $11,000,000

Owner Reference | Mr. James R. Sears
Associate Vice President
Facilities Planning & Management
Wayne State University
j.sears@wayne.edu
313.577.4301

Length of Relationship | 15 years
(Preferred Design Professional since 1998)
Maccabees Building Renovation/Restoration
Wayne State University
Detroit, Michigan

Before

After
Classroom Building Renovation
Eastern Michigan University
Ypsilanti, Michigan

The Pray-Harrold Building, a State Capital Outlay project, is the largest academic classroom and office building on the campus of Eastern Michigan University. SHW Group was selected to provide programming, architectural and interior design, and engineering for the first comprehensive renovation and modernization of the building in its 40 year history. The 1970’s building was transformed from a dated facility to a modern day learning environment with a timeless feel.

The modernization replaced and/or upgraded all mechanical, electrical, and IT/AV systems to provide increased capacity and energy efficiency. In this technology-rich environment, students will not be found tethered to electrical outlets along the floor, charging their electronic devices. Ample electrical access will now meet the needs of today’s students. In addition, the building received a total window replacement and new finishes and furniture. The interior renovation provides an efficient plan with a new student commons space on the main entry level. The new commons is located at the main entrance, and what was before a totally enclosed interior room functioning as a writing center, is now completely opened up, filled with natural light. All this was done in a single-story space, so the drama is not with additional height, but with transparency.

The four main auditoriums were completely renovated. Three of the auditoriums were re-planned to resolve seat count needs for current and future class sizes providing fixed table style seating and technology upgrades. For the first time in the building’s history, wheelchair access was added to the front of the auditoriums. The Pray-Harrold Building is certified LEED Silver.

Professional Services |
Programming, Architectural, Interior Design, and Engineering

Size | 237,000 SF

Start Date | January 2009
Completion | December 2012

Project Budget | $42,000,000

Owner Reference |
Mr. Sean Braden, Manager of Design & Planning
Facilities Planning & Construction
Eastern Michigan University
734.487.1249

LEED SILVER
The McGregor Memorial Conference Center, designed by prominent architect Minoru Yamasaki, is a significant example of modern architecture. The folded concrete slab structure is bisected by a two-story lobby topped by 50 contiguous pyramid-shaped skylights. Constructed in 1958, this building has been published in numerous books on modern architecture.

Numerous factors contributed to the deterioration of the interior of the building. Due to failure of the flashings, single-glazed skylights and curtainwall, and the high humidity levels, the building suffered water damage from condensation and infiltration.

The challenge was to replace the skylights and curtainwall with insulated glazing, meeting current code and technical requirements while remaining true to the original design. Existing skylight support steel was inadequate to carry the increased loads of the insulated glazing and was replaced. Lengths of glass between mullions at the entrances exceeded the maximum 12 foot panel length for insulated glass. Intermediate mullions were added in locations true to the spirit of the design. Existing cast aluminum mullions were replaced with aluminum tube sections with custom caps replicating the original horizontal and vertical reveals.

The completed project is an energy efficient building that solved the existing deterioration problems and remained true to the original design.
Bonstelle Theatre was originally designed in 1902 as Temple Beth El by George Mason and Albert Kahn. As the city grew, the building was converted into a theatre in 1925. After the city no longer had a use for the theatre, Wayne State purchased the building for performances by their theatrical students.

SHW provided current code accessibility upgrades for the Bonstelle Theatre, including provisions for wheelchair seating and accommodations for hearing impaired in the theater, adding accessible drinking fountains, a unisex toilet room, and expanding the women’s toilet room.

The project also involved re-roofing the 36,000 SF theater, originally designed by Albert Kahn in 1903. In the flat roof areas, existing roofing was completely removed, deteriorating substrate repaired, masonry parapets tuck pointed, and areas completely re-roofed with a bituminous system. The 60-foot diameter dome was clad in original terracotta tiles that had deteriorated and exposed the building to water penetration. The dome and two adjacent gabled roofs were resurfaced in standing seam copper.
The Child Development Research Center and the Center for the Study of Addiction Expansion and Renovation presented a unique challenge to the design team: design a complimentary addition that reclaims the historical vocabulary of the campus; maintain program autonomy; and site the addition to reclaim the quad corner allowing optimal daylighting for the facility.

Site Development
The Child Development Research Center requires both safety and ease for efficient operation and care. The transformation of a barren lot through landscaping, site design and architectural improvements will be a welcoming arrival zone protected from traffic. A pathway connects the new Child Development Research Center to the existing playground with an animated journey through landscape design. The Center for the Study of Addiction is easily located, yet discreetly identified. Valuing the privacy and reputation of the users, a new discrete entrance is designed for access to the program.

Maintaining Program Autonomy
Physical separation of the programs is accomplished through several design solutions. An expanded Child Development Research Center transforms an unsightly area into an active, vibrant edge of the campus quadrangle while locating the Center for the Study of Addiction on the opposite side of the building will linking the program and its users to the Student Union and the rest of the campus population, thereby encouraging interaction.

Optimizing Daylighting
The existing facility significantly lacks daylighting; the new design increases daylighting to improve the learning and recovery environment while reducing energy costs over time by minimizing the need for artificial lighting. In addition, porticos at each classroom are provided for tempering direct daylight inside while providing protected exterior play areas.