
Meeting No.: 4 – Building Committee
Topic: Design Development
Present: See attached Attendance Sheet

1. **Mechanical Penthouse Enclosure.** Based upon efficiency requirements established by the State DMB, DSA has previously indicated an open mechanical penthouse. To address concerns raised by CMU, the Design Team has developed a cost-benefit analysis for providing an enclosed penthouse for review by the Project Manager. DSA is awaiting information from the Department of Management and Budget. *The project manager with the DMB verbally approved the enclosure of the mechanical penthouse based upon the Design Team's memo dated August 21, 2006.*
2. **Attic Stock Storage.** Placing attic storage (carpet, ceiling tiles, fixtures, supplemental stock) within the mechanical penthouse would trigger code related issues. CMU does not endorse placing the storage in this location if it would require additional construction or operational expenses. DSA suggests that a separate room in the basement dedicated to attic storage addresses most of CMU's concerns. Providing shelving with a minimum of 2'-0" of clearance to finished floor would offer a safer long-term storage solution over other campus buildings where storage was provided directly on the finished slab.
3. **Exterior Finishes.** Ventilated wall system summary and update: The DMB issue remains pending. DSA anticipates receiving an answer early next week. Pending approval from the Department of Management and Budget, the College approves DSA to proceed with the design of the building using a ventilated wall system with terra cotta panel cladding. CMU expressed an interest in pursuing a domestically based manufacturer (Boston Valley) in lieu of those based in Europe (NBK and Moeding). DSA will continue use of the Boston Valley product as basis of design. *The project manager with the DMB has stated that while it is not the purview of the DMB to determine the appropriateness of a particular building system, she was interested in receiving additional information about the product's installation and typical detailing. Provided that there are (3) reputable manufacturers of the specified system, the State does not foresee any difficulty in receiving a competitive bid.*
 - a. **CMU Research.** To date, the University has contacted building owners, installers, and operators. WJE, a consulting engineering firm, has been contacted by the University to provide additional technical support. The specification writer who previously worked for the University of Michigan is now working with WJE and may be able to offer significant expertise and professional advice to the project. Based upon their research into the product, CMU supports the use of a ventilated wall system using terra cotta panels. The product challenges have been identified on 'Cons' list assembled by the University. CMU will forward this list to DSA for review and comment. CMU believes that any challenges inherent in the product may be overcome (refer to item IV below).
 - i. **Back-up systems:** The use of masonry back up (CMU) is generally recommended where a wall system requires significant stiffness for long-term durability. Due to the open joint and component based nature of the ventilated wall system, a cold-formed metal framing (CFMF) system may be an appropriate solution given the budget, schedule, and deflection requirements of the system. Based upon comments from other similar projects, CMU notes that CFMF may offer advantages in construction speed.

- ii. Use of terra cotta near pedestrians: CMU believes that the product can successfully be brought to the ground if landscaping or alternate methods can limit pedestrian interaction with the product. Other installations have experienced panel chipping or damage where they come in close contact to maintenance or pedestrian traffic.
 - iii. Panelized versus site fabrication: Given scale of building, site fabrication may be more appropriate, however tolerances of construction may be more appropriate for shop fabrication. Based upon DSA's current understanding of the system, this project will likely not utilize a panelized construction method due to potential cost increases.
 - iv. Specifications: Field-testing and inspection, installer qualifications, and material availability are all critical to the successful use of this system. DSA will work with CMU to develop specifications that address these and other related issues.
4. **Interior Finishes.** DSA presented a palette of interior finishes for CMU's review and comment. Based upon this initial meeting, a more refined selection of materials will be chosen and presented for approval. The finishes selected should construct a narrative throughout the building that unifies and instructs the occupants. An emphasis has been placed on materials that invoke natural themes or are otherwise instructive.
- a. **Public Areas:** Auditorium finishes focused on utility and warmth of character. Options for carpeting were presented as well as a general discussion over possible methods for acoustical mitigation.
 - b. **Public Areas:** Corridors: Durability and long-term maintenance requirements top the University's list of desirable characteristics in the corridors and other high traffic areas. DSA presented a number of potential materials including Plyboo (a renewable product), porcelain tile, and perforated steel hand railings – the design intent is to “wrap and introduce warmth into the corridors”. A phenolic resin based material marketed under the trade name Trespa is another option for corridor walls in lieu of natural wood or Plyboo products. DSA will present samples of the Trespa product at the next meeting.
 - c. **Child Development Center:** Walnut, oak, maple, and pine are possible options for covering the curved form spaces. Homasote panels configured for use as felt boards and tack surface were presented for some of the side wall surfaces. As with other areas in the building, the color palette has been proposed as neutral with accent color for impact or to emphasize utility. Area rugs can be used for long-range utility. River rock flooring in mud room and restroom was proposed. Polyurethane finish over end grain flooring was proposed for the entry areas. CMU requested additional information about slip resistance and ongoing maintenance.
5. **Schedule:** A revised project schedule with correct date release date and was issued. The Design Development Agenda schedule was also presented for review and comment. CMU suggests that Meeting 7 (October 5, 2006) be revised to allow the Building Committee to meet in the morning and MEP in the afternoon. DSA will revise the schedule as necessary and provide an updated copy at the next meeting.
6. **Room Data Sheet Summary:** DSA will be delivering the final room data summary document at the next regularly scheduled meeting. The document will provide both a narrative and graphic summary for the majority of proposed spaces within the building. The room data document will be a living document and can be updated throughout the remainder of the process. CMU will have two weeks to



review the document and provide initial input. CMU will review the document with selected user groups. Based upon this strategy, CMU believes the review time will be sufficient.

7. **Elevator.** DSA presented the Gen2 by Otis. This elevator does not require a traditionally configured machine room and therefore would mitigate the elevator's impact on the façade as well as eliminate an accessible space from the building roof. CMU prefers to investigate the option of using non-proprietary controls for the building elevators. A split system will be used involving a hydraulic elevator for the 4 stop run and a roped elevator for the 6 stop elevator. DSA will forward examples of non-proprietary specifications from Michigan State University and the University of Michigan. Based upon these specifications, CMU will provide additional input on the requirements of building elevators.
8. **Next Meeting.** The next Building Committee meeting will be Thursday September 7 at 9am in the Charter Schools Conference Room.

The above represents the items discussed and conclusions reached. If there are any required clarifications, please contact the undersigned.

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Distribution: Meeting attendees
DSA project file