
Meeting No.: Design Development 01
Topic: Refer to attached Agenda
Present: Refer to attached Attendance Sheet

1. **Corrections to previous meeting report.** No corrections were noted.
2. **Landscape.** Paul Andriese of Grisholm Metz Andriese presented the current landscape design and conceptual proposals for the children's play yard. The following topics were reviewed and discussed:
 - a. **Vehicle Access:** Under the current plan, Ottawa Court will be reduced to authorized traffic beginning at a point just east of the proposed service court entry. CMU suggests that shifting the line of limited access further West may be more compliant with the wishes of the University President. Frequent access to the service court by garbage trucks will be a mitigating factor in the decision to limit vehicular traffic. CMU noted that service vehicles in other areas of campus routinely drive on limited access walks if they are sufficiently designed for the loading. The presence of access limiting bollards will require further investigation.
 - b. **Formal and Informal Outdoor Space:** CMU expressed an interest in the plans for both planned and unplanned exterior gathering spaces. Specifically, the University would like to accommodate the possible use of spaces immediately surrounding the proposed building for outdoor class sessions. Previously the University has provided electrical outlets for faculty and student use within landscape areas that are intended for informal use. These informal areas should be softscape (grassy) and varied; both sunny and shady. Structured seating areas that include benches and / or tables will be developed and presented later in design development.
 - c. **Plantings:** The University wishes to avoid developing a mono-culture with the proposed plantings. GMA will review proposed plantings with the University and shares their concern over the long-term success of plantings. The proposed design includes areas of both similar and dissimilar specie.
 - d. **Vehicle Drop-off:** Proposed drop-off areas have been evaluated for use by a 40' CMU bus (refer to additional comments below). Based upon this analysis, the drop-off area is sufficiently sized to handle both passenger car and CMU bus traffic.
 - e. **Snow Piling:** CMU requests that proposed designs accommodate snow piling. The University does export snow from campus lots at times, but consideration should be given to the efficient removal of snow from parking areas, drop-off zones, and pedestrian walks.
 - f. **Pervious Pavers:** GMA presented a water permeable paver product that reduces site water run-off (through limited percolation) and offers some design possibilities. DSA and GMA will provide CMU with additional product information including cost, durability information (freeze / thaw cycles), product availability, and appropriateness to the site given challenging soil conditions.
 - g. **Site Plantings:** The proposed design included both planned and informally planted spaces. In areas where access needs to be controlled a hedge / fence was proposed. For

security reasons evergreens and taller plantings will be avoided especially near entrances to the building. Pedestrian walks should be radiused at intersections or defensively planted to facilitate or discourage students from cutting the corner.

- h. Bike Racks: CMU will provide DSA with information on the current campus standard bike rack. Bike racks should be provided at each entrance and should be placed on concrete slabs located off the main pedestrian walk. Racks should be accessible from either side. CMU will provide an estimate on required bike rack capacity.
 - i. Children's Play Yard: (4) design concepts for a children's play yard were presented. Each proposal was identified by a conceptual name; Big Curve, Circular, Stream, and Quad. These proposals indicated a possible direction that the proposed design could undertake. All schemes were approved for review with users. CMU requested that the presence of water be eliminated due to associated risks. Thrune Park in Mt. Pleasant Midland was cited as a local example of a natural form playground.
3. **Civil Engineering.** Andy Andre of Wilcox Associates presented the current civil engineering design for the proposed project site. The following topics were reviewed and discussed:
- a. Site Circulation: Vehicle modeling is complete for both the service yard and the drop-off areas. Based upon the vehicle assumptions made, the proposed design accommodates likely traffic. CMU noted that on occasion a larger tractor trailer may need to access the building. The current proposal will accommodate these vehicles. Wilcox noted that the transformer, generator, waste, and recycling containers were all contained within a walled service court. Parking stalls were also indicated. CMU indicated that a proposed 5 compartment container would be of similar size to the current recycling containers.
 - b. Site Utilities: Existing site utilities include those serving the apartments as well as the University utility tunnel. A 6" medium pressure natural gas line is located nearby (not within the utility tunnel) and likely sufficient for the proposed building. An 18" chilled water lined is running east west along Ojibway. The University recommends extending the proposed utility tunnel west past the existing pedestrian walk to facilitate later expansion. If the tunnel is terminated in its current position, later extensions would be disruptive and costly. CMU requests that the cost associated with the utility tunnel be included in the general construction budget. This amount could be backed out of the general budget at a later time if the project budget can no longer support the additional costs. Exterior slabs should be heated within 25' of main building entrances to reduce salt tracking and slip hazards.
 - c. Hydrant Coverage: Existing fire hydrants are located at three corners of the site. Additional hydrants may be required; Wilcox will be meeting with the local Fire Chief to determine future needs. A remote siamese connection is proposed for this project.
 - d. Site Water Retention: Sub-surface site water retention is proposed. Preliminary designs indicate that between 7,000 and 8,000 cu. ft. of water will need to be accommodated in underground retention pipes. Mt. Pleasant's *storm water* requirements will be reconciled with base LEED requirements.
4. **Architectural:** Tod Stevens and Dave Rose presented current plans, sections, and elevations that incorporated changes to relocated computer labs, revised IMC location (in compliance with Dean's recommendations), revised Science Methods Lab, and the general shift of the north wing.
- a. **Project Design:** Areas of interest included:

- i. The main stair will be considered a part of the means of egress. A system of fire shutters may be used to isolate the stair from the remainder of the building during an alarm event.
 - ii. Glass handrails were proposed for the main stair. CMU does not wish to include glass handrails in this project. A metal mesh design will be prepared for review and comment.
 - iii. A limited enclosure is included around the seminar and study rooms located at the each end of the main corridor. This system will reduce sound transmission from the corridor into the rooms. The rooms remain open vertically to each other. The fourth level seminar room is enclosed from the rooms below.
 - iv. CMU expressed an interest in locating the food area adjacent to the eastern courtyard to encourage students to stop, purchase food, and stay to eat. The restrooms and food areas could be swapped to accommodate this desire. DSA will review options for accommodating this goal.
 - v. College Storage should be referred to as College Shipping and Receiving.
 - vi. CMU clarified a previously issued sketch: (2) Counseling rooms at 80sf each will be removed under the proposed sketch. The GTA Office is combined to provide a subsequent faculty office if needed.
- b. **Ventilated Wall System:** A ventilated rainscreen wall system was introduced. This method of exterior cladding is intended to reduce the likelihood of exterior envelope failure by eliminating the pressure differential that exists between the face and cavity of a traditional masonry wall assembly. The proposed system uses large format terra-cotta tiles as the exterior cladding. These tiles are durable and are available in a range of colors from a variety of suppliers. The tiles are supported on a durable suspension system that is placed over a weather resistant barrier. Recent applications of this system may be found in the Metro Detroit area. Based upon a field inspection of these systems a decision from CMU will be made within one week.
- c. **Future Expansion Options:** A number of options for future expansion were discussed. These options focused upon the expansion of the north low wing and provide a varying amount of area.
- d. **Waterless Urinals:** Kohler is advertising a new waterless urinal that requires no cartridge for separation and trap controls. DSA will request a sample for University review and evaluation.
5. **Opinion of Probable Cost:** The current Project Cost Summary dated 13-Jul-06 was briefly reviewed. This Cost Summary was based upon the Schematic Design submittal provided to CMU on June 22, 2006. At this time the cost summary includes contingency amounts to cover unforeseen design costs and conditions. As the project progresses an updated summary will be prepared to verify these preliminary numbers. CMU noted the following:
- a. The FF&E budget appears to have been reduced from \$2.79 million to \$2.29 million dollars. The actual estimate as provided in the June 22, 2006 Schematic submittal was \$2,790,000 including a 10.8% escalation and design contingency, a 10% installation contingency, and a \$500,000 allowance for Playground Equipment and Structures. The

current Project Cost Summary shifts \$400,000 for Playground construction to the general construction budget and carries \$2,290,000 for FF&E.

- b. The current estimate for the tunnel expansion, \$79,800, appears too low. Recent projects have cost approximately \$1,200 / In. ft. DSA will review these costs.
 - c. A line item for Kitchen Equipment (\$500,000) appears to be an error. This amount was not included in the summary of costs. DSA will review this line item.
 - d. The Owner's Contingency should remain at approximately \$1.5 million at this time. Previous estimates carried 5% (\$1,530,686), while the current estimate carries 4.5% (\$1,569,400). The actual dollar value has changed by +2.5% (\$38,714).
 - e. CMU requests that a 5% inflation number should be included in the 'Owner Costs'. DSA advised that the FF&E number already includes a 20.8% (refer to the June 22, 2006 Schematic Design submittal) contingency and that historically this number and cost for technology equipment tend to depreciate over time. DSA will review this issue with the project cost estimator and provide a recommendation to the University for their review and approval.
- 6. Penthouse Efficiency:** DSA will present information to the Department of Management and Budget in support of an enclosed mechanical penthouse. This information will include the anticipated costs associated with both open equipment and enclosed equipment. DSA will contact CMU prior to this meeting to coordinate their attendance.
- 7. Schedule Update:** Pending CMU's review of schematic design comments, the project may be up to 4 weeks off of the originally proposed schedule. DSA will prepare a project status summary for the next Building Committee meeting outlining our current schedule position and, if possible, the process necessary to realign project schedule and development progress.
- 8. New Items:**
- a. Field Trip: DSA will establish a site walk-through at the North Oakland YMCA and/or the University of Michigan's Bio-Medical Research facility to review local installations of a ventilated wall system. Date and Time: TBD – Bob Ringel to propose dates during the week of July 31st.
 - b. SD Comment Review: The Building Committee will convene next week to review SD comments to facilitate their incorporation into the proposed design. Date and Time: TBD
- 9. Next Meeting.** The next meeting of the Building Committee will be held Friday, July 28, 2006 at 12:30 pm in the Charter Schools building. Refreshments will be provided.

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

Andrew J. Hetletvedt, AIA

Distribution: Meeting attendees
DSA project file