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**Meeting No.:** 9 - Design Development (Day 1 of 2)  
**Topic:** Design Development - Budget and Architectural Review  
**Present:** Refer to attached Attendance Sheet

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## 1- Project Schedule

The project schedule was discussed by DSA. The CD phase will officially begin on Monday, November 27<sup>th</sup>, 2006 as scheduled. A 50% CD owner review submittal is scheduled to be delivered to CMU on Friday, January 19<sup>th</sup>, 2007.

There were a few comments regarding the project schedule per CMU.

- The demolition of Washington Square Apartments will take place after February 3<sup>rd</sup>, 2007. DSA needs to submit criteria defining how the site should be prepared for construction. This item will be discussed at the next meeting scheduled for December 7<sup>th</sup>.
- The Board of Trustees has provided all necessary approvals, and no further action is needed prior to bid date.
- CMU asked if there was a possibility to expedite the CD phase by a month. DSA will take a look at this issue but believes that the schedule does not allow for such a change. This item will be discussed at the next meeting scheduled for December 7<sup>th</sup>.

## 2- Project Cost

A DD Project Cost Summary dated November 10, 2006 was handed out to all attendees. It was explained by DSA that the summary was not passed along at an earlier date to CMU because it needed to be verified and checked by DSA.

DSA explained that the current estimate is a refined design estimate. An updated estimate in the CD phase will be completed and distributed.

DSA distributed a Proposed Value Engineering spreadsheet dated November 20, 2006. Several items were discussed and analyzed. Please refer to the attached Proposed Value Engineering spreadsheet dated November 22, 2006 that summarizes the decisions made.

The following are comments regarding the DD Project Cost Summary per DSA:

- The total project estimate is \$2.8 million dollars over the project budget (\$2.4 million over in construction costs).
- A \$34.6 million budget rather than \$37.1 million for construction cost is the value engineering goal.
- An escalation number of 8.5% is still high. (The escalation contingency decreased from 9.66% in SD to 8.5% in DD). DSA has investigated this number with respectable construction managers and an escalation of 5% is recommended.
- The design/scope contingency has decreased from 5% to 3.5%. The bid contingency is at 1.5% (reduced from 3%).

- The construction contingency is still set at the DMB requirement of 7%.
- Deduct alternates will be included (provided DMB approves) in the event that bids come in over budget.
- The estimator uses gross square footage figures differing from numbers used on architectural drawings due to the model methodology used in the estimating process. The gross square footage has not increased.

### 3- Value Engineering

The following are responses made by CMU during the value engineering discussion:

- **A2020** Elimination of west tunnel expansion – **Declined**
- **B2010** Reduce/Change exterior slate veneer quantity/product thickness – **Accepted** (change of \$150,000) The veneer thickness may decrease to save money. The irregular pattern of the slate may be evaluated to decrease cost. A suggestion of using burnished block at portions of the north wing as a substitute was discussed. Also, the idea of replacing the slate veneer with another material at the upper portions of the main circulation form was suggested *if* the need for more cost cutting was necessary. DSA will analyze the presented ideas.
- **B2010** Terra Cotta Wall System square footage was calculated incorrectly – **Accepted** (change of \$200,000)
- **B2010** Change kynar finish of curtainwall to clear anodized aluminum – **Accepted** (change of \$50,000)
- **B2010** Replace glazing with metal siding at penthouse – **Hold** (change only if needed)
- **B2030** Eliminate operable windows – **Declined** (would lose LEED point)
- **B3010** Replace standing seam metal roof with membrane – **Hold** (In need of more investigation and analysis. DSA to set up conference call with Tony Duce (DSA) and Steve Lawrence (CMU))
- **C1010** Eliminate fire rated shutter at main stair at levels 2, 3 and 4. Replace with doors on hold opens – **Accepted** (change of \$75,000)
- **C3010** Reduce/Change interior slate facing quantity/product thickness – **Accepted** (change of \$75,000)
- **C3010** Replace wood panel system (plyboo) with impact resistant gypsum board at interior walls – **Hold** (may accept as a deduct alternate)
- **C3010** Replace terracotta wall system with impact resistant (where necessary) gypsum board at interior walls – **Accepted** (change of \$100,000)
- **C3030** Replace wood panel system (plyboo) with a different material at interior ceilings – **Accepted** (change of \$50,000) (keep the wood panel system at the 1<sup>st</sup> floor ceilings but use a different material at the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> floor ceilings)
- **D1010** Change each elevator to a 5 stop ( requires 2 hydraulic units) – **Accepted** (change of \$60,000)

- **D30** Reduce quantity of snow melt system at child care center – **Accepted** (with the following addendum: all current locations of snow melt will remain but such areas will decrease to a 25'-0" length) (change of \$25,000)
- **D30** Eliminate steam piping in west tunnel – **Accepted** (change of \$15,000)
- **D30** Eliminate humidification and RO system – **Declined**
- **D30** Eliminate CO2 monitoring – **Declined**. CMU would like to discuss this issue at a later date.
- **D5030** 500KW Diesel Generator to be reduced or downsized – **Hold** (needs more investigation)
- **D5030** Eliminate lightning protection – **Accepted** (change of \$71,000)
- **D5030** Eliminate cost of cameras (covered in technology budget) – **Accepted** (change of \$45,000)
- **D5030** Eliminate cost of card readers (covered in technology budget) – **Accepted** (change of \$6,400)
- **E10** Reduce quantity of display cases – **Declined**
- **E10** Remove corridor casework in child care center (x2) – **Accepted** (change of \$40,000)
- **G10** Eliminate site furnishings – **Accepted** (change of \$5,000)
- **G10** Eliminate cost of entry signage (covered in owner cost) – **Accepted** (change of \$3,500)
- **G10** Eliminate metal top walkway canopy at child care center – **Declined** (hold for deduct alternate)
- **G10** Eliminate irrigation – **Declined**
- **G3040** Change bollard lights at north and south parking to 10'-0" pedestrian lights – **Accepted** (change of \$18,000)
- **G3040** Eliminate concrete ductbanks and direct bury – **Declined**.
- **G3040** Underground detention system – **Declined**. More investigation is needed.
- **Z20** Reduce escalation contingency from 8.5% to 5% – **Accepted 5% escalation contingency** (change of \$1,169,715)
- **Z60** Eliminate owner inflation value – **Declined** (Due to the fact that there is inflation incorporated in the FF&E and IT budget CMU agreed that the owner inflation value may be utilized at time of bids if costs come in higher than anticipated.)

Potential construction savings - \$1,164,331

Potential savings from escalation contingency reduction - \$1,169,715

Total potential construction savings per VE discussion - \$2,334,046

DSA to verify and confirm inflation value incorporated into FF&E and IT budget.

#### **4- CMU Review Comments**

CMU distributed "CMU Building Committee Review" spreadsheets that summarize their DD review comments:

- Design Development Review Comments OWNER'S NARRATIVE REVIEW (1)
- Design Development Review Comments PLANS (2)
- Design Development Review Comments SPECIFICATION REVIEW (3)

It was explained to the team that the shaded areas of the handouts were items to be completed in the CD phase and discussion on these issues should be limited.

Refer to attached "CMU Building Committee Review" spreadsheets for discussions on each issue.

CMU stated that they would like to receive a revised DD narrative per their comments. DSA will forward as soon as possible.

#### **5 – Additional Comments**

The following comments were made during the review of the architectural plans. These comments were above and beyond the comments noted on the CMU "CMU Building Committee Review" spreadsheets:

- Door hardware shall be discussed at the December 7<sup>th</sup> meeting. (include FRP door type discussion)
- CMU suggested a chair rail at applicable locations through out the building for maintenance reasons. Currently, chair rail is not in the budget. CMU to provide direction.
- Food Prep 126A and Teacher Prep 129A will be re-evaluated to allow for a better space solution. CMU to confirm space requirements for Teacher Prep 129A.
- DSA is currently using the Express (smaller version) layout of the proposed Einstein Bagels at the Food Prep 126A and Future Vendor 126.
- Wall mounted benches were suggested by CMU at public areas. DSA to investigate.
- More space is needed at Loading 112 near the staging area (5 pallets). DSA to investigate.

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

Melanie Hall

Distribution: Central Michigan University  
Attendees  
DSA project file

**Education Building**  
Central Michigan University  
Project No.: 7105.037.00



**Meeting Report**  
Meeting Date: November 20, 2006  
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