# **Wolverine**.Consultants

Subject: 50% Design Development for Wight-Green Building

Dear Dr. Wight:

This document is to serve as the intermediate report of the design development for the Wight-Green Building, which is scheduled to be constructed in Ann Arbor, Michigan.

### 1.0 Summary of Completed Work

Wolverine Consultants has been working with the structural, environmental and geotechnical consultants, to gather design data and we are now at the 50% stage of the design development for the Wight-Green Building. Thus far the project has been phased for fast tracking and the building should ready for move in October 14, 2009. The projected project budget is currently just under \$9.5 million, including the requested addition of a Starbucks on the first floor. A fit and finish package has been put together to address the needs of this 3000 ft<sup>2</sup> retail space. A finalized construction management plan, including bid market analysis and packaging has also been completed, along with recommendations for the MEP system.

## 2.0 Preliminary Conclusions

## 2.1 Construction Management Plan

Wolverine Consultants had put together a construction management plan that will guide the team throughout the design and construction of the Wight-Green Building. We will be monitoring milestones in design and bidding, as well as construction, to keep the project on schedule. A packaging strategy has been developed that will include four phases; foundation systems, building frames systems, MEP systems and interior finishes. A strategy has also been developed for compliance and permitting through the city of Ann Arbor. A commissioning plan and turn over program are both being implemented to verify the installation of all systems in the building and to hand it over to the owner upon completion.

### 2.2 Budget

The projected project budget is currently just under \$9.5 million. This is up slightly from the interim report, where the budget was estimated to be \$9 million. However, there is \$600,000 contingency built into the budget, so that if any unforeseen events or difficulties arise during construction there is a considerable amount of protection from cost overruns. There is still some uncertainty in areas such as the MEP system, glazing and earthwork, which can affect our budget. We will continue to monitor all components with expected variability and work with the other consultants to finalize the design and minimize this uncertainty. Consequently, we are still confident that the project can be completed for less than the requested budget of \$10 million.

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#### 2.3 Schedule

The schedule has been phased for fast tracking. This will allow for construction documentation and bidding to occur simultaneously. According to our schedule the final design is expected to be completed April 15, 2008 and earthwork will commence June 13, 2008. The building is set for move in on October 14<sup>th</sup> 2009.

#### 2.3 MEP Recommendation

Three systems were evaluated for the heating and cooling systems in the Wight-Green Building. Theses systems included a four-pipe fan coil system, water source heat pump system and a ground source closed loop geothermal system. After analysis, a ground source closed loop heat pump is recommended. This system is expected to have double first costs than the traditional systems, however with its energy savings and greater efficiency, a short pay back period is expected and well as increased occupant comfort.

#### 3 0 Further Action

Thus far we have not come across any unforeseen problems that have put the project schedule and or budget outside the owner's criteria. We will continue to work with the other consulting firms to complete the design and to keep the project on schedule and budget. The next planned deliverable will be the completion of the design development April 15, 2008.

We are enjoying working with you on this project and appreciate your business. If there are any questions you have for my team, please feel free to contact me at my office,