CONSTRUCTION MANAGEMENT

The construction management research will cover a design that utilizes the cost of materials, scheduling, and project delivery tasks. The main cost analysis will be the selection of steel and concrete. Due to the current economy, steel prices are at an all time high which has many designers resorting to concrete structures. With a development that can save cost in other areas of construction such as productivity and project delivery time the difference in cost of the two materials may balance to an efficient design.

Cost Management

Structural

Steel

The use of pre-cast elements was selected to increase production. The corner of 40th and Chestnut Streets in Philadelphia is a very congested intersection. The streets in this part of the city are one-way directions and accommodate the traffic of local businesses and the commuters of the several schools and universities in the surrounding communities. Also, the limited space presents no staging areas to store materials onsite. The use of pre-cast concrete and steel can be very beneficial in shortening the project duration. The manufacturers of both materials can dispatch their delivery trucks to site when the material is needed. An onsite crane can unload the materials off the trucks and put them in place. The truck can leave and have the next truck follow in sequence.

Green Roof

