



Executive Summary

The main focus of this technical assignment is to become more familiar with the structural and exterior façade systems for the Center for Health Research and Rural Advocacy. General conditions estimate, site planning, and project schedule also are analyzed in detail.

The project schedule for the project is typical for large construction projects but has a few interesting aspects. Two crews will be used to pour cast-in-place concrete foundation walls, one of which is subcontractor and the other is self-performed by Geisinger Facilities. The interior finishes schedule is phased to start from the second floor and work towards the lower level to minimize re-work and damaged to already finished areas.

An assembly's estimate is prepared for the exterior façade of the Center for Health Research and will be used for future design and construction considerations using prefabrication of components. The value of this estimate came out a little low, which is possibly due to the differing system interfaces as well as high quality architectural precast concrete. The detailed structural estimate showed that the steel prices accounted for about 60% of the structure costs, and should be monitored to make sure prices do not escalate.

The general conditions estimate for the project was derived for the Geisinger Health System to ensure that Geisinger Facilities is spending money discretionally. One project manager and superintendent are assigned to the project and will be utilized for the entire 21 months of preconstruction and construction. It is difficult for the Geisinger Facilities to garner additional funds for general conditions once the project is underway, so it is extremely important for the general conditions to be accurate and reflect the needs for the project.

Site planning is also of importance due to the restricted site conditions along Centre Street and the adjacent Weis Research Center. Steel will be commenced in three separate locations for the crane with two distinct staging areas. Concrete truck movement will flow through to the bottom of the site ensure adequate movement and location of temporary roadways. The dumpsters and loading docks are placed on the lower level next to the material hoists. The reason for this location is on the lower level and will be a simple area to finish once everything else is complete.