

**TECHNICAL ASSIGNMENT #2**  
**COST AND METHODS ANALYSIS**

**Fairfax High School Renovation & Addition**  
**3500 Old Lee Highway**  
**Fairfax, VA 22030**



**A. EXECUTIVE SUMMARY**

This technical assignment provides an introduction to the cost and methods analysis for the Fairfax High School renovation and addition project in Fairfax, Virginia. In this assignment, the project is analyzed in terms of a detailed project schedule, site layout planning, assemblies estimating, structural system estimate, and general conditions estimating all which affect the project's execution.

The detailed schedule is provided that reflects the phasing and sequencing of major activities. The site layout plan depicts the phases of construction as well as all temporary facilities and objects. A cost estimation of the building envelope, structural system and general conditions is included.

The Fairfax High School project is a traditional design-bid-build project delivery system. The first item analyzed in this assignment is a detailed construction schedule for the project. The project was awarded on March 23, 2005 and is scheduled to be completed in September 2007. There are also important milestone dates highlighted throughout the schedule that are important to achieving the project substantial completion on time.

The site layout plan following the schedule is analyzed during the steel / concrete phase of the project. A 100 ton crawler crane will be used to erect steel with multiple mobilizations and a concrete pump is used to place concrete throughout the site. Fairfax High School contains a lot of specialty equipment and furnishings, which are summarized in an assemblies estimate. This includes food service equipment, aluminum stadium seating, chalkboards, and classroom furniture. Lastly, a detailed structural system estimate and general conditions estimate were calculated. The general conditions estimate included staff costs with an integrated fee value.