

Project Budget Report at Completion of Design Development Phase July 17, 2008

Summary of Project History

- **Scope of Original Project in 2003:**
 - New Roofing System
 - New Exterior Windows and Doors
 - New Ceilings and Light Fixtures for classrooms, offices and corridor areas
 - New Mechanical Heating and Ventilating Systems
 - New Fire Protection Sprinkler System
 - New Fire Alarm System
 - New Electrical System only as required by new HVAC and Sprinkler Systems
 - Architectural Renovations only as required by installation of new systems
- **MAAB Moratorium of School Building Funding Assistance in 2003:**
- **Additional Scope Requested in 2007:**
 - Exterior Wall Repairs and Restoration
 - Common Areas Upgrades
 - New Flooring Upgrades
 - New Lockers
 - New Toilet Room Fixtures and Finishes
 - New Interior Doors and Hardware
 - New Elevator Upgrades
 - New Kitchen and Cafeteria Reorganization and Equipment
 - New Accessibility Upgrades
 - Additional Plumbing System Upgrades
 - Additional Electrical System Upgrades
 - New Technology System Upgrades
 - New Green Components
 - Learning Community Centers
 - Science Rooms Upgrades
 - Auditorium Upgrades
 - Exterior Building Aesthetics
 - Incorporation of Security Report Recommendations
 - Painting of Rindge, Media and Arts Buildings
- **Construction Budget for Original and Additional Scope established in 2007:** **\$ 76,690,000**
 - 2003 Original Scope Construction Estimates Escalated to 2009
 - 2007 Additional Scope Construction Estimates Escalated to 2009
- **Project Scope Developed in Greater Detail through April, 2008:**
 - Design Development Set of Drawings and Specifications
- **Construction Cost Estimate of Design Development Package in June, 2008:** **\$ 95,830,000**
 - Estimates were prepared by two independent cost estimators with reconciliation

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Primary Factors Contributing to the Construction Cost Estimate Increase

- **Site Development Costs:** + \$ 1,900,000
 - Site Development scope of work was not included in 2007 construction budget.
 - The new work includes site improvements at the Cambridge Street triangle and the Daycare Courtyard, Traffic Calming and Resurfacing of Felton and Cambridge Streets, and the Amphitheatre waterproofing work.
- **Hazardous Materials Abatement:** + \$ 1,100,000
 - Asbestos abatement scope of work was not included in 2007 construction budget.
 - Previous budgets included only abatement relating to HVAC system replacement.
 - A comprehensive survey of the existing conditions completed during the design development phase identified extensive asbestos flooring to be removed.
- **Exterior Wall Repairs and Restoration:** + \$ 2,000,000
 - A comprehensive survey of the existing wall conditions completed during the design development phase identified the need for more extensive repair work than previously anticipated on both the Rindge limestone facades as well as the Arts and Media concrete walls.
- **New Exterior Windows and Doors:** + \$ 2,000,000
 - The replacement window units have been selected, during the design development phase, to be energy efficient and historically compatible with the age of the building. The 2003 escalated cost for the exterior windows and doors has increased at a greater rate than previously anticipated.
- **New Kitchen and Cafeteria Reorganization and Equipment:** + \$ 1,000,000
 - The designs for the new cafeteria serving areas and the food service equipment were fully detailed during the design development phase. With the addition of a new faculty dining room servery at the Falcon's Nest and need for replacement of all food service equipment the total cost estimate is higher than previously anticipated.
- **New Mechanical Heating and Ventilating Systems:** + \$ 5,500,000
 - The engineering for the building's HVAC systems has been designed to perform well above standard code requirements and includes enhanced energy saving systems such as Chilled Beam Ventilation, CO2 Detection in classrooms and Co-generation.
 - The price increase in part is due to the unanticipated high inflation of material costs due to the economy and fuel cost of manufacturing, which affects the prices of mechanical equipment, ductwork and piping.
- **New Electrical and Communication/ Technology Systems:** + \$ 2,000,000
 - The full extent of the electrical scope of work was increased during the design development phase due to the requirements for additional power distribution for the educational programs as well as the need to rebuild the communications and technology infrastructure throughout the building.
 - The use of the facility as an emergency shelter was a requirement added to the project since the 2007 construction budget was established which has resulted in an increase in the size of the emergency generator.
 - The electrical costs increases are also in part a result of the energy saving Photovoltaic system added to the project.
- **New Plumbing Systems** + \$ 1,000,000
 - The extent of the plumbing work requiring replacement increased during the design development phase as the conditions of the existing systems were examined

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in greater detail. The construction costs are due in part to the number of required toilet rooms provided in the facility as well as the expanded scope of plumbing work found to be necessary in the kitchens and cafeterias for the food service program. The price of the plumbing work is also affected by the unanticipated high inflation of material costs due to the economy and fuel cost of manufacturing, which affects the prices of piping.

- **General Conditions** **+ \$ 3,000,000**
 - The cost increases included in the contractor’s General Conditions is due to the complex occupied phased construction requirements to maintain operation of the high school programs for three grades and provide for additional construction manpower during the summer months.

Total Project Costs including Contingencies and Soft Costs

• New Construction Budget based on Design Development Estimates:	\$ 96,000,000
• Construction Contingency Budget:	\$ 7,680,000
– Contingency for construction change orders at 8% of estimated construction cost.	
• Furniture and Equipment Budget:	\$ 4,000,000
– Budget increased from \$3,400,000 based on design development estimate.	
• Professional Services Budget:	\$ 8,273,000
• Owner’s Budget for Direct Expenses:	\$ 3,614,000
• Project Bid Contingency	\$ 5,433,000
Total Project Budget Authorization	\$ 125,000,000