

Speeding up the School Construction Process: Modular Building Techniques

Alexandria City Public Schools

November 3, 2009

Work Session

Modular Construction

- Advantages:
 - Single manufacturer in controlled conditions
 - Lower environmental impact
 - On site construction shorter
 - LEED silver rating
 - Energy Efficient operations
 - Comparable construction costs
 - Comparable life expectancy

Millmont School, Reading PA, with
brick facing and masonry
construction detailing



Westland Elementary School
Montgomery County, Maryland



Modular Being Installed, Lifted from Above, All Interior Finishes and Fixtures Completed



Interior of modular school construction with standard finishes



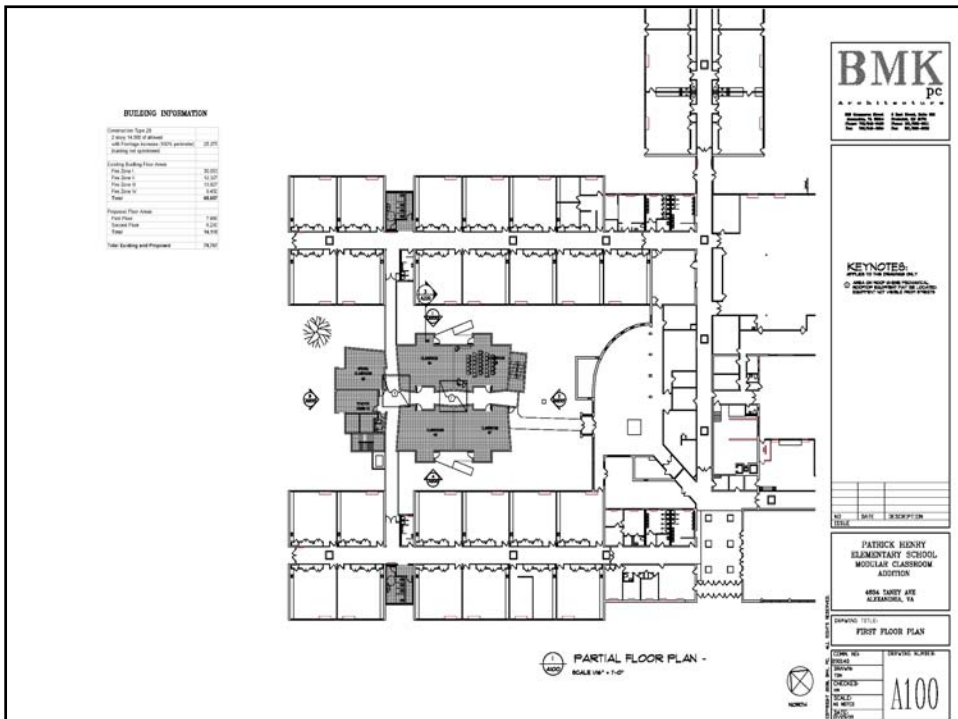
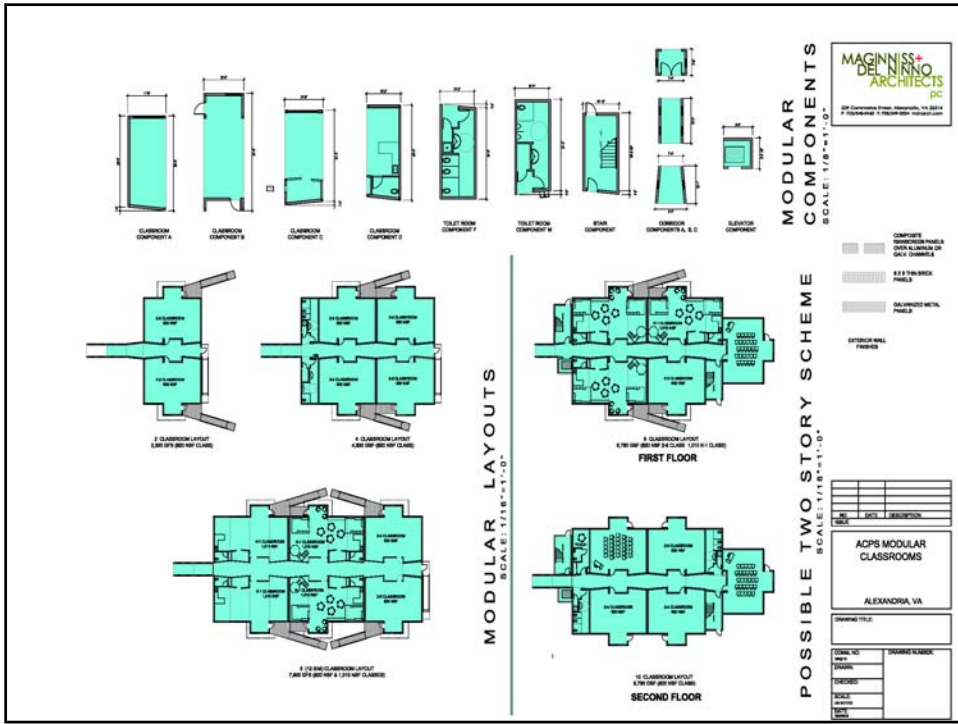
Costs

- Base cost: \$135-150/sf
- Site construction: ~ \$30/sf
- P & Z requirements: ~ \$25/sf
- LEED Certification: \$10/sf

- Total: \$200-215/sf
- Traditional const: \$215-230/sf

Timeline

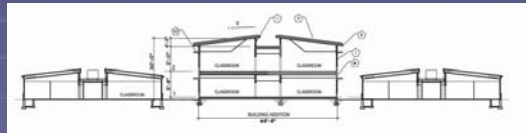
- July: Concept Submission to Planning & Zoning
- Oct: Preliminary plan to P&Z
- Nov: Final plan to P&Z
- Dec: Public notice
- Jan : School Board Approval
- Feb : City Planning & Zoning Approval
Submit for building permit and fabrication
- March: Manufacturing begins
- June: Construction begins on site
- July: Modular units delivered to site for installation
- Aug: Move in furniture
- Sept: Occupy space



**ACPS
Modular
Classroom
Program**

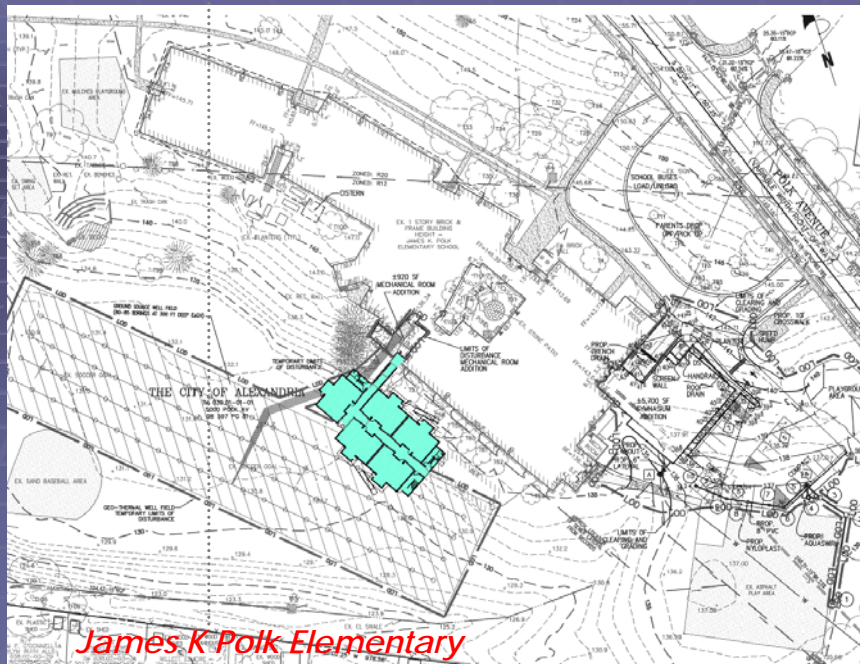


Courtyard Elevations



MAGINNIS+
DEL NINNO
ARCHITECTS

Patrick Henry Elementary



James K Polk Elementary