

progress

2011 EDUCATION ISSUE

El Associates Wins Overall Design Award Three Years Straight



New Classroom on the southwest side of the school. Light shelves are utilized to increase the amount of daylight into the interior spaces.

School District of the City of York, York, PA

The design of Arthur W. Ferguson Elementary School won the overall design award presented by the US Green Building Council, Central Pennsylvania Chapter. This is the third year in a row that an El Associates innovative design project has achieved this honor. The awards ceremony was held on April 21, 2011 at the Wildwood Conference Center at Harrisburg Area Community College, Harrisburg, PA.

Awards were presented to winners in the six LEED® credit areas: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, and Innovation in Design. El Associates entered Ferguson E.S. in the categories of Sustainable Sites and Innovation in Design and was also awarded awards in those categories. Overall awards were split in projects over five million and under five million.

(Continued on page 2)

Rebirth of Newark's Olympic Icon!

It was here Olympian Jesse Owens was defeated by local Eulace Peacock. This site was also home to the 1928 National Women's Olympic trials as well as many other historic track and field events. Officially dedicated during a ribbon cutting ceremony on September 9, 2011, Newark Schools Stadium has been reborn as a tribute to its proud and historic past. The design of the new façade pays homage to the former concrete arched façade. A new clock tower/ticket window symbolizes the past while embracing the future.

The new facility will serve the athletic needs of the students at Barringer High School. It will feature a multi-use synthetic turf field to accommodate football, soccer, softball, and track and field events. Seating for 5,600 spectators is provided along with amenities such as concession areas, locker and shower rooms and public toilet facilities. The new Stadium will serve as a living link to the historical traditions of the Newark Schools and the revitalization of the City of Newark.

Jesse Owens would be proud!



Clock tower / ticket window and new stadium entrance.



New Newark School's Stadium

(Overall Design Award continued from cover)

Ferguson E.S. was designed to seek 59 points under the LEED® for Schools 2007 Version which qualifies for LEED® Platinum Certification.

El Associates assisted the School District of the City of York in making the best possible use of the previously cramped urban site. With a small portion of the existing school removed, the new Arthur W. Ferguson Elementary was built literally a few footsteps away while students continued to attend classes. In order for this project to be a success, efficient construction phasing was established early in the design process and followed to completion, enabling students to transition seamlessly into the new facility. The new three-story Elementary School houses nearly twice as many students as the previous school, and occupies almost the exact same size footprint as the original facility. Once it was no longer needed, the existing elementary school was demolished, providing the space required for a new playground, playfields, and parking.

The completed site, with the new building located along one perimeter edge, more than doubles the amount of usable open space above what was previously available. Along with energy efficiency and reduced water-use design features throughout this building, the new Arthur W. Ferguson Elementary School has a unique feature in its Zero Waste Kitchen. Through the use of a kitchen waste pulping/water extraction system, gray water reticulation, and the elimination of non-biodegradable utensils and napkins, this new kitchen produces a small fraction of the trash that a common school kitchen would produce. In the

place of the trash, the pulping/water extraction system produces biodegradable blocks of kitchen waste which can be diverted from landfills and returned to the ground as fertilizer. Construction costs equaled \$18,736,400, and the total building area was 90,250 sq. ft.



Connecting hallway between the stacked classroom wing and the shared facilities within the School. Daylighting and views were incorporated into the design of the space.

High-Efficiency Mechanical System Upgrades for the County College of Morris (CCM)

The three existing direct-fired absorbers serving Cohen Hall at CCM reached the end of their useful life in 2010. The cost of repairs and ongoing maintenance justified their replacement, along with the replacement of the associated cooling tower system and pumps. The Learning Resource Center (LRC) air handler had also reached the end of its useful life and could no longer be maintained and repaired. The County College of Morris retained EI Associates to perform a feasibility study to determine the available mechanical system replacement options and therefore provide detailed design and construction administration services for the complete Cohen Hall mechanical plant and the LRC Penthouse Air Handler replacements.

The Cohen Hall work included the replacement of the existing gas fired absorption chillers with seven electrical modular screw chillers. Each chiller provided 90 tons of cooling. The existing piping mains were all removed and new branch piping from existing headers to new Inlet/Outlet connections on the chillers was provided. The existing cooling tower was replaced, new DDC controls serving the chillers were installed, and the existing electric boiler was replaced with three high-efficiency, gas-fired condensing boilers.

The LRC work included the replacement of the existing Air Handling Unit with a new Modular Energy Efficiency Air Handling Unit. A new dual-deck variable-air-volume system with new dual-duct VAV boxes was installed as part of this project. New DDC controls (airflow controls and CO2 monitoring) were also provided EI also assisted CCM in obtaining Smart Start Rebates. The completed systems yielded dramatically reduced energy consumptions, significantly improved operating conditions, and a virtually maintenance-free installation.



Creating Energy \$mart Facilities

The current turmoil in school funding is forcing school leaders to look beyond the elimination of staff and programs to balance school budgets. Reduction of current energy costs is providing much needed revenue to districts who are taking steps to implement conservation measures. Nationally, schools spend over \$7 billion annually on utility costs, which is more than is spent on textbooks and computers combined. Taking steps to control these costs now, utilizing various funding opportunities including state and local utility energy grants and “energy equity” financing can dramatically cut operating expenses and yield an excellent return on investment.

Energy efficient improvements such as replacement of aging mechanical, ventilation, lighting and electrical systems; examination of the building envelope including additional insulation, new roofing and window replacement, as well as the incorporation of renewable energy systems will result in energy cost savings that can be applied to maintaining and improving vital educational programs.



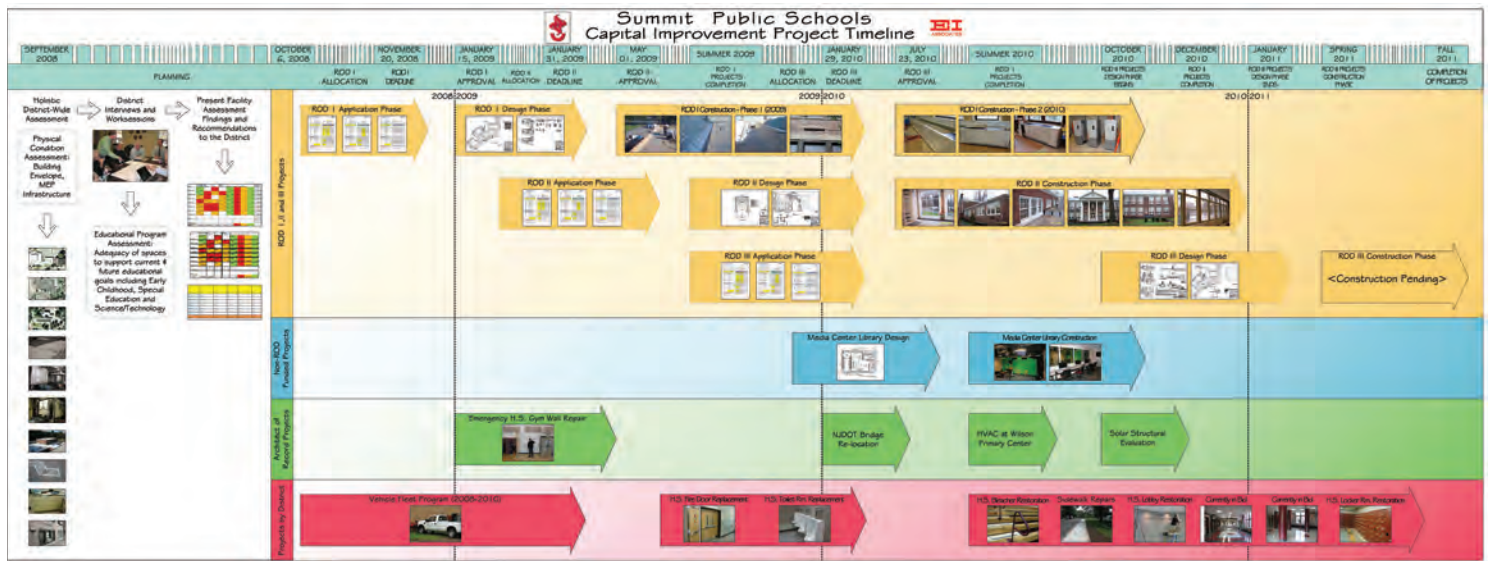
Strategic Planning = Effective Project Execution for Summit, NJ Schools

As Summit's Architect/Engineer-of-Record, EI Associates assisted the District in completing a District-Wide assessment of all nine educational facilities in 2010. We're now executing three rounds of ROD Grant-funded improvements valued at \$30M. The improvements are phased over a three-year period. They include District-Wide boiler, unit ventilator and control system replacements, window and door replacements, roof replacements, auditorium renovations, and the design of a new Media Literacy Center.

Following the completion of the educational facility assessments EI prepared a prioritized list of improvement options and their estimated costs. Options were assessed according to initial costs, energy savings, and life cycle costs. During

in-depth planning sessions with the District EI identified those improvements which could be performed by the District's trade personnel and those which required contractor bidding and construction. Projects were prioritized based upon the urgency of the proposed improvements and were organized in bid packages according to similar work scopes to provide bidding economies of scale.

A detailed master schedule was developed by EIA. It serves as the "road map" for the District's on-going capital improvement program. Capital improvement project categories include a) NJROD Grant Funded Projects, b) Non-ROD Grant Funded Projects, c) Emergent, Architect-of-Record Projects, and d) Projects Performed by District Trade Personnel. EI has prepared bid packages to support twenty-eight separate projects which have been executed over a three-year period. Packages were bid and constructed based upon type of work, lead-time considerations, and minimizing any potential impact to school operations.



Economic Impact on K-12 Capital Projects – the New Paradigm

Economic conditions have severely impacted the day-to-day operations of K-12 School Districts throughout the Northeast. In addition to staffing and program reductions that continue to erode academic offerings, the economy has significantly impacted the planning, funding and execution of capital projects. Funding challenges have forced the delay of many projects with little thought being given to addressing much-needed and overdue facility renovations and repairs in many Districts. Projects that have advanced to construction are experiencing significant unforeseen delays due to the difficulty in securing construction materials and equipment as a result of reduced manufacturer inventories. In addition, inadequate construction labor forces have raised concerns regarding the quality of construction and its oversight. Warranty issues are also impacting capital projects due to

certain manufacturers exiting entire business lines. These challenges have created a new paradigm in the way design teams and school Districts must address project needs, identify alternate funding sources, and ultimately plan the execution of K-12 capital projects.

In the current economic environment educational facility programs must be assessed to ensure that each District's goals are accommodated in the most cost-effective manner. As part of EI's educational program analysis we review scheduling options and identify potential alternative and shared use of existing classroom space to avoid, if possible, redundant facilities to consolidate and simplify capital assets. Flexible learning environments receive special emphasis as a means to provide each District with facility options while eliminating any duplication of spaces.

Project funding is also a significant value-added service of our Capital Project Planning Process. All alternatives including state grants, public and private energy grants, economic incentives and the cost savings generated from renewable energy

sources are explored. Shared services provided as community partnerships have recently helped fund many health and safety upgrades for our school clients. In many cases these partnerships have instilled an enhanced sense of community pride and support for properly addressing District facility needs.

Strategic planning between the Design Team and the District is now more important than ever. Construction documents must be "hardened" by performing on-going quality reviews. Early planning enables Districts to accelerate the award of construction contracts to qualified contractors as early as possible, thereby providing sufficient time to order long-lead materials and equipment without negatively impacting the project schedule. Increased construction oversight by the District's Architect/Engineer may be also necessary to keep construction on-track and minimize the potential for schedule delays and cost impact.



Students, staff and community members join Principal Beth Koontz (center, wearing pink construction hat) during the ground-breaking ceremony for Friendship Elementary School.

Ground-Breaking in Glen Rock, PA

El Associates is pleased to announce the ground-breaking for the Renovation and Expansion of Friendship Elementary School, Southern York County School District, Glen Rock, PA (York County). The ceremony was held on Thursday, 18 August, 2011. El Associates has designed several projects in the Southern York County School District over the past 20 years utilizing the "Design Team Process" developed by the District. Other projects completed by El Associates include Southern Elementary School, Southern Middle School and Susquehannock High School along with the recent Robert Lau Memorial Stadium project. Friendship Elementary will be the first school in the District to be designed for Leadership in Energy & Environmental Design LEED® Silver Certification. The theme for the design is Forestry Stewardship / Wood Reclamation and preserving the existing ecosystem that was established 20 years ago when a forestry grant was received to plant over 90 trees on the site.

The existing K-6 Friendship Elementary School will undergo needed infrastructure repairs. A 26,000 square feet addition will be built to accommodate increased student enrollment. It will also help to meet the School District's new and expanded educational program needs. The building will become much more energy efficient and cost effective to operate. It will provide an enhanced educational environment and serve as an example of the District's dedication to its students and the community. The Southern York County School District was able to utilize the PlanCon process to obtain Pennsylvania Department of Education reimbursement to reduce the financial impact to the community. The total project costs for the Elementary School facility is \$16,935,114.

LEED® Consulting Services

Did you know that El Associates offers Integrated LEED® Design and Project Management Services? With 20 LEED® Accredited Professionals on staff, El Associates acts as a specialist in the area of LEED® Design and Consultation. We remain current in sustainable design trends and standards through extensive continuing education. Our team has designed more than two million square feet of LEED® certified projects and we devote the time and resources to guarantee that each design meets and exceeds standards governed by the United States Green Building Council (USGBC). We have the ability to provide full design services or specialized depending upon the scope of work required.



Services include:

- Creation of a Design Charrette
- Review Meetings with Design Team to maintain LEED® Standards
- Energy Modeling
- Daylighting Analysis
- LEED® Project Management
- LEED® Specifications / Documentation
- LEED® Online Documentation / Management
- LEED® Consulting Services for Contractors

Highlights:

- Designed 5 Gold and 2 Silver LEED® Certified Projects
- Designed the first LEED® Gold certified High School / Middle School facility in Pennsylvania
- Designed the first LEED® Gold certified District Administration Office in Pennsylvania
- Designed the first LEED® Gold certified Public School in New Jersey
- Received "Overall Design" Award from United States Green Building Council Central PA Chapter in 2009, 2010 & 2011

Facilities Assessment and Master Plan

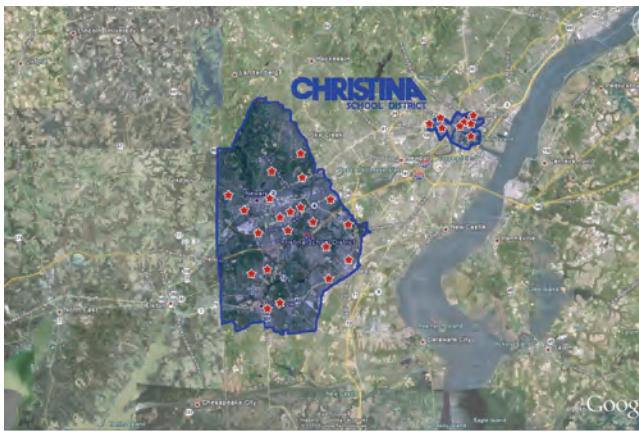
Christina School District, Wilmington, DE

EI Associates has been selected to provide a comprehensive District-Wide Facilities Assessment and Master Plan for the Christina School District in Delaware. The School District is the largest public school system in Delaware serving approximately 17,000 students in more than thirty facilities.

Several of the areas addressed in the Assessment include: Educational Objectives Building Conditions – Infrastructure Assessment, Evaluating Energy Efficiency, Building Capacities. Components reviewed as part of the infrastructure assessment include: site, roof, exterior, interior, code, mechanical, plumbing, electrical, and program. Deficiencies were ranked as urgent, high, medium, and low depending on how quickly the item needed to be addressed.

The Assessment will assist the School System in identifying major and minor capital construction projects, budgeting and referendum planning, and help to support their established strategic plan goals. Data from the study will be incorporated into the District's Work Order Management System. The resulting product will be a master plan document illustrating implementation of multiple projects over a five year span of time.

The Assessment will be completed in the fall of 2011.



Map of District Facilities



For additional information
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News, Notes & Events

USGBC LEED®

LEED® Certified

School District of the City of York – Lindbergh Avenue Educational School – LEED® Silver Certified

Seeking LEED® Gold Certification

Borough of Selinsgrove and Snyder County Libraries, Inc. – Selinsgrove Borough and Community Center Library

Seeking LEED® Silver Certification

School District of the City of York – Jackson Elementary School

Southern York County School District - Friendship Elementary School

NEW PROJECTS

- Carlisle Area SD – Wilson & Lambertson Middle Schools – Alterations/Additions
- Central Dauphin SD – Elementary School Capacity & Redistricting Study
- Christina SD, DE – District-Wide Facilities Assessment & Master Plan
- The County College of Morris, NJ – Mechanical Upgrades at Cohen Hall and the Learning Resource Center
- Cranbury Township SD – Mechanical System Upgrades, Exterior Door and Window Replacements
- Cumberland Valley SD – District Administration Office – Alterations/Additions
- Green Brook Township SD – Mechanical Systems Upgrades and Art and Science Room Renovations
- Greencastle-Antrim SD – Kaley Field Renovations
- Hackettstown SD – Boiler System Replacements at Hackettstown Middle School, Willow Grove Elementary School and Hatchery Hill Elementary School
- Haworth SD – LRFP Health & Safety Improvements
- Jefferson Township SD – Window Replacement at Milton Elementary School
- Metuchen SD – LRFP Update
- Northvale SD – Window Replacement at Nathan Hale Elementary School
- Oceanside Charter School – Preliminary Design for New LEED® Certified K-12 Charter School
- Pearl River SD – Traffic Analysis and Site Improvements
- SD of the City of York – Jackson Elementary School – Alterations/Additions
- Selinsgrove Municipal Building & Community Center Library – Alterations/Additions
- Summit BOE – Window Replacements, HS Auditorium Renovation, Mechanical System Upgrades and Middle School Holistic (Facility and Program) Assessment
- Tewksbury BOE – On-going Mechanical System Upgrades, Site Improvements, Window Replacements, Lighting Upgrades and Security System Improvements
- Wayne SD – Track and D-Zone Renovations at Wayne Valley High School and Wayne Hills High School
- West Amwell/Lambertville BOE – ADA Toilet Room Construction, Playground Installation and Temporary Classrooms
- Wilson SD – Elementary School Capacity Study & Pool Evaluations

EVENTS

- PSBA/PASA Annual Conference, Hershey, PA: October 18-21 - Visit us at our booth 326/328
- NJSBA Fall Workshop 2011 – October 25, 26, 27 – Atlantic City, NJ
Visit us at our Booth #433-435 located in the Partner Pavilion
- EI Staff, in conjunction with the Cranbury SD, will be presenting a 30-minute floor session entitled, "Comprehensive Planning for Energy Smart Schools" within the Main Exhibition Floor of the Convention Center
- KAPPA Fall Conference, Gettysburg, PA: October 25
- DVASBO Trade Show, Jeffersonville, PA: November 11
- Maryland & DC ASBO Fall Conference, Linthicum Heights, MD: November 18
- PASBO Annual Conference & Exhibits, Hershey, PA: March 6-9
- Maryland & DC ASBO Spring Conference, Ocean City, MD: May 20-23