State College Area School District

Proposal Prepared for:

District Wide Facilities Master Plan

April 12, 2016

Crabtree, Rohrbaugh & Associates
401 East Winding Hill Road
Mechanicsburg, PA 17055
Pennsylvania . Virginia . Maryland . West Virginia

April 12, 2016

Ed Poprik, PRSBO
State College Area School District
240 Villa Crest Drive
State College, PA 16801

Dear Mr. Poprik:

We are pleased to provide you with Crabtree, Rohrbaugh & Associates' proposal for the State College Area School District's District Wide Facilities Master Plan. Crabtree, Rohrbaugh & Associates has many unique qualifications that set our team apart from other Pennsylvania architects. Some of these qualifications are as follows:

History with SCASD- Our team began working with SCASD in 2012 on a comprehensive facility assessment of State High. We assisted the district in an effort to pass the referendum through actively engaging the Community through the development of a structured series of public meetings and community outreach workshops and charrettes. We will apply this same approach to the District Wide Facilities Master Plan. Our CRA team will remain consistent, bringing their knowledge of the District and process used at State High.

Educational Program/Sustainability – Our experience with the District has given us valuable insight into the educational vision and the goals and expectations of the Administration and Board of Education. In addition to this we will have Rob Pillar, AIA, ALEP, LEED Ap, Director of Educational Architecture on board as the our in-house Educational Planner.

We are committed to looking for ways to enhance the sustainability of the projects and have already submitted two grant proposals on behalf of SCASD for funding to make the elementary projects, High Performing, LEED Gold buildings.

Approval Process – Our team is versed on the municipal approval process via land development plans, code review and permitting. Our understanding of the local approval process and working with local code officials will give us the ability to expedite the projects to meet the schedule set forth by SCASD.

Thank you again for your consideration. We truly value this opportunity to continue working with the School District.

Sincerely,
Crabtree, Rohrbaugh & Associates

John A. Beddia, AIA, LEED AP
Principal

R. Jeffrey Straub, AIA, REFP, LEED AP
Principal

Overview


Webster's Third New International Dictionary
WORLD BOOK

FIRM OVERVIEW

Welcome to Crabtree, Rohrbaugh & Associates

Who We Are.

Crabtree, Rohrbaugh & Associates is a nationally recognized design firm employing more than seventy leaders in the fields of architecture design, planning and project management. We are recognized as a Top 100 Architectural Firm by Architectural Record and a Top 500 Design Firm by Engineering News-Record. We have the resources to provide our clients with the highest quality architectural design services and through our management approach provide the personal attention associated with a small firm.

Our people are our greatest asset. Our Project Managers and Directors are among the most talented and diversified in the country, and the environment we have created at the firm has kept our core members growing with us.

The firm has no turnover of project management staff, in fact the project team responsible for our first project in 1984 continues to produce architectural design services throughout the Commonwealth. The depth of their experience—together over 425 years across the United States and abroad—translates into impressive, well-executed projects and the highest level of hands-on support for all of our clients.

Our progressive approach to management has earned us recognition as a top 100 places to work in Pennsylvania.

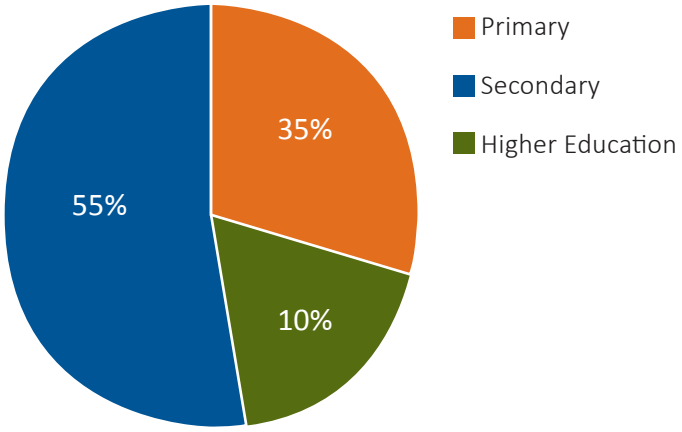
What We Do.

Crabtree, Rohrbaugh & Associates has designed and administered the construction of facilities for our clients in thirty-nine states and counting. Our talented design staff of over 70 professionals can handle any project type, regardless of size. In addition to our experienced educational project team, the firm is also experienced in corrections, detention, judicial, historical, educational, retail, health care, religious, governmental, warehousing, distribution, manufacturing, corporate office, commercial office, professional office, multi- family housing, residential, hotel, restaurant, recreational and banking facilities.

The common thread running through all of our projects is our collaborative design process. We work with our clients from day one to incorporate their needs and goals into the design of the building and place the emphasis on the people who use the facilities.

K-12 Education Focus

Crabtree, Rohrbaugh & Associates has provided educational feasibility studies, facility assessments, long range capital improvement plans, programming and architectural provides design services throughout Pennsylvania for 22 years. Our integrated design approach utilizes state of the art technology to allow the firm to communicate with its consultants and clients and seamlessly coordinate our work efforts on a local and national level.



What Makes Us Different.

Thirty-one years ago, Tom Crabtree and Doug Rohrbaugh founded the firm based on a simple mission of providing "a client-oriented approach to architecture." This dedication to placing the client first in the design process sets us apart. The quality of our design, the completeness of our construction documents and our ability to provide the resources to complete projects on schedule and on budget plays a major role in our success. Eighty percent of our current workload is with repeat clients. Our projects are appropriate, on-budget, on-schedule, well-executed and work well with their surroundings to give our clients and their communities the best in architectural design. At the end of the day, our clients are happy and our designs are continually recognized for excellence by the American Institute of Architects.

Sustainable Design

Crabtree, Rohrbaugh & Associates has held sustainable design as a core company belief prior to the inception of the U.S. Green Building Council (USGBC). The first and strongest example of this dedication located at the Benjamin Olewine III Nature Center at the Wildwood Lake Sanctuary in Harrisburg, Pennsylvania.

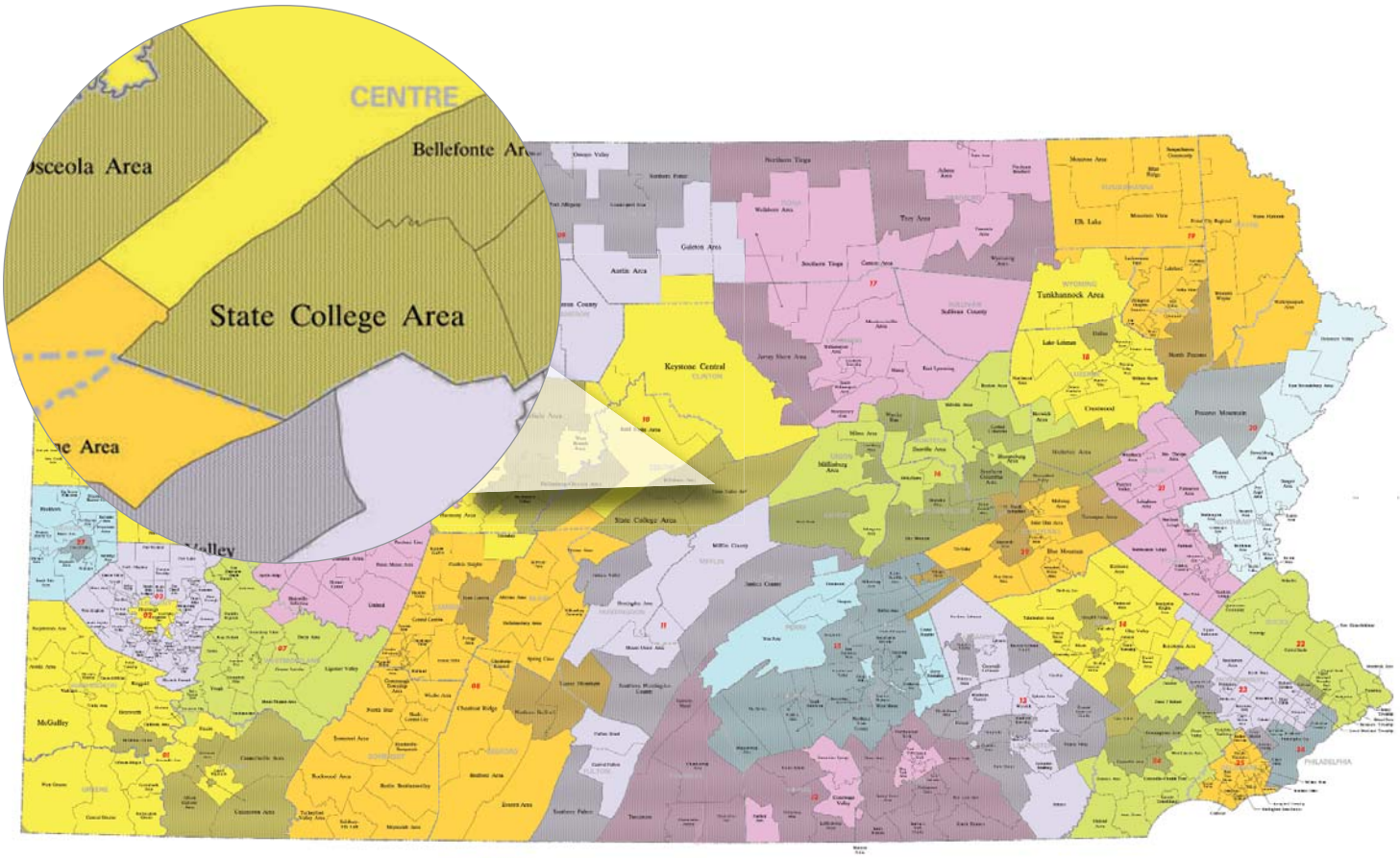
The firm historically has had a talent for recognizing a need and responding with innovation. Based on the need for more efficient and better performing buildings, we create sustainable designs for our clients. Our LEED Accredited Professionals incorporate efficient green building solutions into their designs. We maintain the highest standards in technology, training, education and innovation so that our work is always on the leading edge.

Our LEED Accredited Professionals have over 20 projects which are in various stages of the certification process including 5 LEED Gold certified projects, 4 LEED Silver certified, 1 certified and 2 projects achieving Green Globe status.

> "...CRA brought a depth of experience and people for a transparent and collaborative process, which was critical for our community's acceptance and support."
>
> - Dr. Robert J. O'Donnell,
> Superintendent, State College ASD

Pennsylvania Education Experience

The firm has provided educational feasibility studies, architectural design and interior design services throughout Pennsylvania since 1993. The areas shaded below on the map represent the firm's Pennsylvania Educational Experience.



Corporate Information

Firm
Crabtree, Rohrbaugh & Associates - Architects

Corporate Headquarters
Pennsylvania
401 East Winding Hill Road
Mechanicsburg, PA 17055

Branch Offices
Pittsburgh
Bridgeville, PA 15017

Maryland
Baltimore, MD 21234

Virginia
Charlottesville, VA 22902

West Virginia
White Sulphur Springs, WV 24983

Years Providing Architectural Services
31 years

Contact Persons
Randy Davis
Principal
rdavis@cra-architects.com
(c) 717-514-6809

John A. Beddia, AIA, LEED AP
Principal
jbeddia@cra-architects.com
(c) 717-514-4505

Contact Information
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(f) 717-458-0047
marketing@cra-architects.com
www.cra-architects.com

Date of Incorporation
July 1984

State of Incorporation
Pennsylvania (also foreign incorporation in Maryland and Virginia)

Officers of the Company
Thomas C. Crabtree, President
G. Douglas Rohrbaugh, Vice President/Secretary

Capabilities

Thanks to the diversity and experience of the architects at Crabtree, Rohrbaugh & Associates, we are able to handle every project type that comes our way, regardless of size. We cultivate partnerships with our clients and take them through the entire process, from inception to completion and beyond. As a full-service architectural firm, Crabtree, Rohrbaugh & Associates takes pride in the relationships we build as well as the structures we create.

Pre - Design
Programming
Facilities Assessment
Master Planning
Space Planning
Capital Improvement Planning
Facility Survey
Market Study
Feasibility Study
Development Scheduling
Project Budgeting

Site Analysis
Evaluation And Selection
Master Planning
Development Planning
Utilization Study
Utility Study
Environmental Study
Zoning Processing
Field Observation
Office Administration
Inspection
Project Consultation

Design & Construction Documents
Architectural Design
Structural Design
Civil Design
Landscape Design
Interior Design
Mechanical Design
Electrical Design
Equipment Planning
Materials Research
Warranty Review
Post Construction Evaluation

PLANCON
Part A – Project Justification
Part B – Schematic Design
Part C – Site Acquisition
Part D – Project Accounting
Part E – Preliminary Design Review
Part F – Final Design Review
Part G – Project Accounting, Bids
Part H – Project Financing
Part I – Interim Report
Part J – Project Accounting, Final Costs

Bid / Negotiation
Bid Administration
Bid Evaluation
Contract Preparation

Construction Administration
Project Representation
Field Observation
Office Administration Inspection
Project Consultation Commissioning

Post- Construction
Maintenance/Operational Programming
Occupancy Assistance
Record Document

Specialty
Community Engagement
Referendum Planning
Renderings
Models
Life Cycle Cost Analysis
Value Analysis
Energy Studies
Americans With Disabilities Act Survey
Americans With Disabilities Act Implementation
Code And Regulatory Agency Approvals

Technology Applications

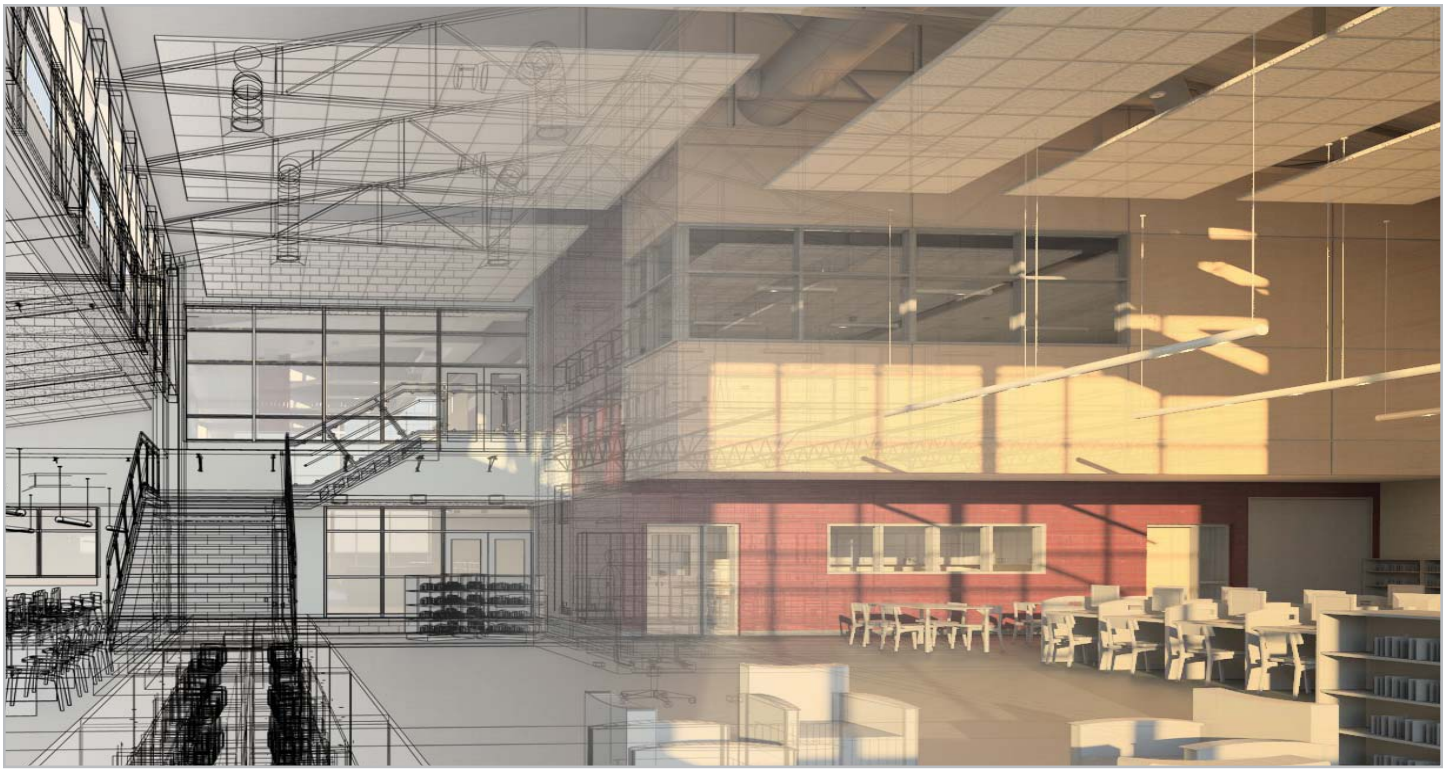
The state of art in architectural design is an integrated process in which all team members interact through the use of collaborative technology. Crabtree Rohrbaugh & Associates uses the latest technological tools to implement these Building Information Model (BIM) and Integrated Project Delivery (IPD) methodologies, including AutoCAD Architecture 2010, Autodesk Revit Architecture 2013, 3D Studio Max Design, and the Attolist/NewForma web-based construction management administration system.

Unlike the Design-Build project delivery method which places the Contractor in the leading role on a building project, IPD represents a return to the "Master Builder" concept where the entire building team including the owner, architect, general contractor, building engineers, fabricators, and subcontractors work collaboratively throughout the construction process.

All of these tools combine to enable 3d design to become 4d and 5d design by incorporating the elements of time (4d) and cost (5d) with geo-spatial (3d) information. Photo-realistic digital renderings and animations/walk-throughs, as well as lighting studies/simulations, are provided through the use of Autodesk 3d Studio Max. Our network consists of Xeon workstations, running 64 bit Windows 7 Professional, which are connected, via gigabit Ethernet with fiber backbone, to servers in a virtual machine environment. Our 10Mbps internet connection provides high speed communication with clients, consultants and contractors.

Our on-site Information Technology Director and our BIM/CAD Manager provides training and support to ensure that construction documents are complete and on schedule. We also utilize a vast library of standard details and equipment to produce drawings in a reliable, cost-effective and timely manner. Our standard CAD library holds the latest technical materials available from manufacturers and suppliers of building systems, ranging from sophisticated HVAC and mechanical systems to the latest technology in energy efficient windows, insulation and roofing systems.

Our Web Based Project Management System allows the architect, consultants and clients to collaborate efficiently and securely. The architect and the client use the site as a means of communication for minutes, drawings, documentation and track revisions. The architect and their consultants use the site as a platform for sharing R.F.I.'s, meeting minutes, drawings, requests for information, and change orders. The client may use the site to communicate with the public through questionnaires, presentations and announcements.



Educational Client Listing

In the past 10 years, Crabtree, Rohrbaugh & Associates has provided more than $3.5 Billion in Educational architecture throughout the Mid-Atlantic.

Abington Heights School District
Albert Gallatin Area School District
Amelia County Public Schools
Annville Cleona School District
Augusta County Public Schools
Baltimore City Public Schools
Bellefonte Area School District
Bethlehem-Center School District
Brookville Area School District
Camp Hill School District
Capital Area Intermediate Unit
Carlisle Area School District
Catasauqua Area School District
Centennial School District
Central Columbia School District
Central Dauphin School District
Central Valley School District
Central PA Institute of Science & Tech
Chambersburg Area School District
Clarion Area School District
Clarke County Public Schools
Clearfield County Career & Technology
Coatesville Area School District
Commonwelath Connections Academy
Connellsville Area School District
Coudersport Area School District
Cumberland Perry Vo-Tech
Culpeper County Public Schools
Cumberland Valley School District
Dauphin County School of Technology
Dallas School District
Dallastown Area School District
Donegal Area School District
Dover Area School District
Eastern Lancaster County SD
Eastern Lebanon School District
Eastern York School District
Elizabethtown Area School District
Fairfax County Public Schools
Fannett-Metal School District
Fayette County Area Vo-tech School
Fluvanna County Public Schools
Franklin County Career Technology
Franklin Learning Center
Frederick County Public Schools
Garrett County Public Schools
Gettysburg Area School District
Gettysburg Montessori Charter School
Greencastle-Antrim School District
Halifax Area School District
Hanover Public School District
Harrisburg School District
Harrisonburg City Public Schools
Hazleton Area School District
Hempfield School District
Infinity Charter School
Iroquois School District
Jersey City School District
Jersey Shore School District
Juniata Valley School District
Juniata County School District
King George County Public Schools
Lancaster Country Day School
Lewisburg Area School District
Lincoln IU #12
Line Mountain School District
Littlestown Area School District
Lower Merion School District
Madison County Public Schools
Manheim Township School District
Matawan Aberdeen Regional SD
Mechanicsburg Area School District
Mecklenburg County Public Schools
Midd-West School District
Middletown Area School District
Millersburg Area School District
Milton Hershey School
Minersville Area School District
Monroe Career & Technical School
Montoursville Area School District
Moshannon Valley School District
Mount Carmel School District
North Pocono School District
North Schuylkill School District
Northeastern York School District
Northern Potter School District
Northern Tier Career Center
Northern Tioga School District
Northern York County School District
Northumberland Vo-Tech
Otto-Eldred School District
Penn Cambria School District
Penn Manor School District
Penns Valley Area School District
The Phelps School
Phoenixville Area School District
Philipsburg-Osceola School District
Pocono Mountain School District
Pottsgrove School District
Pottstown School District
Preston County Schools
Prince George's County Public Schools
Polytech School District
Port Allegany School District
Queen Anne's County Public Schools
Red Lion Area School District
Richmond City Public Schools
School District of Philadelphia
Schuylkill Valley School District
Seneca Highlands Vo-tech
Shamokin Area School District
Shippensburg University Foundation
Shippensburg School District
Southern Huntingdon County SD
South Middleton School District
South Western School District
Southern Columbia School District
Southern Fulton School District
Southern York County School District
Spring-Ford Area School District
Spring Grove Area School District
State College Area School District
Staunton City Public Schools
Susquehanna Twp School District
Susquenita School District
Talbot County Public Schools
Tamaqua School District
Temple University
Trinity High School
Troy Area School District
Tuscarora School District
Tussey Mountain School District
Twin Valley School District
Uniontown Area School District
Upper Adams School District
The Vista School (The Hershey Trust)
Vida Charter School
Warrior Run School District
Warren County School District
Washington County Public Schools
Waynesboro Area School District
West Shore Christian Academy
West Shore School District
Westmoreland County Public Schools
West Perry School District
West Point Public Schools
Williams Valley School District
Wyomissing Area School District
Wyalusing Area School District
York County School of Technology

LEED & Sustainable Design Project Listing

Crabtree, Rohrbaugh & Associates has held sustainable design as a core company belief prior to the inception of the U.S. Green Building Council (USGBC). The first and strongest example of this dedication located at the Benjamin Olewine III Nature Center at the Wildwood Lake Sanctuary in Harrisburg, Pennsylvania. The firm historically has had a talent for recognizing a need and responding with innovation. Based on the need for more efficient and better performing buildings, we create sustainable designs for our clients. Our LEED Accredited Professionals incorporate efficient green building solutions into their designs. We maintain the highest standards in technology, training, education and innovation so that our work is always on the leading edge.

	Project	Cost	Size	LEED Rating & Recognition
	Barth Elementary School Pottstown School District	$4M	39,269 SF	LEED Silver Certified
	Cabela's Retail, Inc.	$28M	240,000 SF	LEED Certified
	Caleb W. Bucher Elementary School Manheim Township School District	$19.4M	126,000 SF	LEED Silver Registered Received Governor's Green Government Council of High Efficiency Buildings Grant
	Central Manor Elementary School Penn Manor School District	$9.5M	94,000 SF	LEED Silver Certified
	Connellsville Area Senior High School Connellsville Area School District	$45M	318,546 SF	LEED Gold Certified 2015 USGBC "LEED Project of the Year"
	Donegal High School Donegal School District	$32.3M	246,000 SF	Two Green Globes Certification
	Eisenhower Elementary School Camp Hill School District	$18.5M	112,000 SF	One Green Globes Certification

	Project	Cost	Size	LEED Rating & Recognition
	Franklin Elementary School Pottstown School District	$5.3 M	39,269 SF	LEED Gold Certified
	HACC Public Safety Training Center Harrisburg Area Community College	$9M	100,000 SF	LEED Silver Certified
	Iron Forge Elementary School South Middleton School District	$18.9M	118,164 SF	LEED Gold, Version 3 Registered Qualified for an Alternative & Clean Energy Program Grant from PA DCED
	Jersey Shore Elementary School Jersey Shore School District	$11.7M	93,875 SF	LEED Silver Registered
	Landis Run Intermediate School Manheim Township School District	$28.6M	205,000 SF	LEED Silver Registered
	Lewisburg High School	$30M	182,481 SF	LEED Gold Registered Qualified for an Alternative & Clean Energy Program Grant from PA DCED
	Lincoln Elementary School Pottstown School District	$5.6M	40,722 SF	LEED Gold Certified
	Middleburg Elementary School Midd-West School District	$20.5M	109,820 SF	LEED Gold Certified

	Project	Cost	Size	LEED Rating & Recognition
	Middletown Area High School	$30M	202,700SF	Green Globes
	Midd-West High School Midd-West School District	$32.7M	192,492 SF	LEED Gold Certified Most Innovative Project of the Year- USGBC Forever GREEN Design Awards
	Montoursville Area High School Montoursville Area School District	$32.5M	210,000 SF	LEED Gold Registered Qualified for an Alternative & Clean Energy Program Grant from PA DCED
	National Guard Combined Readiness Center	$10.6M	38,619	LEED Silver Registered
	Pennsylvania State Employees Credit Union Headquarters	$45M	240,000 SF	LEED Gold Certified
	Rupert Elementary School Pottstown School District	$5.9M	47,969 SF	LEED Gold Certified
	SCI- Cambridge Springs	$10.6M	31,645 SF	LEED Certified
	State College Area High School State College Area School District	$120M	683,000 SF	LEED Gold Registered Qualified for an Alternative & Clean Energy Program Grant from PA DCED

	Project	Cost	Size	LEED Rating & Recognition
	Stevensville Middle School Queen Anne's County Public Schools	$17.3M	96,709 SF	LEED Silver Registered
	Sudlersville Middle School Queen Anne's County Public Schools	$23M	100,884 SF	LEED Gold Certified USGBC Maryland- Wintergreen Award for Excellence in Green Building 2012 "Project of the Year" 2014 USGBC "Green School of the Year" Forever Green Award Recipient
	Wyalusing Biomass Plant* Wyalusing Area School District *project was apart of the addition/ renovation to the Jr/Sr High School	$9M	140,835 SF	Awarded $300,000 Energy Harvest Grant

PROJECT TEAM

Organizational Chart

State College Area School District

District Wide Facilities Master Plan

Crabtree, Rohrbaugh & Associates: Architectural Prime & Interior Design

John A. Beddia, AIA, LEED AP
Principal in Charge

Jeffrey Straub, AIA, REFP, LEED AP BD+C
Principal/Studio Director

Robert M. Pillar, AIA, CEFP, LEED AP
Director of Educational Architecture

Arif Hasanbhai
Project Designer

Jessie Harder
Architectural Project Coordinator

Kyle L. Strock, LEED AP BD+C
Architectural & LEED Coordinator

Tracy Rohrbaugh, Allied IIDA
Director of Interior Design

Mary E. Rowe, Allied IIDA
Interior Design Project Manager

Nichole Wickline
Interior Designer

Keith Gingrich, MCP
Code Review

Brian Kilgus, LEED AP
Construction Administration

Consultants

Moore Engineering
MEP Engineering
- Ken L. Kauffman, PE, LEED AP
- William M. Fleischer

Carney Engineering
Structural
- Joshua M. Carney, PE

ELA Group
Site/Civil
- Matthew R. Harlow, RLA
- George J. Lower, PE
- Todd H. Smith

Key Personnel Overview

CRA proposes to provide a collaborative process and leadership to assist SCASD in the discovery, analysis and definition of the needs of students, staff, board and community. We will outline sequentially the necessary steps and establish a protocol for communication and decision making to allow for the study to be completed in-line with your schedule.

The team outlined below will work corroboratively together and alongside SCASD administration, board and community to ensure a comprehensive feasibility study, which represents your vision and your goals is completed.

John A. Beddia, AIA, LEED AP, Principal in Charge

John will be responsible for overall project oversight, ensuring adequate resources are provided to meet the established deadlines and verification of the districts vision and goals are successfully implemented.

Jeff Straub, AIA, REFP, LEED AP, BD+C, CPD, Principal/Studio Director

Jeff will be responsible for overall District Wide Facilities Master Planning management tasks, consultant coordination and will manage the architectural team for the project.

Robert Pillar, AIA, ALEP, LEED AP, Director of Educational Design

Rob is responsible for the exploration and development of the districts educational vision. Rob will work closely with key administrators, teachers, staff and board members to shape the classroom environments with long range consideration of flexibility, technology and curriculum.

Arif Hasanbhai, Project Designer

Arif will be responsible for assisting the Studio Director during the study phase to develop options implementing the educational program developed and assisting in Community Engagement Charettes. He will lead with the Studio Director a collaborative design process incorporating community, staff and school board input and translate into a built work. He will share management of the production design team.

Tracy Rohrbaugh, Allied IIDA, Director of Interior Design

Tracy will be responsible during the study phase to review interior specifications during the educational program and validation phase. She will work closely with your staff and administration during the study and design phase to ensure every aspect of the interior planning of the facility is clearly realized.

Mary E. Rowe , Interior Design Project Manager

M.E. will be responsible for assisting the Director of Interior Design during the study phase to review interior specifications during the educational program and validation phase. She will be responsible for the development of interiors, including design, space planning, finish selections and creation of design concepts.

CRA's team offers the depth, resources and strength necessary to implement to goals and schedule set forth by the State College Area School District.

John A. Beddia AIA, LEED AP

Principal in Charge

Mr. Beddia has more than 21 years of educational experience and joined the firm in 1994. As Principal in Charge, Mr. Beddia will provide project oversight, ensuring project goals, schedule and budget defined by the client are met. During planning and design, Mr. Beddia will be assisted by the Project Manager and Director of Design.

> A vital part of the design process is to ensure the architecture provides a creative and collaborative solution while integrating my client's vision and goals.

Education

Bachelor of Architecture, North Carolina State University, 1992

Bachelor of Science, Environmental Design, 1991

Registered Architect

Pennsylvania, Maryland & Louisiana

Affiliations

A4LE, Association for Learning Environments (Formerly CEFPI)

Relevant Project Experience

State College Area High School, State College Area School District

Facility Study, Addition & Renovation / 683,000 SF / $120,345,200 / LEED Gold Registered

The high school project began as a comprehensive study and schematic design of the current facility as well as programming to integrate STEAM education (Science, Technology, Engineering, Arts & Math). Programming also includes diverse program options through a partnership with State College Career and Technical Center (CTC) and Penn State University.

Hempfield School District Elementary School Prototype

In an effort to address the district's growing enrollment and condition of its elementary facilities, CRA developed an elementary school prototype design. The design was site adapted to build five new elementary schools for the district. The two most recent were bid together and were awarded at an estimated $300,000 savings and both projects were under budget and reported as the lowest cost/SF elementary school in 2012 at $129/SF.

Cumberland Valley Elementary School, Cumberland Valley School District

New Construction / $24,000,000

Our firm is currently designing a new $24M elementary school for Cumberland Valley School District which will be a designed with flexible and adaptable educational environments able to meet the individualized needs of all learners and accommodate small and large group instructional activities. The school will be organized into three educational wings which each serve two grade levels and contain classrooms and support spaces.

Dover Elementary School, Dover Area School District

Addition & Renovation / 96,000 SF / $14,560,700

The additions/renovations include a new main entry lobby, two story academic wing and new District Administration Office and existing building renovations. Included in the renovation are a new HVAC system, fire suppression system, security system, data and technology systems, new casework, interior finishes and window replacement.

Lafayette Elementary School, Uniontown Area School District

Addition & Renovation / $11,858,049 / 75,000 SF

Constrcution was completed through phases which included the completion a two story academic wing to allow students to vacate the 1926 portion prior to demolition, then a connecting wing was constructed to join the new academic wing to the fully renovated 1983 wing.

R. Jeffrey Straub AIA, REFP, LEED AP BD+C, CPD

Principal / Studio Director

Mr. Straub has more than 16 years of experience and joined the firm in 1999. Mr. Straub is responsible for overseeing design-related activities pertaining to LEED and Security design. Jeff will actively participate in all design review meetings that will be held throughout the life of the project. Additionally he brings an in-depth level of expertise in Premise Security and Liability and has successfully used Crime Prevention Through Environmental Design (CPTED) techniques.

> In 1914, Paul Scheerbart wrote, 'If we want our culture to rise to a higher level, we are obliged, for better or for worse, to change our architecture. And this only becomes possible if we take away the closed character from the rooms in which we live.' Over the years, this idea has become part of my design philosophy.

Education

Bachelor of Architecture and Art History, The Pennsylvania State University, 2001

Sedi Di Roma Program, Rome, Italy, 1999

Distinguished Thesis (Educational Architecture within the Inner City)

Registered Architect

Pennsylvania, Maryland, Virginia, Delaware, Ohio, West Virginia, New York, New Jersey, Texas, Michigan & Colorado

Affiliations

The American Institute of Architects Board Member- Central PA Design Awards Chairman

US Green Building Council

AFREC (Alternative Fuels & Renewable Energies Council)

Awards

Sixteen projects cited for design recognition from American Institute of Architects, U.S. Green Building Council, CEFPI and PA Historic Museum Commission

Thirteen projects receiving U.S. Green Building Council Certification from Certified through Gold Designation

Relevant Project Experience

State College Area High School, State College Area School District

Facility Study, Addition & Renovation / 683,000 SF / $120,345,200 / LEED Gold Registered

The high school project began as a comprehensive study and schematic design of the current facility as well as programming to integrate STEAM education (Science, Technology, Engineering, Arts & Math). Programming also includes diverse program options through a partnership with State College Career and Technical Center (CTC) and Penn State University.

Middleburg Elementary School, Midd-West School District

Addition & Renovation / 109,820 SF / $20,550,766 / LEED Gold Certified

Middleburg Elementary School which is part of a large campus project is divided into both public and private areas and houses three grade levels, each divided into "grade houses". The three interior grade houses are further broken down into grade pods consisting of a ring of classrooms centered around a communal daylit central activity space or open classroom.

Rupert Elementary School, Pottstown School District

Addition/Renovation / 47,969 SF / $5,982,436 / LEED Gold Certified

This project includes a two story addition to accommodate a new primary entrance, administration, music and library. The addition will create a loop system within the building maximizing educational adjacencies, while limiting disturbance to the three front historic facades of the building.

Iron Forge Elementary School, South Middleton School District

Addition & Renovation / $22,400,000 / 118,164 SF / LEED Gold, V3 Registered

Currently under construction, the Iron Forge Educational Center will include classrooms in grade level pods with learning support, classroom technology, flexible learning spaces and furniture, the consolidation of school office, separation of school and district support.

Maple Manor Elementary & Middle School, Hazleton Area School District

Addition & Renovation / 113,732 SF / $15,712,937

The K-8 elementary/middle school design addresses the district's increasing enrollment. The existing two-story 77,732 SF building was completely renovated plus the construction of a new two-story 36,000 square foot classroom wing which creates adequate space and flexible learning environments with integration of technology throughout the building.

Robert M. Pillar AIA, ALEP, LEED AP

Director of Educational Architecture

Mr. Pillar has 28 years of experience and has focused on educational planning and design throughout his career. He works side by side with our clients to design facility environments that support innovative curricula and enable our next generations to excel in a global society. Mr. Pillar will lead our team through the facilities assessment and prepare the educational program as well as offer appropriate solutions to problems found during the facilities assessment.

> Educational environments must enhance the teaching and learning experience, inspire wonder, challenge the intellect, and reward the spirit of all learners. We must plan to support current pedagogy yet allow for adaptation for evolution in learning.

Education

Advanced Certificate in Educational Planning, San Diego State University

Bachelor of Architecture, Kent State University

Registered Architect

Pennsylvania

Affiliations

American Institute of Architects

Licensed Planner, Council of Educational Facility Planners International

A4LE, Association for Learning Environments (Formerly CEFPI)

Certificate of Authorization Holder National Council of Architectural Registration Boards

Relevant Project Experience

Bethlehem-Center School District

High School Study & Design

Crabtree, Rohrbaugh & Associates' has begun work on a district wide study, focusing on the High School Facility. The assessment will document the educational program, evaluate educational spaces as well as MEP and structural issues. At the conclusion, our team will provide initial schematic design solutions and cost estimates to address the problems identified in the study.

Central Valley School District

New Construction / 200,000+ SF / $45+

Crabtree, Rohrbaugh & Associates' is moving forward with initial schematic design for a new high school facility. The new high school will be designed to incorporate 21st Century Learning environments and provide flexible classroom space and furniture.

State College Area School District*

Various Projects

Mr. Pillar served as Educational Planner as the district developed new standards for renovation for all the elementary schools. Projects include Easterly Parkway Elementary (Renovation), Gray's Woods Elementary School (New Construction) and Park Forest Elementary (New Construction).

Avonworth School District*

Various Projects

Mr. Pillar served as Project Manager for various projects with Avonworth, including a District-Wide Feasibility Study, Junior/Senior High School (Addition/Renovation) and Elementary School (Renovation).

Steel Valley School District*

Various Projects

Mr. Pillar worked with Steel Valley for various projects , including a District-Wide Feasibility Study, Middle School (Science Lab Conversion) and Senior High School Auditorium (Renovation).

*Denotes personal Experience

Tracy M. Rohrbaugh Allied IIDA

Principal / Director of Interior Design

Tracy has more than 25 years of experience in educational interior design and project management. She has worked for the firm since 1990. She serves as the Director of Interior Design and a principal of the firm. Tracy is responsible for the direction, and oversight of the firm's Interior Design professional services. This includes programming, space planning, project management, interior concepts, finishes, furniture and design specifications.

> Our designers work to enhance the quality of the experience for the people who use the facility. Integrating interior design elements into the building design ensures that our clients receive what they want and need in the interior spaces of a project.

Education

Associates Degree in Interior Design, Bradley Academy for the Visual Arts, 1990

Affiliations

International Interior Design Association

Pennsylvania Green Building Alliance

Awards

2014 USGBC Green School of the Year- Sudlersville Middle School

2014 AIA Citation Award - Middleburg Elementary School

Larry J. Macaluso Elementary School- Outstanding Design" Common Areas by American School & University- 2010

West Manheim Elementary School - Recognized for Educational Design Excellence by American School & University- 2007

Relevant Project Experience

State College Area High School, State College Area School District

Facility Study, Addition & Renovation / 683,000 SF / $120,345,200 / LEED Gold Registered

The high school project began as a comprehensive study and schematic design of the current facility as well as programming to integrate STEAM education (Science, Technology, Engineering, Arts & Math). Programming also includes diverse program options through a partnership with State College Career and Technical Center (CTC) and Penn State University.

Cumberland Valley Elementary School, Cumberland Valley School District

New Construction / $24,000,000

Our firm is currently designing a new $24M elementary school for Cumberland Valley School District which will be a designed with flexible and adaptable educational environments able to meet the individualized needs of all learners and accommodate small and large group instructional activities. The school will be organized into three educational wings which each serve two grade levels and contain classrooms and support spaces.

Dover Elementary School, Dover Area School District

Addition & Renovation / 96,000 SF / $14,560,700

The additions/renovations include a new main entry lobby, two story academic wing and new District Administration Office and existing building renovations. Included in the renovation are a new HVAC system, fire suppression system, security system, data and technology systems, new casework, interior finishes and window replacement.

Middleburg Elementary School, Midd-West School District

Addition & Renovation / 109,820 SF / $20,550,766 / LEED Gold Certified

Middleburg Elementary School which is part of a large campus project is divided into both public and private areas and houses three grade levels, each divided into "grade houses". The three interior grade houses are further broken down into grade pods consisting of a ring of classrooms centered around a communal daylit central activity space or open classroom.

Iron Forge Educational Center, South Middleton School District

Addition & Renovation / $22,400,000 / 118,164 SF

Currently under construction, the Iron Forge Educational Center will include classrooms in grade level pods with learning support, classroom technology, flexible learning spaces and furniture, the consolidation of school office, separation of school and district support.

Arif Hasanbhai

Project Designer

Mr. Hasanbhai has 14 years of experience and joined the firm in 2001. He assists with all aspects of design and design-related activities, including coordination of all disciplines and specialty consultants. During the development of construction documents he will be assisted by the Senior Project Manager. Mr. Hasanbhai's strongest focus will be on listening and translating the district's vision and goals into reality.

> As a project designer it is exciting to see the electronic design become a functional and efficient building that is used by the students, administration and community.

Education

Bachelor of Architecture, Penn State University, 2001

Sedi Di Roma Program
Rome, Italy, 1999

Professional Awards

2014 USGBC Green School of the Year- Sudlersville Middle School

2014 AIA Citation Award - Middleburg Elementary School

2012 USGBC Maryland "Public Project of the Year"- Sudlersville Middle School

2012 AIA Citation Award
Midd-West High School

2010 CEFPI Northeast Design Award
Midd-West High School

AIA 2008 Merit Awards
Connellsville Area Career & Technical Center

AIA 2007 Merit Award- York County School of Technology

Nine buildings receiving U.S. Green Building Council Certification

Relevant Project Experience

State College Area High School, State College Area School District

Facility Study, Addition & Renovation / 683,000 SF / $120,345,200 / LEED Gold Registered
The high school project began as a comprehensive study and schematic design of the current facility as well as programming to integrate STEAM education (Science, Technology, Engineering, Arts & Math). Programming also includes diverse program options through a partnership with State College Career and Technical Center (CTC) and Penn State University.

Rupert Elementary School, Pottstown School District

Addition/Renovation / 47,969 SF / $5,982,436 / LEED Gold Certified
This project includes a two story addition to accommodate a new primary entrance, administration, music and library. The addition will create a loop system within the building maximizing educational adjacencies, while limiting disturbance to the three front historic facades of the building.

Iron Forge Educational Center, South Middleton School District

Addition & Renovation / $22,400,000 / 118,164 SF
Currently under construction, the Iron Forge Educational Center will include classrooms in grade level pods with learning support, classroom technology, flexible learning spaces and furniture, the consolidation of school office, separation of school and district support.

Lincoln Elementary School, Pottstown School District

Addition/Renovation / 40,722 SF / $5,179,779 / LEED Gold Certified
The design reorganized educational spaces to meet current district educational goals focusing on team teaching along with supporting specialty classes including art, music, special education and physical education. The entire building will be wireless allowing all classrooms to be utilized for technology including mobile computer classrooms and smart board interactive screens.

Hamilton Elementary School, Carlisle Area School District

Addition/Renovation / 65,300 SF / $5,400,000 (est)
The building improvements project at the Hamilton Elementary School are being completed in order to address educational program deficiencies which currently exist. Design will address minor building renovations to accommodate educational programand a one story addition to include a new kitchen, cafeteria, new secure main entrance and administration suite, four classrooms, library, art, and one small group instruction classroom.

Jessie Harder Associate AIA

Architectural Project Coordinator

Ms. Harder joined the firm in 2007 and will serve as Architectural Project Coordinator. Ms. Harder will work with our architectural team during the investigation, evaluation and recommendation of design solutions. She will play a vital role during each design phase and will work closely with the project team.

> It is vital to every project to collaborate with my clients to create a space that not only is esthetically pleasing, but also meets the project goals, requirements and vision set forth by the client.

Education

Bachelor of Architecture, Philadelphia University

Affiliations

American Institute of Architects

A4LE, Association for Learning Environments (Formerly CEFPI)

National Council of Architectural Registration Boards

Harrisburg Young Professionals

Volunteerism

ACE Mentor Program

Community Design Collaborative

P.U.M.P-UP Program

Awards

2014 AIA Citation Award- Middleburg Elementary School

2014 USGBC Green School of the Year- Sudlersville Middle School

2012 USGBC Maryland "Public Project Of the Year"- Sudlersville Middle School

Relevant Project Experience

State College Area High School, State College Area School District

Facility Study, Addition & Renovation / 683,000 SF / $120,345,200 / LEED Gold Registered

The high school project began as a comprehensive study and schematic design of the current facility as well as programming to integrate STEAM education (Science, Technology, Engineering, Arts & Math). Programming also includes diverse program options through a partnership with State College Career and Technical Center (CTC) and Penn State University.

Iron Forge Educational Center, South Middleton School District

Addition & Renovation / $22,400,000 / 118,164 SF

Currently under construction, the Iron Forge Educational Center will include classrooms in grade level pods with learning support, classroom technology, flexible learning spaces and furniture, the consolidation of school office, separation of school and district support.

Hambright Elementary School, Penn Manor School District

New Construction / 95,806 SF / $16,611,874

Hambright Elementary School was designed with the public spaces arranged along "Main Street" which acts as a way-finding element as well as group gathering/staging space. The library spaces are located near the main entry so it can be used for both students and the community.

Middleburg Elementary School, Midd-West School District

Addition & Renovation / 109,820 SF / $20,550,766 / LEED Gold Certified

Middleburg Elementary School which is part of a large campus project is divided into both public and private areas and houses three grade levels, each divided into "grade houses". The three interior grade houses are further broken down into grade pods consisting of a ring of classrooms centered around a communal daylit central activity space or open classroom.

Hamilton Elementary School, Carlisle Area School District

Addition/Renovation / 65,300 SF / $5,400,000 (est)

The building improvements project at the Hamilton Elementary School are being completed in order to address educational program deficiencies which currently exist. Design will address minor building renovations to accommodate educational programand a one story addition to include a new kitchen, cafeteria, new secure main entrance and administration suite, four classrooms, library, art, and one small group instruction classroom.

Kyle L. Strock LEED AP BD+C

Architectural & LEED Coordinator

Mr. Strock has more than 12 years of experience and joined the firm in 2001. He is responsible for developing quality drawings and specifications within the prescribed time frame under the direction of their Senior Project Manager and provide day to day direction to technical staff on assigned projects. Additionally, Mr. Strock will lead the integration of sustainable design within the project between school district, community, architects, engineers and contractors

> Our goal is to create more than just a building. We design spaces that people can both enjoy as well as function.

Education

Bachelor of Architecture, Penn State University, 2001

Sedi Di Roma Program
Rome, Italy, 1999

Professional Awards

2014 USGBC Green School of the Year- Sudlersville Middle School

2012 USGBC Maryland "Public Project of the Year"- Sudlersville Middle School

2012 AIA Citation Award - Midd West High School

2010 CEFPI Northeast Design Award- Midd-West High School

AIA 2007 Merit Award- York County School of Technology

AIA 2008 Merit Awards
- Connellsville Area Career & Technical Center

2010 PA Historic Preservation Award- Jefferson County Courthouse

LEED Coordinator

Has been the LEED Coordinator on 12 USGBC projects receiving certification from Certified to Gold designation.

Relevant Project Experience

State College Area High School, State College Area School District

Facility Study, Addition & Renovation / 683,000 SF / $120,345,200 / LEED Gold Registered
The high school project began as a comprehensive study and schematic design of the current facility as well as programming to integrate STEAM education (Science, Technology, Engineering, Arts & Math). Programming also includes diverse program options through a partnership with State College Career and Technical Center (CTC) and Penn State University.

Iron Forge Educational Center, South Middleton School District

Historic, Addition & Renovation / $22,400,000 / 118,164 SF/ LEED Registered
Our design solution includes classrooms in grade level pods with learning support, classroom technology, flexible learning spaces and furniture throughout, technology current library, the consolidation of school office, separation of school and district support and additional safety/ security. When complete, the school will house grades 3rd to 5th.

Middleburg Elementary School, Midd-West School District

Addition & Renovation / 109,820 SF / $20,550,766 / LEED Gold Certified
Middleburg Elementary School which is part of a large campus project is divided into both public and private areas and houses three grade levels, each divided into "grade houses". The three interior grade houses are further broken down into grade pods consisting of a ring of classrooms centered around a communal daylit central activity space or open classroom.

Rupert Elementary School, Pottstown School District

Addition/Renovation / 47,969 SF / $5,982,436 / LEED Gold Certified
This project includes a two story addition to accommodate a new primary entrance, administration, music and library. The addition will create a loop system within the building maximizing educational adjacencies, while limiting disturbance to the three front historic facades of the building.

Maple Manor Elementary & Middle School, Hazleton Area School District

Addition & Renovation / 113,732 SF / $15,712,937
The K-8 elementary/middle school design addresses the district's increasing enrollment. The existing two-story 77,732 SF building was completely renovated plus the construction of a new two-story 36,000 square foot classroom wing which creates adequate space and flexible learning environments with integration of technology throughout the building.

Mary E. Rowe Allied IIDA

Interior Design Project Manager

Ms. Rowe has more than 17 years of experience and joined the firm in 2000. Ms. Rowe is responsible for assisting the Director of Interior Design with the management and development of interiors, including design, space planning, finish selections and creation of design concepts and specification of furniture, fixtures and equipment.

Our interior designers draw on their diverse education and experience to creatively resolve issues relating to our clients' needs. We use color psychology, space planning integration and specialty detailing to create customized environments that range from corporate retail spaces to schools.

Education

Bachelor of Interior Design, O'More College of Design, 1996

Affiliations

American Society of Interior Designers

Awards

Larry J. Macaluso Elementary School- Outstanding Design" Common Areas by American School & University- 2010

West Manheim Elementary School - Recognized for Educational Design Excellence by American School & University- 2007

Relevant Project Experience

State College Area High School, State College Area School District
Facility Study, Addition & Renovation / 683,000 SF / $ 120,345,200 / LEED Gold Registered
The high school project began as a comprehensive study and schematic design of the current facility as well as programming to integrate STEAM education (Science, Technology, Engineering, Arts & Math). Programming also includes diverse program options through a partnership with State College Career and Technical Center (CTC) and Penn State University.

Cumberland Valley Elementary School, Cumberland Valley School District
New Construction / $24,000,000
Our firm is currently designing a new $24M elementary school for Cumberland Valley School District which will be a designed with flexible and adaptable educational environments able to meet the individualized needs of all learners and accommodate small and large group instructional activities. The school will be organized into three educational wings which each serve two grade levels and contain classrooms and support spaces.

Dover Elementary School, Dover Area School District
Addition & Renovation / 96,000 SF / $14,560,700
The additions/renovations include a new main entry lobby, two story academic wing and new District Administration Office and existing building renovations. Included in the renovation are a new HVAC system, fire suppression system, security system, data and technology systems, new casework, interior finishes and window replacement.

Lafayette Elementary School, Uniontown Area School District
Addition & Renovation / $11,858,049 / 75,000 SF
Construction was completed through phases which included the completion a two story academic wing to allow students to vacate the 1926 portion prior to demolition, then a connecting wing was constructed to join the new academic wing to the fully renovated 1983 wing.

Central Manor Elementary School, Penn Manor School District
Addition & Renovation / 94,000 SF / $9,600,000 / LEED Silver Certified
Sustainable design elements which aided in the LEED Silver Certification include a new Geothermal ground source heat pump, hot water heating is now done through solar thermal panels and two locations of building are interactive Green resources areas so building can be used as an educational tool for the students.

Nichole Wickline

Interior Designer

Ms. Wickline joined the firm in 2009 and is responsible for assisting the Interior Design Project Manager in the development of interiors which includes design, space planning, finish selections and creation of design concepts as well as the specification of furniture, fixtures and equipment.

> Interior Design is a fun, inspirational, puzzle that allows us to solve the complexities of a space while creating balance, harmony, and function, but also enabling us to accommodate the client's needs and budget.

Education

Associates of Technology, Interior Design, Bradley Academy for the Visual Arts, 2006

Awards

2012 AIA Citation Award - Midd-West High School

Relevant Project Experience

State College Area High School, State College Area School District
Facility Study, Addition & Renovation / 683,000 SF / $120,345,200 / LEED Gold Registered
The high school project began as a comprehensive study and schematic design of the current facility as well as programming to integrate STEAM education (Science, Technology, Engineering, Arts & Math). Programming also includes diverse program options through a partnership with State College Career and Technical Center (CTC) and Penn State University.

Rupert Elementary School, Pottstown School District
Addition/Renovation / 47,969 SF / $5,982,436 / LEED Gold Certified
This project includes a two story addition to accommodate a new primary entrance, administration, music and library. The addition will create a loop system within the building maximizing educational adjacencies, while limiting disturbance to the three front historic facades of the building.

Lincoln Elementary School, Pottstown School District
Addition/Renovation / 40,722 SF / $5,179,779 / LEED Gold Certified
The design reorganized educational spaces to meet current district educational goals focusing on team teaching along with supporting specialty classes including art, music, special education and physical education. The entire building will be wireless allowing all classrooms to be utilized for technology including mobile computer classrooms and smart board interactive screens.

Maple Manor Elementary & Middle School, Hazleton Area School District
Addition & Renovation / 113,732 SF / $15,712,937
The K-8 elementary/middle school design addresses the district's increasing enrollment. The existing two-story 77,732 SF building was completely renovated plus the construction of a new two-story 36,000 square foot classroom wing which creates adequate space and flexible learning environments with integration of technology throughout the building.

Dover Elementary School, Dover Area School District
Addition & Renovation / 96,000 SF / $14,560,700
The additions/renovations include a new main entry lobby, two story academic wing and new District Administration Office and existing building renovations. Included in the renovation are a new HVAC system, fire suppression system, security system, data and technology systems, new casework, interior finishes and window replacement.

Brian J. Kilgus LEED AP

Construction Administration

Mr. Kilgus has 20 years of experience in construction management. Mr. Kilgus responsible for on-site construction maintenance. From his office in Bridgeville Pennsylvania, he will serve as liaison between contractors and owner. He will conduct meetings and resolve issues when necessary. He will update the owners and architect throughout the course of construction to ensure the project is constructed in compliance with the contract documents.

> My Construction Management role on the construction site is working through the issues with the Owner, contractors, & consultants in an efficient and cost effective manner while keeping the big picture and end result in focus.

Education

Bachelor of Science in Civil Engineering, Penn State University, 1993

Bachelor of Science in Physics, Westminster College, 1993

Relevant Project Experience

State College Area High School, State College Area School District
Facility Study, Addition & Renovation / 683,000 SF / $120,345,200 / LEED Gold Registered
The high school project began as a comprehensive study and schematic design of the current facility as well as programming to integrate STEAM education (Science, Technology, Engineering, Arts & Math). Programming also includes diverse program options through a partnership with State College Career and Technical Center (CTC) and Penn State University.

Uniontown High School, Uniontown Area School District
Addition & Renovation / $21,611,554 / 180,000 SF
The design of the 1900's Uniontown High School facility included the relocation of kitchen and cafeteria to make room for additional classroom space. Given significant restrictive site conditions, a concept for swing space was developed to allow full occupancy during construction. The design improved site safety and traffic and a new identity to the Main entrance.

Lafayette Elementary School, Uniontown Area School District
Addition & Renovation / $11,858,049 / 75,000 SF
The addition was constructed first and then connected to the original building. The new addition will house K-5 grades and a new media center along with a new gymnasium with a stage and administrative offices.

Benjamin Franklin Elementary School, Uniontown Area School District
Addition & Renovation / $7,276,300 / 70,000 SF
This project included a comprehensive renovation to all building systems, while renewing the historical integrity of the building. Extensive renovations to the building's ornate decorative masonry will be performed while the building is still occupied by students.

Mr. Kilgus has previous experience with several school districts which include:

- Norwin SD- Norwin Middle School, Norwin High School & Norwin Stadium
- West Allegheny School District- West Allegheny High School
- Deer Lakes School District- Curtisville Primary School
- Pittsburgh Public Schools- Reizenstein High School
- Crawford County- Career & Technical School
- Allegheny-Clarion Valley School District- Allegheny Clarion High School

Keith C. Gingrich M.C.P.

Master Code Reviewer

Keith C. Gingrich has over 36 years experience in the construction industry as a certified inspector, plan examiner, Building Code Official, construction foreman, surveyor and drafter. Mr. Gingrich has numerous International Code Council and PA Department of Labor and Industry Certifications.

> Starting a project with code analysis and planning at the earliest design phase leads to a smooth and successful construction code review process. Code compliance is just one of the many aspects a building owner expects when their project is completed.

Education

Building & Codes Enforcement, Harrisburg Area Community College, 1969

Affiliations

National Fire Protection Association

ICC Certifications

Certified Building Official (#3735)
Certified Electrical Code Official
Certified Housing Code Official
Certified Mechanical Code Official
Certified Plumbing Code Official
Combination Plans Examiner
Commercial Combination Inspector
Commercial Energy Inspector
Commercial Energy Plans Examiner
Fire Inspector I
Master Code Professional (MCP)
Spray-applied Fireproofing Special Inspector
Accessibility Inspector & Plans Examiner

Department of Labor & Industry Certifications

Residential Building Inspector, 10
Residential Electrical Inspector, 11
Residential Mechanical Inspector, 12
Residential Plumbing Inspector, 13
Residential Energy Inspector/ Plans Examiner, 14
Building Inspector, 15

Relevant Project Experience

State College Area High School, State College Area School District

Facility Study, Addition & Renovation / 683,000 SF / $120,345,200 / LEED Gold Registered
The high school project began as a comprehensive study and schematic design of the current facility as well as programming to integrate STEAM education (Science, Technology, Engineering, Arts & Math). Programming also includes diverse program options through a partnership with State College Career and Technical Center (CTC) and Penn State University.

Middleburg Elementary School, Midd-West School District

Addition & Renovation / 109,820 SF / $20,550,766 / LEED Gold Certified
Middleburg Elementary School which is part of a large campus project is divided into both public and private areas and houses three grade levels, each divided into “grade houses”. The three interior grade houses are further broken down into grade pods consisting of a ring of classrooms centered around a communal daylit central activity space or open classroom.

Rupert Elementary School, Pottstown School District

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This project includes a two story addition to accommodate a new primary entrance, administration, music and library. The addition will create a loop system within the building maximizing educational adjacencies, while limiting disturbance to the three front historic facades of the building.

Dover Elementary School, Dover Area School District

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The additions/renovations include a new main entry lobby, two story academic wing and new District Administration Office and existing building renovations. Included in the renovation are a new HVAC system, fire suppression system, security system, data and technology systems, new casework, interior finishes and window replacement.

Lafayette Elementary School, Uniontown Area School District

Addition & Renovation / $11,858,049 / 75,000 SF
Construction was completed through phases which included the completion a two story academic wing to allow students to vacate the 1926 portion prior to demolition, then a connecting wing was constructed to join the new academic wing to the fully renovated 1983 wing.

Moore Engineering

MEP Engineer

MOORE ENGINEERING COMPANY

3637 Columbia Avenue
Lancaster, PA 17603

Phone: 717-285-3141
Fax: 717-285-2443
www.mooreengineering.com

KENNETH L. KAUFFMAN, P.E., LEED AP

Vice President
Project Manager/Mechanical Engineer

PROJECT RESPONSIBILITIES

Mr. Kauffman is Vice President of Moore Engineering Company. In addition to his executive responsibilities, he will serve as the lead Mechanical Engineer. These responsibilities will include all related aspects of the HVAC, Plumbing, and Fire Protection systems. Specific tasks will include feasibility studies, energy modeling, system options studies, system calculation and design, specification writing, bid coordination, construction administration, submittal review, inspections, and general overall project coordination.

PROFESSIONAL TRAINING AND EXPERIENCE

31 Years	Mechanical Engineer at Moore Engineering Company
12 Years	Vice President of Moore Engineering Company
7 Years	LEED Accredited Professional

EDUCATION

1994 Bachelors of Science in Construction Engineering, Pennsylvania State University

1985 Mechanical Engineering Technology, Pennsylvania State University

REGISTRATIONS

Registered as a Licensed Professional Engineer in Pennsylvania, Maryland, New York and Virginia.

MEMBERSHIPS

American Society of Heating, Refrigeration, and Air-Conditioning Engineers, Inc. (ASHRAE)

National Society of Professional Engineers

Pennsylvania Society of Professional Engineers

PROFESSIONAL ACTIVITIES AND SERVICES

2012 – Present	Warwick Education Foundation Board Member
2011 – Present	Warwick Township Built and Natural Infrastructure Committee
2010 – Present	Warwick Township Planning Commission
2003 – 2010	Warwick Township Zoning Board
2004 – Present	Lancaster-Lebanon Science & Technology Alliance
1989 – Present	American Society of Heating, Refrigeration and Air Conditioning Engineers

RELATED K-12 FEASIBILITY STUDY EXPERIENCE

Downingtown Area School District
Coatesville Area School District
West Chester Area School District
Eastern Lancaster County School District
Penn Manor School District
Warwick School District

Moore Engineering

MEP Engineer

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www.mooreengineering.com

WILLIAM M. FLEISCHER

Electrical Design/Lighting Design
Project Manager

PROJECT RESPONSIBILITIES

Mr. Fleischer is the lead Electrical Designer for electrical systems including interior and exterior lighting systems, normal and emergency power distribution systems, sports field lighting systems, fire alarm systems, security and access control systems, as well as data and telecommunications systems.

His responsibilities include electrical system design, specification writing, project coordination, feasibility studies, cost analysis, and construction supervision.

Mr. Fleischer regularly performs surveys of the electrical systems in existing facilities to evaluate the age, reliability, code compliance, maintenance requirements and costs of those systems. He has also served as the lead electrical project manager on many LEED projects as well as solar photovoltaic projects.

PROFESSIONAL TRAINING AND EXPERIENCE

15 Years	Electrical Design/Project Management at Moore Engineering Company
2 Years	Electrical Department Manager
1 Year	Relevant engineering experience at another firm

EDUCATION

1999 Bachelors of Science in Electrical Engineering, University of Pittsburgh

MEMBERSHIPS

BICSI - Building Industry Consulting Service International

NFPA – National Fire Protection Association

ICC – International Code Council

RELATED K-12 FEASIBILITY STUDY EXPERIENCE

Coatesville Area School District
West Chester Area School District
Springfield Township School District
Bensalem Township School District
Cornwall Lebanon School District
Littlestown Area School District

MOORE ENGINEERING COMPANY

3637 Columbia Avenue
Lancaster PA 17603
717-285-3141
www.mooreengineering.com

Company Overview

Moore Engineering Company was founded in 1961 as a Professional Engineering firm dedicated to the application of the latest design methods consistent with sound engineering practice. Our firm maintains a full staff of Mechanical Engineers, Electrical Engineers, LEED Accredited Professionals, Designers, Draftsmen, Commissioning Agents, and other Technicians for a total of 21 employees at our office in Lancaster, Pennsylvania.

Our practice specializes in both Mechanical and Electrical Engineering on Educational, Institutional, Commercial, and Industrial projects. We are registered professionally in Pennsylvania, Virginia, West Virginia, Maryland, Delaware, New Jersey, North Carolina, Connecticut, Colorado, Michigan, and Georgia. We have also extended our services to many other states and foreign countries where professional registration was not required.

Our projects include K-12 Schools buildings, Colleges/University buildings, Corporate Headquarters, Continuing Care Retirement Communities, Medical Facilities, Places of Worship, Theatres, Banks, Municipal Offices, Fire Stations, Retail Centers, Industrial Buildings, Hotels, Condominiums, and High Rises. Moore Engineering has provided Professional Engineering services for over 50 different School Districts on over 800 school projects. We have also served as the MEP Engineer for many Colleges and Universities on both new and renovation projects. Our commitment to Green Building Design is made evident by our long list of related projects including over 30 LEED Projects, the majority of which are in the K-12 market.

Project Representatives

Mechanical – Mr. Kenneth L. Kauffman, PE, LEED AP
Electrical – Mr. William M. Fleischer

MOORE
ENGINEERING
COMPANY

3637 Columbia Avenue
Lancaster, PA 17603

Phone: 717-285-3141
Fax: 717-285-2443
www.mooreengineering.com

PARTIAL LIST OF SCHOOL DISTRICTS SERVED BY MOORE ENGINEERING COMPANY

Avon Grove SD
Baltimore County SD
Bensalem Township SD
Big Spring SD
Blue Mountain SD
Boyertown Area SD
Bristol Borough SD
Canton Area SD
Carlisle Area SD
Central Dauphin SD
Coatesville Area SD
Cocalico SD
Colonial SD
Columbia Borough SD
Conestoga Valley SD
Conewago Valley SD
Cornwall-Lebanon SD
Council Rock SD
Cumberland Valley SD
Danville Area SD
Dauphin County
Donegal SD
Downingtown Area SD
East Pennsboro Area SD
Eastern Lancaster County SD
Ephrata Area SD
Fleetwood SD
Forest Hills SD
Glendale SD
Governor Mifflin SD
Great Valley SD
Greencastle-Antrim SD
Halifax Area SD
Hatboro-Horsham SD
Hempfield SD
Jim Thorpe Area SD
Kennett Consolidated SD
Kutztown Area SD
Lampeter-Strasburg SD
Lebanon SD
Lehighton Area SD
Line Mountain SD
Littlestown SD
Lower Dauphin SD
Lower Merion SD
Mahanoy Area SD
Manheim Central SD
Manheim Township SD
Middletown Area SD
Millersburg Area SD
Montrose Area SD
Norristown Area SD
Northern Lebanon SD
Octorara Area SD
Oxford Area SD
Palmyra Area SD
Parkland SD
Penn Manor SD
Pennsbury SD
Pequea Valley SD
Phoenixville Area SD
Pocono Mountain SD
Pottsgrove Area SD
Pottstown SD
Radnor Township SD
Reading SD
Red Lion Area SD
Shanksville-Stonycreek SD
Shikellamy SD
Shippensburg Area SD
Solanco SD
Souderton Area SD
South Eastern SD
South Western SD
Springfield SD
Springfield Township SD
Spring-Ford Area SD
Stroudsburg Area SD
The School District of Lancaster
Tredyffrin Easttown SD
Tri Valley SD
Tunkhannock Area SD
Unionville Chadds Ford SD
Upper Dauphin Area SD
Valley View SD
Wallingford Swarthmore SD
Warwick SD
Waynesboro Area SD
West Chester Area SD
West York Area SD
Williams Valley SD
Wilson SD
Wissahickon SD
York City SD
York Suburban SD

BIOGRAPHY

JOSHUA M. CARNEY, P.E. - *President*

Education

Pennsylvania State University

Bachelor of Science, Civil and Environmental Engineering, State College, PA

Professional Licenses

Professional Engineer in CT, DC, DE, FL, GA, IN, MA, MD, MO, NC, NJ, NY, OH, PA, TN, VA, WV

Professional Associations

- American Institute of Steel Construction (AISC)
- Pennsylvania Society of Professional Engineers (PSPE), Lincoln Chapter President, 2004—2005
- York County Board of Construction Appeals, Vice Chair

Community Involvement

- Ace Mentor Program of Central PA, Founder & Past Chair
- Child Care Consultants Board of Directors
- Leadership York Board of Directors
- York Suburban Education Foundation Board of Directors

Awards

- PSPE Young Engineer of the Year
- *Central Penn Business Journal's* Emerging Business of the Year Finalist
- *Central Penn Business Journal's* Forty under 40

Joshua M. Carney, P.E. is President and Owner of Carney Engineering Group (CEG), a multi-discipline, forward-looking engineering firm located in York, PA. Josh founded CEG in January 2009, and supervises the firm's conceptual structural design and forensic engineering work. In addition, he oversees firm management, business development, marketing and top-level project management. Josh holds 20 years experience in structural engineering, specifically with historic renovation and preservation, forensic engineering and analysis, long-span steel structures, design/build and Integrated Project Delivery (IPD).

Josh's experience on specific projects includes: steel construction, including conventional joist framing, composite design, tension-compression ring structures, rigid frames, concentric and eccentrically braced frames and staggered trusses. He has designed various foundations including footings, caissons, concrete and steel driven piles, auger cast concrete piles and micro and mini piles, and has been involved in multiple underpinning projects.

Josh has been an expert structural witness to the U.S. Department of Justice and is called on for professional forensic consulting services by a wide variety of clients. He is experienced in seismic analysis, ATFP design and analysis and teaches regularly at Penn State University on structural load path issues in steel construction.

PROJECT EXPERIENCE

Since its inception in 2009, CEG has completed over 200 projects of various sizes under Josh's review and direction. Over the course of his career, Josh has served as the Principal-in-Charge on many notable projects including:

DONEGAL INTERMEDIATE SCHOOL, MARIETTA, PA

Project included a complete renovation of the existing school, including façade upgrades and replacements, canopy modifications and structural repairs.

LANDIS RUN INTERMEDIATE SCHOOL, MANHEIM, PA

Project management of structural design, structural modeling and coordination of a new three-story, 200,000-square-foot school housing fifth and sixth grades. Designed with a hybrid structural system of steel and load-bearing masonry. Project is seeking LEED certification.

DOVER ELEMENTARY SCHOOL, DOVER, PA

Design of additions and renovations to existing elementary school. Scope included structural engineering, full BIM modeling and production of steel fabrication drawings.

MIDDLETOWN HIGH SCHOOL, MIDDLETOWN, PA

Design of a 200,000-square-foot new replacement high school.

CARNEY ENGINEERING GROUP

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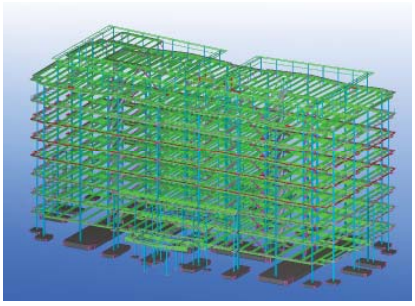
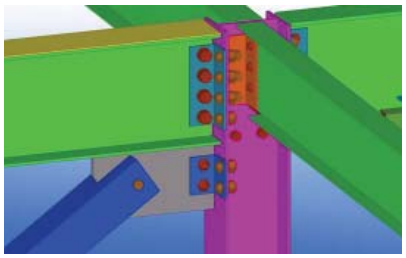
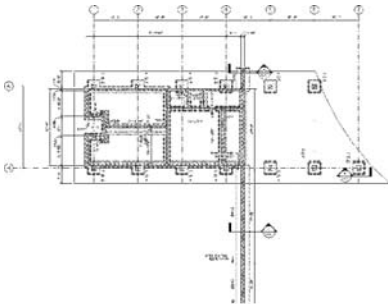
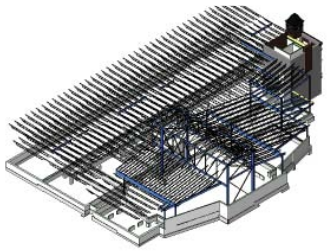
CARNEYENGINEERINGGROUP.COM

ABOUT CARNEY ENGINEERING GROUP









Carney Engineering Group (CEG) is a multi-discipline, forward thinking structural engineering firm in York, PA. Our strategic approach offers comprehensive design utilizing Building Information Modeling (BIM), streamlining the connection between design and field construction. Our capabilities include both typical Structural Engineering services as well as High Definition Laser Scanning and the production of fabrication drawings for structural materials. These additional areas of expertise can be combined with our engineering services when desired to accelerate project schedules and reduce errors in the field. Industry expertise, combined with modern technology, provides our clients with a distinct advantage in the competitive marketplace.

We are more than just BIM specialists and structural gurus. We're also Project Managers working on behalf of the Owner to achieve the specified requirements for scope, schedule, cost control and contract administration. We know how to design, bid, oversee, and manage all aspects of construction projects, including making the process seamless while addressing the constraints you are faced with.

Every project we approach is both unique and routine all at the same time. Our process allows us to streamline the routine, and invest our knowledge in solving the specific issues your project may present. We have the flexibility to think outside the box to develop cost-effective approaches to complex projects. The best solutions are created by identifying the possible paths and through close collaboration with our clients, finding the best results. At CEG, we take a proactive approach to Project Management, and maintain close communications with the Owner and our clients to ensure you stay aware of both the progress and any risks identified by our team.

Our staff includes Professional Engineers and modeling specialist serving a range of clients including architects, builders, corporations, institutions and public agencies. Our firm's geographic footprint spans much of the East Coast and Mid-West. Our firm is licensed throughout the eastern United States in CT, DC, DE, FL, GA, IA, IN, MA, MD, MO, NC, NJ, NY, OH, PA, TN, VA, WV.

Service Expertise Includes:

- STRUCTURAL ENGINEERING
- FORENSIC ENGINEERING
- HIGH DEFINITION LASER SCANNING
- STEEL CONNECTION ENGINEERING
- CONSTRUCTION ENGINEERING (SHORING, TEMPORARY STRUCTURES, ETC.)
- BUILDING INFORMATION MODELING UTILIZING REVIT STRUCTURE AND TEKLA STRUCTURES
- VALUE ENGINEERING
- CONSTRUCTABILITY REVIEWS
- SPECIAL INSPECTIONS

For more information about Carney Engineering Group, visit www.CarneyEngineeringGroup.com, follow on Facebook at facebook.com/carneyengineering or on Twitter @CEGEngineering.

EDUCATIONAL PROJECTS

Quakertown High School

The four-year high school renovation project will be completed in phases allowing continuous operation and occupancy of the facility during construction. The work includes 25,000 square feet of new additions and approximately 274,000 square feet of alterations. Rather than building from scratch, district officials decided to modernize the 57-year-old school combining conventional classrooms with hi-tech digital learning. Construction began in Summer of 2013.

Donegal Intermediate School, Marietta, PA

Project included a complete renovation of the existing school, including façade upgrades and replacements, canopy modifications and structural repairs.

Landis Run Intermediate School, Manheim, PA

Project management of structural design, structural modeling and coordination of a new three-story, 200,000-square-foot school housing fifth and sixth grades. Designed with a hybrid structural system of steel and load-bearing masonry. Project is seeking LEED certification.

Middleburg Elementary School, Middleburg, PA

Structural design project management of a single-story, 43,000-square-foot addition to a 57,000-square-foot existing facility. Features exposed steel framing throughout the building. Project is seeking LEED certification.

Dover Elementary School, Dover, PA

Project management of second floor addition, remodeling, steel detailing and BIM services.

Dallastown School District, Dallastown, PA

Structural design project management of a 300,000-square-foot school housing fourth, fifth and sixth grades.

Red Lion School District, Red Lion, PA

Structural design project management to additions and renovations to the high school and new elementary school.

Logos Academy, York, PA

Structural modeling and coordination consulting on an $8 million addition and historic renovation. The existing building was HD laser scanned and incorporated into the building models to ensure accurate fit with the new addition.

York Academy Regional Charter School, York, PA

Project management and structural design of an addition and renovation of an existing historic industrial facility to repurpose for use as a school. The project included design through construction in less than 12 -months.

York College of Pennsylvania, Freshman Dormitory, York, PA

Project management of structural design of new five-story, 80,000-square-foot dormitory housing over 250 students. The facility was designed and constructed in a 12-month period.

California University of PA, Convocation Center, California, PA

Consulting on the sequencing and erection of the structural steel frame and long span joist framing for a 6,000-seat arena. Additional work included general construction engineering, forensic work and structural rehabilitation.

Registration:

Landscape Architect,
PA and NY

Education:

Pennsylvania State University, PA
B.S. Landscape Architecture – 1989

Professional/Technical Affiliations:

- Pennsylvania Planning Association

Training:

- Annual PA Greenways and Trail Summit
- PA DEP Chapter 105 (Waterway Management) Workshop
- Professional Registration Continuing Education

Previous Experience:

Project Manager
Herbert, Rowland & Grubic, Inc.
Lancaster, PA
9/89 – 1/97

Years of Experience:

Years with this firm: 19 yrs
Years with other firms: 7 yrs

Offices in Pennsylvania
Lititz 717.626.7271
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Butler 717.201.5334
www.elagroup.com

MATTHEW R. HARLOW, RLA

Principal-in-Charge: Central PA Office

Responsibilities:

Mr. Harlow joined ELA Group, Inc., in January 1997 as a Project Manager. In August of 2000, Mr. Harlow opened the Central Pennsylvania Regional Office of ELA Group, Inc. and currently is the Principal-In-Charge. His responsibilities include project management/client coordination, oversight and preparation of all aspects of Site Design, Land Development and Subdivision Plans, Master Planning, Due Diligence, Construction and Bidding Documents, construction administration and observation, public presentations/outreach and client representation.

Key Project Experience:

Institutional

- State College Area High School, Additions and Renovations, Borough of State College, Centre County, PA – Site design, land development planning and construction drawings for the High School additions and renovations, which includes an approximate 600,000 SF in buildings, significant parking, circulation and pedestrian improvements, traffic impact studies, utility infrastructure upgrades and storm water management improvements.
- State College Area School District, Miscellaneous Projects, Centre County, PA – Projects include: Design and construction documents for Summer Site Work for High School, design and construction documents for temporary parking facilities at the High School; and design and permitting of a Rectangular Rapid Flash Beacon pedestrian signal through PENNDOT for a pedestrian crossing of a State College Borough street.
- State College Area School District, Pre-Referendum Planning, Centre County, PA – Development of a district wide analysis of 23 vacant properties suitable for a high school with an evaluation matrix and sketch planning of the three final properties for the school board and community input and selection as part of the pre-referendum information.
- Bellefonte Area School District, Miscellaneous Projects, Centre County, PA – Provided design and engineering services for various projects for the school district.
- Minersville Area School District, Conditions Assessment for District Wide Feasibility Study, Schuylkill County, PA – Performed an on-site assessment of the District's three building facilities as part of a District Wide Feasibility Study.
- Transportation Enhancement for Wiley Lane and Fox Hollow Road Interconnection, University Park/College Township, Centre County, PA – Design layout and construction documents, and highway occupancy permitting for the construction of a 1,600 LF roadway for Penn State football parking.
- East Area Locker Room/Holuba Hall Landscape and Transportation Enhancement, University Park, Centre County, PA – Design development of pedestrian and vehicular circulation and safety improvements, outdoor plaza spaces and landscaping enhancements.
- Philipsburg-Osceola High School, Sports Field, Philipsburg Borough, Centre County, PA – Design, engineering and construction documents for a new all weather surface running track, practice football field, baseball and softball fields and additional parking facilities.
- Marion-Walker Elementary School, Additions and Renovations, Walker Township, Centre County, PA – Land Development Plans and construction documents for the additions and renovations to the exiting Elementary School, which included parking and circulation improvements with separate bus loop and parent drop-off and utility infrastructure improvements including an on-site waste water disposal facility.
- Middletown Area School District, Feaser/Fink Campus, Middletown Borough, Dauphin County, PA – Design and construction documents for site renovations and building additions on the Urban Campus.

Registration:

Professional Engineer, PA

Education:

Pennsylvania State University
- B.S. Civil Engineering - 1995
- Minor Environmental Engineering - 1995

Training:

- PADEP PAG-02 Update Training seminar, 2013
- EnviroSoxx Treatment Train for Targeted Invisible Pollutants webinar, 2013
- LID/Post-Construction Water Quality Treatment webinar, 2013
- Erosion & Sediment Control RECP Training session, 2013
- PADEP ESCGP-2 Permit Training seminar, 2013
- Segmental Retaining Walls for Landscape Design Training session, 2013
- ASCE Sinkholes in Pennsylvania seminar, 2013
- Sustainable Sites & Permeable Paving Systems webinar, 2013
- Low Impact Development and the Basics of Bioretention webinar, 2012

Previous Experience:

Project Manager
Lake Roeder Hillard & Associates
Lancaster, PA
2/2005 – 5/2012

Project Manager
Robert Gabriel & Associates
Mount Joy, PA
3/2004 – 2/2005

Project Engineer
Lake Roeder Hillard & Associates
Lancaster, PA
5/2001 – 3/2004

Assistant Engineer & Engineer
Rettew Associates, Inc.
Lancaster, PA
9/1995 – 5/2001

Years of Experience:

Years with this firm: 4 yrs
Years with other firms: 16.5 yrs

GEORGE J. LOWER, P.E.

Senior Project Engineer

Responsibilities:

Mr. Lower joined ELA Group, Inc. in May 2012 as a Senior Project Engineer. His experience includes the design and project management related to the development and planning of commercial, industrial, residential, and educational sites. His responsibilities includes site layout and grading; storm water management collection, conveyance, and management design; best management practice design; erosion and sediment pollution control design and plan preparation; PCSM plan preparation and associated NPDES permitting; roadway design; utility design; construction cost opinions; construction drawings preparation; and the processing of Subdivision and Land Development plans.

Key Project Experience:

Athletics and Sports Field

- Greater Nanticoke Area School District -Athletic Facilities Improvements, Nanticoke City, Luzerne County, PA – Erosion and Sediment Pollution Control design and NPDES permitting for improvements to existing athletic fields.
- Bent Creek Country Club - Pond Removal, Manheim Township, Lancaster County, PA – Stormwater Management design, Erosion and Sediment Pollution Control design, and NPDES permitting for the removal of an existing pond on a golf course.
- Warwick to Ephrata Rail Trail, Ephrata Township/Akron Borough/Ephrata Borough, Lancaster County, PA – Stormwater Management design and Erosion and Sediment Pollution Control design for a rails-to-trails project.
- Philipsburg Osceola Area High School, Philipsburg Borough, Centre County, PA – Erosion and Sediment Pollution Control design for improvements to existing athletic fields.

Educational/Institutional

- State College Area High School, Additions and Renovations, Borough of State College, Centre County, PA – Engineering and design of the storm water management infrastructure, sanitary sewer and water infrastructure design assistance, Erosion and Sediment Pollution Control plans and NPDES permitting on the campus for both the Summer Site Work and Main Project phases.
- Lewisburg Area School District - Newman Road High School, Kelly Township, Union County, PA – Stormwater Management design, Erosion and Sediment Pollution Control design, NPDES permitting, and a DEP General Permit (GP-7) for a new high school and athletic fields.
- Landisville Education Center, East Hempfield Township, Lancaster County, PA – Stormwater Management design for a new school building.
- Oxford Area High School, East Nottingham Township, Chester County, PA – Stormwater Management design for a new high school.
- Garnet Valley High School, Concord Township, Delaware County, PA – Stormwater Management design for building additions and new parking lots.

Collegiate

- Immaculata University, East Whiteland Township, Chester County, PA – Stormwater Management design for building additions and new parking lots.

Commercial/Industrial

- Toftrees Clubhouse, Patton Township, Centre County, PA – Stormwater Management design, Erosion and Sediment Pollution Control design, and NPDES permitting for a new community center.
- Clearfield Bank & Trust, North Woodbury Township, Blair County, PA – Stormwater Management design and plan processing for a new bank.

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State College 814.861.6328
Butler 717.201.5334
www.elagroup.com

Education:

Pennsylvania State University, PA
B.S. Landscape Architecture – 1988

Professional/Technical Affiliations:

- American Planning Association, 2002
- Pennsylvania Planning Association, 2002
- Centre County Chamber of Business and Industry – Heritage I, 2004
- Centre County Association of Realtors – Affiliate Member, 2008

Previous Experience:

Zoning Administrator
College Township, Centre County, PA
10/96 – 10/00

Zoning/Assistant Codes Admin.
City of Harrisburg, PA
4/92 – 10/96

Planner/Drafter
Harlin J. Wall, Architect and Associates
State College, PA
6/87 – 11/91

Years of Experience:

Years with this firm: 15 yrs
Years with other firms: 12 yrs

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TODD H. SMITH

Project Manager

Responsibilities:

Mr. Smith joined ELA Group, Inc. in October 2000 in the position of Project Manager. His responsibilities include project management/coordination, athletic venue programming, feasibility studies and site master planning, preparation of all aspects of Land Development and Subdivision Plans, Erosion and Sediment Control Plans, Landscaping Plans, Construction and Bidding Documents, Construction Administration and Observation and Client/Owner representation at project meetings and at municipal authority boards and commissions.

Key Project Experience:

Institutional

- Lewisburg Area School District New High School, Kelly Township, Union County, PA – Master Planning and construction documents for a new high school on 200 acre site. Planning included master planning the entire site for the school district and then documents for the construction of the new high school. Planning included vehicular access and parking, bike and pedestrian facilities, playing fields, all utilities, and pedestrian school signal permitting.
- BEASD High School, Middle School and Elementary School, Boggs Township, Centre County, PA – Additions and renovations to the Middle/High School and Wingate Elementary School Campus. The campus is approximately 200 acres. Site improvements included new parking/circulation and stormwater and utility connections.
- Bellefonte Area High School Athletics Feasibility Study, Bellefonte Borough, Centre County, PA – Evaluated needs and facilities of the Bellefonte Area High School programs to determine future land area requirements and venues to accommodate the needs of the District. The report focused pm the needs of physical education curriculum and extra curriculum sports and athletics for High School students. Recommendations and conclusion provided the District with facility requirements and land area needs to fulfill the needs of the District.
- Bellefonte Area High School, Bellefonte Borough, Centre County, PA – Additions and renovations to the existing High School Facility which includes: Building additions, new bus and parent staging/drop-off areas, new internal vehicular circulation, new parking areas, and stormwater management facilities.
- Bellefonte Area High School Master Plan, Bellefonte Borough, Centre County, PA – Based on the Athletics Feasibility Study, the School Board authorized a Master Plan to be prepared on the existing High School site and a nearby property. The Master Plan included relocating the existing baseball field and creating separate varsity and junior varsity fields with supporting facilities. In addition to the baseball venues, the Master Plan also included areas for soccer fields, softball fields, a cross country course (that included varying lengths for training) and the potential for an indoor instructional office/ facility. All of these facilities will serve the functions and programs of the School District as well as the public-programmed use. A key issue in developing the Master Plan is that the existing High School property is proposed to be improved with a new stadium facility to serve the football, soccer, and track programs of the High School with an adjacent open turf field for track and field events, practice football and band practice.
- Phillipsburg Area School District, Phillipsburg Borough, Centre County, PA – Prepared design documents for the conversion of a natural grass field into a synthetic turf field within an existing eight lane 400 meter track. The scope of work included development of field drainage system design, stormwater management facilities expansion, and synthetic turf and related amenities installation.
- Greenberg Indoor Sports Complex Ice Hockey Arena, The Pennsylvania State University, University Park Campus, State College Borough, PA – Prepared planning design, land development plans and construction documents for additions and renovations to the exiting *Penn State Icers Arena*. The project included complete replacement of the interior ice rink, locker rooms, utility service areas, and zamboni access.

Corporate Officers:

President

Grant W. Hummer, PE

- Registered Professional Engineer
  PA, DE, MD, NC, NJ, NY, VA, WV
- Pennsylvania State University
  B.S. Civil Engineering
  M.S. Engineering Science

Secretary

Cheryl L. Love, RLA

- Registered Landscape Architect
  PA
- Pennsylvania State University
  B.S. Landscape Architecture

Treasurer

Charles R. Haley, Jr., PE

- Registered Professional Engineer
  PA, DE, MD, NJ
- University of Texas
  B.S. Civil Engineering

Mission:

ELA Group, Inc. is focused to meet and exceed the varied needs of our public and private sector clients by providing prompt, highly creative, technically competent, and fiscally sound design solutions.

Corporate Office
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Western Pennsylvania Office
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Butler, PA 16001
717.201-5334
elasport@gmail.com

CORPORATE OVERVIEW

ELA Group, Inc.

Established in 1996 as a Pennsylvania corporation, ELA Group, Inc. is registered in four states (PA, DE, MD and NJ) and provides consulting services in the fields of Engineering and Landscape Architecture. Our growth, from three employees in one office to over 35 employees in two principal offices, has been made possible by adhering to a simple vision…

...to be recognized as an organization of integrity and respect,

...one that contributes to the success and well-being of our clients and employees.

To meet the expanding challenges of our clients' projects, our staff has continued to grow and evolve in its capabilities. Today, ELA is home to the talents of Civil Engineers, Landscape Architects, LEED Green Associate, Transportation Engineers, Water Resources Engineers, Geographic Information System Specialists, Retaining Walls Project Designer, CAD Designers and Administrative Support Staff. We focus these talents to providing services that relate to virtually every type of project imaginable.

While our staff has grown in number and capability, we remain committed to providing personalized service to each and every client and each and every project. Still-and-all, we have realized the need to expand our scope of services by establishing three affiliated business ventures:

ELA Sport:
A division specializing in Athletic Facilities Design and Consulting;

ELA Technologies:
A division specializing in Document and Business Process Management;

Land Grant Surveyors, LLC:
A subsidiary providing a full-range of Surveying Services.

Affiliated Business Contacts

ELA Sport: Ernest J. Graham, RLA/ASLA, CDT
Principal-in-Charge: ELA Sport; ejgraham@elasport.com

ELA Technologies: Patrick R. Moulds
Director: GIS & Chief Information Officer; prmoulds@elagroup.com

Land Grant Surveyors, LLC: Steven C. Black, PLS
Principal: Surveying; scblack@lgs-llc.com

Professional Registrations & Certifications

ELA Group's Professional Staff includes Registered/Certified Professional Engineers, Engineers-in-Training and Registered Landscape Architects. Please note that each registered professional holds a license to practice in Pennsylvania; several are registered in additional states (DE, FL, MD, NC, NJ, NY, VA, and WV).

ELA group, inc.
ENGINEERS + LANDSCAPE ARCHITECTS

Offices in Pennsylvania
Lititz 717.626.7271
State College 814.861.6328
Butler 717.201.5334
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Since our inception, ELA Group, Inc. has made a strong commitment to providing Land Planning/ Landscape Architecture Services to educational facility providers, including public school districts, private schools and academies, and colleges and universities. Our service to these institutions has positioned us as one of this region's leaders in educational facility site planning and design. Through our involvement in over one hundred public educational facilities alone, we have been instrumental in changing the landscape and enhancing the learning environment for students of all ages. Whether by providing our services directly to the educational institution itself or in conjunction with its architect, ELA Group is proud to currently serve or to have served the following institutions.

EDUCATIONAL FACILITIES CLIENTS

Pennsylvania Public School Districts

(Partial Client List)

Annville-Cleona School District
Bald Eagle Area School District
Bellefonte Area School District
Berwick Area School District
Blue Mountain School District
Chichester School District
Coatesville Area School District
Columbia Borough School District
Conestoga Valley School District
Daniel Boone Area School District
Danville Area School District
Downingtown Area School District
East Stroudsburg Area School District
Eastern York School District
Ephrata Area School District
Exeter Township School District
Garnet Valley School District
Glendale School District
Governor Mifflin School District
Hatboro-Horsham School District
Hempfield School District
Lampeter-Strasburg School District
Lewisburg Area School District
Manheim Township School District
Marple Newtown School District
Middletown Area School District
Northampton Area School District
Northern Lebanon School District
Octorara Area School District
Palmyra Area School District
Penn Manor School District
Penn-Delco School District
Pennsbury School District
Philipsburg-Osceola Area School District
Phoenixville Area School District
Pottsgrove School District
Red Lion School District
School District of Lancaster
Shanksville-Stoneycreek School District
South Middleton School District
State College Area School District
Unionville-Chadds Ford School District
Upper Merion Area School District
Upper Moreland School District
Warwick School District
West Chester Area School District

Pennsylvania Private Schools and Academies

(Partial Client List)

Bethlehem Catholic High School
Charter School of Wilmington
Linville Hill Mennonite School
Montessori Academy
The Agnes Irwin School
The Haverford School

Pennsylvania Colleges and Universities

(Partial Client List)

Franklin & Marshall College
Gettysburg College
Gettysburg Lutheran Theological Seminary
Harrisburg Area Community College
Kutztown University
Lancaster General College of Nursing & Health Sciences
Millersville University
Shippensburg University
The Pennsylvania State University

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DECISIONINSITE PROFESSIONAL TEAM

DecisionInsite is a dynamic team with many years of experience in the educational sector, specializing in professionally developed student enrollment forecasts, school boundary configuration, geo-demographic analysis, information technology, and facilities planning. We believe team efforts produce the best results.

Founders and Senior Management

Michael Regele. Mr. Regele brings over 20 years of expertise applying geo-demographic analysis and studies to planning and decision making. His specialty lies in the creation of GIS-based demographic models and the interpretation and presentation of demographic research and student enrollment forecasts. Mr. Regele used this knowledge and experience to design the functional capabilities of the DI System. He firmly believes that complex data must be presented in a manner that promotes good understanding and supports wise decisions.

The vision for **DecisionInsite** emerged during his experience as a school board member for 11 years in the highly respected Irvine Unified School District in Irvine, CA. Mr. Regele has 25 years of experience as a planning consultant assisting non-profit organizations in clarifying their primary mission and strategic focus. Mr. Regele's is President and CEO. He is the primary spokesperson for the firm. With extensive experience working both on and with public school boards and with top level administrative staff, he understands the challenges boards and administrators face. Mr. Regele is skilled in presenting to boards in public settings.

Dean Waldfogel, PhD. With over four decades of leadership experience in public education, Dr. Waldfogel brings a unique perspective to **DecisionInsite**. Formerly the Superintendent of the Irvine Unified School District, he invested over 32 years in the district as an administrator. Dr. Waldfogel was the chief designer and developer of the Irvine enrollment projection model that very successfully supplied the district with information necessary to plan for school facilities and staffing in concert with the Irvine Company's development of the Irvine community. His model guided Irvine Unified from serving a community of 50,000 to now well over 200,000 over two decades.

Dr. Waldfogel applied his years of expertise to the design and

development of the enrollment projection engine within the DI System. Dr. Waldfogel's primary role in **DecisionInsite** is the management of the production and consulting departments. He oversees all facets of production including quality control. Each set of projections generated are carefully reviewed by Dr. Waldfogel. He is also the managing senior consultant on boundary configuration engagements.

Pennsylvania Consultant

Laird Warner: Ed.D. Dr. Warner has over 37 years of experience in the field of education, with 34 years in administrative positions. Subsequent to being a high school principal and assistant principal, he served 26 years as Superintendent of Schools in three eastern Pennsylvania school districts (Bangor Area SD, Methacton SD and Rose Tree Media SD). Dr. Warner has taught at the high school and college levels. He has extensive experience working with boards in strategic planning, team building, human resources/negotiations, budgeting and executive coaching.

After retiring from Rose Tree Media School District where he served as superintendent for ten years, Dr. Warner joined **DecisionInsite** as a regional consultant. Laird works in concert with **DecisionInsite's** projection analysts, research and client relation teams.

Eastern USA

Jonathan Simms. Mr. Simms' 30 years of experience in the arena of sales, sales management and consulting serve him well in his role as Lead Business Developer, Client Liaison Specialist and Presenter for the Eastern U.S.A.

Before joining **DecisionInsite**, Mr. Simms represented several Educational Publishers as a consultant/sales manager in the Northeast U.S.A. These companies included Perfection Learning, Continental Press and Borders Books, among others.

In the east, Mr. Simms works closely with our Architect friends, other strategic partners and Dr. Warner in Pennsylvania to make certain prospective clients understand the full scope of **DecisionInsite** offerings. Mr. Simms strives to ensure **DecisionInsite** meets and exceeds the expectations of Superintendents, Board Members, and all those involved with **DecisionInsite** at the district level.

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decisioninsite.com

Overview

DecisionInsite was founded in 2004 and we are entering our eleventh year of serving school district clients. The senior members of DecisionInsite are the company founders, Michael Regele and Dr. Dean Waldfogel. Mike and Dean continue to lead our company.

DecisionInsite provides school district leaders with a combination of enrollment analytics, location intelligence technology and real-world expertise, the totality of which reveals the total enrollment impact picture. The combination and integration of these services allows school districts to move from analyzing data to understanding, which means that school districts spend more time making decisions about how to best meet the needs of their students.

DecisionInsite – Summary of Services Provided and StudentView System Features

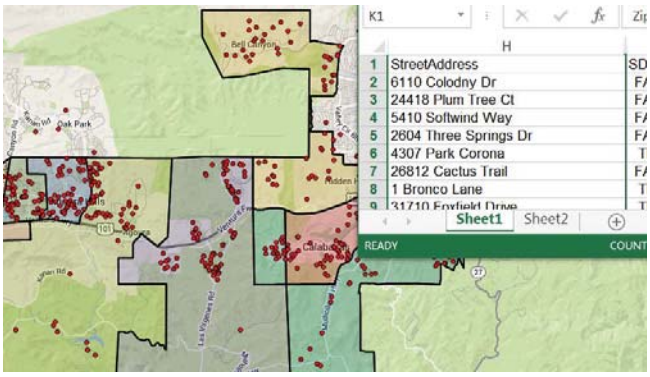
1. Accurate, practical enrollment forecasts
    a. Primary enrollment forecast by school is based on historical patterns of open enrollment within the district and enrollment from outside the district.
    b. The enrollment forecast can be adjusted if necessary based on feedback from the district subsequent to reviewing preliminary results.
    c. School x School

Grade	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
TransK	0	0	23	131	131	131	130	130	128	125	123	121	119	117
K	595	669	636	630	633	687	683	683	671	660	649	638	627	617
1	690	669	703	680	640	642	698	693	693	681	669	657	646	635
2	676	742	696	722	672	661	664	721	705	705	692	680	669	657
3	709	769	773	726	752	690	678	682	731	714	714	702	689	677
4	726	760	788	760	731	757	693	682	684	733	716	716	703	691
5	810	767	771	805	770	741	767	704	687	689	739	722	722	709
6	831	852	827	847	863	818	795	799	759	742	741	795	778	778
7	882	842	900	863	863	880	834	810	806	767	749	749	803	786
8	957	906	887	920	883	883	900	853	820	815	776	758	787	813
9	926	970	902	951	949	909	909	925	892	847	842	805	790	796
10	1021	961	974	896	942	940	903	903	920	879	843	840	801	787
11	994	1000	954	974	884	929	927	891	897	914	873	838	835	796
12	993	968	1012	936	960	871	916	914	884	890	907	866	831	828
Subtotals:	10820	10875	10848	10822	10673	10539	10497	10390	10268	10161	10034	9887	9770	9677
Pct Chg:		0.5%	-0.2%	-0.2%	-1.4%	-1.3%	-0.4%	-1%	-1.2%	-1%	-1.2%	-1.5%	-1.2%	-1%
SDCs:	278	313	290	287	283	278	278	276	272	269	266	261	257	253
Totals:	11098	11188	11138	11109	10956	10818	10775	10666	10541	10430	10300	10148	10027	9932
Capacity:	13020	13020	13020	13020	13020	13020	13020	13020	13020	13020	13020	13020	13020	13020
Open Seats:	1726	1648	1698	1703	1861	2000	2043	2123	2277	2286	2217	2672	2793	2894

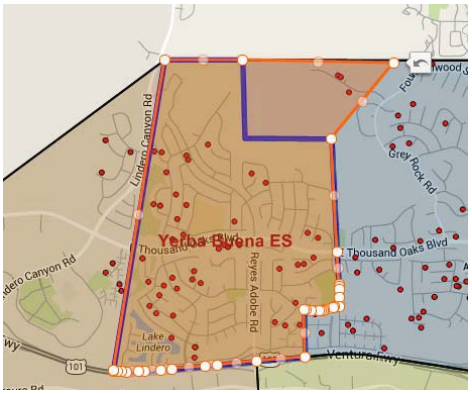
2. Optional enrollment forecast assumptions
    a. Open enrollment AND Geographic area projections by residents in the attendance area are also available in the system.
    b. Students overflowed for a given school year can be flagged and thereby included in their neighborhood school forecast for the following year.
    c. Opening or closing a school can be modeled
    d. Expanding or reducing out of district enrollment

Grade	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
K	0	0	0	0	0	0	68	109	141	164	192	244	318	404
1	0	0	0	0	0	0	71	115	145	166	196	251	328	415
2	0	0	0	0	0	0	72	115	149	169	197	251	330	419
3	0	0	0	0	0	0	73	113	146	171	198	249	325	416
4	0	0	0	0	0	0	69	112	143	167	198	246	318	405
5	0	0	0	0	0	0	63	102	137	161	190	239	306	387
6	0	0	0	0	0	0	57	93	125	154	182	228	294	368
7	0	0	0	0	0	0	0	99	127	150	186	231	300	376
8	0	0	0	0	0	0	0	0	126	147	177	226	290	369
Subtotals:	0	0	0	0	0	0	473	858	1239	1449	1716	2165	2809	3558
Pct Chg:		0%	0%	0%	0%	0%	0%	81.4%	44.4%	16.9%	18.4%	26.2%	29.7%	26.7%
SDCs:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals:	0	0	0	0	0	0	473	858	1239	1449	1716	2165	2809	3558
Capacity:	0	0	0	0	0	0	1000	1000	1000	1000	1000	1000	1000	1000
Open Seats:	0	0	0	0	0	0	527	142	-239	-449	-716	-1165	-1809	-2558

3. Plot, count, and list selected students
    a. by school, grade level, ethnicity, etc.
    b. Include any number of student attributes for plotting purposes, e.g., Free & Reduced Lunch
    c. Create an excel spreadsheet of any set of students you select.
    d. Plot open enrollment

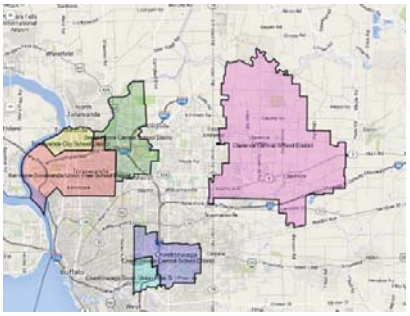


4. Boundary and/or Grade Configuration Changes Made Easy
    a. No other vendor has the set of efficiency tools for working with possible boundary or grade configuration changes.
    b. Edit an existing boundary, or draw a polygon anywhere on the map to represent a proposed boundary.
    c. Quickly see an enrollment forecast for a selected grade level span on any edited or newly created polygon.



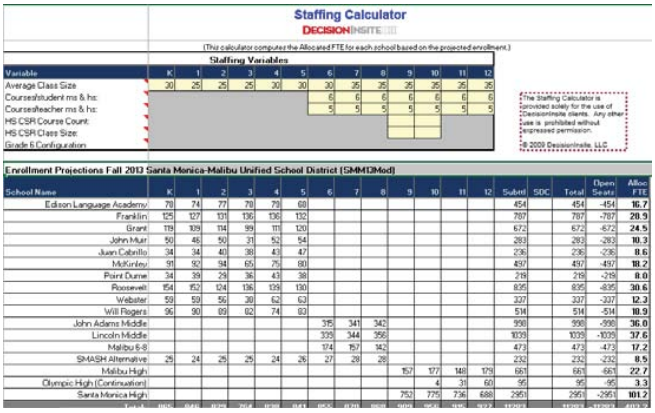
d. Display an entirely revised boundary configuration on top of existing attendance boundaries.
e. Display projected enrollment for each school based on the revised set of attendance boundaries.

5. Easy to Learn, to Use, to Maintain



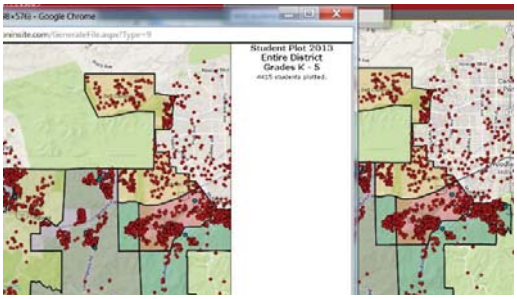
a. Access and training for an unlimited number of users; no additional cost
b. User interface similar to familiar online applications
c. No GIS expertise is required
d. Support videos
e. Based on familiar Google Maps
f. Automated student data upload at specific intervals using SFTP.
g. The system is entirely web-based so no hardware is required, nor are software upgrades required.
h.

6. Time-Saving Calculators



a. The Staffing Calculator quickly shows the teaching staff required under the revised boundary and or grade configuration.
b. Update school capacities based on class size and the number of usable rooms for instruction using the Capacity Calculator. Quickly compare different capacity scenarios
c. Combination Class calculator.

7. Works Well with Others



a. Three clicks or less export to Excel and PowerPoint
b. Create a PowerPoint slide for any portion of on-screen map in three clicks.
c. Download to Excel any displayed table report in one click.

8. More than Just Projections (Comprehensive features and

K-5 Open Enrollment (sans SDC)

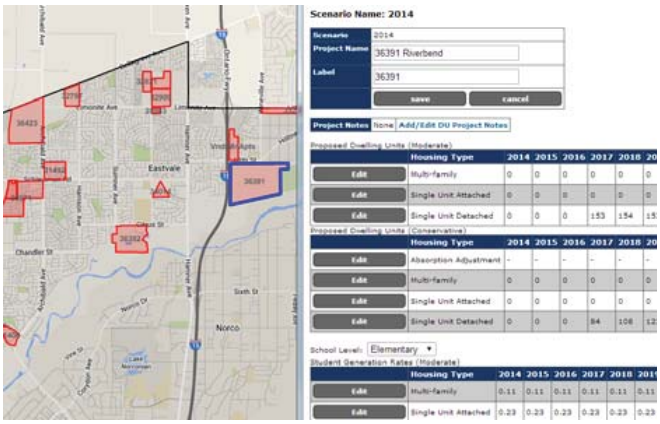
Attending School > / Attendance Area v	ByLrl	Chprl	LpnHl	RdMdw	Sumac	WhtOk	Willw	YrbBn	Totals
ByLrl	449	36	3	27	2			1	518
Chprl	105	419	2	16					542
LpnHl	14	5	524	69	19	6	44	15	696
RdMdw	4	21	5	303	1			2	336
Sumac			11	2	253	9	97	19	391
WhtOk			1		5	326	4	28	364
Willw		2	3		12	1	312	25	355
YrbBn			1	3	16	8	33	289	350
Subtotals:	572	483	550	420	308	350	490	379	
Out of District:	23	93	51	122	41	52	30	44	456
Totals:	595	576	601	542	349	402	520	423	

reports analyzing or addressing various aspects of enrollment.)

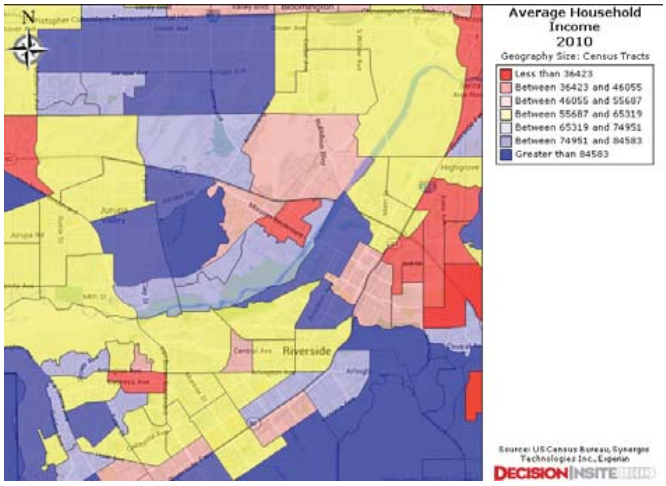
a. Students first enrolled
b. Students no longer enrolled
c. Out of district
d. Open enrollment reports
e. Kindergarten retention
f. In District Transfers

9. Easy access to Census Data and Demographic Data
    a. Trends district or school
    b. Predefined demographic reports of variables relevant to schools.
    c. Dozens of census data variables accessible

10. Residential Development
    a. Display polygons of new housing developments
    b. Click to display data on a given development: unit types, phasing by year, student generation rates.
    c. We do the research or you provide the data.



11. Lots of helpful features
    a. My School Locator is included in the basic price.
    b. Add your own custom layers
    c. Theme maps
    d. Measure distance
    e. Satellite View
    f. Show walking or travel distance polygons around a selected school
    g. Locate an address
    h. Beautiful, readable Final Report

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EXAMPLES OF RELEVANT PROJECT EXPERIENCE

Feasibility Study Experience - Last 5 Years

Susquehanna Township School District
Dr. Tod F. Kline, Superintendent
2579 Interstate Drive
Harrisburg, PA 17110
717-657-5100
District Wide Facility Study – 2016

Waynesboro Area School District
Mr. Thomas Dick, Business Manager
210 Clayton Avenue
Waynesboro, PA 17268
570-368-2491
District Wide Facility Study – 2014

State College Area School District
Dr. Robert J. O'Donnell, Superintendent
1951 Washington Ave
State College, PA 16801
814-231-1016
District Wide Facility Study – 2014

Spring-Ford Area School District
Dr. David Goodin, Superintendent
857 S. Lewis Road
Royersford, PA 19468
610-705-6219
District Wide Facility Study- 2015

Connellsville Area School District
Mr. Mike Omatick, Jr, PE,
Former Director Buildings & Grounds
724-322-2077
District Wide Feasibility Study- 2011

Pottstown School District
Dr. Jeffrey Sparagana, Superintendent
230 Beech Street
Pottstown, PA 9454
610-323-8200
District Wide Feasibility Study- 2011

Big Spring School District
Mr. Richard Fry, Superintendent
45 Mount Rock Road
Newville, PA 17241
724-776-2000
District Wide Facility Study – 2015

Bellefonte Area School District
Mr. Kenneth Bean, Business Manager
318 N. Allegheny Street
Bellefonte, PA 16823
814-355-4814
District Wide Facility Study – 2016

Central Valley School District
Mr. Nicholas Perry, Superintendent
160 Baker Road, Ext
Monaca, PA 15061
724-775-5600
District Wide Facility Study – 2016

Bethlehem-Center School District
Mrs. Linda Marcolini, Superintendent
197 Crawford Road
Fredericktown, PA 15333
724-267-4910
District Wide Facility Study – 2016

Mechanicsburg Area School District
Mr. Mark Leidy, Ed.D., Superintendent
100 E. Elmwood Ave
Mechanicsburg, PA 17055
717-691-4500
District Wide Facility Study – 2016

Eastern York Area School District
Todd Hoover, Director of Facilities
120 South Third Street
Wrightsville, PA 17368
717-252-1551
District Wide Facility Study – 2015

Elizabethtown Area School District
Dr. Michele Balliet , Superintendent
600 East High School
Elizabethtown, PA 17022
717-354-1504
District Wide Facility Study- 2012

West Perry School District
Mr. Shawn Skethway, Facilities Supervisor
2606 Shermans Valley Road
Elliotsburg, PA 17024
717-789-3934
District Wide Facility Study- 2012

Montoursville Area School District
Dr. Timothy Bowers, Superintendent
50 N. Arch Street
Montoursville, PA 17754
570-368-2491
District Wide Facility Study – 2014

Cumberland Valley School District
Dr. Fred Withum, III., Superintendent
6746 Carlisle Pike
Mechancisburg, PA 17050
717-697-8261
District Wide Facility Study – 2013

Penn Manor School District
Dr. Mike Leichliter, Superintendent
PO Box 1001
Millersville, PA 17551
717-872-9500
District Wide Facility Study – 2010
Penn Manor High School Facilities
Assessment- 2014

Midd-West School District
Ms. Lynn Naugle, Business Manager
568 E. Main Street
Middleburg, PA 17842
570-837-0046
District Wide Facility Study- 2013

Elementary School Project Matrix

The firm has provided educational planning and architectural services since 1993. The following chart outlines the firm's experience in the planning and design of Elementary School Facilities in the last 10 years.

	Project	Completion	Cost	Size	Relevance to Project
	Cumberland Valley Elementary School Cumberland Valley School District	2017	$44M	200,000+ SF	Result of Study/Master Plan 21st Century Learning Spaces Educational Programming Plancon Experience Community Involvement
	Iron Forge Elementary School South Middleton School District	2016	$22M	122,791+ SF	Result of Study/Master Plan LEED Certification/Design 21st Century Learning Spaces Educational Programming Occupied Phased Construction Plancon Experience Community Involvement
	Marion Elementary School Chambersburg Area School District	2016	$6.7M	37,062 SF	Result of Study/Master Plan Educational Programming Plancon Experience Community Involvement
	Pequea Elementary School Penn Manor School District	2016	$10.9M	63,856 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Plancon Experience Community Involvement
	Rupert Elementary School Pottstown School District	2015	$5.9M	47,969 SF	Elementary School Experience Result of Study/Master Plan LEED Certification/Design 21st Century Learning Spaces Educational Programming Plancon Experience Community Involvement
	Hambright Elementary School Penn Manor School District	2014	$17.7M	95,740 SF	Elementary School Experience Result of Study/Master Plan 21st Century Learning Spaces Educational Programming Plancon Experience Community Involvement
	Maple Manor Elemetary & Middle School Hazleton Area School District	2014	$21.9M	113,732 SF	Elementary School Experience 21st Century Learning Spaces Educational Programming Plancon Experience Occupied Phased Construction Community Involvement
	Barth Elementary School Pottstown School District	2014	$4.2M	39,269 SF	Elementary School Experience Result of Study/Master Plan LEED Certification/Design 21st Century Learning Spaces Educational Programming Plancon Experience Community Involvement

	Project	Completion	Cost	Size	Relevance to Project
	Baresville Elementary School South Western School District	2014	$8.9M	79,600 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Occupied Phased Construction Community Involvement
	Franklin Elementary School Pottstown School District	2014	$5.3M	39,269 SF	Elementary School Experience Result of Study/Master Plan LEED Certification/Design 21st Century Learning Spaces Educational Programming Plancon Experience Occupied Phased Construction Community Involvement
	Lincoln Elementary School Pottstown School District	2014	$5.6M	40,722 SF	Elementary School Experience Result of Study/Master Plan LEED Certification/Design 21st Century Learning Spaces Educational Programming Plancon Experience Occupied Phased Construction Community Involvement
	East Petersburg & Farmdale Elementary Schools (Prototype) Hempfield School District	2014	$14.9M	101,500 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Plancon Experience Community Involvement
	Jersey Shore Elementary School Jersey Shore Area School District	2014	$11.7M	93,875 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Occupied Phased Construction Plancon Experience Community Involvement
	Franklin Township Elementary School Gettysburg Area School District	2013	$5.4M	60,800 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Plancon Experience Occupied Phased Construction Community Involvement
	Middleburg Elementary School Midd-West School District	2013	$20.5M	109,820 SF	Elementary School Experience Result of Study/Master Plan 21st Century Learning Spaces LEED Certification/Design Educational Programming Plancon Experience Occupied Phased Construction Community Involvement
	George J. Plava Elementary School Albert Gallatin Area School District	2013	$5.4M	50,785 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Plancon Experience Community Involvement

	Project	Completion	Cost	Size	Relevance to Project
	James Gettys Elementary School Gettysburg Area School District	2012	$1.9M	57,900 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Occupied Phased Construction Plancon Experience
	Dover Elementary School Dover Area School District	2012	$14.5M	96,000 SF	Elementary School Experience Result of Study/Master Plan 21st Century Learning Spaces Educational Programming Plancon Experience Occupied Phased Construction Community Involvement
	Lafayette Elementary School Uniontown Area School District	2012	$11.8M	86,000 SF	Elementary School Experience Result of Study/Master Plan 21st Century Learning Spaces Occupied Phased Construction Plancon Experience Educational Programming
	Mercersburg Elementary School Tuscarora School District	2012	$5.8	50,253 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Occupied Phased Construction Plancon Experience
	Wyalusing Elementary School Wyalusing Area School District	2011	$20.7M	126,840 SF	Elementary School Experience Result of Study/Master Plan Sustainable Design Educational Programming Plancon Experience Community Involvement
	Hillside Elementary School West Shore School District	2011	$9.6M	76,000 SF	Elementary School Experience Result of Study/Master Plan Plancon Experience Educational Programming
	Eisenhower Elementary School Camp Hill School District	2011	$11.2M	112,000 SF	Elementary School Experience Result of Study/Master Plan Sustainable Design Plancon Experience Educational Programming
	Central Manor Elementary School Penn Manor School District	2011	$9.5M	94,000 SF	Elementary School Experience Result of Study/Master Plan LEED Certification/Design Educational Programming Occupied Phased Construction Plancon Experience Community Involvement
	Ben Franklin Elementary School Uniontown Area School District	2011	$7.2M	70,000 SF	Elementary School Experience Result of Study/Master Plan Occupied Phased Construction Plancon Experience

	Project	Completion	Cost	Size	Relevance to Project
	Caleb W. Bucher Elementary School Manheim Township School District	2010	$19.4M	126,000 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Plancon Experience Occupied Phased Construction Community Involvement
	Manheim Elementary School South Western School District	2010	$9M	54,113 SF	Elementary School Experience Result of Study/Master Plan Plancon Experience Educational Programming
	Trevorton Elementary School Line Mountain School District	2010	$5.8M	86,000 SF	Elementary School Experience Result of Study/Master Plan Plancon Experience Occupied Phased Construction Educational Programming
	Weigelstown Elementary School Dover Area School District	2010	$9.6M	83,000 SF	Elementary School Experience Result of Study/Master Plan 21st Century Learning Spaces Educational Programming Plancon Experience Community Involvement
	Larry J. Macaluso Elementary School Red Lion Area School District	2009	$17.9	113,000 SF	Elementary School Experience Result of Study/Master Plan 21st Century Learning Spaces Educational Programming Plancon Experience
	Martic Elementary School Penn Manor School District	2009	$5.5M	50,522 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Plancon Experience Occupied Phased Construction Community Involvement
	Benjamin Chambers Elementary School Chambersburg Area School District	2008	$13.1M	92,790 SF	Elementary School Experience Result of Study/Master Plan 21st Century Learning Spaces Educational Programming Plancon Experience
	Elmwood Elementary School Mechanicsburg Area School District	2008	$7.8M	135,000 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Plancon Experience
	Port Allegany Elementary School Port Allegany School District	2008	$6.7	78,000 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Plancon Experience

	Project	Completion	Cost	Size	Relevance to Project
	Marion Walker Elementary School Bellefonte Area School District	2007	$5.4M	53,000 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Plancon Experience
	Iroquois Elementary School Iroquois School District	2007	$13.9M	120,800 SF	Elementary School Experience Result of Study/Master Plan Plancon Experience Educational Programming
	Fayetteville Elementary School Chambersburg Area School District	2007	$13.7M	83,190 SF	Elementary School Experience Result of Study/Master Plan 21st Century Learning Spaces Educational Programming Plancon Experience Community Involvement
	West Manheim Elementary School South Western School District	2006	$10.4	86,600 SF	Elementary School Experience Result of Study/Master Plan Educational Programming Plancon Experience

Rupert Elementary School

Rupert Elementary School represents part of the second phase of a four building modernization of Elementary Education for the Pottstown School District. The 85 year old, University Gothic" building is part of the local historic district. The goal of the project was to restore the original character to the building while creating a 21st century educational core within the building that maximizes the communities investment.

A two story addition was added to the rear of the building to accommodate a new primary entrance, administration, music classroom and library. The addition created a loop system within the building maximizing educational adjacencies, while limiting disturbance to the three front historic facades of the building.

A large component of this renovation is to maintain the original character of the building, including approval from the Pennsylvania Historic Commission as well as create a 21st educational environment for the students. The design addressed the reorganization of the educational spaces to meet current district educational goals focusing on team teaching along with supporting specialty classes including art, music, special education and physical education.

LEED Certification elements include a "chilled beam" four pipe heating and cooling system that is 25.9% more efficient than building systems nationally, daylighted classrooms, 30% water reduction and focus on Indoor Air Quality and Environment for the Students.

Construction Estimate

$6,336,757

Construction Cost

$6,079,963

Construction Completion

August 2014

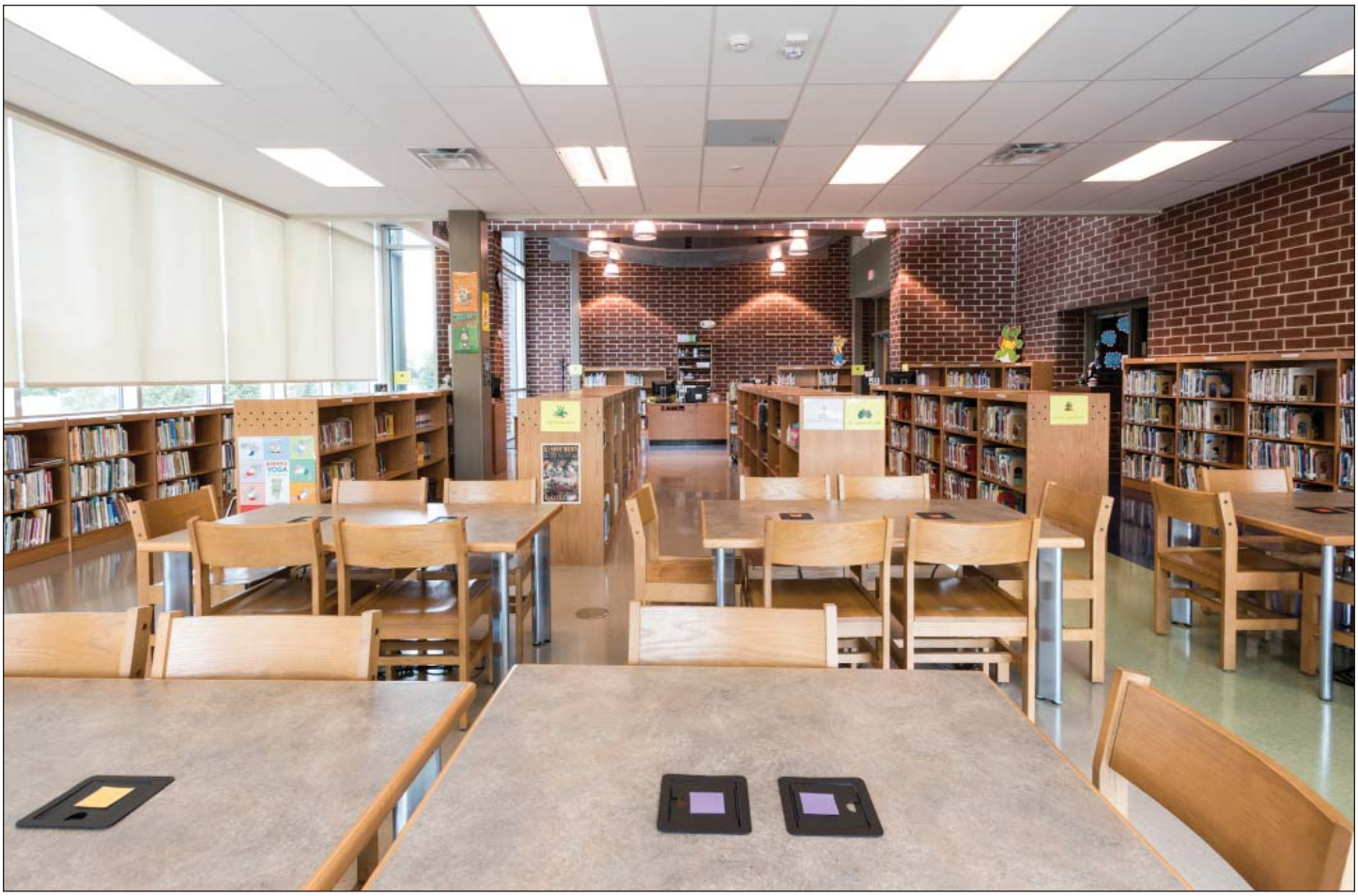
Project Size

14,610 SF Additions
35,345 SF Renovations
400 students

Client

Pottstown School District
Dr. Jeffrey Sparagana
Superintendent
610-323-8200
jsparaga@pottstownsd.org

Relevance to Project: Elementary School Experience, Result of Study/Master Plan, LEED Certification/Design, 21st Century Learning Spaces, Educational Programming, Plancon Experience & Community Involvement



Iron Forge Elementary School

Qualified for a Alternative & Clean Energy Program Grant from PA DCED.

The addition/renovation will modernize the Iron Forge Educational Center which dates back to 1923. Our team worked with the district to re-program the school to move all third grade level students to this facility and create an "Upper Elementary School" as well as alleviate overcrowding at other elementary facilities. Our design solution includes classrooms in grade level pods, which are for 3rd- 5th grades, with learning support, classroom technology and flexible learning spaces, all outfitted with appropriate furniture. This project is being designed to the USGBC's LEED Gold, Version 3 Design Standards.

Since the facility is located on the same campus as the middle school and high school, separation of all campus traffic is a key site issue and includes bus drop-off, parent/ visitor, staff parking, service delivery, high school and middle school traffic, district support and pedestrian/ bike.

The project will be completed in four phases and will not require modular classrooms. Components of this phased renovation include construction of a new classroom wing, the demolition of a central section of the current facility and a complete renovation of additional classroom wings which date back to 1951.

Construction Estimate

$22,200,000

Construction Cost

$22,027,858

Construction Completion

December 2016

Student Capacity

56,728 SF Addition
61,436 SF Renovation
600 Students

Contact

South Middlton School District
Dr. Alan Moyer
Superintendent
717-258-6484

LEED Gold, Version 3 Registered

Relevance to Project: Result of Study/Master Plan LEED Certification/Design, 21st Century Learning Spaces, Educational Programming, Occupied During Phased Construction, Plancon Experience & Community Involvement

Middleburg Elementary School

2014 American Institute of Architects Citation Award for Design Excellence

This project was the result of a comprehensive feasibility studyand included significant additions/renovations which doubled the size of the building and included 21st Century Learning Environment principles. The program space was divided to inclute three main Grade Houses, consisting of a Kindergarten House, 1st-2nd Grade House and a 3rd-5th Grade House. This was done to break down the 750 student population and foster a small elementary school atmosphere.

The three interior grade houses are further broken down into grade pods consisting of a ring of classrooms centered around a communal daylit central Open Classroom. These Open areas can be used for team teaching or small group instruction. In the future these spaces create flexibility to accommodate a rise in enrollment.

Connecting the Grade Houses is a “Main Street” that connects the main entrances to the building without intruding into the Grade Pods. Along Main Street are shared spaces including Administration, Music, Art, Library, Computer Classrooms, Gymnasium and Cafeteria. Special Education classrooms have also been located along Main Street. This was done for ease of access into the building, but also to support all Grade Houses.

This 2-phased project began as the renovation of a high school and elementary school within an existing three school campus. Early discussions stressed the importance of redeveloping the entire campus and not only the two buildings to create a unified campus.

Construction Estimate

$20,108,713

Construction Cost

$20,550,766

Project Size

60,446 SF Additions
49,374 SF Renovations
750 students

Construction Completion

August 2013

Contact

Midd-West School District
Lynn Naugle
Business Manger
570-837-0046
lnaugle@mwsd.cc

Relevance to Project: Elementary School Experience, Result of Study/Master Plan, 21st Century Learning Spaces, LEED Certification/Design, Educational Programming, Plancon Experience & Community Involvement

MIDDLEBURG ELEMENTARY SCHOOL

MIDDLEBURG, PA

PROGRAM:
KINDERGARTEN THROUGH 5TH GRADE ELEMENTARY SCHOOL
(CAPACITY 700 STUDENTS)

ADDITIONS AND RENOVATIONS
EXISTING BUILDING 49,374 SF
NEW CONSTRUCTION 60,446 SF
TOTAL BUILDING 109,820 SF

CLIENT:
MIDD-WEST SCHOOL DISTRICT

FUNDING:
$20.6 MILLION DOLLAR CONSTRUCTION BUDGET

SCHEDULE:
START OF CONSTRUCTION- FEBRUARY 2011
SUBSTANTIAL COMPLETION- OCTOBER 2012

THE PROJECT BEGAN AS THE RENOVATION OF A HIGH SCHOOL AND ELEMENTARY SCHOOL WITHIN AN EXISTING THREE SCHOOL CAMPUS. EARLY DISCUSSIONS STRESSED THE IMPORTANCE OF REDEVELOPING THE ENTIRE CAMPUS AND NOT ONLY THE TWO BUILDINGS TO CREATE A UNIFIED CAMPUS. ALTHOUGH THEY WERE IN CLOSE PROXIMITY TO EACH OTHER, ALL THREE BUILDINGS FACED AWAY FROM EACH OTHER. PEDESTRIAN, DELIVERY, FACULTY, VISITOR AND TOWN TRAFFIC OVERLAPPED EACH OTHER ALONG WITH ATHLETIC AND PLAY AREAS CREATING UNSIGHTLY SAFETY CONCERNS.

THE FINAL DESIGN REORGANIZED THE ENTIRE CAMPUS STRESSING CONNECTIONS BETWEEN THE THREE BUILDINGS AND SEPARATION OF TRAFFIC. A SERIES OF PLAZAS, PLAY AREAS AND STUDENT LAWNS WERE DEVELOPED AT THE CORE OF THE CAMPUS CONNECTED BY WALKWAYS BETWEEN THE BUILDINGS.

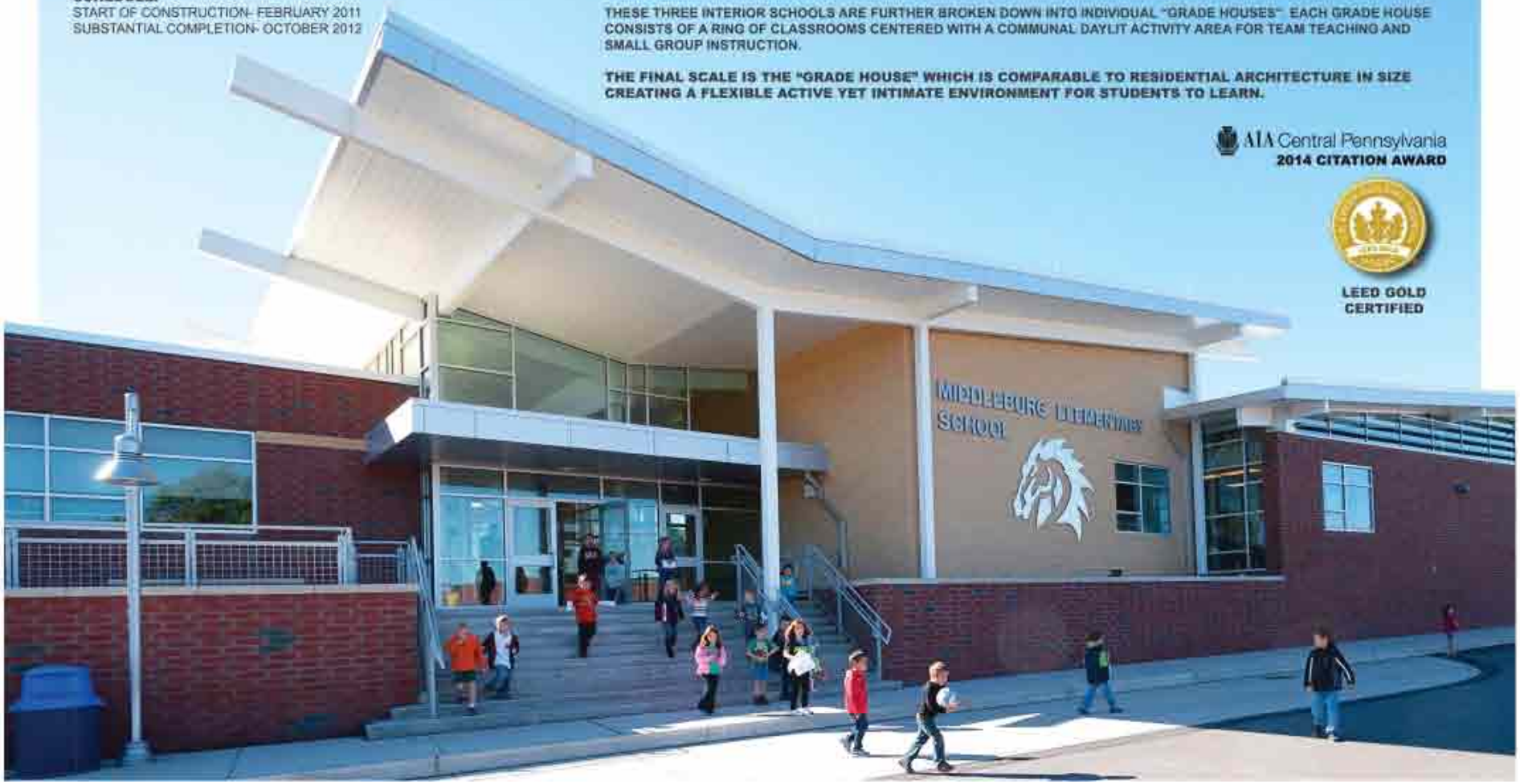
THE PUBLIC EXTERIOR AND INTERIOR SPACE WERE PULLED INTO MIDDLEBURG ELEMENTARY SCHOOL THROUGH A PROGRESSION OF SCALES. THE PLAZAS CONCLUDE WITH THE ENTRANCES TO THE BUILDINGS. THESE ENTRANCES TRANSFER INTO PUBLIC STREETS WITHIN THE BUILDINGS LEADING TO THE COMMUNITY SPACES WITHIN THE BUILDINGS, GYMNASIUMS, CAFETERIAS, LIBRARIES AND OTHER PUBLIC SPACES. THESE "PUBLIC STREETS" LEAD TO THREE "SCHOOLS WITHIN A SCHOOL" REDUCING THE SCALE FOR ELEMENTARY AGE CHILDREN.

THESE THREE INTERIOR SCHOOLS ARE FURTHER BROKEN DOWN INTO INDIVIDUAL "GRADE HOUSES". EACH GRADE HOUSE CONSISTS OF A RING OF CLASSROOMS CENTERED WITH A COMMUNAL DAYLIT ACTIVITY AREA FOR TEAM TEACHING AND SMALL GROUP INSTRUCTION.

THE FINAL SCALE IS THE "GRADE HOUSE" WHICH IS COMPARABLE TO RESIDENTIAL ARCHITECTURE IN SIZE CREATING A FLEXIBLE ACTIVE YET INTIMATE ENVIRONMENT FOR STUDENTS TO LEARN.

AIA Central Pennsylvania
2014 CITATION AWARD

LEED GOLD CERTIFIED



1 EXISTING CONNECTION TO MIDD-WEST HIGH SCHOOL

THE EXISTING CONNECTION TO MIDD-WEST HIGH SCHOOL HIGHLIGHTS THE PROBLEMS THAT EXIST ON THE CURRENT SCHOOL CAMPUS. PEDESTRIAN STUDENT TRAFFIC CONNECTING THE HIGH SCHOOL, ELEMENTARY SCHOOL AND PLAYFIELDS IS ALONG A ROAD USED FOR SERVICE DELIVERIES, ACCESS TO MECHANICAL ROOMS, BUS DROP OFF AND ENTRANCE, AND FACULTY PARKING. THE STACKING OF FUNCTIONS ALONG WITH SLOPED TERRAIN THAT LIMITS VISIBILITY CREATES A SUBSTANTIAL SAFETY CONCERN AT THE HEART OF THE CAMPUS.

MAIN STREET US 322
FACULTY PARKING
BUS DROP OFF
VISITOR ENTRANCE
FACULTY/ STUDENT PARKING
SOUTH SHUMAN STREET
STUDENT PARKING
ATHLETIC FIELD
FACULTY PARKING
FACULTY PARKING
TENNIS COURTS
BUS DROP OFF
STUDENT PARKING
WAGENSELLER STREET
FACULTY/ VISITOR PARKING
BUS DROP OFF
ATHLETIC FIELD PARKING
A
B
C
1

A HIGH SCHOOL
B ELEMENTARY SCHOOL
C MIDDLE SCHOOL

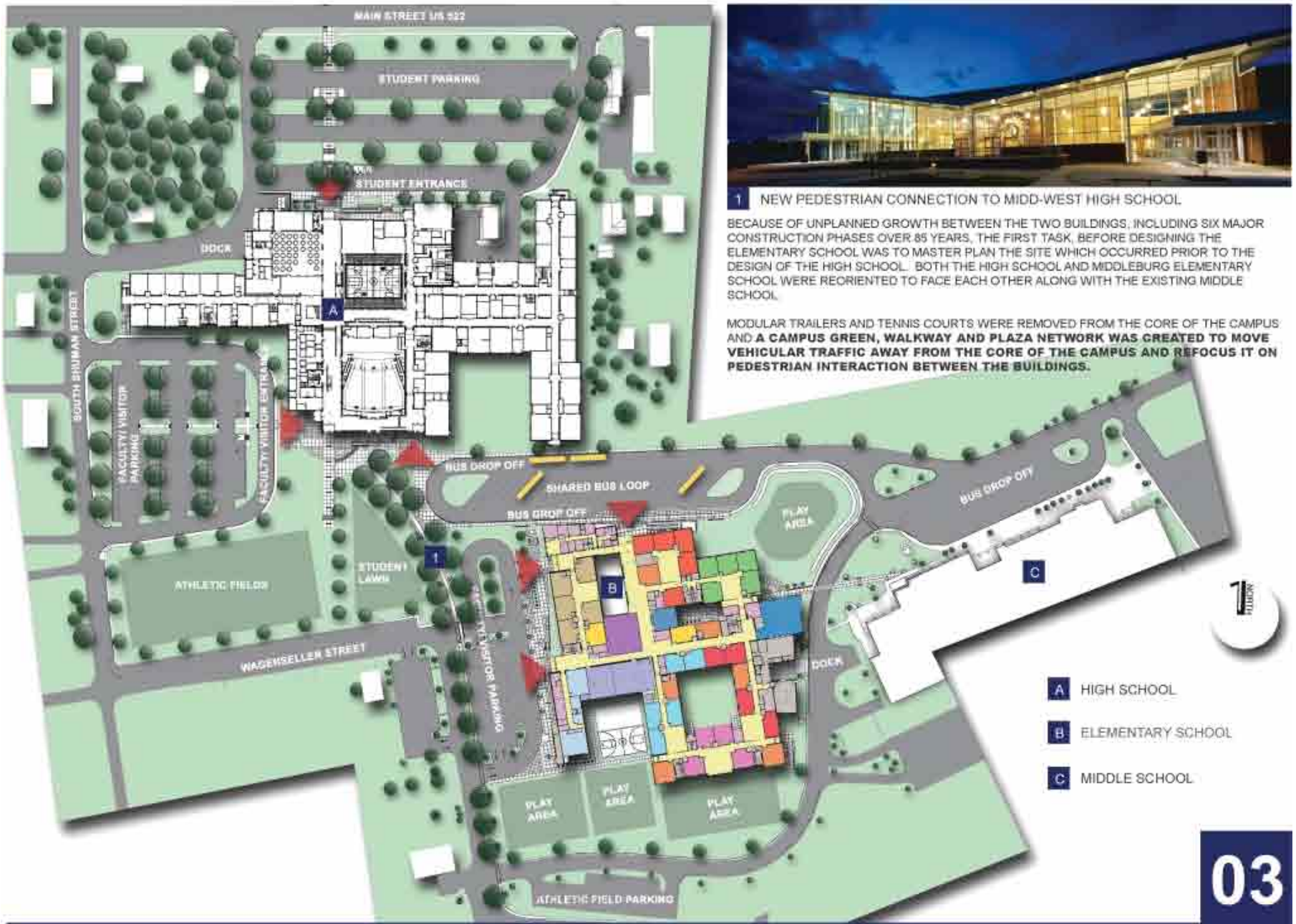
02

EXISTING CAMPUS PLAN

1 NEW PEDESTRIAN CONNECTION TO MIDD-WEST HIGH SCHOOL

BECAUSE OF UNPLANNED GROWTH BETWEEN THE TWO BUILDINGS, INCLUDING SIX MAJOR CONSTRUCTION PHASES OVER 85 YEARS, THE FIRST TASK, BEFORE DESIGNING THE ELEMENTARY SCHOOL WAS TO MASTER PLAN THE SITE WHICH OCCURRED PRIOR TO THE DESIGN OF THE HIGH SCHOOL. BOTH THE HIGH SCHOOL AND MIDDLEBURG ELEMENTARY SCHOOL WERE REORIENTED TO FACE EACH OTHER ALONG WITH THE EXISTING MIDDLE SCHOOL.

MODULAR TRAILERS AND TENNIS COURTS WERE REMOVED FROM THE CORE OF THE CAMPUS AND **A CAMPUS GREEN, WALKWAY AND PLAZA NETWORK WAS CREATED TO MOVE VEHICULAR TRAFFIC AWAY FROM THE CORE OF THE CAMPUS AND REFOCUS IT ON PEDESTRIAN INTERACTION BETWEEN THE BUILDINGS.**



NEW CAMPUS MASTERPLAN

03

RENOVATIONS TO THE ELEMENTARY SCHOOL INCLUDED THE DEMOLITION OF ABOUT TWENTY FIVE PERCENT OF THE BUILDING TO ACCOMMODATE CONNECTIONS TO THE NEW ADDITIONS AND NEW PUBLIC STREETS THROUGH THE BUILDING. CAREFUL ATTENTION TO THE REMAINING STRUCTURE WAS TAKEN TO MINIMIZE THE MOVEMENT OF WALLS AND MINIMIZE CONSTRUCTION COSTS.

04

EXISTING FLOOR PLAN

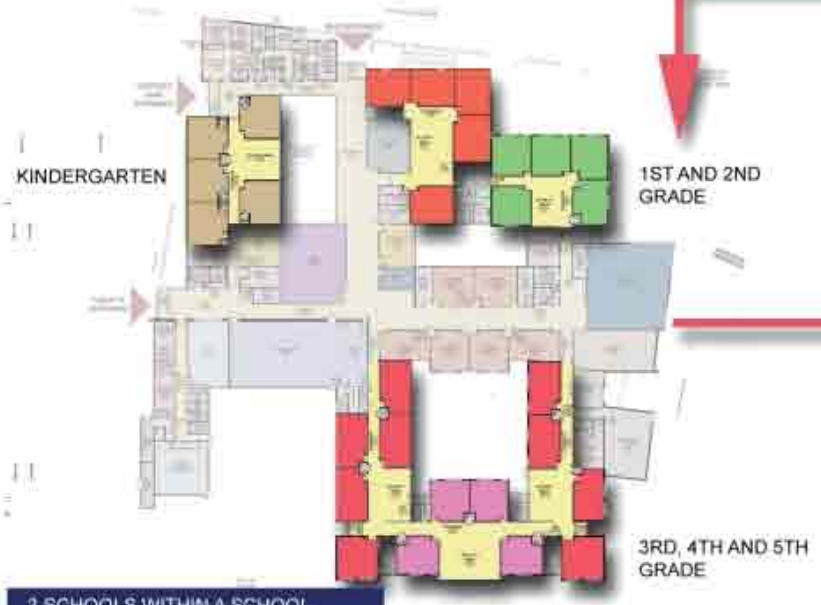
EARLY DISCUSSION WITH THE CLIENT STEERED TO THE FACT THAT THE BUILDING WOULD BE APPROXIMATELY A 100,000 SF ONE STORY BUILDING. THIS CREATED THE POSSIBILITY OF LONG DISTANCES WITHIN THE BUILDING TO REACH AREAS OF THE BUILDING. A THREE LOOP SYSTEM WAS CREATED WITHIN THE ELEMENTARY SCHOOL TO AVERT THIS CONCERN. EACH LOOP ENTERS ONE OF THE THREE SCHOOLS WITHIN THE BUILDING AND TIES TO THE MAIN STREET SYSTEM ALLOWING ACCESS TO ALL OF THE PUBLIC PROGRAM WITHIN THE BUILDING.

05

PROPOSED FLOOR PLAN - LOOP SYSTEM

SCALE OF CAMPUS

SCALE OF SCHOOL

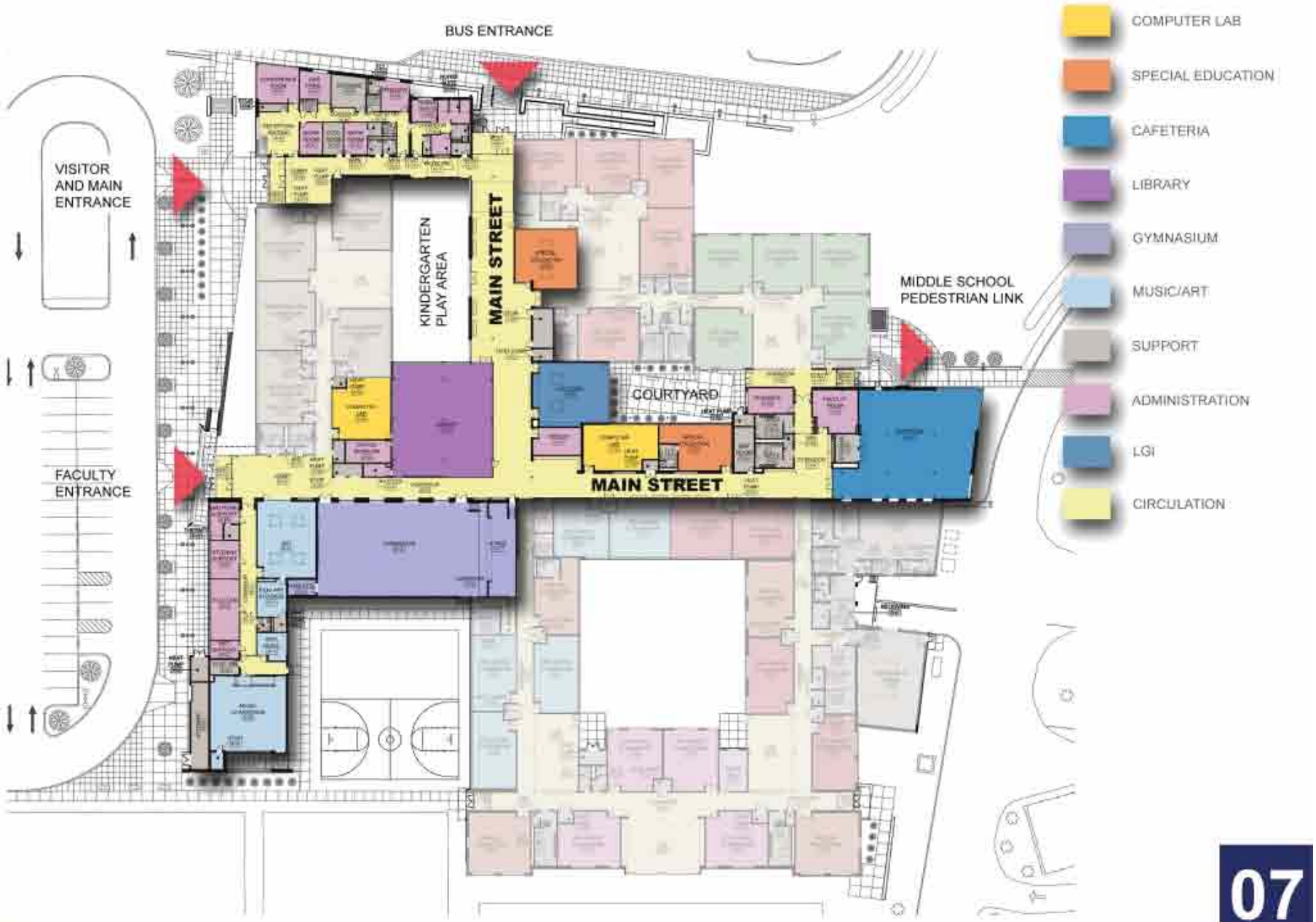


3 SCHOOLS WITHIN A SCHOOL

GRADE HOUSE

06

FOUR SCALES TO MIDDLEBURG ELEMENTARY SCHOOL



07

CENTRAL SHARED PUBLIC SPACES

ACTIVITY AREAS ARE LOCATED AT THE HUB OF EACH OF THE 6 GRADE HOUSES. THESE AREAS ARE INFORMAL GATHERING AREAS FOR EACH GRADE LEVEL ALLOWING TEAM TEACHING OR MULTIPLE SMALL GROUP INSTRUCTION.

08

ACTIVITY AREAS

EXISTING LIBRARY

THE LIBRARY IS CENTRALLY LOCATED AT THE CORE OF THE BUILDING FOR ALL GRADE LEVELS TO EASILY ACCESS. THE HIGHER VOLUME, TRANSPARENCY THROUGH LARGE EXPANSES OF INTERIOR AND EXTERIOR GLAZING AND AMPLE NATURAL LIGHT CREATES A CONDUCIVE SPACE FOR LEARNING OF DIFFERENT GROUP AND ACTIVITY SIZES.

09

LIBRARY

VIEW FROM ENTRANCE

EXISTING CAFETERIA AND GYMNASIUM

THE CAFETERIA ACTS AS THE CONCLUSION TO THE MAIN STREET OF THE BUILDING THAT CONNECTS ALL OF THE PUBLIC SPACES OF THE BUILDING. THE EXISTING CAFETERIA WAS UNDERSIZED AND PARTIALLY USED AS A MULTI PURPOSE SPACE.

DEDICATED CAFETERIA

EXISTING SHARED GYMNASIUM AND CAFETERIA

THE EXISTING SHARED GYMNASIUM AND CAFETERIA WAS RENOVATED INTO A DEDICATED GYMNASIUM SPACE. ALL OF THE EXISTING FINISHES WERE STRIPPED AND REPLACED WITH MODERN AND DURABLE MATERIALS. THE EXISTING STRUCTURE WAS LEFT EXPOSED TO PROVIDE ADDITIONAL HEIGHT FOR ATHLETIC ACTIVITIES. THE WINDOW OPENING WAS ENLARGED TO PROVIDE AMPLE NATURAL LIGHT INTO THE SPACE.

DEDICATED GYMNASIUM

THE IMPORTANCE OF DEFINED ENTRANCES WAS EMPHASIZED THROUGHOUT THE PROJECT. EXISTING ENTRANCES WERE NON DESCRIPT AND ALLOWED FOR POTENTIAL CONFUSION UPON APPROACHING THE BUILDING. **A DECISION WAS MADE TO USE THE EXISTING BUILDING AS A BACKDROP AND USE NEW CONSTRUCTION TO HIGHLIGHT CLEAR DEFINED ENTRY POINTS WITH LIMITED DIRECTIONAL SIGNAGE IN UNISON WITH SITE DESIGN.**

EXISTING VISITOR AND FACULTY ENTRANCE

THE VISITOR AND MAIN ENTRANCE IS LOCATED AT THE ONE END OF THE NEW ADMINISTRATION BLOCK **UTILIZING BLUE BLADE WALLS TO CALL ATTENTION TO THE ENTRY** AND RAISED OVERHUNG STRUCTURE THAT ACTS AS ADDITIONAL COVERAGE FOR VISITORS.

12

VISITOR AND MAIN ENTRANCE

THE STUDENT ENTRANCE ALONG THE SHARED BUS LOOP WITH THE HIGH SCHOOL IS FOUND AT THE OTHER END OF THE ADMINISTRATION WING, **ALLOWING THE TWO PRIMARY ENTRANCE POINTS TO BE MONITORED FROM ONE LOCATION.**

EXISTING STUDENT ENTRANCE

THE ENTRY POINT IS RAISED TO ACCOMMODATE A TRANSITION IN GRADE, BUT AT THE SAME TIME ALLOW THE ADMINISTRATION T**HE ABILITY TO OVERLOOK THE ENTIRE BUS LOOP FOR SAFETY** DURING MORNING AND AFTERNOON MOVEMENT OF THE STUDENT BODY.

STUDENT ENTRANCE

A SERIES OF SUNCONTROL ALUMINUM FINS WERE MOUNTED DIRECTLY TO THE STOREFRONT WINDOWS. IT WAS DETERMINED THAT A MORE CONVENTIONAL EXTERIOR MOUNTED LIGHT SHELF COULD NOT BE STRUCTURALLY SUPPORTED FROM THE EXISTING STRUCTURE AND THE INTERIOR CLEARANCES DID NOT ALLOW FOR ADEQUATE DEVELOPMENT OF INTERIOR LIGHT SHELVES OR RELATED CONSTRUCTION.

EXISTING FACADE

THE ORIGINAL RIBBON WINDOWS AND GLASS BLOCK CLASSROOM FACADES WERE SINGLE PANED AND LEAKING AFTER FORTY YEARS OF USE. **THE CLIENT STRESSED THE IMPORTANCE OF MAINTAINING DAYLIGHTING AND WITHOUT THE USE OF SOLID MATIERIALS.** CLOSE ATTENTION WAS GIVEN TO GLARE CONTROL THROUGH THE USE OF LIGHT WEIGHT BRIS SOLEIL SYSTEMS. THIS ALLOWS THE CLASS-ROOMS TO RECEIEVE THE MAXIMUM AMOUNT OF DAYLIGHTING WITHOUT THE USE OF BLINDS.

FACULTY ENTRANCE

THERE ARE THREE SECURE COURTYARDS DEFINED BY THE LOOP SYSTEM CIRCULATION CREATED WITHIN THE BUILDING. WHILE ALL OF THE COURTYARDS ARE ACCESSIBLE BY THE GRADE HOUSES, EACH OF THE COURTYARDS SERVE A DISTINCTIVE PURPOSE. THE COURTYARD ADJACENT THE KINDERGARTEN WING IS USED AS A SECURE KINDERGARTEN OUTDOOR PLAY AREA WHILE THE OTHER COURTYARDS SERVE AS AN EXTENSION OF THE LARGE GROUP INSTRUCTION ROOM AND HIGHER GRADE LEVELS RESPECTIVELY. ALL OF THE COURTYARDS CAN BE EASILY MONITORED THROUGH MAJOR GLASS EXPANSES IN THE SURROUNDING EDUCATIONAL SPACES.

COURTYARD

OVERALL ROOF PROFILE

THE ROOF PROFILE AND EXTERIOR ELEVATIONS ILLUSTRATE THE RAISED ROOF STRUCTURES OVER THE MAIN STREET, CAFETERIA, LIBRARY, ADMINISTRATION AND ACTIVITY AREAS. THIS DESIGN ELEMENT ALONG WITH PLACEMENT OF CLASSROOMS ALLOWED MORE THAN 92 PERCENT OF THE EDUCATIONAL SPACES WITHIN THE BUILDING TO BE FULLY DAYLIT. MIXTURE OF MASONRY ALONG WITH THE EXISTING RIBBON WINDOW FAÇADE THAT IS REGLAZED ALLOW FOR THE SCALE OF THE BUILDING TO BE REDUCED AND TAKE ON THE APPEARANCE OF AN ENTIRELY NEW FAÇADE FOR A BUILDING THAT IS MORE THAN 55 YEARS OLD.

EXISTING ROOF PROFILE (UNDER CONSTRUCTION)

EXTERIOR ELEVATIONS

17

EXTERIOR ELEVATIONS

Lafayette Elementary School

The existing Lafayette Elementary School was comprised of several additions dating back from 1926 and again in 1983. The urban setting and limited available space on site presented issues with both vehicular and pedestrian traffic, safe student pick-up/drop zones and lacked adequate parking.

The existing 1983 two story section was suitable to meet the new program requirements and underwent comprehensive renovations to all interior finishes and replacement of all major building systems. The new constrcution of the project was completed through phased construction which included the completion a two story academic wing to allow students to vacate the 1926 portion prior to demolition, then a connecting wing was constructed to join the new academic wing to the fully renovated 1983 wing.

The project features a curtain wall glass lobby and corridor which unifies the entire plan by distributing natural day lighting throughout and provides space for large events in the gymnasium/cafeteria. The site was re-configured to identify clear separation of both bus and parent drop zones and increased staff and public parking.

The stark austere architecture of the original building has been replaced by a visually open school filled with color and with integrated technologies to provide for a stimulating learning environment. The new construction incorporates brick to match the existing west wing and also introduces contrasting materials and color by use of glazed brick and tile to express different building layers and forms.

Relevance to Project: Elementary School Experience, Result of Study/Master Plan, 21st Century Learning Spaces, Plancon Experience &Educational Programming

Construction Estimate

$12,084,300

Construction Cost

$11,858,049

Construction Completion

September 2012

Project Size

60,000 SF Additions
26,000 SF Renovations

Client

Uniontown Area SD
Dr. Charles Machesky
Superintendent
724-438-4501

Central Manor Elementary School

Crabtree, Rohrbaugh & Associates performed additions and renovations to the K-6 school to include LEED Certification. Additions include 10 new classrooms and office space. Renovated spaces include the administration and kitchen. Roof, windows, casework and interior finishes were replaced, as well as HVAC and installation of a fire suppression system.

Mechanical system is now Geothermal ground source heat pump. Hot water heating is now done through solar thermal panels. Toilets use recycled greywater to reduce domestic water consumption. Two locations of the building serve as interactive Green resources areas so the building can be used as an educational tool for the students.

Construction Estimate

$9,569,550

Construction Cost

$9,516,605

Project Size

14,000 SF addition
80,000 SF renovation
750 students

Construction Completion

September 2011

Contact

Penn Manor School District
Dr. Mike Leichliter
Superintendent
717-872-9500

Relevance to Project: Elementary School Experience, Result of Study/Master Plan, LEED Certification/Design, Educational Programming, Plancon Experience & Community Involvement

Maple Manor Elementary & Middle School

Maple Manor Elementary/Middle School is the District's newest K-8 elementary/middle school which was necessary to address the overcrowding and continual growth in the area.

The existing Hafey Building, recently purchased by the District was transformed to provide appropriate space for instructional areas and community activities. The environment of the school provides age appropriate instructional spaces for the students, creates a friendly, inviting and exciting building and is designed to accommodate the needs of community members as they use the recreational and assembly areas.

Building design incorporates the most efficient and cost effective health/climate technology, including controlled heating and ventilating systems, plumbing and lighting. In-room cabinetry, whiteboards, display areas, soundproofing and communications systems (voice, video, data), improve classroom environments and program opportunities.

The existing two-story 77,732 sf building was completely renovated along with the construction of a new two-story 36,000 square foot classroom wing to create adequate space and flexible learning environments with integration of technology throughout the building.

Site access was improved by separating bus drop-off and pick-up from staff/parent/visitor vehicular traffic.

Construction Estimate

$21,900,000

Construction Cost

$21,780,300

Construction Completion

December 2014

Project Size

36,000 SF Additions
77,732 SF Renovations
1,000 students

Client

Hazleton Area School District
Mr. Anthony Ryba
Business Manager
570-459-3111

Relevance to Project: Elementary School Experience, 21st Century Learning Spaces, Educational Programming, Occupied During Phased Construction, Plancon Experience & Community Involvement

Hambright Elementary School

This project was the result of a comprehensive feasibility study and is designed with flexible and adaptable educational environments able to meet the individualized needs of all learners and accommodate small and large group instructional activities. The school is organized into three educational wings which each serve two grade levels and contain classrooms and support spaces. Each wing is organized around a large academic commons which develops and fosters collaborative learning and small group and individual instruction.

Public spaces are arranged along "Main Street" which acts as a way-finding element and group gathering/staging space. Administrative offices have visual access to the transportation areas, as well as maintain physical security via the secure vestibule entry system.

Library spaces are located near the main entry and commons to serve all grade levels as well as potential use for public meetings. Anchoring each end of "Main Street" are the art and music classroom spaces, designed with ample natural daylight.

The gymnasium and cafeteria are separated via a common stage to allow for flexible programming. Gymnasium functions serve both academic programming as well as community sports events as will the proposed athletic fields.

The facility is adjacent to the Manor Middle School and connected to the community via pedestrian paths. Bus and parent drop off drives are separated.

Construction Estimate

$16,600,000

Construction Cost

$17,745,846*

*Includes Technological Energy Savings Requirements

Construction Completion

August 2014

Project Size

95,740 SF
750 students

Contact

Penn Manor School District
Dr. Mike Leichliter
Superintendent
717-872-9500

Relevance to Project: Elementary School Experience, Result of Study/Master Plan, 21st Century Learning Spaces, Educational Programming, Plancon Experience & Community Involvement

Cumberland Valley Elementary School

The design of a new $20M+ elementary school for Cumberland Valley School District includes integrating 21st century educational spaces for various forms of instruction and indvidual and group projects. The facility is designed with flexible and adaptable educational environments able to meet the individualized needs of all learners and accommodate small and large group instructional activities.

The school will be organized into three educational wings which each serve two grade levels and contain classrooms and support spaces and is organized around a large academic commons which develops and fosters collaborative learning and small group and individual instruction. The facility will house grades Pre-K through 5.

The library and gymnasium are located along “main street” to serve all grade levels as well as provide spaces for public meetings and events. Anchoring each end of main Street are the art and music classroom spaces, designed with ample natural daylight.

Construction Estimate

$26,500,000

Construction Completion

August 2018

Project Size

850 students

Contact

Cumberland Valley SD
Dr. Fred Withum, III
Superintendent
717-697-8261

Relevance to Project: Result of Study/Master Plan, 21st Century Learning Spaces, Educational Programming, Plancon Experience & Community Involvement

Elizabeth B. Barth Elementary School

Barth Elementary School represents the first project of a four building modernization of the district's Elementary Education. The two story building is more than 44 years old and required building wide upgrade of systems, finishes and educational technology to 21st century educational needs.

The project is Certified Silver with U.S. Green Building Council. The design includes a "chilled beam" four pipe heating and cooling system which is projected to be 25.8% more efficient than building systems nationally, daylighted classrooms, 30% water reduction and focus on Indoor Air Quality and Environment for the students.

The design reorganized educational spaces to meet current district educational goals which focus on team teaching along with supporting specialty classes including art, music, special education and physical education.

The entire building is wireless allowing all classrooms to be utilized for technology including mobile computer classrooms, smart board interactive educational screens and short throw projection.

Construction Estimate

$4,252,156

Construction Cost

$4,060,738

Construction Completion

August 2013

Project Size

854 SF Additions
38, 415SF Renovations
400 students

Client

Pottstown School District
Dr. Jeffrey Sparagana
Superintendent
610-323-8200
jsparaga@pottstownsd.org

Relevance to Project: Elementary School Experience, Result of Study/Master Plan, LEED Certification/Design, 21st Century Learning Spaces, Educational Programming, Plancon Experience & Community Involvement

Franklin Elementary School

Franklin Elementary School represents part of the second phase of a four building modernization of Elementary Education for the Pottstown School District. The two story building is more than 60 years old and required a building wide upgrade of systems, finishes and educational technology to meet the needs of 21st century education. Included with the project is a 4 classroom two story addition including an elevator, small group instruction and support spaces. The project is Certifeid Gold with U.S. Green Building Council.

The design includes a "chilled beam" four pipe heating and cooling system which is 22% more efficient than building systems nationally, daylighted classrooms, 30% water reduction and focus on Indoor Air Quality and Environment for the Students.

The design reorganized educational spaces to meet current district educational goals focusing on team teaching along with supporting specialty classes including art, music, special education and physical education. The entire building will be wireless allowing all classrooms to be utilized for technology including mobile computer classrooms, Smart board interactive educational screens and short throw projection.

Construction Estimate

$5,503,128

Construction Cost

$5,330,743

Construction Completion

August 2014

Project Size

6,200 SF Additions
33,501 SF Renovations
400 students

Client

Pottstown School District
Dr. Jeffrey Sparagana
Superintendent
610-323-8200
jsparaga@pottstownsd.org

Relevance to Project: Elementary School Experience, Result of Study/Master Plan, LEED Certification/Design, 21st Century Learning Spaces, Educational Programming, Occupied During Phased Construction, Plancon Experience & Community Involvement


1 2 3 4 5 6 7 8 9 10

Lincoln Elementary School

Lincoln Elementary School represents part of the second phase of a four building modernization of Elementary Education for the Pottstown School District. The two story building is more than 60 years old and required a building wide upgrade of systems, finishes and educational technology to meet the needs of 21st century education. Included with the project is a 4 classroom two story addition including an elevator, small group instruction and support spaces. The project is Certified Gold with U.S. Green Building Council.

The design includes a "chilled beam" heating and cooling system which is 23.2% more efficient than building systems nationally, daylighted classrooms, 30% water reduction and focus on Indoor Air Quality and Environment for the students.

The design reorganized educational spaces to meet current district educational goals focusing on team teaching along with supporting specialty classes including art, music, special education and physical education. The entire building is wireless allowing all classrooms to be utilized for technology including mobile computer classrooms, smart board interactive educational screens and short throw projection.

Construction Estimate

$5,818,963

Construction Cost

$5,646,578

Construction Completion

August 2014

Project Size

7,270 SF Additions
33,452 SF Renovations
400 students

Client

Pottstown School District
Dr. Jeffrey Sparagana
Superintendent
610-323-8200
jsparaga@pottstownsd.org

Relevance to Project: Elementary School Experience, Result of Study/Master Plan, LEED Certification/Design, 21st Century Learning Spaces, Educational Programming, Occupied During Phased Construction, Plancon Experience & Community Involvement

Dover Elementary School & Dover Area School District Administration Offices

One of the main concerns of the Dover Elementary School and District Administration Offices was to allow construction activities to occur with little impact on the operations of the existing school. Careful consideration was given to the areas of the existing school to be demolished and the limited space for the new additions, while achieving the requirements of the educational program.

The result included a new main entry Lobby, two story academic wing and new District Administration Office and existing building renovations. Included in the renovation are a new HVAC system, fire suppression system, security system, data and technology systems, new casework, interior finishes and window replacement. Site improvements include a separate parent and bus drop-off areas, designated parking areas, storm water management facilities and hard surface play areas.

Construction Estimate

$14,528,035

Construction Cost

$14,560,700

Project Size

70,000 SF Addition
26,000 SF Renovation
700 students

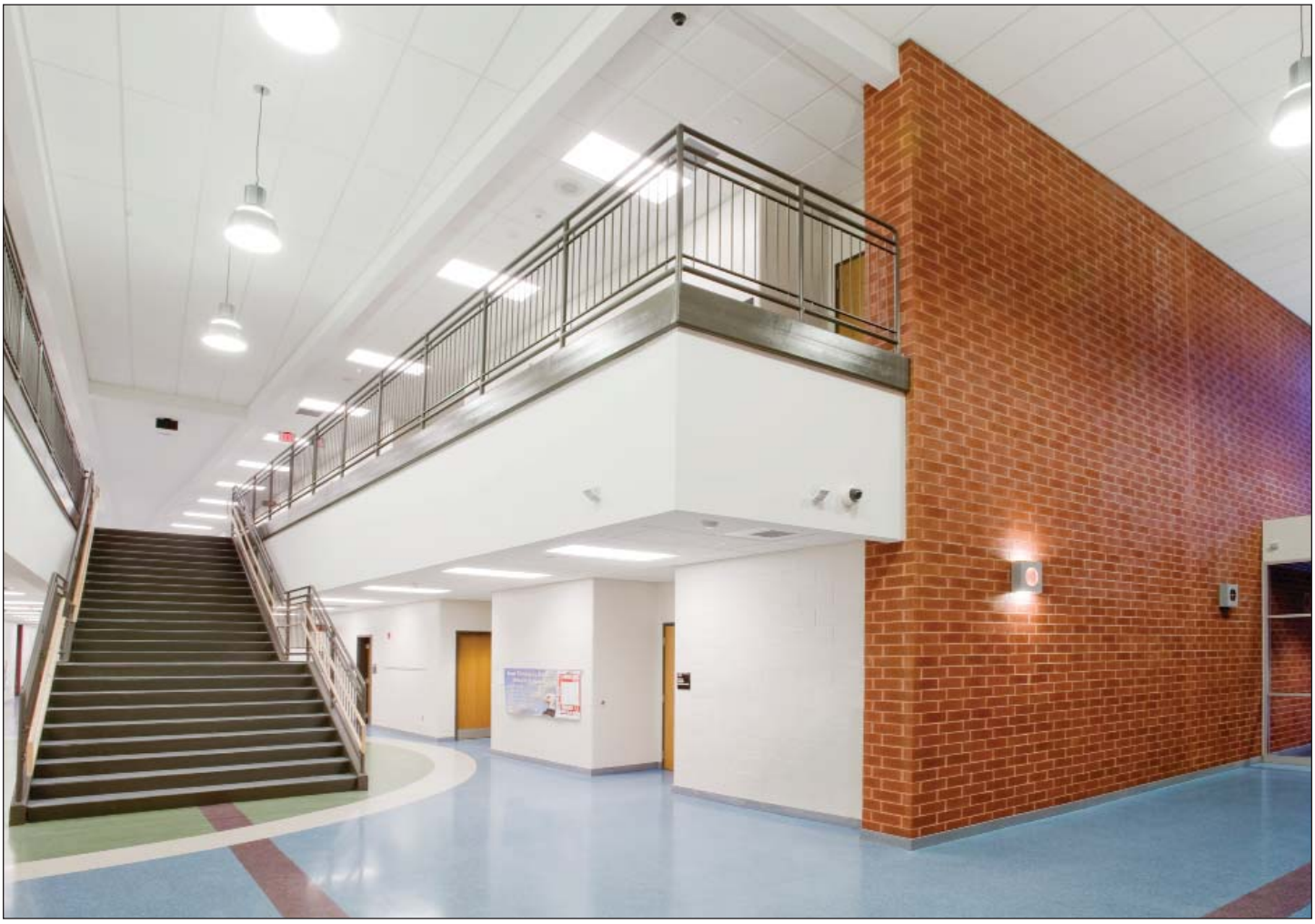
Construction Completion

September 2012

Contact

Dover Area School District
Mr. Dave Nelson
Building & Grounds Director
717-292-3671

Relevance to Project: Elementary School Experience, Result of Study/Master Plan, 21st Century Learning Spaces, Educational Programming, Plancon Experience & Community Involvement



Gettysburg Middle School

The facility is designed with a “main street” which separates the academic areas from the large program spaces, such as the gymnasium, auditorium, cafeteria and media center. The entry vestibule design provides security card access control and requires all visitors to enter the building through the supervised administration area. The classroom wing is designed in a system to achieve appropriate separation between grade levels. The partially rectangular footprint minimizes building perimeter and allows for a more efficient HVAC system. The building angle design responds to the views of the Gettysburg battlefields and additionally maintain classrooms on an east-west axis to utilize northern and southern day light into the educational spaces. On the interior the overlapping grid creates a visually stimulating sequence of interior and exterior views throughout the building.

The exterior of the building utilizes brick masonry and ground-face masonry veneer of red and gray for durability. The masonry veneer wraps into the public spaces, coupled with large amounts of natural light. The interior flooring uses maroon and grays, which are networked in a grid pattern in the lobby, main corridor and cafeteria, which continue in a sidewalk scoring pattern into the courtyard and main entry plaza.

Site work includes the straightening of Lefever Street to allow better vehicular traffic flow into the new entrance and exit driveways of the middle school and near by elementary school. Separate bus drop off from the parent drop off are incorporated to avoid vehicular congestion and enhance safety. Considerations were also taken into account for pedestrian and bicycle traffic through the site.

Relevance to Project: Result of Study/Master Plan, 21st Century Learning Spaces, Educational Programming, Plancon Experience & Community Involvement

Construction Estimate

$31,557,681

Construction Cost

$31,973,726

Construction Completion

September 2014

Project Size

224,000 SF
1100 students

Contact

Gettysburg Area School District
Dr. Larry Redding
Superintendent
717-334-6254


EISENHOWER
MEDIA CENTER

Sudlersville Middle School

2014 USGBC "Green School of the Year" Forever Green Award Recipient
USGBC Maryland- Wintergreen Award for Excellence in Green Building- 2013 Project of the Year

The new Sudlersville Middle School for Queen Anne's County Public Schools is a replacement school for the existing middle school within the town. A feasibility study determined that due to growth and the number of students a building expansion of the existing building could not be accommodated on the site which led to a new building.

Queen Anne's County Public Schools was committed to building a 21st century school that would support their current educational program, optimize technology, create four educational pods within the building to be flexible for change over the next 40 years. Sustainable design was a cornerstone of the project from the start of design with a goal of minimizing life cycle costs for the building lifespan. Energy Efficiency was developed throughout the project with an integrated design process between the owner, architects, engineers and contractors. Energy modeling was used to evaluate multiple wall and roof designs for both cost and overall impact on the building.

Program space includes special education classrooms as well as music, art, and science rooms. Also included is a state of the art media center, complete with computer lab and reading areas. The kitchen, cafeteria, and gymnasium are located within a central area.

The Building is LEED Gold Certified with over 70% of daylighted spaces and its energy savings is 46.3%. Annually, it is projected that the school will save $156,551 in energy costs, and will have a 54.5% reduction in water use.

Construction Estimate

$26,000,000

Construction Cost

$23,203,000

Construction Completion

May 2012

Project Size

100,884 SF
600 students

Client

Queen Anne's County PS
Andrew Onukwubiri
Construction Program Manager
(during the project)
410-490-1223
andrew.onukwubiri@pgcps.org

Relevance to Project: Result of Study/Master Plan, LEED Certification/Design, 21st Century Learning Spaces, Educational Programming & Community Involvement

PROJECT APPROACH

Project Understanding & Approach

Crabtree Rohrbaugh & Associates is excited to submit our team qualifications and proposal to provide architectural, engineering planning and design services for an update to the District Wide Facility Master Plan (DWFMP).

As you are aware, our team has been serving State College Area School District since 2012 on the State College Area High School project currently under construction. It is understood with the high school successfully under construction, State College Area School District (SCASD) is now refocusing upon the elementary schools within the district that have been part of SCASD's master plan over the last 15 years. SCASD in the early 2000's began renovation of the elementary schools with Gray's Woods, Easterly Parkway and Park Forest Elementary School with the support of architect Rob Pillar, AIA who recently joined Crabtree, Rohrbaugh & Associates as our Director of Educational Architecture. Rob will be Crabtree, Rohrbaugh & Associates' Educational Planner on the project reinforcing Crabtree, Rohrbaugh and Associates' recent experience with SCASD.

At this time, it is understood the DWFMP Facility Study will primarily be focused upon the four remaining elementary schools within the district requiring renovation. These elementary schools include Corl Street, Radio Park, Lemont and Houserville. Currently, these four elementary schools serve approximately 950 students within the school district's 2,850 elementary school population. Our team does anticipate discussion of the additional elementary, middle and high schools within the district as part of the district wide plan for educating and sharing of information within the school district. This effort will be focused on two primary phases. Phase One will be the DWFMP and Phase 2 will be the development and construction of option(s) selected from Phase One.

Phase One will include analysis of the four existing elementary schools focusing on community engagement, educational planning, demographic/re-districting analysis, building infrastructure analysis and option development within approximately a four month timeframe. It is anticipated that options will be developed based upon renovations, additions or new construction for the four buildings.

Phase Two will be the implementation a selected option from Phase One. As proposed in the attached schedule, it is anticipated Phase Two will have a 10-12 month design period consisting of SCASD's standard 30/60/90 submission schedule and 14-16 months of construction

Photos- State College Area School District (Corl Street, Radio Park, Lemont and Houserville Elementary School Students)

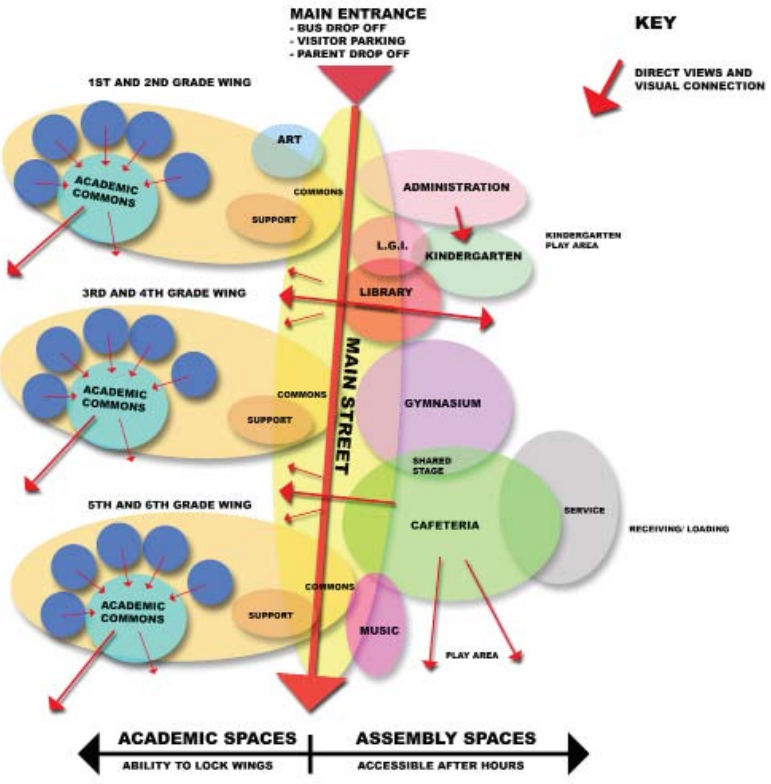
District Wide Facility Master Plan (Phase One)

During the DWFMP, educational specifications will be developed which support State College Area School District's vision and model for your elementary schools. Our team includes Rob Pillar, AIA, Certified Educational Facility Planner with The Association for Learning Environments (formerly CEFPI). Rob recently joined our team with more than 28 years of experience in educational planning including working with SCASD in the early 2000's on their initial modernization of elementary schools. While building on the vision and goals already established by the District, we will identify and determine all facility related educational requirements and constraints, in addition to discussing options with the school board, district personnel, students and community members to provide analyses, critical decisions and decision-making processes and documentation procedures. This essential pre-design work will lay the foundation for and expedite the successful completion of the project. At the completion of the DWFMP (Phase One), a complete Function and Area building programming summary and diagrammatic facility analysis, depicting overall building organization, will be provided for each of the options developed.

During the DWFMP, we will define the general scope, preliminary design options, scale and relationships among the components of the elementary schools. With the programming and educational specifications reviewed and updated, we will proceed to define the size, shape and layout of spaces within the building(s) that will satisfy the program and all building code and land use requirements. (To the right is an excerpt from State College Area High School educational specifications developed early in the project that acted as a guide throughout the project.) It will be important to meet the specific program requirements for the elementary schools and define the needs and relationship of the elementary schools to the community, capitalizing on efficiency of operation while maximizing the positive aspects of the site and providing safety for students, staff and visitors.

Community Engagement

Crabtree, Rohrbaugh & Associates assisted State College Area School District with the successful passage of the referendum required for your high school project. The process of The District Wide Feasibility Study will be as participatory, and include student, staff and community involvement. This collective input will provide great value during the process and help to ensure a successful outcome. Once the critical stakeholders are engaged, it is encouraged



that they continue to inform the direction of the project with knowledge and enthusiasm as it progresses to funding and subsequent phases of design and implementation.

Crabtree, Rohrbaugh & Associates, along with the State College Area School Board will actively seek the advice of project stakeholders to discuss a broad range of issues including, but not limited to:

- Student Achievement
- Human Resources
- Parent Involvement & Family Engagement
- School Culture & Climate
- School Facilities
- Community & Business Partnership

Meetings

Our team anticipates community meetings in the month of May and early June to discuss and gather community thoughts toward elementary school education within SCASD. Listening and discussion will allow the school board, district administration and design team to develop preliminary options incorporating the community's input during the summer months. Our goal will be to present final DWFMP options in the month of September that are clear and incorporate all stakeholder input, creating the ability to make informed decisions on option(s) transitioning from Phase One to Phase Two of the DWFMP.

We believe that effective community participation will encourage a sense of community ownership of and responsibility for the DWFMP and elementary schools, and support the free flow of ideas and opinions between the community and the School Board, as well as the design team's mission to partner with the Community. Crabtree Rohrbaugh & Associates will engage the stakeholders at key milestones throughout the planning, design and construction process in order to collaborate on both specific and integrated needs such as:

Student Needs

- Recognize the unique developmental needs of students to be served
- Understand the specific demographics of the designated student body
- Recognition of 21st century skills acquisition

School Needs

- Attributes of a school facility that support student success
- Integration of technology for teaching, learning and administration
- Potential Integration of STEM/ STEAM within elementary school education.

Community Needs

- Explore community issues and concerns
- Recognize mutual benefits
- Explore arts & cultural connections

SCASD Needs

- Provide learning environments that support 21st Century learning.
- Provide equitable opportunities for all students.
- Provide safe, efficient and effective facilities.
- Consider operational efficiencies in the selection of systems, materials and finishes.
- Provide safe, efficient and effective facilities.
- Commitment to sustainability, and a LEED accredited facility as required by SCASD board policy and opportunity for additional State Funding.

State Parameters

- Coordination with state-wide educational initiatives
- Planning Guidelines (PDE and SCASD)
- Educational Funding Strategies (impacts of state-funded programs)

Design Charette (Community discussion of Library as heart of elementary school)

Concept Sketch developed from Charette

21St Century Learning

A dramatic shift is sweeping through our schools, and this change is being driven, more than ever, by technology. Today's students are not the same learners we have seen over the first decade of the 21st century. Today's students are highly relational and demand quick access to new knowledge. The planning and design of the elementary schools within the DWFMP is an opportunity to re-envision learning and design a new facilities that will prepare students for a rapidly evolving global and technological world.

Learning Spaces Within Elementary Education Should

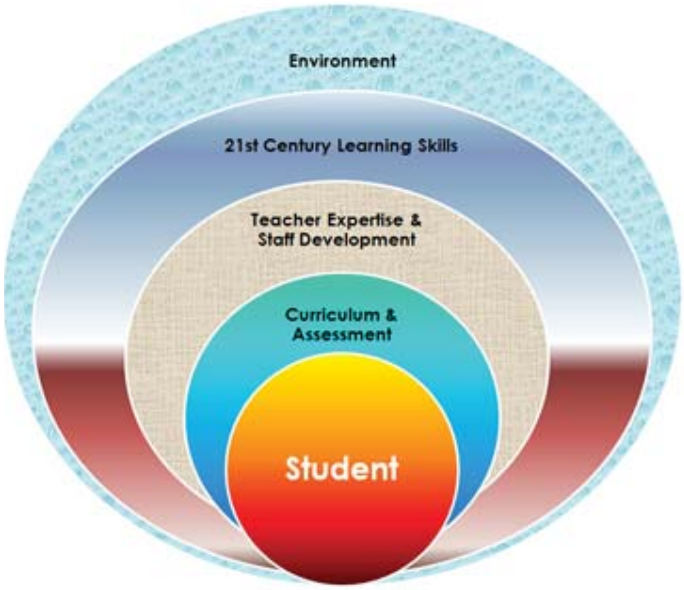
- Motivate learners and promote learning as an activity,
- Support collaborative & project-based learning, as well as formal practice,
- Provide a personalized and inclusive environment,
- Support problem solving, perseverance, critical thinking and communication,
- Foster creativity & adaptability while needs change

Today's students are capable of engaging in learning at a whole new level. With the world literally at their fingertips, today's students need school facilities designed to not only accommodate, but facilitate a comprehensive, collaborative, technology based education.

The Elementary Education Needs To Be

- Flexible – to accommodate both current and evolving pedagogies;
- Future-proofed – to enable space to be re-allocated and reconfigured;
- Bold – to look beyond tried and tested technologies and pedagogies;
- Creative – to energize and inspire learners and tutors;
- Supportive – to develop the potential of all learners;
- Enterprising – to make each space capable of supporting different purposes;

> Our goal is to continue to partner with State College Area School District to develop a dynamic and relevant district wide and elementary school environment, designed to meet the diverse needs of the students, staff, school and community, supporting the implementation of your educational programs, while addressing the unique and specific characteristics of a 21st - Century teaching and learning environment.



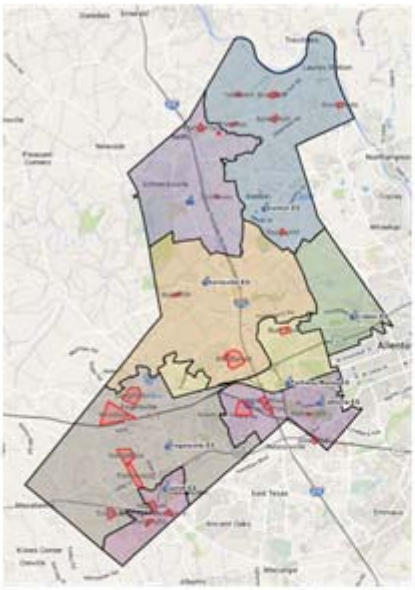
Demographic Analysis

Developing options for redistricting is a collaborative process between the District, the design team, and a demographic specialist.

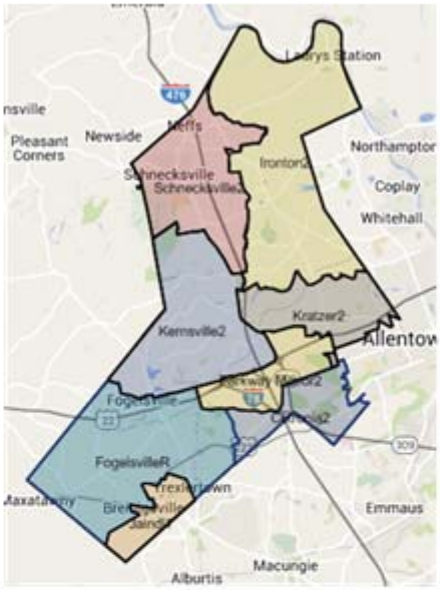
CRA will engage the services of a company that specializes in demographic analysis and GIS graphics. These companies will provide an interactive graphic database that will be used as a tool to assist the district and the design team in developing and analyzing redistricting options. The graphic below, is an example of such analysis from Parkland SD.

The demographer will need to gather a lot of information from and work very closely with the district. It is best that the district assigns a champion to this task that is very familiar with the neighborhoods within the district. Often we see that this person is the director of transportation.

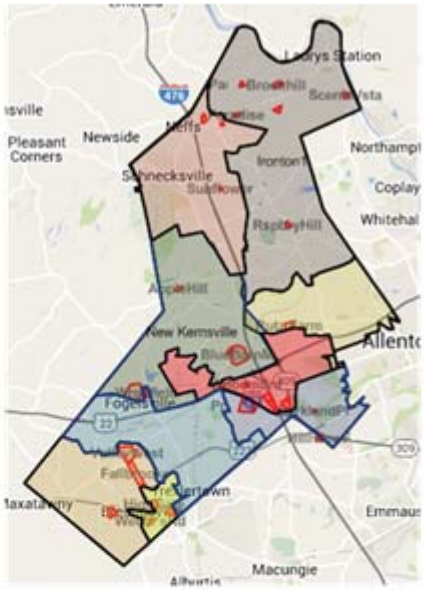
We have worked with firms such as Decision Insite, and Futurethink to complete the interactive demographic data. We estimate that their fee will be in the range of $15,000 to $25,000.



Current with Half Day K	Capacity	Projected Enrollment (2024)	Surplus /Deficit
Cetronia	570	700	(130)
Fogelsville	606	876	(270)
Ironton	517	431	86
Jaindl	736	816	(80)
Kernsville	715	489	226
Kratzer	490	446	44
Parkway Manor	523	368	155
Schnecksville	523	295	228
Total	4680	4,421	259



Phase 1 Redistricting Full Day K	Capacity	Projected Enrollment 2019-2020	Surplus /Deficit
Cetronia	528	527	1
Fogelsville	564	698	(134)
Ironton	475	421	54
Jaindl	674	708	(34)
Kernsville	574	488	86
Kratzer	473	452	21
Parkway Manor	556	518	38
Schnecksville	454	422	32
Total	4298	4,234	64



Phase II Full Day K	Capacity	Projected Enrollment (2024-2025)	Surplus /Deficit
Cetronia	528	516	12
Fogelsville	564	470	94
Ironton	475	414	61
Jaindl	674	560	114
Kernsville	574	550	24
Kratzer	473	454	19
Parkway Manor	556	521	35
Schnecksville	454	425	29
New School	528	528	0
Total	4,826	4,438	388

Site Planning & Land Development

One of the key elements in any development project is navigating the local and State regulatory agencies to obtain the required approvals for construction to commence. There are many facets of the regulatory approvals including local Zoning and Land Development Planning which are related to land use, and within those processes there are required County and State approvals regarding storm water management regulations and permits. Any one of the regulatory agency approvals/permits can have an impact on project schedule and cost, so it is imperative to have experienced professionals leading the way.

ELA Group, Inc. (ELA) established a branch office in State College over 15 years ago and has been working on various projects within the Centre Region municipalities since that time. ELA's staff has developed professional relationships with all of the Centre Region agencies and municipalities and has earned a well respected reputation for thoughtful, cost effective design and quality plans/documents. ELA has also established close working relationships with the County and State agencies such as the Centre County Conservation District, Pennsylvania Department of Environmental Protection and Pennsylvania Department of Transportation. Along with our well established relationships, our staff has thorough experience and knowledge of municipal land use ordinances and plan review/approval processes. As the plan review/approval processes generally dictate the project schedule, ELA's early involvement in a project will outline a strategy for the most efficient process to meet the owner's project schedule goals.

The professional staff from ELA who led the State College Area High School - Additions and Renovations project from the pre-referendum stage through the regulatory agency approval processes then on through construction documents will also be on the design team for the next projects undertaken by the school district.

Site Design Considerations

- Confirm land-use, lot coverage, parking, stormwater regulations, etc.
- Incorporate sustainable and best practices where appropriate for long term durability and reduction in maintenance.
- Incorporating CPTED strategies for safety and security, including:
    - The initial placement of the building on the site
    - Lines of sight
    - Secure perimeter (fencing)
    - Landscaping (proper landscaping and placement)
    - Location of parking lots and vehicular circulation routes to reduce conflicts and congestion
    - Pedestrian circulation routes
    - Exterior lighting (dark sky requirements)
- Development of service area entranceway (clearances, radiuses, etc of service and delivery vehicles).
- Development of specific parking requirements and clearly evident travel paths.
- Development of recreational and athletic venues.
- Maximize efficiency of excavation and required sitework.
- Signage and wayfinding.
- Separation of community use areas of the site from school uses areas.
- Selection of type of landscaping to ensure aesthetic and hardiness, as well as maintenance considerations.

Project Methodology

Philosophy

- We believe in a transparent educational facility design process, with a user-centered focus and a client-driven, collaborative approach.
- We match the pursuit of innovative and creative solutions with a common-sense approach to building design, and a straightforward methodology for team building and project management.
- Our design and management approach is comprehensive, integrated and inclusive.
- We understand the distinct connection between design and construction.

Project Management

The cornerstone of our project delivery is an experienced Project Design Team, led by a Senior Project Manager as a single point of contact and coordination, responsible to facilitate overall project communication and coordination among all disciplines, develop consensus, provide direction, and manage external project issues. A Project Architect will be assigned to work with the Project Manager, leading the design effort and coordinating design related activities, including technical development and management of electronic project design and drawing files. This dual-management approach to your project will provide for comprehensive management and design expertise to be delivered in a methodology that is comprehensive and seamless.

Project Management Plan

A Project Management Plan will be developed for the project, which will provide the framework for the implementation of established detailed Quality Management Procedures to be utilized during the development of the project phases identified below. The Project Management Plan will document the key management tasks and will be updated throughout the project.

The Project Management Plan includes:

- Project Objectives
- Scope of Work
- Project Budget
- Project Schedule
- Team Organization
- Quality Control
- Change Management
- Communication Plan

> As a team, we have formulated a project approach to successfully manage and navigate efficiently through the regulatory approval processes, integrating the required site planning and land development tasks and approvals within the framework of the project design schedule.

Project Objectives

Based upon the initial project information contained within the RFP, as well as the project goals identified by State College Area School District (SCASD) at the project kick-off meeting, a list of goals and objectives will be established as a framework for the development of each project. Objectives & goals will be:

- Specific
- Measurable
- Attainable
- Realistic
- Timely

Scope of Work

Based upon specific project goals and scope of work, a task outline detailing a list of deliverables to be provided at the completion of each phase, will be generated and distributed among the design team for review prior to project initiation. All design phase deliverables will become part of a phase submittal package to SCASD, for review and approval. As per SCASD policy, it is anticipated these submittals will be focused around 30%/60%/90% submissions during Phase 2 of the project.

Project Budget

The initial project budget will be developed, aligning with scope and quality requirements and based on current market conditions. Our team will work closely with SCASD's Construction Manager a budgets are developed to provide validation of scope and construction techniques. Scope and cost management strategies will be applied during each phase of the project. This process includes scope of work tracking, milestone estimates at 30%, 60% and 90%, value engineering, procurement strategies, and change order management.

Project Schedule

Our team is accustom to working with School Districts at various paces due to factors beyond our control. We have provided a preliminary schedule within our proposal anticipating an accelerated schedule for both the DWFMP and Potential Project(s) including allocation of appropriate staff and consultants to meet SCASD's expectations. A comprehensive project schedule will be developed which identifies all of the project's stages, phases, and major activities; mapping them to a timeline that measures key dates used to keep track of the work progress required to meet SCASD's needs. Our schedule management will adjust as necessary and interface directly with scope, cost, and quality management procedures outlined within the Project Management Plan.

Team Organization

Technical staff will be assigned based upon the scope of work and specific project needs. The Project Manager will coordinate and manage the design team, including engineering consultants. Project Management will include the oversight of schedules and budgets; review of key submissions and deliverables, and verification of stakeholder input. The Project Manager will insure the application of Quality Assurance Principles.

Quality Control

We focus on the preparation of design and construction documents that are clear, concise, correct, complete, and coordinated. A Project Quality Control Plan is established and implemented for each project. The Project Manager will manage this plan, with support by the Project Architect and overall administration by one of our Quality Control specialists.

Quality Control is not a process in and of itself, rather it is an inherent part of the Project Management Plan and the development of the project, from concept development through completion of the construction documents.

Change Management

The Project Manager will provide oversight and management of the project, assuring the project is delivered in compliance with the Professional Services Agreement. Any deviations to the services required under the Agreement will be coordinated by the Project Manager, with State College Area School District. The Project Manager, as part of the Quality Management Procedures, will monitor the development of the project against the approved scope of work and budget, and communicate and coordinate any deviations.

Communication Plan

The Project Manager will develop the communications methodology with SCASD for internal and external project communications, coordinated with the project schedule, including:

- Regularly scheduled design and team meetings;
- Any project website & social media management;
- SCASD project updates.

Project Implementation (Phase 2)

Schematic Design (30% Submission)

The concept(s) selected from the DWFMP are developed into alternative schemes to study design and technical alternatives for the specific option(s). A design scheme is selected and developed for each "finding" or item. Program and functional relationships are finalized in the plan. Selections are made for primary materials, structure, building enclosure, lighting and mechanical systems. The completed schematic design documents will define the size, appearance, project scope of work and preliminary cost analysis.

Design Development (60% Submission)

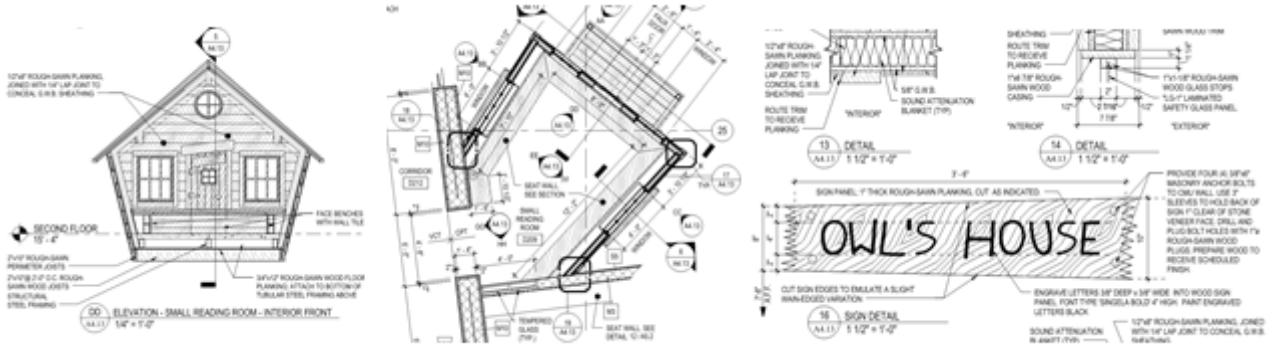
The Design Development phase refines the scope of work previously approved in the Schematic Design phase. The project is developed to a level of detail necessary to work out a clear, coordinated description of all aspects of the project. Impact on engineered systems are reviewed. A budget and scope update is prepared, reviewed and approved by the owner.

Design Development of Interior Spaces (Elementary School is adjacent to Appalachian Trail and Children's Lake)

Construction Documents (90% Submission)

Construction documents based upon the approved design development package is produced and results in development of working drawings and specifications in sufficient detail to permit the bidding of the project(s) and to direct the work of the contractors. Engineered systems, involving fire protection, mechanical, electrical, structural, and telecommunications are designed, integrated and coordinated as needed. During this phase, we will perform final Quality Control reviews, and facilitate reviews with the local approval agencies. The project schedule and budget are updated and verified and all bidding requirements are reviewed and approved by the owner. Depending on client funding, project work can be prioritized for bidding in packages coordinated around the school calendar and activities.

Design Development of Interior Spaces (Elementary School is adjacent to Appalachian Trail and Children's Lake)



Final Construction Drawings of Reading Tree House (Community Concept- Center of Elementary School)

Bidding

During the Bidding Phase, we will respond to questions from bidders in coordination with SCASD's Construction Manager, issue addenda as necessary and conduct a pre-bid conference. Upon receipt of bids we will assist the owner in reviewing the bidding documents, including analyzing bids vs. project cost estimate, reviewing alternate bid pricing, checking and verifying references and credentials and making an ultimate recommendation for bid award(s).

Construction Administration

During this phase of the project(s) we will administer construction as set forth in the architect/owner contract in conjunction with SCASD's Construction Manager. Major tasks include:

- Assist in arranging for any necessary testing services;
- Visit the site to observe general conformance with the contract documents;
- Review of shop drawings and product submittals;
- Expediting requests for information and construction change directives;
- Change orders will be reviewed and evaluated.
- Applications for payment will be reviewed and processed;
- Facilitate punch lists and project close-out procedures.

Post Occupancy Evaluation

We typically perform a Post Occupancy Evaluation in order to evaluate how the completed project facility or renovations are functioning. We believe that building occupants are an essential source of information on overall building performance and the effectiveness of our building design solutions. As such, post-occupancy facility evaluations are a necessary and critical step in the design process and a vital tool in creating high-performance design solutions.

The following components will be utilized by Crabtree, Rohrbaugh & Associates in the completion of our Post-Occupancy Building Assessment process:

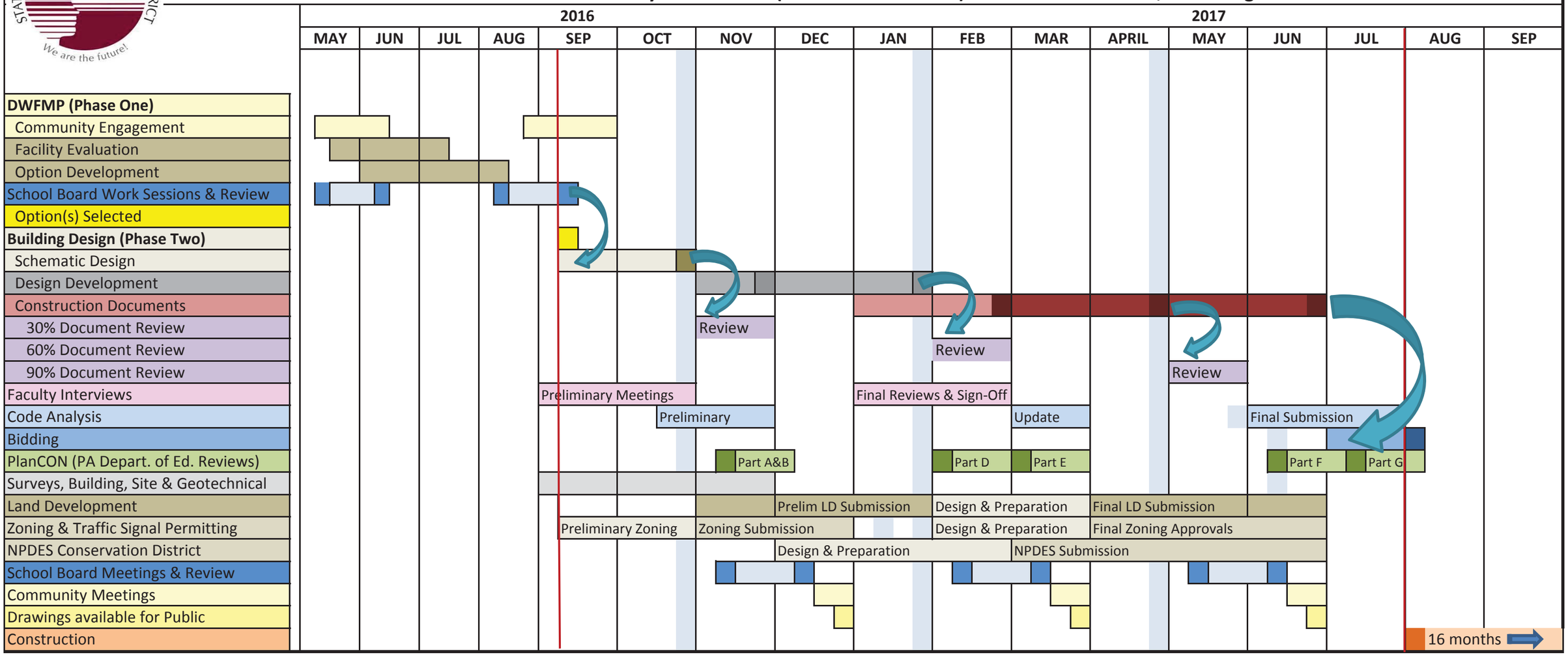
- Occupant Satisfaction Survey
- Field Assessment
- Client Interview

Project Schedule

STATE COLLEGE AREA SCHOOL DISTRICT

PROPOSED DESIGN SCHEDULE- District Wide Facility Master Plan (Phase One and Two)

Crabtree, Rohrbaugh & Associates Architects 11-Apr-16



* Preliminary DWFMP Schedule to identify general approach, it is anticipated this schedule will evolve with the integration of School Board, Adminstration and Design Team.

FEE STRUCTURE

Fee Structure

1) District Wide Facilities Master Plan

Crabtree, Rohrbaugh & Associates proposes a lump sum fixed fee of $38,000 for the District Wide Facilities Master Plan (DWFMP) update. It is understood the focus of the DWMFP effort will be Radio Park, Corl Street, Lemont, and Houserville Elementary Schools.

It is anticipated the scope will include community engagement, educational planning, demographic/ re-districting analysis, building infrastructure analysis and option development within approximately a four month timeframe as detailed in the proposed schedule. Please note, it is anticipated the demographic/ redistricting analysis will span both Phase One and Two.

DWFMP FEE Breakdown

CRA	$20,000
LEED Investigation	Included above
DCED Grant Submissions	Included above
MEP Systems Analysis	$5,000
Community Engagement	$4,500
Civil Engineering	$8,500
Total DWFMP Fees	$38,000

Other Services

Demographics / Re-Districting Analysis	$14,000-25,000

2)Architectural & Engineering Professional Design Services

Crabtree, Rohrbaugh & Associates proposes a fixed fee for options selected from the DWFMP to not exceed 5.75% for projects that are new construction and a fee not to exceed 6.25% for projects including additions and renovations of the Final Cost of the Work (Article 6; AIA B101) based upon the option(s) selected from the DWFMP (Phase One). CRA will contract all services as requested by SCASD. Basic services shall include Architectural, Structural, Mechanical, Electrical, Plumbing, Fire Protection, Energy Modeling, Daylighting Analysis and USGBC LEED Documentation. USGBC application fees are excluded. Civil engineering fees will be determined upon the Board's determination of the scope of the project(s).

Consultant Team

MEP Engineering:	Moore Engineering
Structural Engineering:	Carney Engineering
Site/Civil Engineer:	ELA Group
Demographics/Re-district Analysis:	Decision Insite