I. Team Introduction
II. Tailored Approach
III. Team Advantages
IV. Existing Site and Building Evaluation
V. Concept Reviews
VI. Schedules & Cost Estimates
VII. Evaluations
VIII. Q & A
I. TEAM INTRODUCTION

- Founded 1954
- 85 employees
- 62 years of school experience

- 200+ academic projects
  - 15+ school districts

- Relationships
  - Warwick (35 years)
  - Lancaster (34 years)
  - Palmyra (16)
introductions

Chris Linkey
Partner-in-Charge

Erin Hoffman
Project Manager

Brent Stebbins
Senior Designer

Dustin Julius
Designer / Dover graduate

Marc Kurowski
K&W

Ken Kauffman
Moore Engineering

Jim California
Providence Engineering / former board member
- Blue Mountain
  - Blue Mountain MS
- Columbia Borough School District
  - Columbia Jr-Sr High School
- ELANCO School District
  - Garden Spot HS/MS (2)
  - New Holland Elementary
  - Blue Ball Elementary
- Ephrata Area School District
  - Akron Elementary
  - Fulton Elementary
  - Ephrata Middle School
  - Ephrata High School
- Lampeter-Strasburg School District
  - Martin Meylin Middle School
- Manheim Township School District
  - Neff Elementary
  - Brecht Elementary
  - Schaeffer Elementary
- Penn Manor School District
  - Penn Manor High School
  - Manor Middle School
  - Marticville Middle School
  - Hambright Elementary
  - Martic Elementary
  - Central Manor Elementary
  - Pequea Elementary
- Pequea Valley
  - Pequea Valley High School
  - Pequea Valley Middle School
- School District of Lancaster
  - Carter & MacRae
  - District Offices
  - Elizabeth Martin School
  - Hand Middle School
  - Lincoln Annex Service Center
  - Wheatland Middle School
- Solanco School District
  - Solanco High School
  - Swift Middle School
  - Providence Elementary I
  - Bart Colerain Elementary
  - Clermont Elementary
  - Quarryville Elementary
- Unionville-Chadds Ford
  - Pocopson Elementary
  - Patton Middle School
- Warwick School District
  - Warwick High School (2)
  - Warwick Middle School
  - Kissel Hill Elementary (2)
  - John Beck Elementary
  - Littitz Elementary
- West Shore School District
  - District-wide Study

Moore Engineering – collaborative experience
- Dover Area School District
  - Stadium
  - Weigelstown Elementary
  - Dover Elementary

- Dallas School District
  - Dallas High School

- Diocese of Harrisburg
  - Bishop McDevitt High School
  - Stadium

- Donegal School District
  - High School
  - Athletic Stadium

- Northeastern School District
  - New Middle School

- West York Area School District
  - West York Area High School

- West Shore School District
  - Hillside Elementary School

- Elizabethtown Area School District
  - Bear Creek Intermediate School

- Eastern Lebanon County School District
  - ELCO Intermediate School
School District of Lancaster
- Carter & MacRae
- District Offices
- Elizabeth Martin School
- Hand Middle School
- Ross Elementary School
- Wheatland Middle School

Faust Jr High School

Fountain of Life Academy

The Janus School

Lancaster Mennonite School
- Field House
- Ag Tech Building
- Kraybill Campus
- New Danville Campus

Westtown School Boiler Room

Lancaster Mennonite School
- Field House
- Ag Tech Building
- Kraybill Campus
- New Danville Campus

Lancaster Bible College
- Esbenshade Hall
- Residence Hall
- Student Learning Center
- Frey Center

Millersville University
- Speaker Mount
- Dutcher Hall
- Osborne Building
- Gordinier Hall
- Lyte Auditorium
- Student Memorial Center
- Biemesderfer Stadium
- Parking Garage
- Water Tower
- Net Zero Building

Messiah College

Lancaster General College of Nursing & Health Sciences

Albright College Shirk Stadium

Loyola College

Penn State University
- Chandlee Lab
- Pattee-Paterno Library
- Old Main
- Food Science Building
- BRL Laboratory
- Mueller Lab & Frear North
- South Halls
- Est Campus Steam Plant
- Mont Alto Campus

Providence Engineering – related experience
II. TAILORED APPROACH

- Track record
- Building consensus
- Consistency
- Communications
Palmyra Area High School
Addition and Renovation
Construction Cost: $28,233,866

Columbia Jr-Sr High School
Significant Renovation
Construction Cost: $14,681,853
Annville-Cleona Secondary School

New Construction

Construction Cost: $30,426,434

General Information

Avg. E&O: less than .5%

Avg. bidding cost deviation less than 2% of estimate
finding the best solution
### 2. What is the best utilization of the land around the school?

- Expand building/more classrooms/new school — 24
- Athletic fields/sports complex — 24
- Parking/better drop off area — 18
- Move stadium to High School — 14

### 4. What specialized programs should be incorporated into academic electives?

- Language as core class — 27
- Art — 14
- Music — 14
- Shop/tech ed. — 12
- Computer/technology — 11

---

**• Focus groups**

- Crawford Slip Method (small group brainstorming)

---

**Dr. Claude Crawford**

*University of Southern California*
How would you like to collect responses to your survey?

- **Focus groups**
  - Crawford Slip Method (small group brainstorming)
  - Survey Monkey (flexible, large scale)
• Focus groups
  ✓ Crawford Slip Method (small group brainstorming)
  ✓ Survey Monkey (flexible, large scale)
  ✓ Poll Everywhere (instant results)
• Design charrette

• Ongoing information & support public meetings, District website, other communications

• Public meetings
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<tr>
<th>Key Personnel</th>
<th>Project Role</th>
<th>Study</th>
<th>SD</th>
<th>DD</th>
<th>CD</th>
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<td>18%</td>
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<td>William Fleischer</td>
<td>Lead Electrical Designer</td>
<td>20%</td>
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<td>45%</td>
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<td>80%</td>
<td>45%</td>
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<td>55%</td>
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<td>20%</td>
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Project Status Report

To: Matt Przywara, Harry Snavely
From: Erin Hoffman
Re: Elizabeth Martin K-A School
Cc: Dan Cicela, Melanie Heckel, Steve Gorgely, Jim Hackman, Joe Manda, Mark Broomell, Craig Kimmel, Filling

PROJECT PHASE:

ACTIVITIES LAST WEEK:
1. RLPS continued development of the interiors of the building.
2. The team continued development of the Revit model.
3. Harbur Engineering continued development of the overall site and grading.
4. The team met with PennDOT to discuss outstanding issues.
5. The team continued coordination of all disciplines within the building.

TASKS FOR THIS WEEK:
1. RLPS will continue development of the Revit model.
2. Harbur Engineering will continue development of the grading plan and land requirements and the land development submission process.
3. RLPS will continue interior & exterior development for the building.
4. RLPS will continue development of the building systems.
5. RLPS, REI and SDot will meet to review all door hardware throughout.

SCOPE OF WORK / CONSTRUCTION BUDGET UPDATE:
1. Current construction estimate including design contingency is $225,000.

ISSUES YOU SHOULD BE AWARE OF:
1. Comments from the PennDOT meeting should be forthcoming (November 30).
2. The next coordination meeting will be held at RLPS on December 2, 2000.
3. A door hardware review meeting is scheduled for December 11, 00am.

• Project meetings every two weeks through CDs
• Electronic meeting minutes
• Weekly status report
• Team depth / partner support
III. TEAM ADVANTAGES

- 21st Century Learning
- Grants
- Change Orders
- Relationships
21st century learning models
hands on learning

global or community connection

4 C’s (Critical thinking, Collaboration, Creativity, Communication)

authentic problem solving

student centered

final product

21st century learning models
space psychology

- intimate
- personal
- social
- public

21st century learning
space psychology
connections

- thinking walls
- quiet reading / learning
- global connection zone
- online learning

21st century learning spaces
classroom flexibility

- student options
- traditional classroom modifications

21st century learning spaces
1. Classroom (Home)
   - Decentralized Classroom
   - Small group “zones”
1. Classroom (Home)
   - Open classroom
2. Group of Classrooms (Neighborhood)

- Shared Space
- Group Activities

21st century zoning
3. Cafeteria / Library (Town Center)
   - Starbucks
   - Barnes & Noble
   - HOMAGO
• Building systems
  ✓ MEP
  ✓ Structural
- LEED Certification / Reimbursement
- ACE Grants
- Safe Routes to Schools
- Professional Grant Writer
1. DESIGN:
   Communication

2. DOCUMENTATION:
   Quality Control
   ✓ Partner Led
   ✓ Design Checklist
   ✓ Post Occupancy Evaluations
   ✓ Experienced team members

3. CONSTRUCTION:
   Scrutiny of Potential Changes
   Avg. E&O: less than .5%

change order control
• Constructability review / input

• Pre-qualify contractors

• CPM scheduler by owner
21\textsuperscript{st} Century Design Tools
IV. EXISTING SITE & BUILDING EVALUATION

- Goals
- Site Review
- Building Conditions
Site Evaluation – bridge to elementary site
Site Evaluation – extension of road
Site Evaluation – crossing canal street
V. CONCEPT REVIEWS

- Site Studies
- New Buildings
- Renovations
Historic View: Original Building
Historic View
Current View

Year Built:
1928

Additions:

Remodeling:
Proposed Options

I.  

II.  

III.  

IV.
Option I: New High School on Current Intermediate School Site
Option I: 100 Year Floodplain
Option I:
Option I:
Option II: New High School on Current Intermediate School Site
Option II: 100 Year Floodplain
Option II:
Option II:
Option III: Renovated High School on Current High School Site
Option III:
Option III A:
Option III A: 100 Year Floodplain
Option IV: New High School on Current High School Site
Option IV:
Option IV:
Option IV A:
Option III:
Option III: Phasing - Existing
Option III: Phase I
Option III: Phase II
Option III: Phase III
Option III: Phase IV
Option III: Phasing

I.

II.

III.

IV.
Option III:
Proposed Options

I.

II.

III.

IV.
Pros & Cons: Option I vs. Option II

**Opt. I**

**Pros:**
- Good curb appeal from West Canal Street
- Easily separated for evening activities
- Good solar orientation for classrooms
- Potential close proximity to adjacent school property

**Cons:**
- One large parking lot
- Limited athletic fields
- Football field across street

**Opt. II**

**Pros:**
- Dense, efficient building plan
- Woodland views from classrooms

**Cons:**
- Lack of visibility from Canal Street
- Football field across street
Pros & Cons: Option III vs. Option IV

**Opt. III**

Pros:
- Maintains historic connection
- Adjacent to football field
- Cost effective
- New courtyard
- New front façade

Cons:
- Less design flexibility
- Limited athletic fields
- Limited parking

**Opt. IV**

Pros:
- Maintains current address
- New start on historic site
- Greater design flexibility
- Adjacent to football field
- Woodland views from classrooms
- New aesthetic

Cons:
- Parking challenges during construction
- Limited athletic fields
VI. SCHEDULES & COST ESTIMATES
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<th>Preliminary Construction Schedules</th>
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<td><strong>Renovation of High School Scheme</strong></td>
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<tr>
<td>PHASE 1</td>
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<tr>
<td>PHASE 2</td>
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<td>PHASE 3</td>
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<td>PHASE 4</td>
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<td>Total Duration</td>
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<th><strong>Duration (Months)</strong></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<td>PHASE 1 - NEW</td>
<td>20</td>
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<td>PHASE 2 - RENOVATION</td>
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<td>PHASE 3 - DEMOLITION/ SITE</td>
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<td>Total Duration</td>
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<table>
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<tr>
<th>New High School Construction at High School</th>
<th><strong>Duration (Months)</strong></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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<tbody>
<tr>
<td>PHASE 1 - NEW</td>
<td>20</td>
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<tr>
<td>PHASE 2 - DEMOLITION/ SITE</td>
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<td>Total Duration</td>
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## H.S. Renovation Scheme

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<th>Area</th>
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<td><strong>Ground Floor</strong></td>
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<tr>
<td>Renovations</td>
<td>24,150</td>
<td>$45</td>
<td>$1,086,750</td>
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<tr>
<td>Mechanical Rm.</td>
<td>3,450</td>
<td>$10</td>
<td>$34,500</td>
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<tr>
<td><strong>First Floor</strong></td>
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<td>Demolition - Ag Area</td>
<td>13,800</td>
<td>$10</td>
<td>$138,000</td>
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<tr>
<td>Demolition - Front</td>
<td>20,280</td>
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<td>$202,800</td>
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<td>Renovations</td>
<td>108,100</td>
<td>$135</td>
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<tr>
<td>New</td>
<td>90,750</td>
<td>$190</td>
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<td><strong>Second Floor</strong></td>
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<td><strong>Soft Costs (20%)</strong></td>
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<td><strong>Total Project Cost</strong></td>
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<td>$51,160,520</td>
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Preliminary cost comparison
### NEW HS @ HS SITE CONSTRUCTION SCHEME

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<td>New</td>
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<td><strong>TOTAL CONSTRUCTION COST</strong></td>
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<td><strong>SOFT COSTS (20%)</strong></td>
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<td><strong>TOTAL PROJECT COST</strong></td>
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<td>$72,221,360</td>
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Cost per Student vs. Cost per S.F.

1,000 students

LESS SF per student

LOWER Project Cost

1,000 students

MORE SF per student

HIGHER Project Cost

(Cost/Student is a better measure of **efficiency** and **cost savings** than Cost/S.F.)
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<tr>
<th>DESCRIPTION</th>
<th>H.S. RENOVATION</th>
<th>NEW H.S. @ H.S. SITE</th>
<th>NEW H.S. @ I.S. SITE</th>
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<td>3 Combined Bidding (HS &amp; IS)</td>
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<td>4 Desired Site Adjacencies</td>
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<td>5 Maximize Available Site Use</td>
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<tr>
<td>6 Limited Disruption to Students</td>
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<td>7 Building Layout Flexibility</td>
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<td>8 Canal Street Crossing</td>
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<td>9 Fewer Construction Surprises</td>
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<td>10 Academic and Activity Separation</td>
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<td>11 21st Century Learning</td>
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<td>14 Sustainable Design</td>
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our promise
a passion for architecture

our values
integrity, empathy and creativity

our mission
listen, create, serve