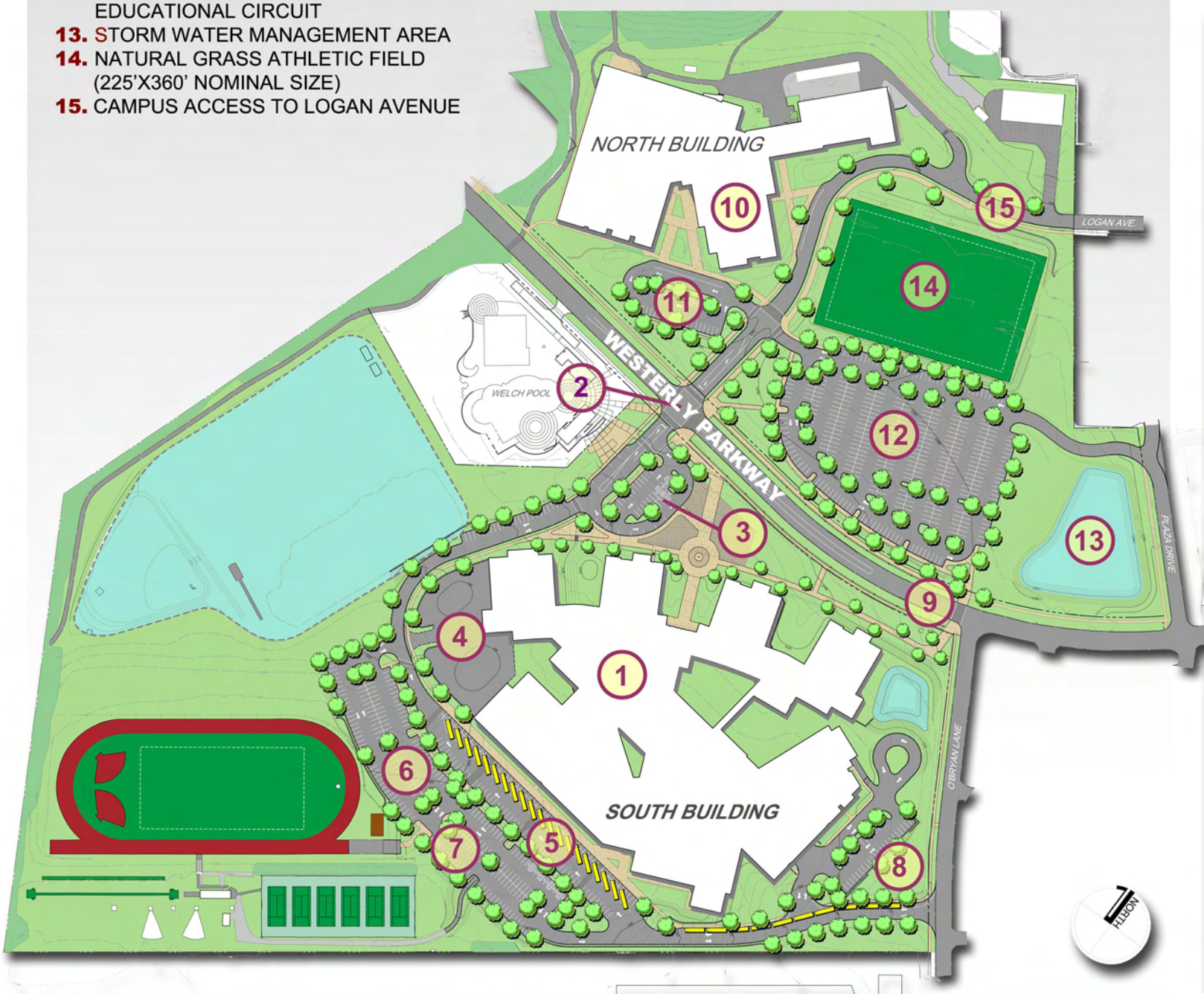
KEY

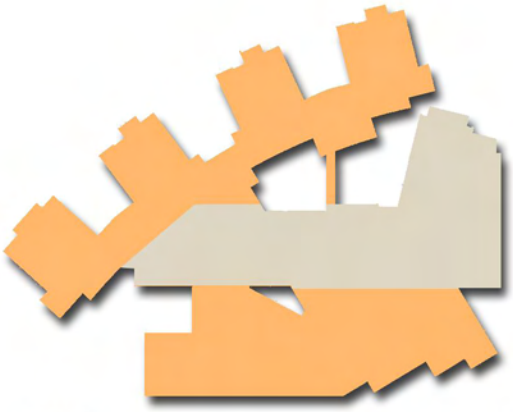
1. SOUTH BUILDING ADDITIONS AND RENOVATIONS
2. ENHANCED CIRCULATION AND CAMPUS ACCESS WITH NEW 4-WAY INTERSECTION
3. ACCESSIBLE AND VISITOR PARKING AREA WITH SEPARATE DROP OFF LANE
4. CAREER AND TECHNICAL CENTER (CTC) OUTDOOR "YARD" AREA
5. BUS QUEUING SPACES FOR ORGANIZED STUDENT PICK UP AND DROP OFF
   ADDITIONAL "EVENT" PARKING DURING NON SCHOOL HOURS
6. PRIMARY PARKING AREA ON SOUTH CAMPUS
7. IMPROVED ACCESS TO TRACK FACILITIES
8. SERVICE AREA AND PARKING
9. ENHANCED PEDESTRIAN CIRCULATION, INCLUDING FENCING ON BOTH SIDES OF WESTERLY PARKWAY
10. NORTH BUILDING RENOVATION AND DELTA ADDITION
11. BUS DROP OFF LANE FOR EVENTS AND ADDITIONAL ACCESSIBLE PARKING SPACES
12. PRIMARY PARKING AREA ON NORTH CAMPUS- INCLUDING PROVISIONS FOR BAND PRACTICE AND DRIVER'S EDUCATIONAL CIRCUIT
13. STORM WATER MANAGEMENT AREA
14. NATURAL GRASS ATHLETIC FIELD (225'X360' NOMINAL SIZE)
15. CAMPUS ACCESS TO LOGAN AVENUE



STATE HIGH INFORMATION FAIR

SITE PLAN - KEY FEATURES

CRABTREE ROHRBAUGH AND ASSOCIATES
ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055



KEY

- NEW ADDITIONS
- RENOVATIONS

LEGEND

- ADMIN & STUDENT SERVICES
- BUSINESS & COMMUNICATIONS LEARNING OMMUNITY
- CIRCULATION
- SUPPORT
- TOILETS
- WORLD LANGUAGES
- ARTS & HUMANITIES LEARNING COMMUNITY
- BUILDING SERVICES
- HEALTH & HUMAN SERVICES LEARNING COMMUNITY
- LARGE GROUP INSTRUCTIONS
- LIBRARY, LE & TECHNOLOGY
- S.T.E.M. LEARNING COMMUNITY
- SPECIAL EDUCATION
- SPECIALTY PROGRAMS - ELL PROGRAM
- STUDENT COMMONS/ DINING
- VISUAL & PERFORMING ARTS
- 9TH GRADE LEARNING COMMUNITY
- PHYS ED, HEALTH & ATHLETICS

GROUND FLOOR PLAN

FIRST FLOOR PLAN

NORTH

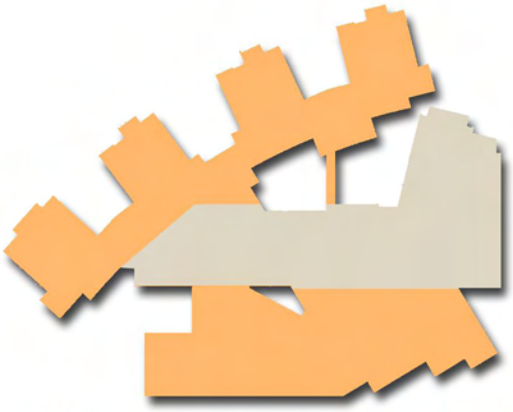
STATE HIGH INFORMATION FAIR

SOUTH BUILDING EDUCATIONAL MODEL

STATE COLLEGE AREA SCHOOL DISTRICT

CR

CRABTREE ROHRBAUGH AND ASSOCIATES
ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055



KEY

- NEW ADDITIONS
- RENOVATIONS

SECOND FLOOR PLAN

LEGEND

- ADMIN & STUDENT SERVICES
- BUSINESS & COMMUNICATIONS LEARNING OMMUNITY
- CIRCULATION
- SUPPORT
- TOILETS
- WORLD LANGUAGES
- ARTS & HUMANITIES LEARNING COMMUNITY
- BUILDING SERVICES
- HEALTH & HUMAN SERVICES LEARNING COMMUNITY
- LARGE GROUP INSTRUCTIONS
- LIBRARY, LE & TECHNOLOGY
- S.T.E.M. LEARNING COMMUNITY
- SPECIAL EDUCATION
- SPECIALTY PROGRAMS - ELL PROGRAM
- STUDENT COMMONS/ DINING
- VISUAL & PERFORMING ARTS
- 9TH GRADE LEARNING COMMUNITY
- PHYS ED, HEALTH & ATHLETICS

THIRD FLOOR PLAN

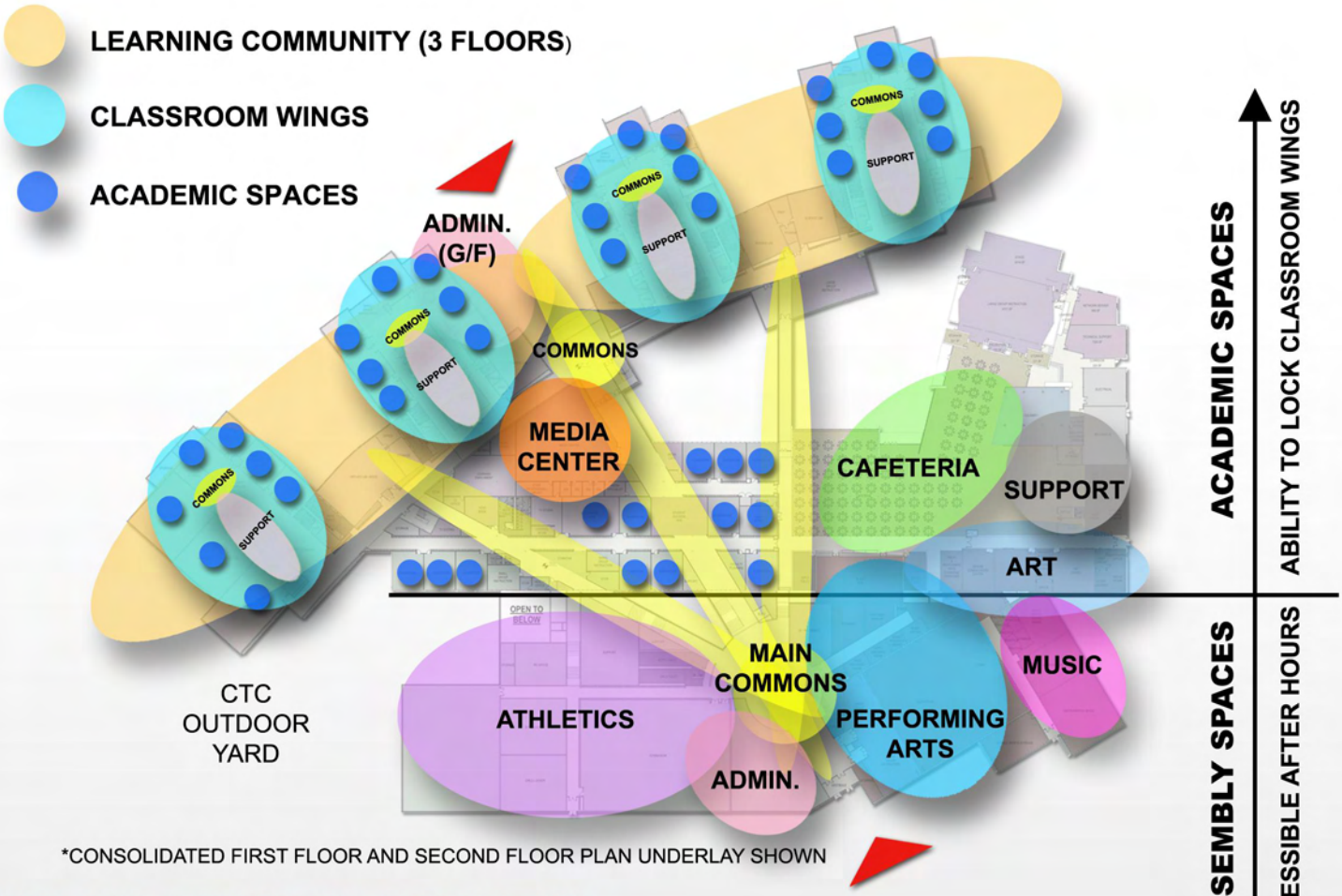
STATE HIGH INFORMATION FAIR

SOUTH BUILDING EDUCATIONAL MODEL

STATE COLLEGE AREA SCHOOL DISTRICT

CR

CRABTREE ROHRBAUGH AND ASSOCIATES
ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055



*CONSOLIDATED FIRST FLOOR AND SECOND FLOOR PLAN UNDERLAY SHOWN

MAIN HIGHLIGHTS:

SEPARATION OF ASSEMBLY AND ACADEMIC SPACES

MAIN COMMONS IS CENTRALLY LOCATED AS AN **ORGANIZING ELEMENT** BETWEEN THE ASSEMBLY AND ACADEMIC SPACES

ADMINISTRATION OFFICES ADJACENT BOTH MAIN ENTRANCES TO MONITOR VISITOR ACCESS

HIGHER ROOF PROFILE AT ASSEMBLY SPACES TO PROMOTE GATHERING OF STUDENTS

CLEARLY IDENTIFIABLE MAIN ENTRANCE WITH DIRECT ACCESS TO MAIN COMMONS

ALL ACADEMIC SPACES SHALL HAVE NATURAL DAYLIGHT AND VIEWS TO THE EXTERIOR

SEPARATE ACCESS TO EACH LEARNING COMMUNITY FROM THE MAIN CORRIDOR

STACKED CLASSROOM WING CONSTRUCTION FOR COST EFFICIENCY

CLEARLY DEFINED BUILDING CIRCULATION

STATE COLLEGE AREA SCHOOL DISTRICT

STATE HIGH INFORMATION FAIR

SOUTH BUILDING ORGANIZATIONAL MODEL

CRABTREE ROHRBAUGH AND ASSOCIATES
ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

VIEW FROM WESTERLY PARKWAY

VIEW FROM MAIN VEHICULAR ENTRANCE

STATE COLLEGE AREA SCHOOL DISTRICT

STATE HIGH INFORMATION FAIR

SOUTH BUILDING

CRABTREE ROHRBAUGH AND ASSOCIATES ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

CR

WHAT IS LEED CERTIFICATION?

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED) IS A STRUCTURED RATING SYSTEM FOR THE DESIGN, CONSTRUCTION, OPERATION, AND MAINTENANCE OF GREEN BUILDINGS, HOMES AND NEIGHBORHOODS.
DEVELOPED BY THE **U.S. GREEN BUILDING COUNCIL (USGBC),** LEED IS INTENDED TO HELP BUILDING OWNERS FIND AND IMPLEMENT WAYS TO BE ENVIRONMENTALLY RESPONSIBLE AND RESOURCE-EFFICIENT.

WHY LEED CERTIFICATION?

IMPROVE HEALTH AND WELFARE
INCREASE ENERGY CONSERVATION
REDUCE POLLUTION
REDUCE OPERATIONAL COSTS
USE LOCAL RESOURCES
REDUCE CONSTRUCTION WASTE TO LANDFILLS
REUSE MATERIALS
DAYLIGHTED EDUCATIONAL SPACES
WATER USE REDUCTION
LOW VOLATILE ORGANIC COMPOUND (VOC) MATERIALS
IMPROVE AIR QUALITY
EXHIBIT LEADERSHIP AND SOCIAL RESPONSIBILITY
PROVIDE EDUCATIONAL OPPORTUNITIES

5 COMPONENTS OF LEED CERTIFICATION

LEED BENEFITS TO STUDENTS*

*BASED ON NATIONWIDE CASE STUDIES OF HIGH PERFORMANCE SCHOOLS

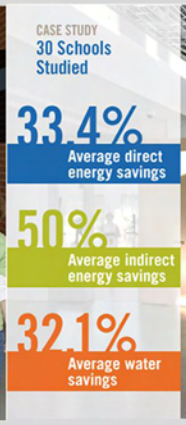
INCREASED LEARNING RATES
INCREASE IN PRODUCTIVITY
REDUCTION IN ABSENTEEISM

PROPOSED LEED RATING

Gold 73*

Sustainable sites	21/24
Water Efficiency	6/11
Energy & Atmosphere	17/33
Materials & Reasources	6/13
Indoor Environmental Quality	13/19
Innovation & Design	6/6
Regional Priority	4/4

** Proposed out of 110 points*



LEED RATING: CERTIFIED 40 TO 49 POINTS SILVER 50 TO 59 POINTS GOLD 60 TO 79 POINTS PLATINUM 80 TO 110 POINTS

STATE COLLEGE AREA SCHOOL DISTRICT

STATE HIGH INFORMATION FAIR
LEED INFORMATION

CRABTREE ROHRBAUGH AND ASSOCIATES
ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

STATE COLLEGE AREA SCHOOL DISTRICT

STATE HIGH INFORMATION FAIR

LEED CHECKLIST

CRABTREE ROHRBAUGH AND ASSOCIATES
ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

LEED 2009 for Schools New Construction and Major Renovations

Project Checklist

State College Area High School- Westerly Site Options

Sustainable Sites — Possible Points: 24

21	1	2			
Y	?	N			
Y			Prereq 1	Construction Activity Pollution Prevention	
Y			Prereq 2	Environmental Site Assessment	
1			Credit 1	Site Selection	1
4			Credit 2	Development Density and Community Connectivity	4
1			Credit 3	Brownfield Redevelopment	1
4			Credit 4.1	Alternative Transportation—Public Transportation Access	4
1			Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
2			Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	2
2			Credit 4.4	Alternative Transportation—Parking Capacity	2
		1	Credit 5.1	Site Development—Protect or Restore Habitat	1
1			Credit 5.2	Site Development—Maximize Open Space	1
1			Credit 6.1	Stormwater Design—Quantity Control	1
1			Credit 6.2	Stormwater Design—Quality Control	1
		1	Credit 7.1	Heat Island Effect—Non-roof	1
1			Credit 7.2	Heat Island Effect—Roof	1
	1		Credit 8	Light Pollution Reduction	1
1			Credit 9	Site Master Plan	1
1			Credit 10	Joint Use of Facilities	1

Water Efficiency — Possible Points: 11

6	5				
Y			Prereq 1	Water Use Reduction—20% Reduction	
4			Credit 1	Water Efficient Landscaping	2 to 4
	2		Credit 2	Innovative Wastewater Technologies	2
2	2		Credit 3	Water Use Reduction	2 to 4
	1		Credit 3	Process Water Use Reduction	1

Energy and Atmosphere — Possible Points: 33

17	7	1			
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
10	5		Credit 1	Optimize Energy Performance	1 to 19
2	2		Credit 2	On-Site Renewable Energy	1 to 7
2			Credit 3	Enhanced Commissioning	2
1			Credit 4	Enhanced Refrigerant Management	1
2			Credit 5	Measurement and Verification	2
		1	Credit 6	Green Power	2

Materials and Resources — Possible Points: 13

6	1	5			
Y			Prereq 1	Storage and Collection of Recyclables	
		2	Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 2
		1	Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			Credit 2	Construction Waste Management	1 to 2

Materials and Resources, Continued

Y	?	N			
		1	Credit 3	Materials Reuse	1 to 2
2			Credit 4	Recycled Content	1 to 2
2			Credit 5	Regional Materials	1 to 2
		1	Credit 6	Rapidly Renewable Materials	1
	1		Credit 7	Certified Wood	1

Indoor Environmental Quality — Possible Points: 19

13	4	2			
Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
Y			Prereq 3	Minimum Acoustical Performance	
1			Credit 1	Outdoor Air Delivery Monitoring	1
		1	Credit 2	Increased Ventilation	1
1			Credit 3.1	Construction IAQ Management Plan—During Construction	1
1			Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
3	1		Credit 4	Low-Emitting Materials	1 to 4
1			Credit 5	Indoor Chemical and Pollutant Source Control	1
1			Credit 6.1	Controllability of Systems—Lighting	1
	1		Credit 6.2	Controllability of Systems—Thermal Comfort	1
1			Credit 7.1	Thermal Comfort—Design	1
1			Credit 7.2	Thermal Comfort—Verification	1
2	1		Credit 8.1	Daylight and Views—Daylight	1 to 3
1			Credit 8.2	Daylight and Views—Views	1
	1		Credit 9	Enhanced Acoustical Performance	1
		1	Credit 10	Mold Prevention	1

Innovation and Design Process — Possible Points: 6

6					
1			Credit 1.1	Innovation in Design: Integrated Pest Management	1
1			Credit 1.2	Innovation in Design: Green Cleaning	1
1			Credit 1.3	Innovation in Design: Exemplary Preformance MRc5 Regional Mat.	1
1			Credit 1.4	Innovation in Design: Exemplary Performance SSc5.2 Open Space	1
1			Credit 2	LEED Accredited Professional	1
1			Credit 3	The School as a Teaching Tool	1

Regional Priority Credits — Possible Points: 4

4					
1			Credit 1.1	Regional Priority: SSc3 Brownfield Redevelopment (Asbestos)	1
1			Credit 1.2	Regional Priority: SSc4.4 Alternate Transportation	1
1			Credit 1.3	Regional Priority: SSc5.2 Site Development- Max Open Space	1
1			Credit 1.4	Regional Priority: SSc6.2 Stormwater Design- Quality Control	1

Total — Possible Points: 110

73	18	10

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

WHAT ARE WATER SOURCE HEAT PUMPS?

A WATER SOURCE HEAT PUMP **HEATS AND COOLS A BUILDING USING WATER INSTEAD OF AIR** AS A SOURCE OF ENERGY.

THE SPECIFIC SYSTEM WE PROPOSE WILL HAVE **A CLOSED CIRCUIT & GAS-FIRED BOILER, AS WELL AS A DEDICATED OUTDOOR AIR SYSTEM (DOAS) WITH ENERGY RECOVERY.**

WHY THIS SYSTEM?

LOW INITIAL & LIFETIME COST OVER 20 YEARS

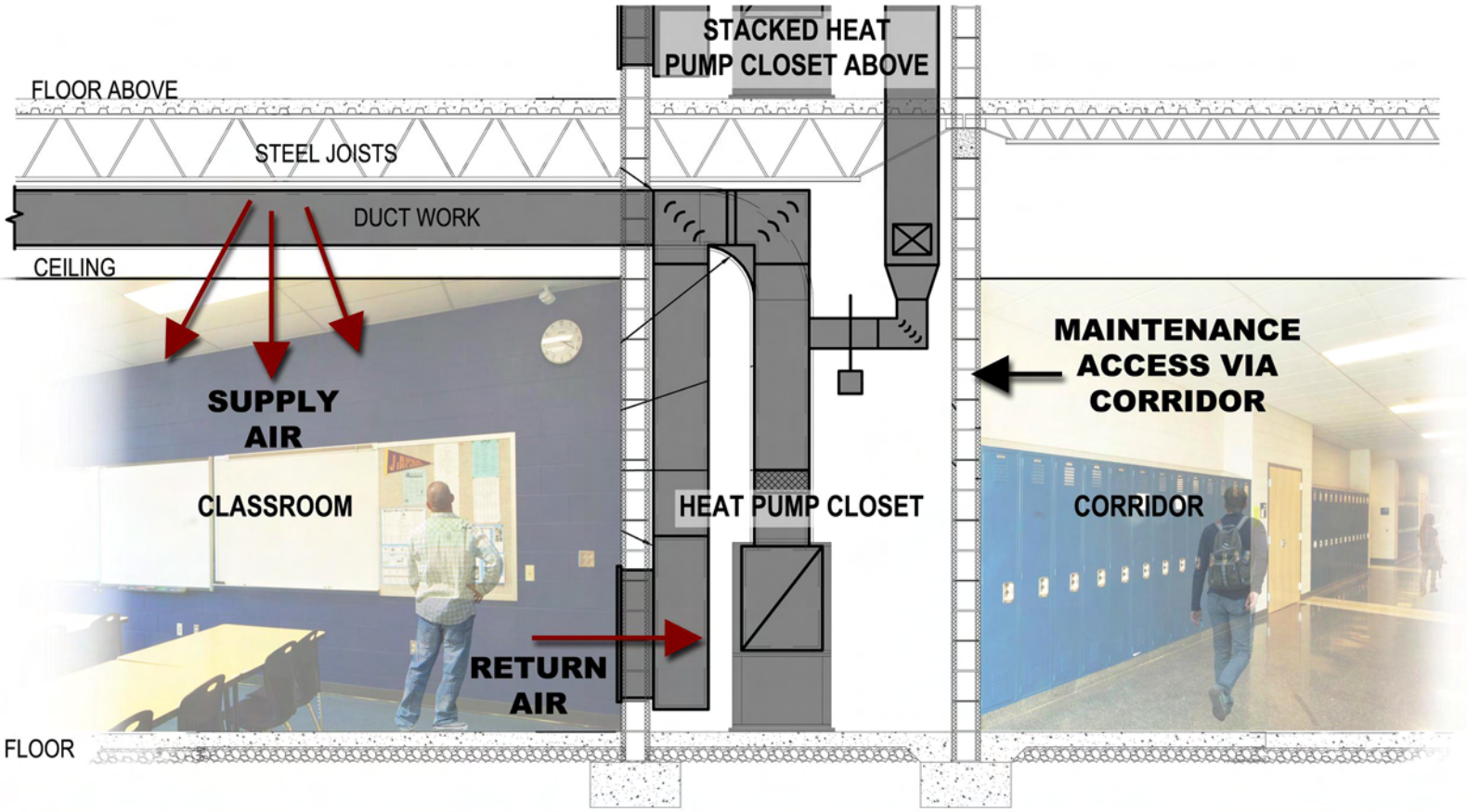
"EASY" ACCESS TO MAINTAIN EQUIPMENT

ONE UNIT PER "THERMAL ZONE" (I.E. EACH CLASSROOM)

WILL GROUP SIMILAR OCCUPANCIES TOGETHER

DOAS W/ ENERGY RECOVERY WHEELS, C02 CONTROL

BASE- MOUNTED PUMPS FOR WATER CIRCULATION



STATE HIGH INFORMATION FAIR

MECHANICAL SYSTEMS

CRABTREE ROHRBAUGH AND ASSOCIATES
ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

DESIGN INTENT

ALL NEW PLUMBING FIXTURES

- VITREOUS CHINA FIXTURES IN BATHROOMS
- S/S SINKS IN VARIOUS AREAS
- MANUAL FLUSH VALVES ON WATER CLOSETS
- URINALS (LOW FLOW VS WATERLESS)
- BATTERY OPERATED SENSOR FAUCETS
- SOLIDS INTERCEPTORS IN ART SINKS
- BI-LEVEL WATER COOLERS

ALL NEW PIPING

- DOMESTIC, WASTE, VENT, GAS, ETC.

GAS-FIRED HOT WATER GENERATOR

- HIGH EFFICIENCY STORAGE TYPE
- DISTRIBUTE 140°F WATER
- MIXED DOWN AT POINT OF USE

FULLY SPRINKLERED BUILDING

- STANDPIPE SYSTEM IN 2 PODS
- FIRE PUMP REQUIRED

ACID NEUTRALIZATION SYSTEM

- OUTDOOR CONCRETE VAULT TYPE

LIMITED RAINWATER HARVESTING SYSTEM

- 10,000 GALLON STORAGE TANK
- GREY-WATER USE FOR PLUMBING
- FIXTURES OR HVAC MAKEUP WATER
- SKID-MOUNTED PROCESSING EQUIPMENT

STATE COLLEGE AREA SCHOOL DISTRICT

STATE HIGH INFORMATION FAIR

PLUMBING SYSTEMS

CR
CRABTREE ROHRBAUGH AND ASSOCIATES
ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

DESIGN INTENT

NEW POWER DISTRIBUTION

ELECTRICAL SWITCHBOARD FOR EACH UTILITY SERVICE

NEW PANELBOARDS THROUGHOUT THE BUILDING

POWER WIRING & DICONNECTING PROVIDED FOR HVAC, PLUMBING, & OWNER FURNISHED EQUIPMENT

LED LIGHTING INTERIOR

2 X 2 RECESSED FIXTURES FOR CLASSROOMS (AVG 35 - 50 FOOTCANDLES)

2 X 4 RECESSED FIXTURES FOR CORRIDORS (AVG 10 - 20 FOOTCANDLES)

DECORATIVE FIXTURES SELECTED FO SPACES LIKE MAIN ENTRY, LIBRARY, ETC.

ILLUMINATING ENGINEERING SOCIETY (IES) RECOMMENDATIONS SHALL BE MET FOR LIGHTING LEVELS

DIGITAL LIGHTING MANAGEMENT SYSTEM

FOUR-BUTTON LOW VOLTAGE WALL STATION FOR LIGHTING CONTROLS

VACANCY SENSORS TO PROVIDE AUTOMATIC 'SHUT-OFF'

PHOTOSENSORS IN SELECT ROOMS FOR DAYLIGHT HARVESTING

INTEGRATED CONTROL SETBACK FOR HVAC IN EACH SPACE WHEN ROOM IS UNOCCUPIED

INTEGRATED PLUG LOAD REDUCTION DESIGNED TO SHUT OFF POWER TO SPECIFIC RECEPTACLES IN CLASSROOMS & OFFICES WHEN SPACE IS UNOCUPIED.

DATA CENTER RELOCATION TO SOUTH BUILDING

EMERGENCY GENERATOR SETS

EACH SERVICE TO HAVE DEDICATED GENERATOR

EMERGENCY GENERATOR SETS (CONT.)

EACH EMERGENCY SYSTEM WILL BE PROVIDED WITH (2) NEW AUTOMATIC TRANSFER SWITCHES, A CONTRACTOR FOR EMERGENCY ONLY LOAD, AND AN AREA PROTECTION PANEL FOR EMERGENCY LIGHTING CONTROL.

GENERATORS WILL POWER EGRESS LIGHTING, EXIT SIGNS, SYSTEM HEAD END EQUIPMENT.

BUILDING SYSTEMS

VOICE OVER INTERNET PROTOCOL (VOIP) PROVIDED BASED ON SCHOOL DISTRICT'S CURRENT SYSTEM.

INTERCOM SYSTEM WITH THE ABILITY TO MAKE PROGRAM CHANGES VIA A NETWORK WEB PORTAL

ENTIRE BUILDING PROVIDED WITH WIRELESS ACCESS POINT CONNECTIONS

FIRE ALARM SYSTEMS

THE FIRE ALARM SYSTEM WILL BE A DIGITAL ADDRESSABLE SYSTEM.

VISUAL/AUDIBLE AND VISUAL NOTIFICATION DEVICES SHALL BE PROVIDED AS REQUIRED BY CODE.

CARBON MONOXIDE DETECTORS SHALL BE PROVIDED AT ALL ROOM WITH A NATURAL GAS CONNECTION.

SECURITY & ACCESS CONTROL SYSTEMS

ACCESS CONTROL SYSTEM WILL BE BASED UPON THE DISTRICT WIDE SYSTEM.

ACCESS CONTROL CARD READERS WILL BE LOCATED AT AREAS AS DIRECTED BY THE SCHOOL DISTRICT.

SECURITY SYSTEM SHALL HAVE PANIC BUTTONS LOCATED IN THE MAIN OFFICE FOR EMERGENCY SITUATIONS.

INTERNET PROTOCOL CLOSED CIRCUIT TELEVISION (IP CCTV) COVER SHAL BE THROUGHOUT ALL GENERAL AREAS OF THE BUILDING.

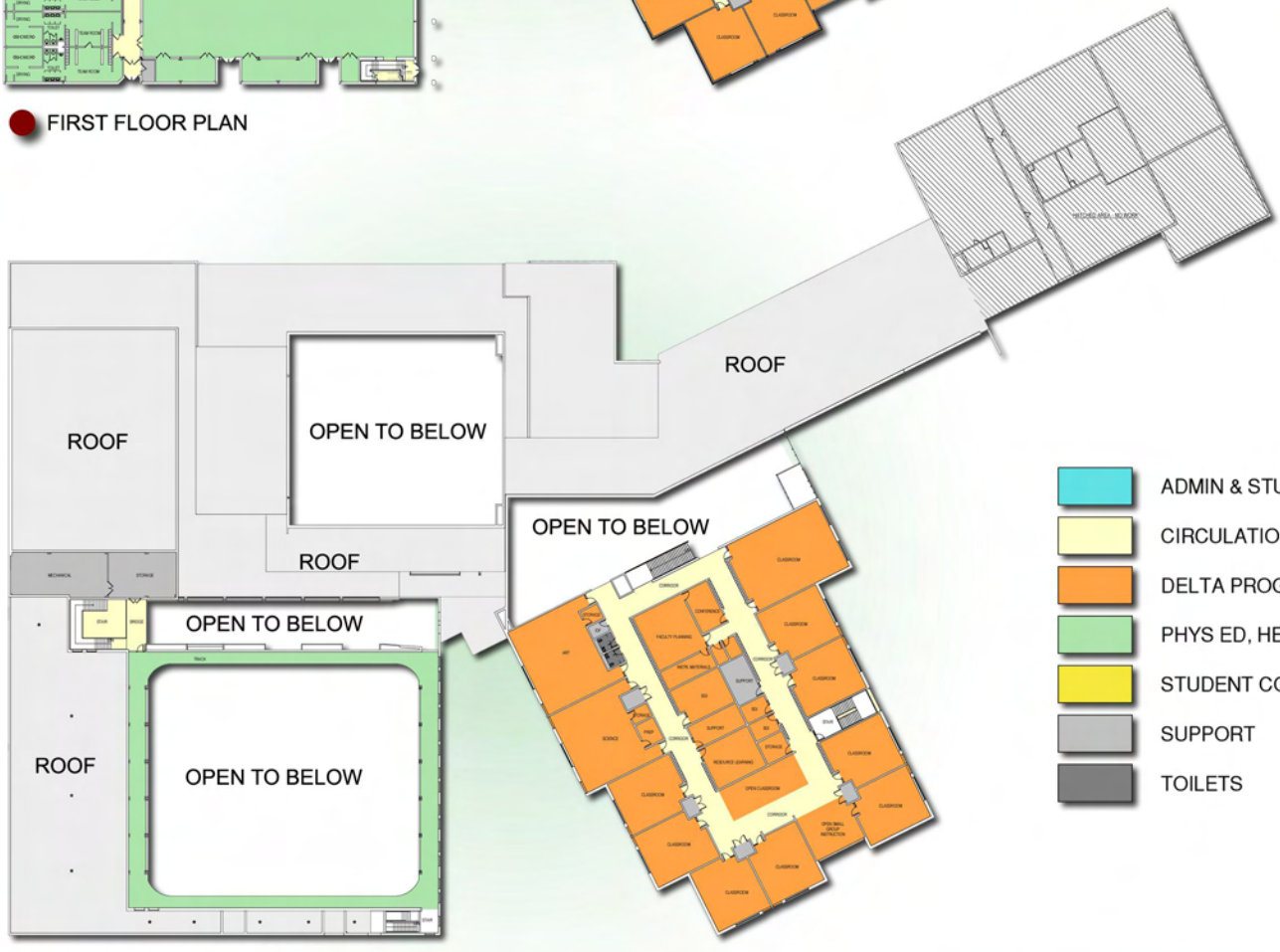
STATE COLLEGE AREA SCHOOL DISTRICT

STATE HIGH INFORMATION FAIR

ELECTRICAL SYSTEMS

CRABTREE ROHRBAUGH AND ASSOCIATES
ARCHITECTS
401 EAST WINDING HILL ROAD
MECHANICSBURG PENNSYLVANIA 17055

FIRST FLOOR PLAN



SECOND FLOOR PLAN

STATE HIGH INFORMATION FAIR

NORTH BUILDING EDUCATIONAL MODEL

STATE COLLEGE AREA SCHOOL DISTRICT

CR