Energy Project –Phase 1

Essex County Public Schools

December 8, 2025

ECPS & McClure Co Partnership & Project Priorities

- Enhance Operational Efficiency and Modernize School Infrastructure
- Address Deferred Maintenance Across Educational Environment
- Align Improvements with Immediate Needs and Long-Term Strategic Goals
- Reduce Unnecessary Operating Costs and Reinvest Savings into a Thriving Learning Environment

Strategic Priorities and Focus by Project Phase

Phase 1 Focus

- Essential Facility Upgrades and Quick-Return Improvements at TES
- Energy Conservation Measures and Quick Payback items at EHS and JCIS not affected by JCIS renovation
- Roof Solar Sites that maximize ITC credit before 12/31/25 deadline

Phase 2 Focus

- Unaddressed Capital and Energy Efficiency Projects for JCIS and EHS
  - Baseball Field Lighting at EHS
  - Door Locks
  - Roofing Improvements/Upgrades
- CTE Building MEP Renovations
- Shared Transportation Facility MEP Needs
- Ground Mount Solar Opportunities

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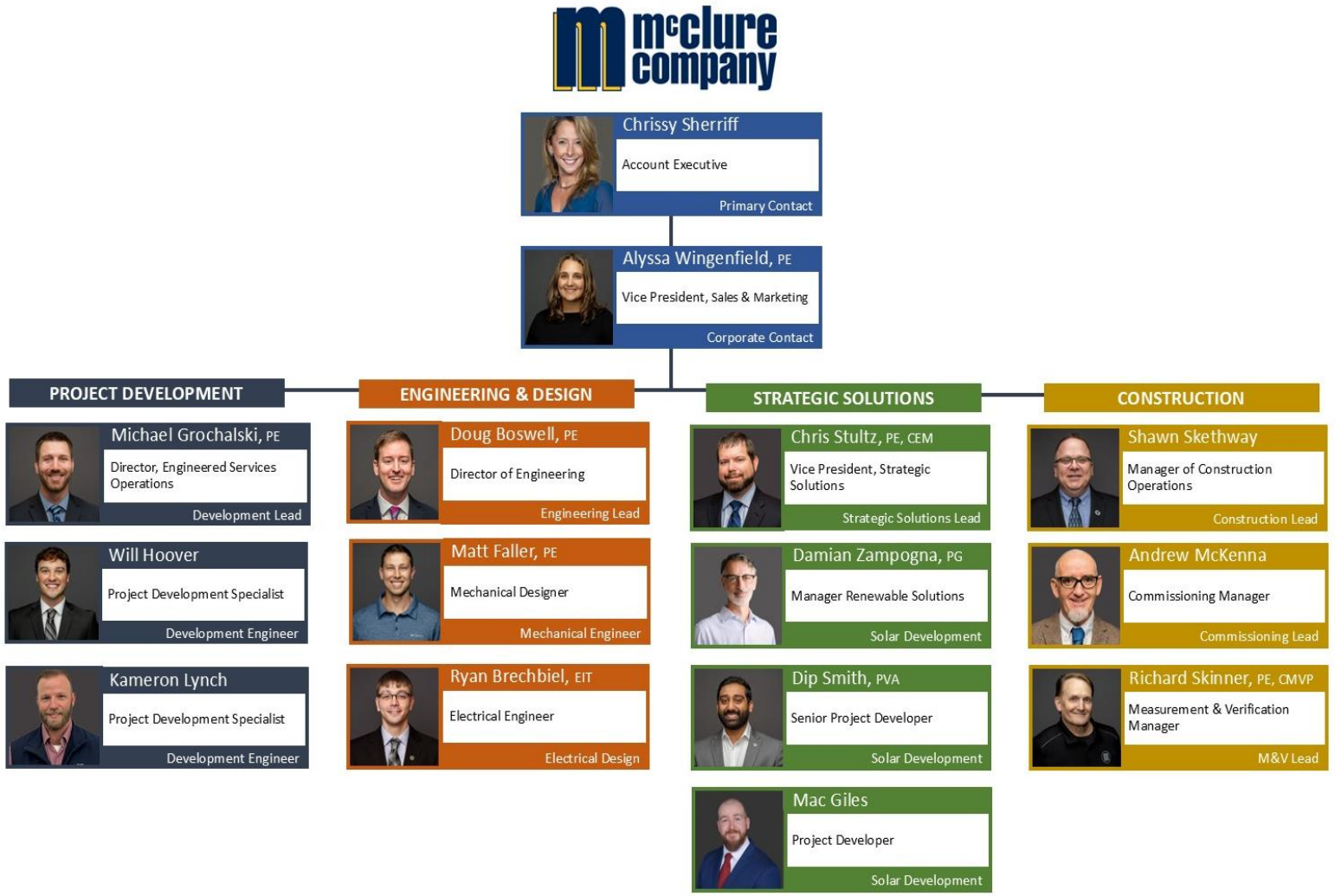
Your Single Point Resource



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Project Timeline

STEP 1

SCOPING AUDIT

- ✓ Identify Goals (11/2024)
- ✓ Data Collection & Survey (12/2024)
- ✓ Present to Facilities (2/17/25)
- ✓ Present to Superintendent (2/18/2025)
- ✓ Meet with County (5/11/2025)
- ✓ Present to County Administrator and Chairman of BoS (5/30/2025
- ✓ Present to School Board for approval to move into (IGA) Investment Grade Audit (10/13/25)

Winter- Fall 2025

STEP 2

PROCUREMENT

- ✓ Procurement (Coop) GSA MAS
- ✓ Board Action to Approve ESCO
- ✓ Present preliminary savings potential at Town Hall Meeting (10/27/25)
- ✓ McClure begins Investment Grade Audit on school bldgs.

Fall 2025

STEP 3

INVESTMENT GRADE AUDIT

We are Here

- ○ ESCO Presents to Admin and Board & Selects Project(s)
- ○ Admin/Board Approves Projects
- ○ Board Action to Execute ESCO Contract
- ○ BoS Approval

December 2025/Winter 2026

STEP 4

CONSTRUCTION

- ○ Final Engineering
- ○ Permit Submission
- ○ Owner Final Design Review
- ○ Procure Major Equipment
- ○ Installation Coordination
- ○ Commissioning
- ○ Owner Training
- ○ Measurement and Verification

Spring/Summer 2026/27 + Phase 1 & 2

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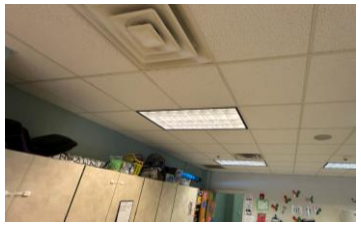
Critical Facility Needs and Energy Conservation Measures

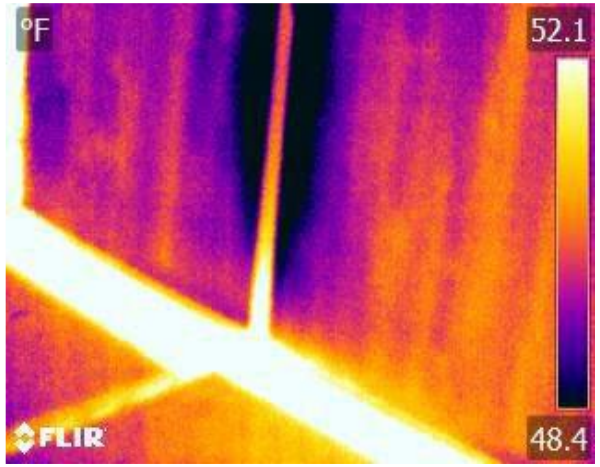
Tappahannock Elementary School

History
- Building additions in 1977 and 2001

Existing Conditions
- Lighting – Interior is primarily a mix of T8 and T12 fluorescent fixtures. Exterior is metal halide or high-pressure sodium wall packs and pole fixtures.
- Roof and Door replacement need identified

Recommendations for Phase 1
- Fluid Cooler is beyond useful life and critical point of failure- strongly recommended for immediate replacement
- LED Lighting Upgrades
  - Option for LED Re-Lamp
  - Option for LED Door Kits
- Building Envelope Upgrades





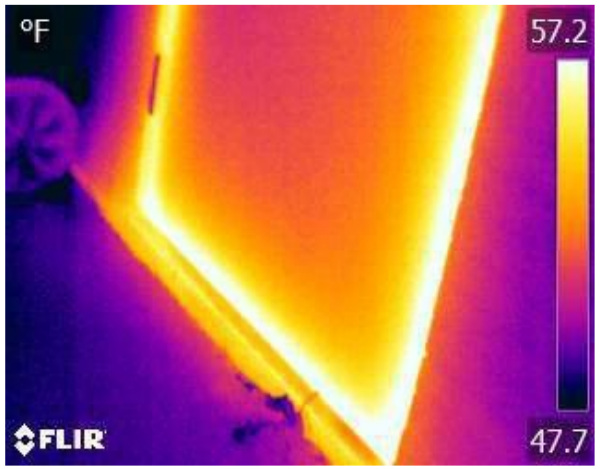
Critical Facility Needs and Energy Conservation Measures

James H. Cary Intermediate School

History
- 2006 Renovation

Existing Conditions
- Lighting – Interior is primarily a mix of fluorescent fixtures with T8 tubes or CFL lamps. Exterior is metal halide or high-pressure sodium wall packs and pole fixtures.

Recommendations for Phase 1
- LED Lighting Upgrades
  - Option for LED Re-Lamp
  - Option for LED Door Kits
- Building Envelope Upgrades
- Solar (Roof Mount)



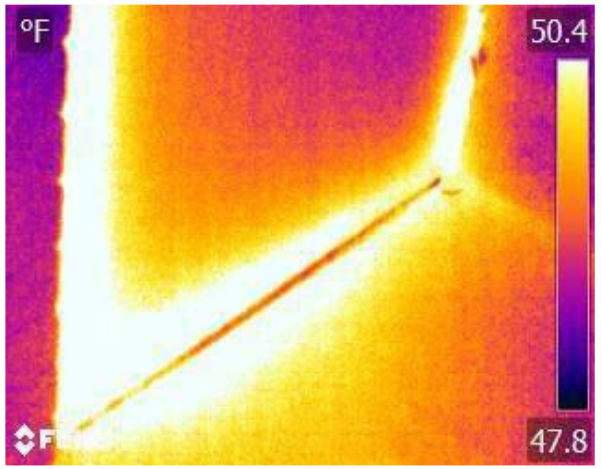
Critical Facility Needs and Energy Conservation Measures

Essex High School

History
- Built in 1978
- Building renovated in 2012

Existing Conditions
- Many Energy Conservation Measures addressed during 2012 renovation effort.
- Lighting upgrades and Building Envelope Upgrade opportunities remain present.
- Lighting – Interior is primarily a mix of fluorescent fixtures with T8 tubes or CFL lamps. Exterior has already been converted to LED.

Recommendations for Phase 1
- LED Lighting Upgrades
  - Option for LED Re-Lamp
  - Option for LED Door Kits
- Building Envelope
- Solar (Roof Mount)



Critical Facility Needs and Energy Conservation Measures

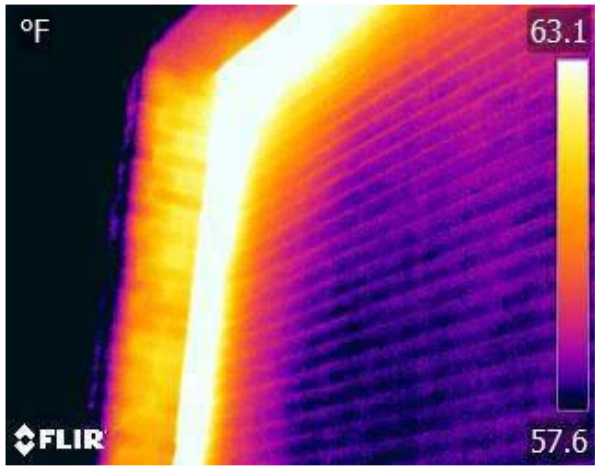
Essex High School CTE Building

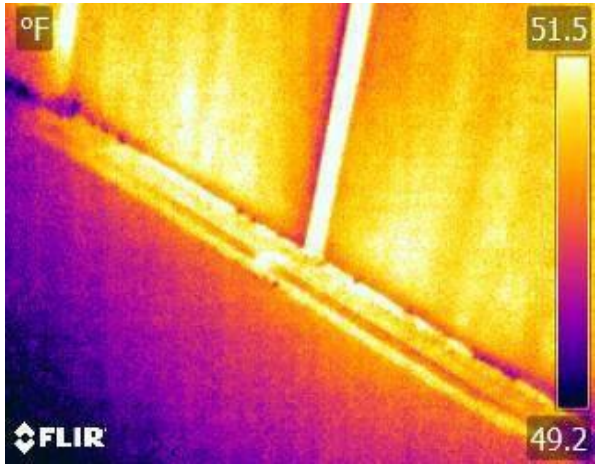
Existing Conditions

- Lighting – Interior is primarily a mix of fluorescent fixtures with T8 tubes or CFL lamps.
- Opportunities exist to air seal areas of the building to reduce outside air infiltration and increase energy savings

Recommendations for Phase 1

- LED Lighting Upgrades
  - Option for LED Re-Lamp
  - Option for LED Door Kits
- Building Envelope





Solar Savings Potential with PPA

Essex High School
127% Offset
1,234 kW Production
$ 52K 1st Year Savings
$ 3.1M 30 Year Savings

James H. Cary Intermediate School
91% Offset
747 kW Production
$ 24K 1st Year Savings
$ 1.57M 30 Year Savings

PPA –Power Purchase Agreement -is a financial arrangement that allows schools & governments to install solar energy systems on their property with no upfront costs

Benefits:

- No Upfront Payment
- No Installation or Maintenance Costs
- Significant Annual Electric Savings

How it Helps:

- School District pays a significantly reduced electricity rate for 10-25 years
- Schools use savings from PPA to reduce cost for capital projects

Phase 1 Project Financials Summary

ECM	Description	Program Cost
1	LED Lighting Upgrades- TES, JCIS, EHS, CTE	
2	Building Envelope Upgrades- TES, JCIS, EHS, CTE	
3	HVAC- Fluid Cooler Replacement - TES	
4	Solar PPA- EHS & JCIS (Roof)	
	Costs for Project	**$1,683,941**
	20 Year Energy and Operational Savings	**$4,562,052**
	Total Projet Costs	**-$2,878,111**

Table Notes	
1	Project costs are turnkey and include all preconstruction (i.e., engineering, permits, etc.), construction (hard/soft costs) and post-construction (i.e., commissioning, training, etc.) services.
2	20-Year Energy Savings represent energy savings on utilities, operational savings for equipment under warranty (i.e., lighting), and local utility rebates.
3	Savings above reflect a 30 Year Solar Savings

Phase 2 Scopes Under Development

ECM	Description	
1	Transformer Upgrades- EHS	
2	Outisde Air Makeup Unit Replacement (4) - JCIS	
3	HVAC Upgrades- Includes RTUs, Split System Replacements (4), DWH- JCIS	
4	Domestic Water Heater Upgrade- JCIS & TES	
5	Roofing, Doors, Windows Upgrades/Replacements	
6	Power System Study & Cleaning (All Schools)- JCIS & EHS	
7	Baseball Field Lighting at EHS	
8	CTE Building- Renovations	
9	Ground Mounted Solar PPA	

Project Timeline

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Spring/Summer 2026/27 + Phase 1 & 2

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Benefits to Projects with McClure Co

- Leverage Design- Build Construction Procurement
- Comprehensive Project Management Under One Roof
- Firm Fixed Pricing
- Work Directly with McClure In-house Engineers and Designers
- Co-Created Solutions through Integrated Partnership
- Consistent Team from Start to Finish
- Address Critical Infrastructure Needs and Deferred Maintenance
- Results are Guaranteed
- Use Your Existing Budget as a Funding Source for Capital Projects
- Demonstrates Fiscal Stewardship
- Provides Long Term Strategic Asset Management Plan

Questions & Answers

Thank You!