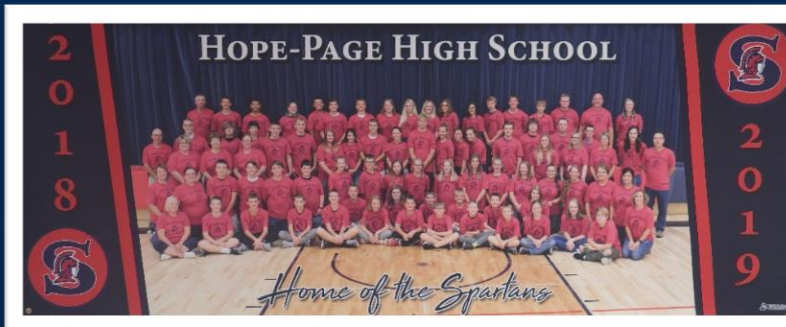
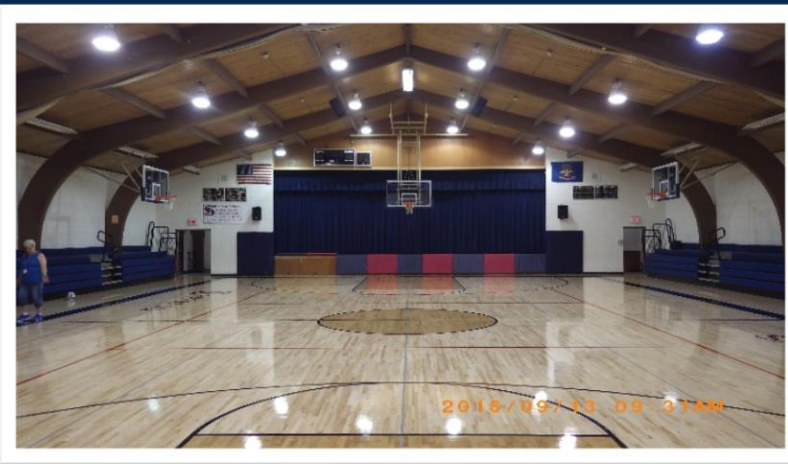


Hope - Page Public Schools

Report to the Community

August 2019



Tonight's Discussion

- Why are we talking about facilities?
- School Funding Overview
- Building Assessment / Cost Review
- We want to hear from you
- Solicit Committee Members
- Questions / Discussion
- ***No decisions have been made***
- Sharing information collected to date
- No decisions tonight – seeking input / ideas for committee to explore.



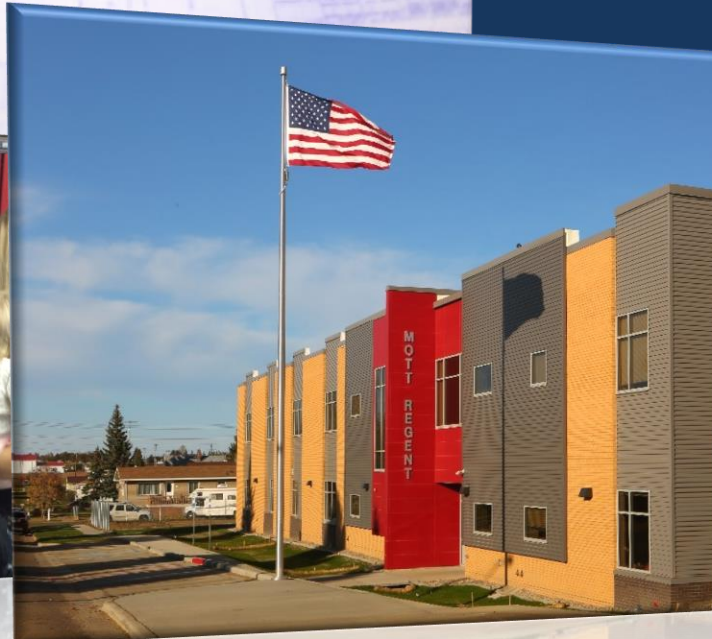
EngTech is a Multi-Discipline E/A Firm

Integrated Disciplines

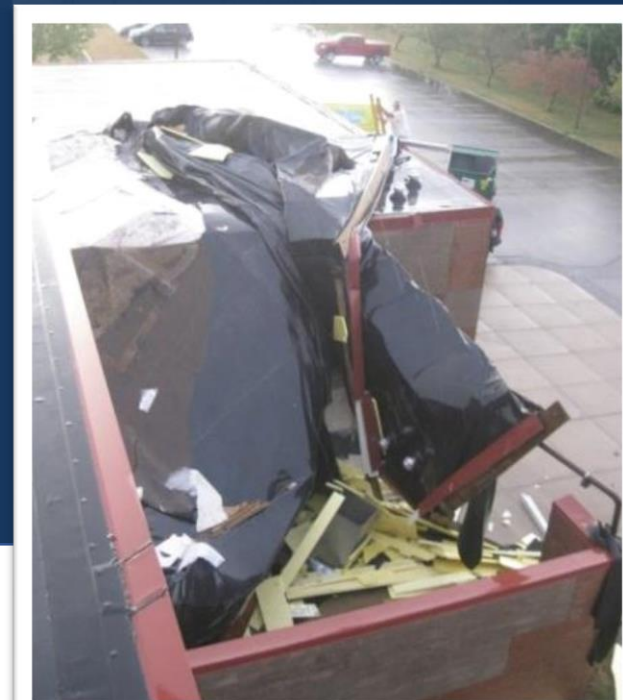
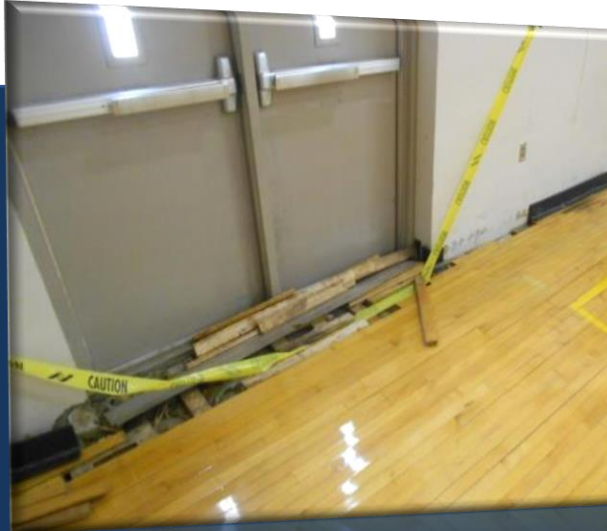
- Architecture
- Structural Engineering
- Architectural Engineering
- Mechanical Engineering
- Electrical Engineering
- Forensics

Professional Services

- Building Assessments
- Energy Studies
- Master Planning
- Community Engagement
- Referendum Assistance
- Construction Drawings/Bid Sets
- Construction Administration



Forensic Experience



Class B School Experience



▪ Strasburg.....	122 Students
▪ Montpelier.....	102 Students
▪ Glen Ullin.....	129 Students
▪ Drake-Anamoose..	165 Students
▪ Hope-Page.....	170 Students
▪ Mott-Regent	209 Students
▪ Edgeley.....	244 Students
▪ Beach.....	266 Students
▪ Parshall.....	277 Students
▪ Enderlin.....	298 Students
▪ LaMoure.....	299 Students
▪ TGU.....	330 Students
▪ Garrison.....	347 Students
▪ Kidder County.....	351 Students
▪ DLB Lakers.....	645 Students

Planning Process

- ✓ 10 Year Capital Maintenance Plan
- Community Facilities Committee / Public Engagement
- ☐ Educational Adequacy
- ☐ **Community Listening > Focus Groups**
- ☐ Analyze Funding/Tax Impact
- ☐ Align Design w/Budget
- ☐ Board Recommendation > “Handshake”
- ☐ ***Public Meetings/Feedback***
- ☐ School Board Decision
- ☐ Referendum Vote
- ☐ Design / Bid / Build Project



Construction Engineers Overview

- ▶ **North Dakota Roots Since 1978**
- ▶ **Leaders of CM Services Delivery Method**
- ▶ **Education/Public Sector Focus**
 - ▶ UND
 - ▶ Watford City Schools
 - ▶ Grafton Schools
 - ▶ East Grand Forks, MN Senior High
 - ▶ Westhope School
 - ▶ Bottineau Elementary School
 - ▶ Clay County
 - ▶ McKenzie County
 - ▶ Divide County



Construction Engineers Role

▶ Facility Assessment Review

- ▶ Collaborate with EngTech
- ▶ Provide feedback
- ▶ Establish opinion of Cost

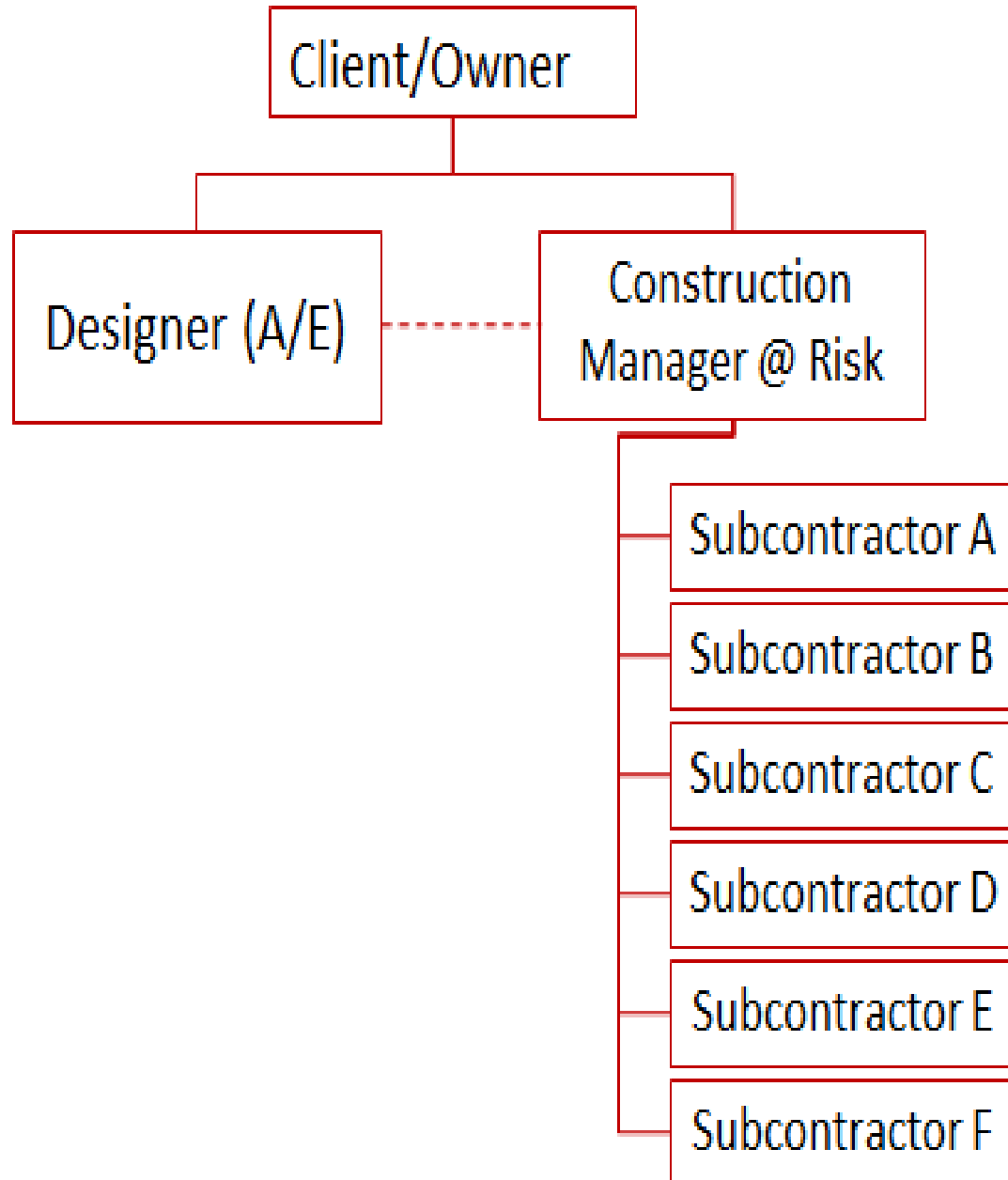
▶ Community Engagement

- ▶ Educate public on construction manager role and process
- ▶ Lay out facility improvement options
- ▶ Gather feedback from community members

▶ Construction Management

- ▶ Design Phase Services
- ▶ Subcontractor procurement and management
- ▶ Manage project safety, quality, schedule, and cost

Construction Manager At Risk (CMAR)



- ▶ CM hired based on qualifications & experience early in the project
- ▶ CM provides consulting to client/owner during design
 - Transparent cost reports
 - Value engineering
- ▶ CM & AE Collaboration
- ▶ CM holds ALL Subcontractors
- ▶ CM provides an open book GMP to complete the project
- ▶ Earlier completion scheduled by phasing

Bidding Process

Methodology for Subcontractor Participation

- ▶ Multiple Bid Packages
- ▶ Engage Local Subcontractors Early On
- ▶ Tailor Bid Packages to Fit Project and Community
- ▶ **Local subcontractor engagement and involvement is an important part of the process**



Why are we talking about facilities?

Hope-Page Facilities are in need of significant HVAC/Electrical improvements....while providing an excellent education for our students.

- General Fund/Building Fund Discussion
- Capital Maintenance Needs



School Finance Basics - Funds

- **General Fund**
 - Salaries, benefits, books, equipment, services
 - Majority of revenue is driven by student enrollment (\$9,839 per student)
 - A majority of general fund expenses (72%) are spent on staff salaries and benefits
- **Building Fund**
 - Purchase or repair of larger facility and equipment items



Other Funding Methods

❑ Building Fund Levy

- Requires 60% voter approval, maximum of 20 mils, no “sunset”
- Can be used to pay back a conventional loan
- Currently: Hope @ 5.68 mils; Page @ 4.99 mils

❑ Lease Revenue Bonds

- Up to \$4 million, paid back by General Fund
- Can be authorized by School Board, without voter approval

❑ Bond Referendum

- Requires 60% voter approval, up to 5% of debt limit (~\$11.2 million)
- Requires 50% voter approval to exceed 5% of debt limit, up to 10%
- 2017/18 Taxable Valuation of \$22.4 million (Maximum debt limit)

➤ Bank of North Dakota 2% Interest Loans

- Requires voter approval of Bond Referendum
- Approved through DPI on April 1 of each year

Mill Levies of our “Neighbors”

State Average 100.71 Mils (Highest 179.83)

	Levy	Rank (Out of 146)
Central Cass	114.6	#22
Kindred	105.93	#32
Griggs County	102.04	#40
Northern Cass	101.88	#43
Maple Valley	85	#82
Finley Sharon	85	#84
Mayport CG	84.31	#87
<u>Page</u>	71.81	#116
Barnes County North	70	#120
<u>Hope</u>	57.68	#136

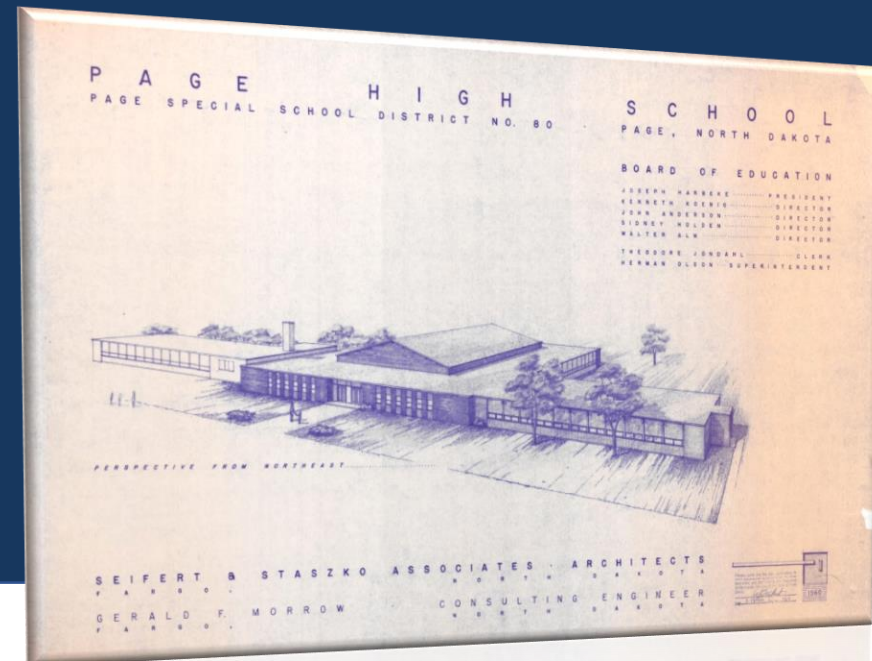
What is a facility assessment?

- ✓ Determine Expected Useful Life of Systems
- ✓ Determine Expected Useful Life of a Facility
- ✓ Prevent Costly Emergency Repairs = Save Money
- ✓ Level Resources/Expenses
- ✓ Prioritize for Funding
- ✓ Identify Issues to be considered w/ Educational Needs



Information Gathering

- Researched Historical Records
 - ✓ Square Footages/Ages of Facilities
 - ✓ Work Recently Done
 - ✓ Fire Marshal Reports*
 - ❑ Asbestos Reports
- Field Work
 - ✓ Toured Facilities
 - ✓ Photos of Existing Conditions
 - ❑ Roofing Report
- Conversations
 - ✓ Superintendent – Brad Callendar
 - ✓ Elementary Principal – Heidi Kingston
 - ✓ High School Principal – Angie Zerface
 - ✓ Facility Personnel – Mike Kingston & Steve Huscka
 - ✓ IT Coordinator – Brent Jacobson
 - ✓ Various staff conversations



Positive Takeaways

- Architectural / Site
 - Buildings are in average overall condition
 - Maintained well
 - Efficient layout
 - Good visual control
 - Security measures*
 - Building envelope*
 - No structural issues
 - Hope Science / FACS
- Mechanical
 - Doing the best to keep things going
- Electrical
 - Adequate electrical capacity (Hope)
 - IT Network – Good Coverage
 - Surveillance – Good Coverage
 - Fire Alarm – Good Coverage*

Facilities

Hope



Page

- 1961 Original Building (34,991 SF)
- 1980 Addition (5,936 SF)
- Greenhouse
- Total SF – 41,128
- 69 Students

- 1954 Original Building (8,406 SF)
- 1960 Addition (33,574 SF)
- Total SF – 41,980
- 88 Students - K-6
- 13 Students - PK



Assessment Categories

- Architectural
 - Site (circulation, paving, drainage)
 - Envelope (exterior, windows)
 - Roof (type, age, condition)
 - Finishes (flooring, walls, ceilings)
 - Code Compliance (life safety, accessibility “ADA”)
 - Hazardous Materials
 - Safety / Security
- Mechanical / Plumbing
 - HVAC (boilers, AHUs, piping, ductwork, terminal units, controls)
 - Plumbing piping, fixtures
 - Design, Code issues, etc.
- Electrical
 - Electrical service
 - Power distribution (panels, breakers, etc.)
 - Lighting
 - Information Technology
 - Master Clock
 - Access Systems
 - Fire Alarm System

Site Conditions

Hope



Page



Deteriorated Sidewalk



Sidewalk



Parking is not ADA Compliant



Parking is not ADA Compliant

Roof/Envelope

Hope



Page



Ballasted EPDM



Ballasted EPDM



Missing Sealant



Deteriorated Sealant

Exterior Doors/Windows

Hope



Page



Original HM Door



Newer Front Entrance



Newer Front Entrance



Rusted Hinges



Newer Windows



Rotted Window Sashes

Interior Finishes

Hope



Page



Ceilings

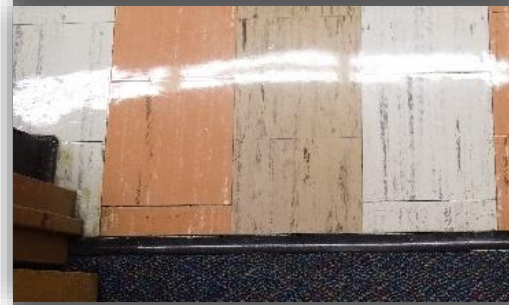
2x4 Ceiling Grid and Tile
2x2 Ceiling Grid and Tile
Metal Ceiling Tile
Exposed Structure

Carpet

13+ types
Broadloom & Squares

Hard Flooring

4+ types of VCT
4+ types of VAT
Ceramic Tile
2 types of Epoxy
Sealed Concrete



Ceilings

T&G Wood Deck
2'x4' Acoustic Ceiling Tile
12"x12" Acoustic Ceiling Tile
12"x12" Metal Ceiling Tile

Carpet

11+ types
Broadloom & Squares

Hard Flooring

6+ types of VCT
6+ types of VAT
Ceramic Tile
Epoxy
Sealed Concrete

Interior Finishes

Hope



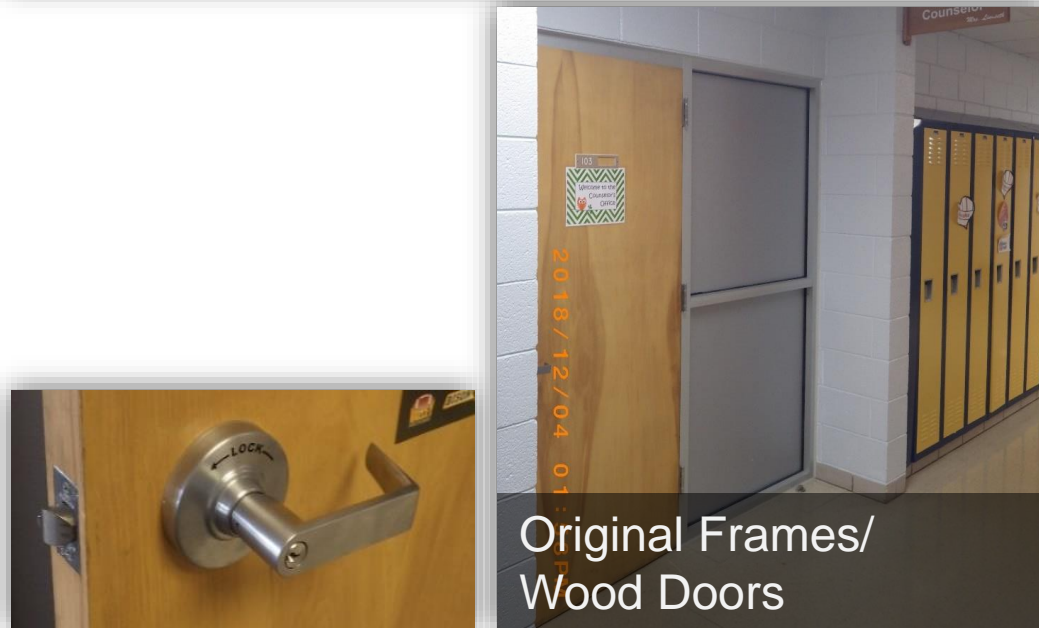
Page



Classroom Casework (Select Rooms)



Classroom Casework (1954 Building)



Original Frames/
Wood Doors



Kindergarten Room

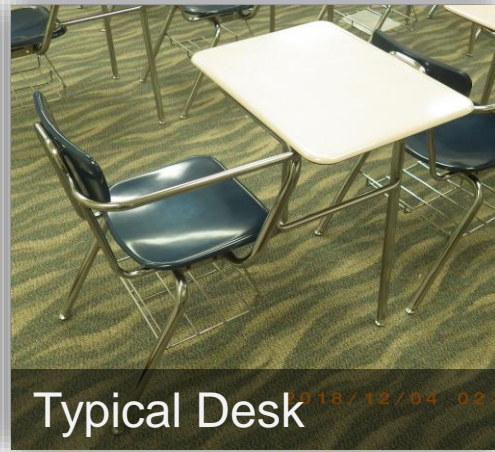


Hope

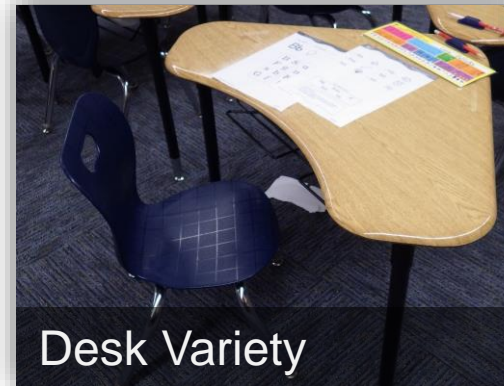
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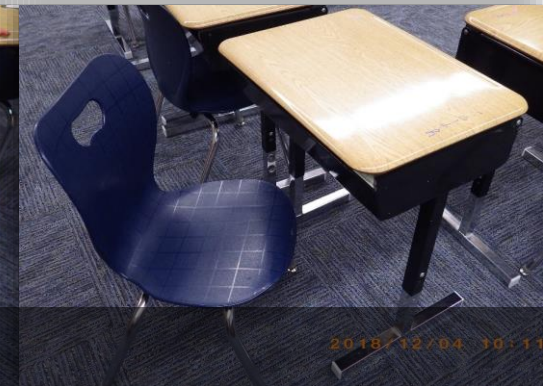
Markerboard



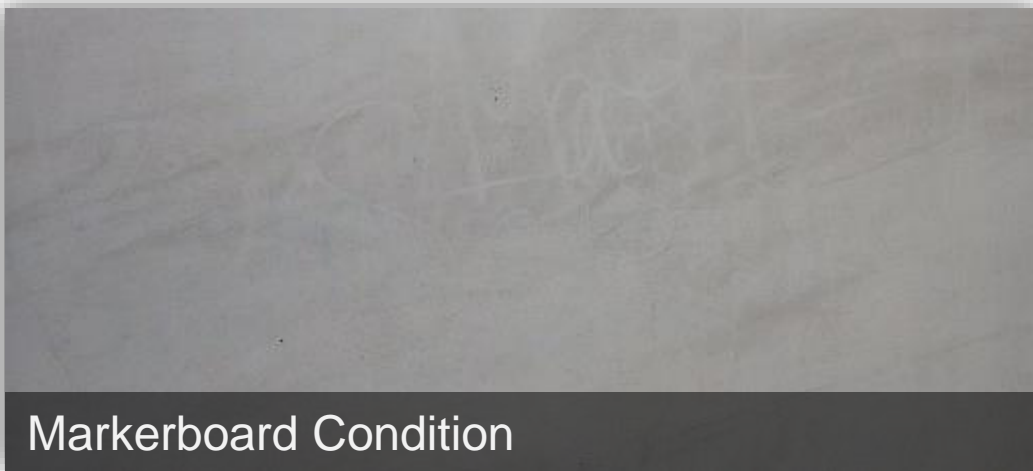
Typical Desk



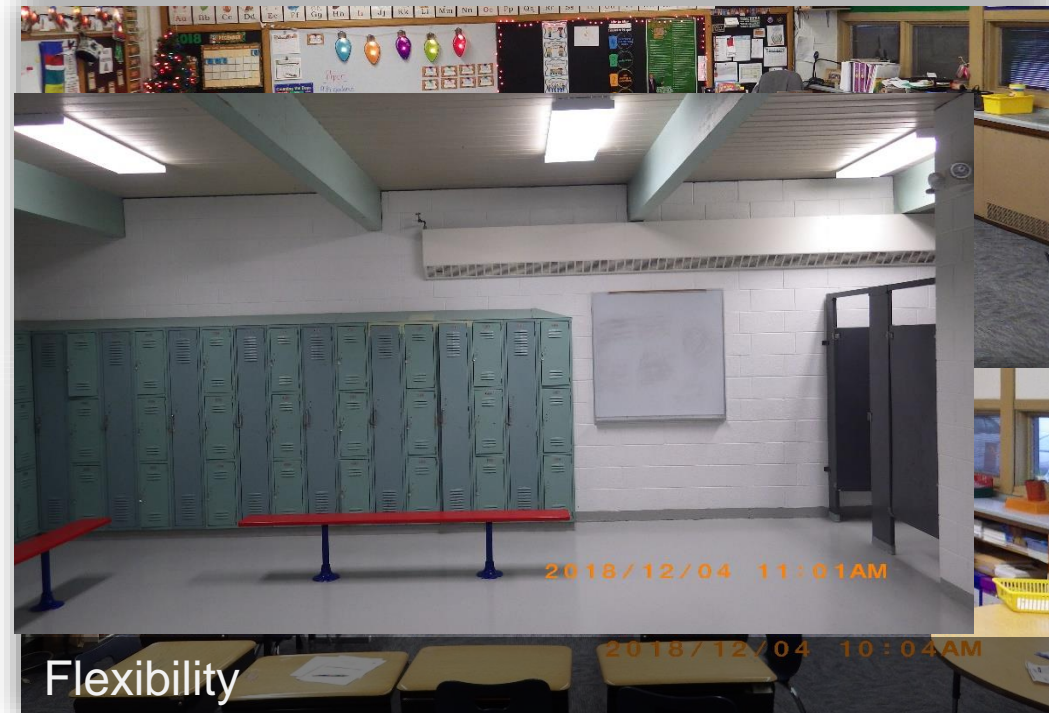
Desk Variety



2018/12/04 10:11



Markerboard Condition



2018/12/04 11:01AM

Flexibility

2018/12/04 10:04AM

Restrooms / Locker Rooms

Hope



Page



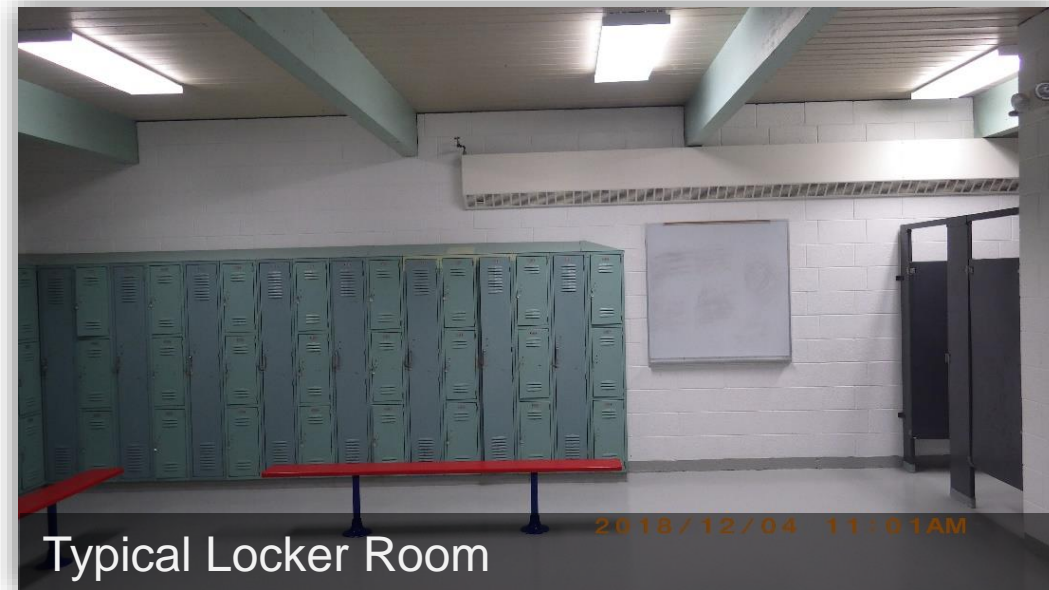
Typical Restroom



Typical Restroom



Typical Locker Room



Typical Locker Room

Potential Code Issues

Hope



Page



Limited Fire Suppression System
Wood Framed Walls Not Allowed



No Fire Suppression System
Wood Framed Walls Not Allowed



Restricted Corridor Width



Restricted Corridor Width /
Combustible (No Lockers)

Accessibility Issues

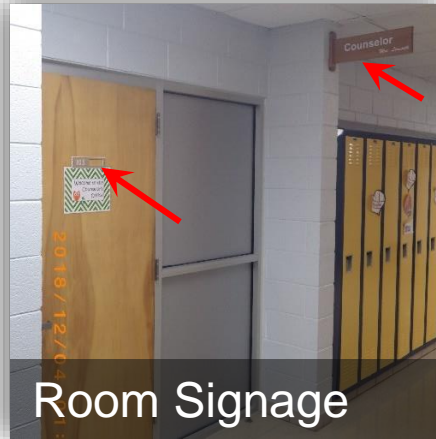
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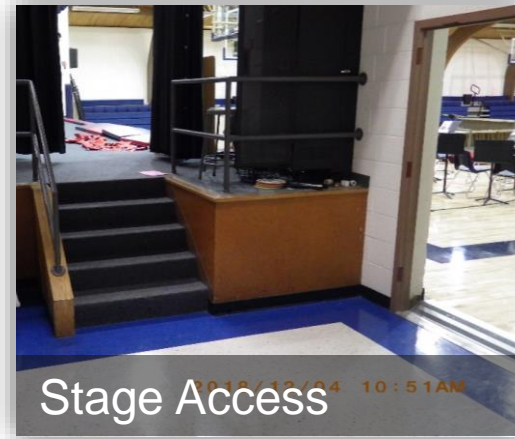
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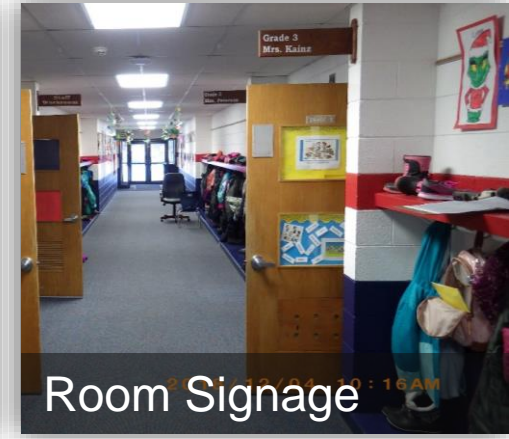
Stage Access



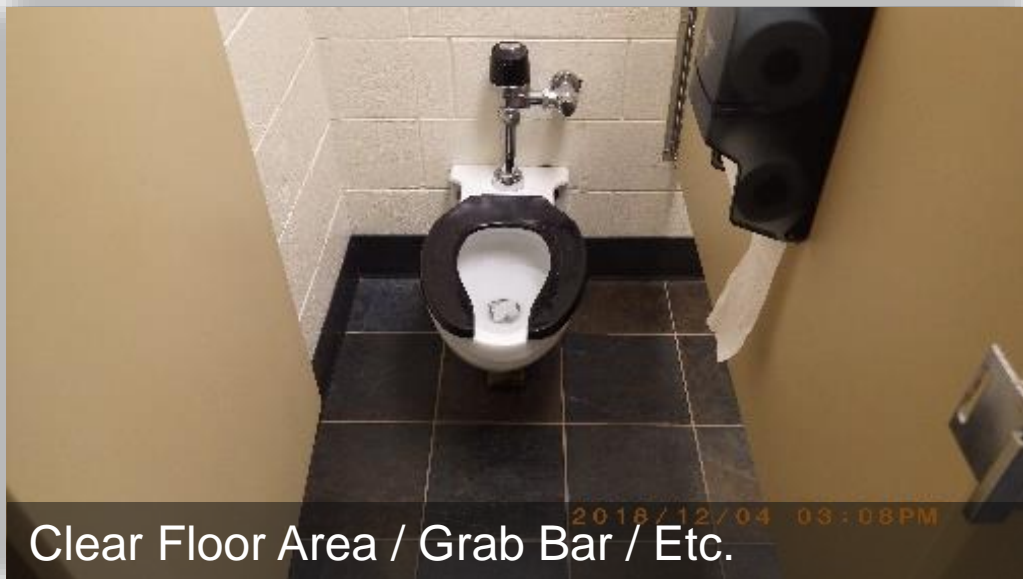
Room Signage



Stage Access



Room Signage



Clear Floor Area / Grab Bar / Etc.



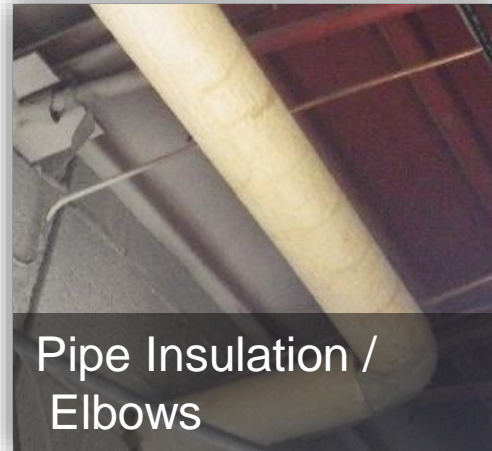
Door Widths / Clearances

Hazardous Materials

Hope



Page



Safety / Security

Hope



Page



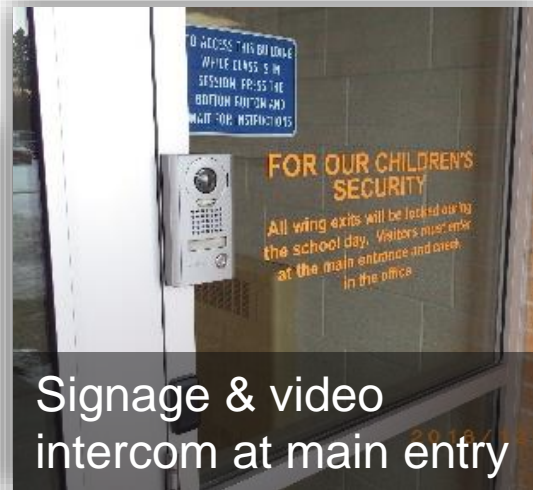
Office location is not ideal



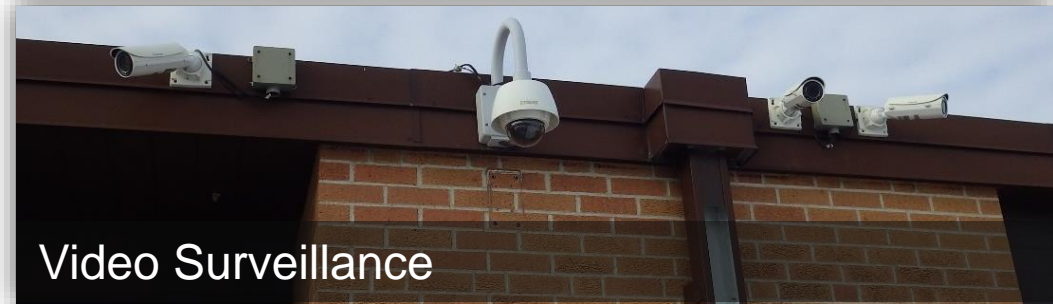
Lack of Secure Entrance; Inexpensive solution exists because of office location



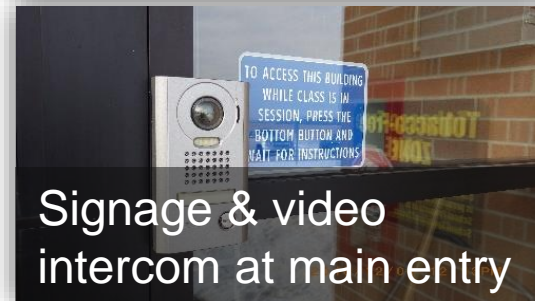
Video Surveillance



Signage & video intercom at main entry



Video Surveillance



Signage & video intercom at main entry

Mechanical/Plumbing

Hope



Page



HVAC Controls



Heating Water Boilers



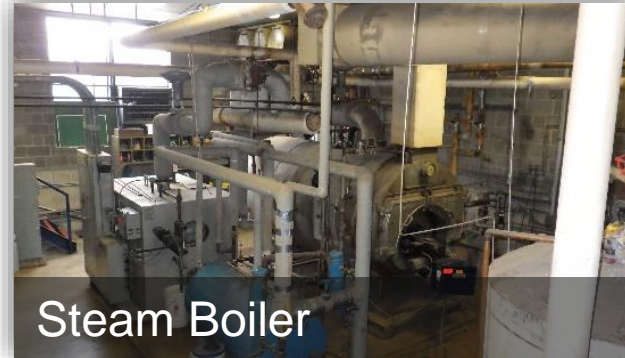
Electric Boiler



HVAC Controls



Electric Boiler



Steam Boiler



Piping in tunnel with missing insulation



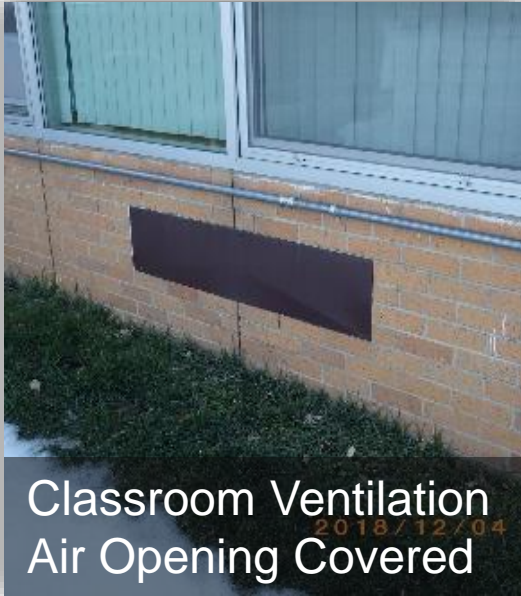
Piping with missing insulation

Mechanical/Plumbing

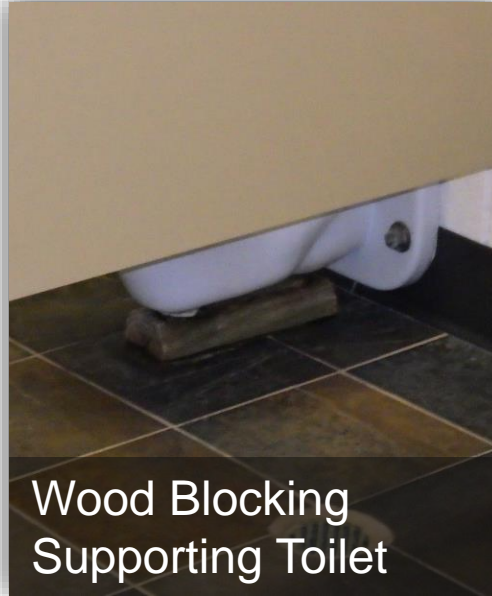
Hope



Page



Classroom Ventilation
Air Opening Covered



Wood Blocking
Supporting Toilet



Classroom Ventilation Air Opening Covered



Shop sink with no
drain pipe



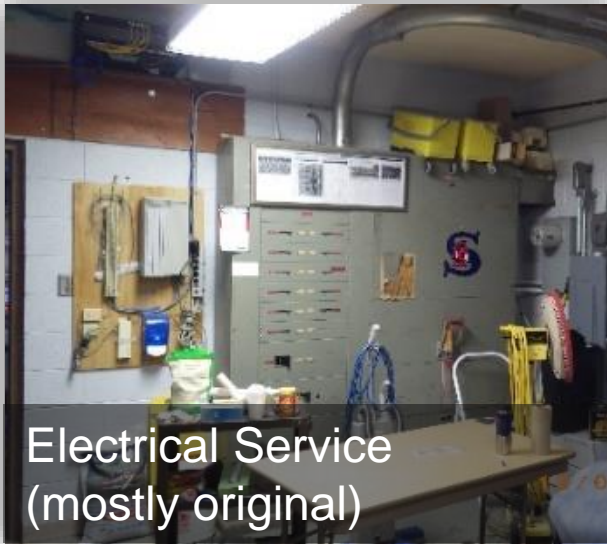
No Ventilation Air in Workout
room

Electrical

Hope



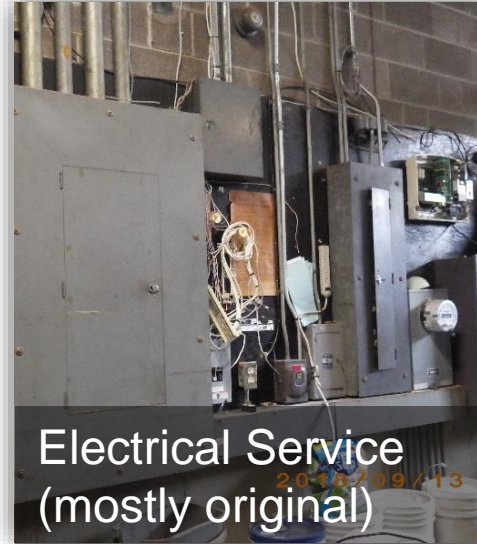
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Electrical Service
(mostly original)



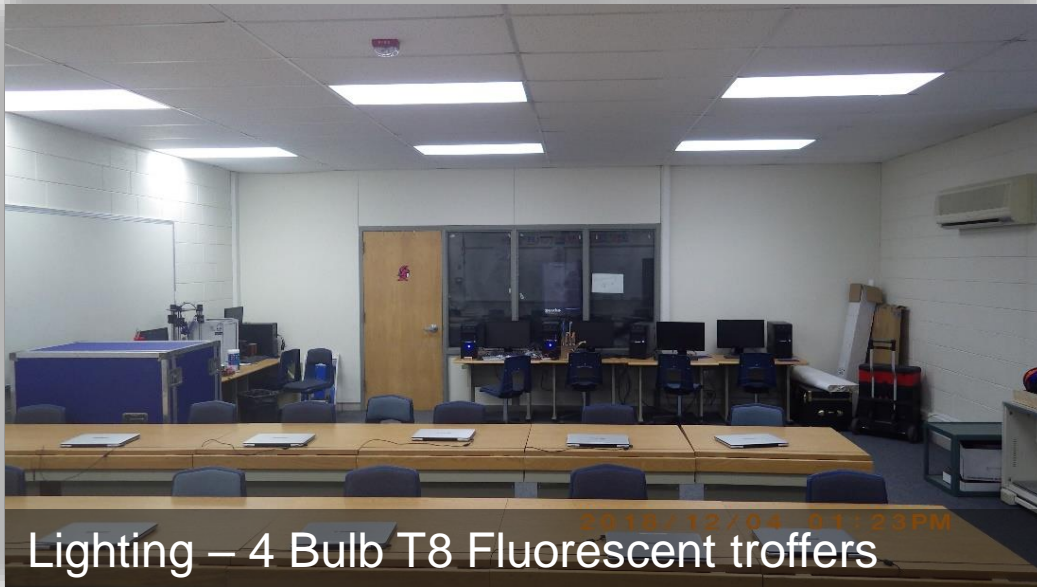
Fire Alarm
(new, but
obsolete)



Electrical Service
(mostly original)



Fire Alarm
(new, but obsolete)



Lighting – 4 Bulb T8 Fluorescent troffers



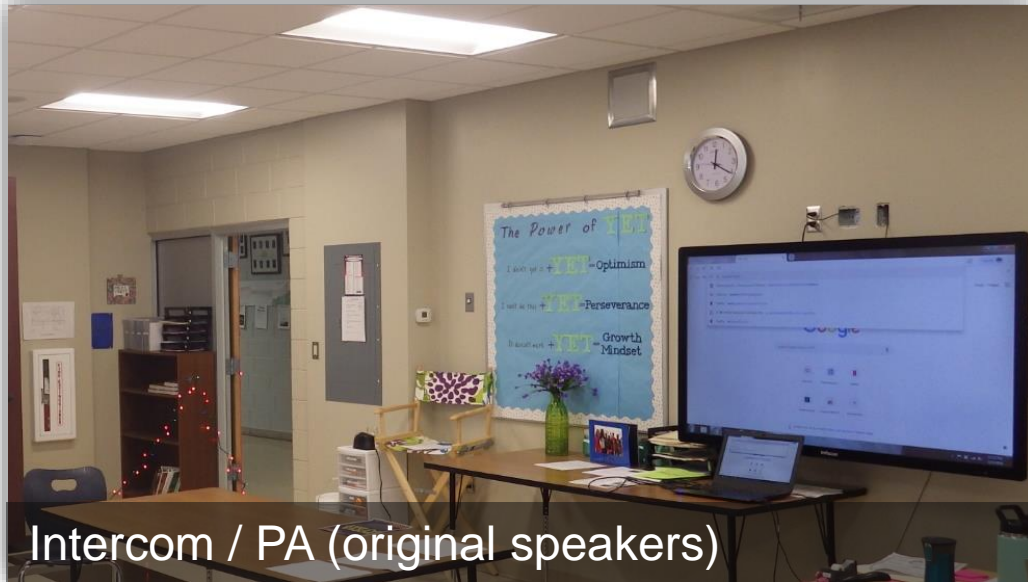
Lighting – Suspended T8 fluorescents

Special Systems

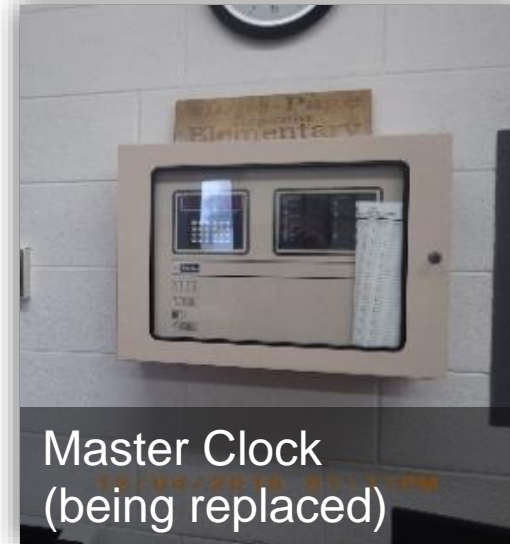
Hope



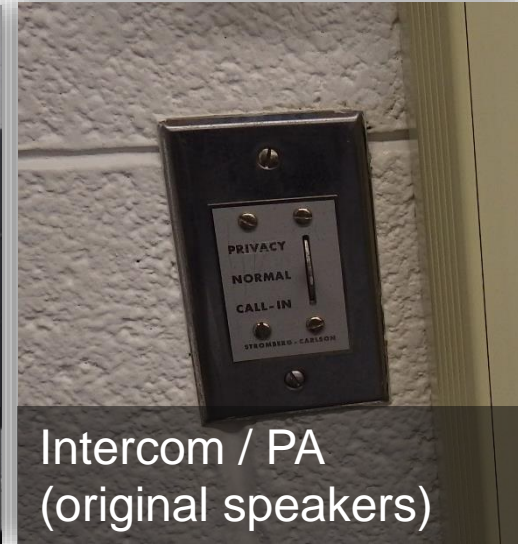
Page



Intercom / PA (original speakers)



Master Clock
(being replaced)



Intercom / PA
(original speakers)



Data Network



Master Clock
(being replaced)



Data Network

Questions about Hope-Page Facilities?



Site / Architectural Recommendations

Hope



Page

- Provide ADA complaint accessible parking
- Repair/replace deteriorated concrete walks.
- Perform minor grading around building.
- Provide code compliant roof access hatch and ladder.
- Tuckpoint deteriorated mortar / brick masonry.
- Roof maintenance / replacement.
- Remove/replace joint sealants at exterior.
- Replace majority of flooring throughout building.
- Replace suspended ATC grid and ceilings tiles throughout.
- Paint walls.
- Replace casework in classrooms.
- Replace visual display boards in classrooms.
- Replace original wood doors
- Repaint HM doors/frames.
- Remodel restrooms and locker rooms
- Review extent of kitchen equipment.
- Provide new room signage / wayfinding signage.
- Add interior vestibule doors.
- Asbestos abatement throughout the building.
- Address building code deficiencies.
- Safe, Secure Entrance through office.
- **Paint exterior hollow metal doors and frames.**
- **New classroom furniture.**
- **Repair cracking at exterior plaster soffit. Paint.**
- **Add protective covering at greenhouse CMU foundation.**
- **Address grading issues at parking lot.**
 - **Consider paving part of parking lot to address multiple issues (circulation, drainage, ADA).**

- Provide ADA company accessible parking.
- Repair/replace deteriorated concrete walks.
- Perform minor grading around building.
- Provide code compliant roof access hatch and ladder.
- Tuckpoint deteriorated mortar /brick masonry.
- Roof maintenance / replacement.
- Remove/replace joint sealants at exterior
- Replace majority of flooring throughout building.
- Replace suspended metal ATC grid and ceilings tiles.
- Paint walls.
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- Replace original wood doors
- Repaint HM doors/frames.
- Remodel restrooms and locker rooms
- Review extent of kitchen equipment.
- Provide new room signage / wayfinding signage.
- Add interior vestibule doors.
- Asbestos abatement throughout the building.
- Address building code deficiencies.
- Safe, Secure Entrance through office.
- **Paint exterior steel lintels.**
- **Consider relocating playground to north side of building.**
 - **This could allow for staff parking on the south side of the building and a bus lane.**

Mechanical / Plumbing Recommendations

Hope



Page

- Install HVAC system incorporating water source heat pumps with geothermal heating and cooling.
 - Remove fuel oil fired boilers and all associated piping.
 - Remove electric boiler and all associated piping.
 - Remove heat exchanger and all associated piping.
 - Replace Cabinet Unit Ventilators with water source heat pumps.
 - Replacing HVAC piping in tunnels.
 - Include a four-pipe HVAC piping system to accommodate both heating and cooling.
- Replace unit heaters in corridors and vestibules.
- Install Direct Digital Controls on any existing and new HVAC equipment.
- Remove all pneumatic controls.
- Provide proper ventilation air as required to areas which currently do not have ventilation.
- Install a chemical water treatment for HVAC heating water system.
- Replace all corroded plumbing piping, valving, deteriorated insulation and valving.
- Restroom Renovation
 - Replace sinks, toilets, urinals.
 - Install low-flow flush valves on toilets and urinals.
 - Replace plumbing piping and insulation.
- Gym - Replace HVAC units

- Install HVAC system incorporating water source heat pumps with geothermal heating and cooling.
 - Remove fuel oil fired boilers and all associated piping.
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- Restroom Renovation
 - Replace sinks, toilets, urinals.
 - Install low-flow flush valves on toilets and urinals.
 - Replace plumbing piping and insulation.
- Gym - Replace HVAC units
- **Weight Room - Provide code required ventilation.**

Electrical Recommendations

Hope



Page

- Replace the electrical service entrance equipment with new 2000A main switch board to feed existing equipment downstream.
 - Replace electrical panels original to 1961 building.
 - Provide additional outlets to reduce reliance on extension cords and power strips.
 - Upgrade all fluorescent lighting to LED fixtures.
 - Include lighting controls, dimmers, and zone controls.
 - Install occupancy sensor to increase energy efficiency.
 - Add additional telephones to classrooms/occupied spaces.
 - Install cable tray for routing of data cabling.
 - Consider installing access control card throughout.
 - Consider adding audio enhancement equipment to all classrooms.
-
- Replace “rocker” switches with standard wall switches.
 - Provide dedicated room for data equipment or provide equipment with secured boxes for protection.
 - Replace exterior service equipment and weather head into building.

- Replace the electrical service entrance equipment with new 1000A main switch board to feed existing equipment downstream.
 - Replace circuit breaker panels more than 30 years old.
 - Provide additional outlets to reduce reliance on extension cords and power strips.
 - Upgrade all fluorescent lighting to LED fixtures.
 - Include lighting controls, dimmers, and zone controls.
 - Install occupancy sensor to increase energy efficiency.
 - Add additional telephones to classrooms/occupied spaces.
 - Consider adding cable tray for routing of all data cabling.
 - Consider installing access control card readers throughout.
 - Consider adding audio enhancement equipment to all classrooms.*
-
- Install additional emergency lighting fixtures.
 - Reinstall Telecom headend equipment in secured space with temperature controls.
 - Install new functional stage lighting to eliminate use of cloth insulated wire.

Project Priorities

- **Critical Issues**
 - Life Safety
 - Building Security
 - High Risk of Emergency Repair/Prevent Secondary Damage
- **End of Useful Life Issues**
 - Code Recommendations
 - Energy Efficiency Projects
 - End of Useful Life Items

Critical Issues

Hope



Page

- Mechanical
 - Replace entire system (All Recommendations)
 - Address casework & flooring as required
- Electrical
 - Replace Distribution/Breaker Panels
 - Replace Exterior Service Equipment
 - Add / Replace Receptacles/Switches
 - Add / Replace Phones and PA System
 - Dedicated Data Room
- Exterior Envelope
 - Sealant, Tuckpointing, Painting, Grading, Roof Leaks
- Accessibility
 - Parking, Room Signage*
- Secure Entrance
 - Vestibule Doors
- Roof /Asbestos Assessment

- Mechanical
 - Replace entire system (All Recommendations)
 - Address casework & flooring as required
- Electrical
 - Replace Distribution/Breaker Panels
 - Replace Exterior Service Equipment
 - Add / Replace Receptacles/Switches
 - Add / Replace Phones and PA System
 - Dedicated Data Room
 - Replace Stage Wiring / Lighting
 - Additional Emergency Lighting
- Exterior Envelope
 - Sealant, Tuckpointing, Painting, Grading, Roof Leaks
 - Windows
- Accessibility
 - Parking, Room Signage*
- Secure Entrance
 - Vestibule Doors
- Roof /Asbestos Assessment

End of Useful Life Issues

Hope



Page

- Plumbing Replacement
- Electrical
 - LED Lighting/Occupancy Sensors
 - Cable Tray
 - Access Control Throughout Building (Replace doors)
 - Audio Enhancement
- Site Improvements
 - Parking Lot Improvements
 - Sidewalk
- Accessibility
 - Restrooms
 - Other remaining items
- Furniture
- Roof Replacement
 - Add Access Hatch/Ladder
- Interior Finishes
 - Replace Misc. Kitchen Equipment
 - Replace Flooring, Ceilings, Paint
 - Replace Casework where needed
 - Asbestos Abatement*
 - Replace Markerboards

- Plumbing Replacement
- Electrical
 - LED Lighting/Occupancy Sensors
 - Cable Tray
 - Access Control Throughout Building (Replace doors)
 - Audio Enhancement
- Site Improvements
 - Sidewalk
 - Relocate / Replace Playground
 - Address Site Circulation
- Accessibility
 - Restrooms
 - Other remaining items
- Roof Replacement
 - Add Access Hatch/Ladder
- Interior Finishes
 - Replace Misc. Kitchen Equipment
 - Replace Flooring, Ceilings, Paint
 - Replace Casework where needed
 - Asbestos Abatement*
 - Replace Markerboards

Opinion of Cost

- ▶ Preliminary Opinion of Cost Budget based on a mix of detailed cost estimates and historical costs for similar projects
- ▶ Scope of work is not set in stone and can flex up or down based on budget
- ▶ “Bundle” priorities for cost effectiveness
- ▶ Budget Example:

Spreadsheet Level	Takeoff Quantity	Total Cost/Unit	Total Amount
3000 Building Shell			
3040 Building Masonry	41,250.00 SF	0.76	31,381.08
3060 Building Carpentry	41,250.00 SF	1.27	52,488.59
3075 Building Membrane Roofing	41,250.00 SF	19.47	803,178.86
3079 Building Joint Sealants	41,250.00 SF	0.44	18,122.59
3084 Building Entrances & Storefronts	41,250.00 SF	1.38	56,818.57
3000 Building Shell	41,250.00 SF	23.32	961,989.69
4000 Building Finishes			
4001 Remodel Bathroom - HC Accessible	41,250.00 SF	4.58	189,021.31
4100 Specialties	41,250.00 SF	0.19	7,638.67
4000 Building Finishes	41,250.00 SF	4.77	196,659.98
6000 Mechanical & Electrical			
6230 Mechanical	41,250.00 SF	28.34	1,168,945.51
6260 Electrical	41,250.00 SF	12.55	517,787.97
6000 Mechanical & Electrical	41,250.00 SF	40.89	1,686,733.48
002 Hope School Critical Items	41,250.00 SF	78.09	3,221,137.40

Opinion of Cost

Hope



Page

\$3,221,000

Critical Issues

\$3,550,000

\$2,503,000

End of Useful Life

\$2,690,000

\$5,724,000

Sub-Total

\$6,240,000

Hope + Page

Total Construction Cost **\$11,964,000 (\$144/SF)**

Soft Costs **\$1,200,000**

(design, furniture, equipment, demolition)

Total Project Cost: **\$13,164,000**

- ▶ Benchmark costs for six similar projects is \$140/SF - \$206/SF
- ▶ Cost for new construction is around \$275/SF - \$300/SF
- ▶ Questions we need to ask ourselves:
 - ▶ Can we maintain our facilities with current funding?
 - ▶ Does it make sense to keep investing in two Schools?

Next Steps

- ***Form Community Facilities Committee***
- Identify Prepare Conceptual plans
- Identify Cost of Various Concepts
- Construction Cost, Capital Improvements
- Soft Cost (Fees, FF&E, etc.)
- Identify Tax Impact
- Prepare for Community Meetings
- Receive Community Feedback
- Make final recommendation to the School Board

Planning Process

- ✓ 10 Year Capital Maintenance Plan
- Community Facilities Committee / Public Engagement
- ❑ Educational Adequacy
- ❑ **Community Listening > Focus Groups**
- ❑ Analyze Funding/Tax Impact
- ❑ Align Design w/Budget
- ❑ Board Recommendation > “Handshake”
- ❑ **Public Meetings/Feedback**
- ❑ School Board Decision
- ❑ Referendum Vote
- ❑ Design / Bid / Build Project





Thank You!