

Facility Study and Master Plan

Northeast School

69 East St, Vernon, CT 06066



SUMMER 2023



DRAFT

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Section 1 : Introduction

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Introduction

Background

Friar Architecture Inc. was engaged by Vernon Public Schools to prepare a facilities study for several district maintained buildings in Vernon Connecticut. The buildings included in the study are:

- Rockville High School
- Vernon Center Middle School
- Center Road School
- Lake Street School
- Maple Street School
- **Northeast School**
- Skinner Road School
- Vernon Public School Central Administration Building
- Next Step Building
- Maintenance Building, 166 Union Street

Purpose of this Study

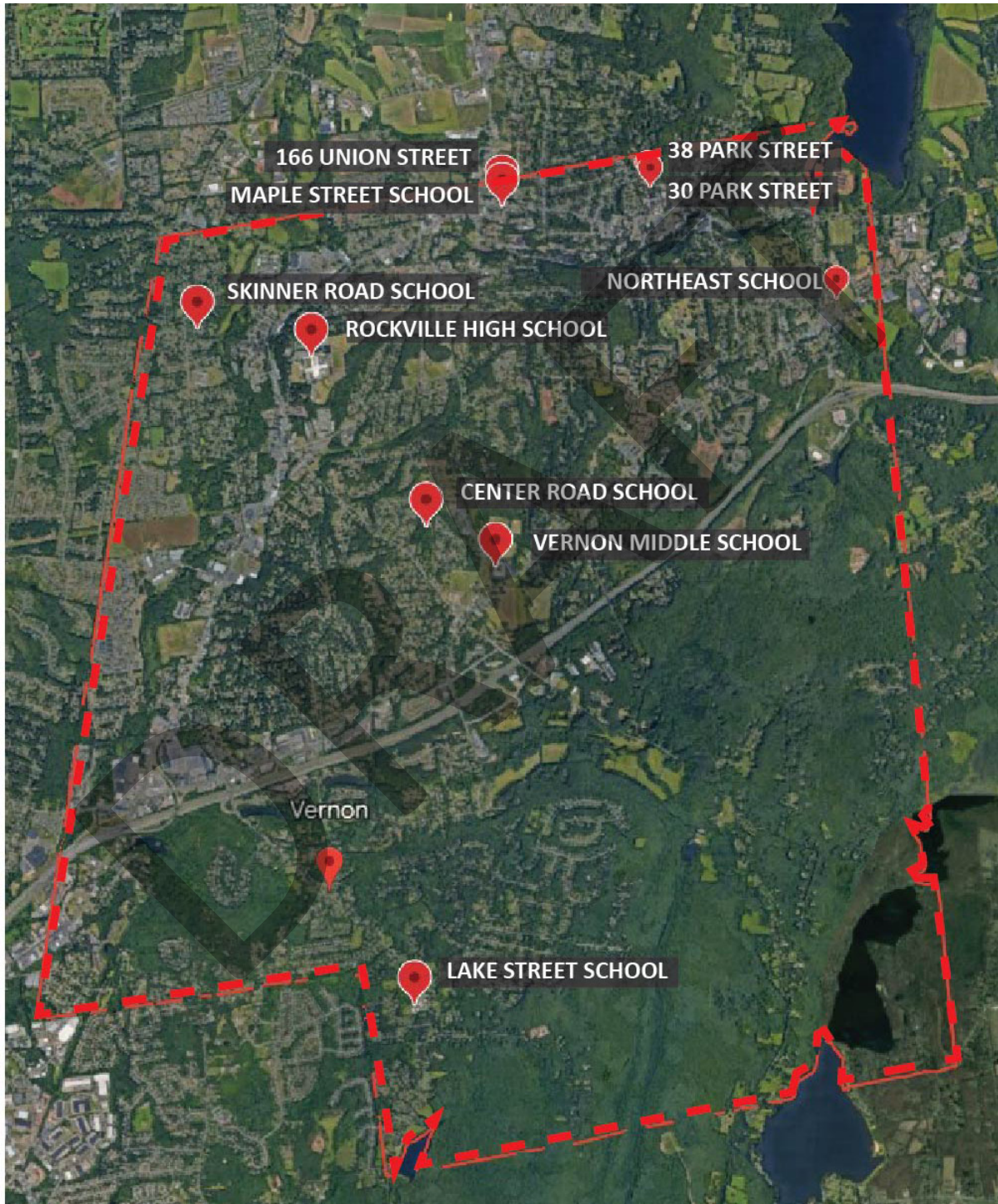
The purpose of this study is to provide the client with an understanding of the current challenges and in the near future, a comprehensive view of the range of possible options with cost implications, and a means to reach consensus on the best possible solution to those challenges.

The intent of the facility study process is:

- To offer a transparent process to move the community toward consensus
- To present information clearly to decision makers
- To present the final recommendations as foundation for future actions

Building Location Plan

A plan of the area is provided below, identifying the location of each building evaluated under this Existing Conditions Survey.



Map Data: Google Earth

Section 2 : Executive Summary

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Building Information

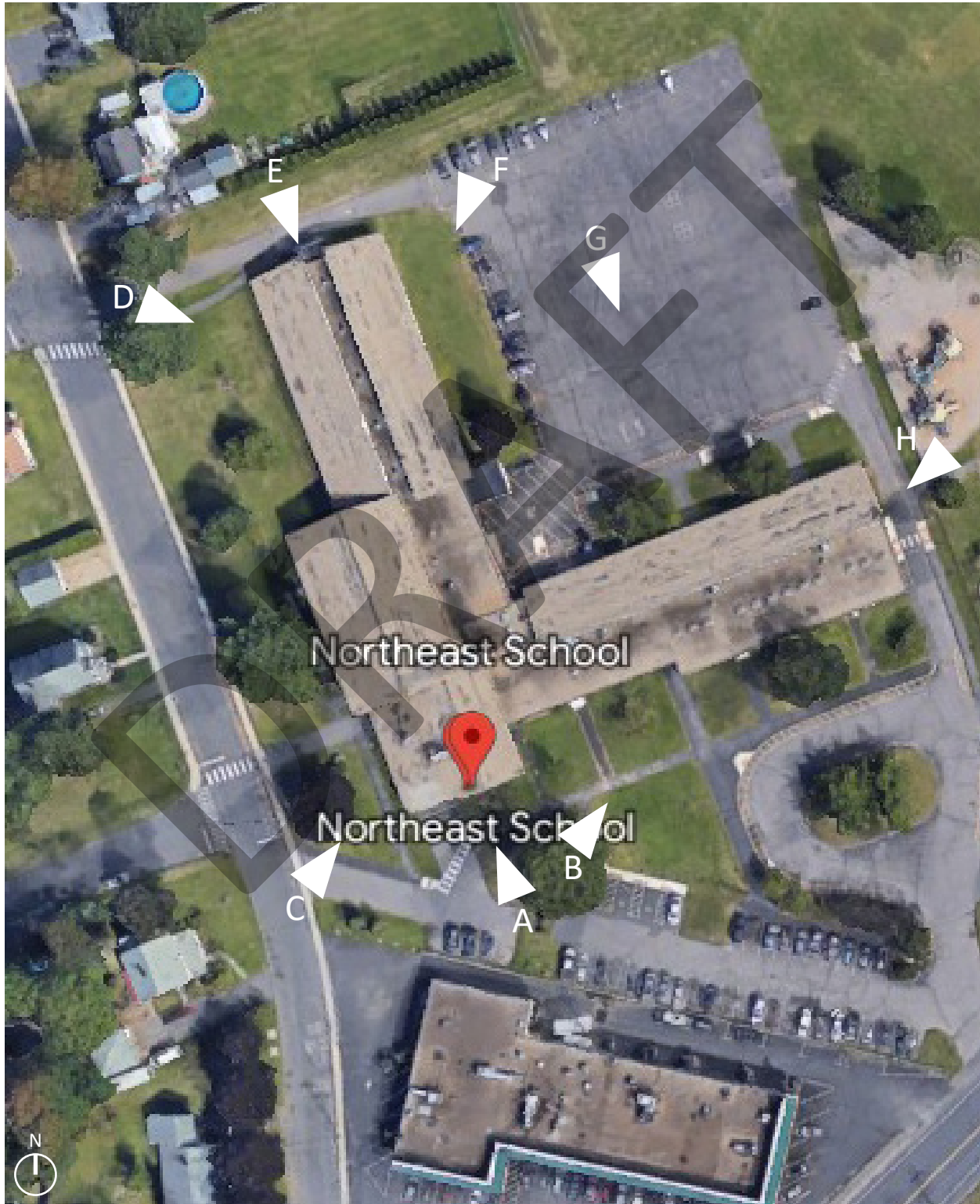
This section contains the executive summary, which provides an overview of the building and summarizes the survey results. Graphs are included to represent current conditions of the building's components and conformity with IBC, NFPA and ADA requirements. Photographs of various elevations of the building are provided for reference. This section also provides a summary of the opinion of probable costs, presenting a graphic comparison of the work required to address the deficiencies uncovered during the survey versus the cost of replacing the structure. At the end of Section 2, a chart provides an overview of the required work addressed by the building survey and potential replacement costs.

Northeast School

Stories	1 Story (plus partial Basement) - with Partial Basement/Crawl Spaces and Main Level
Area	41,500 SF
Address	69 East St, Vernon, CT 06066
Original Construction	1963
Addition(s) / Renovations	2009 Renovation
Grades	Kindergarten to Grade 5
Condition	Fair to Good
Description	This is a masonry school building with a timber frame housing elementary aged students.

Building Overview - Photographs

The following is a selection of photographs showing the main exterior elevations of the building. These photographs are keyed by letter on the site plan below. The elevation marks show the location and direction from which the photographs were taken.



Building Overview - Photographs



South Elevation (Cafeteria) - A



South Elevation - B

Building Overview - Photographs



West Elevation - C



West Elevation - D

Building Overview - Photographs



North Elevation (Classroom Wing) - E



West Elevation (Classroom Wing) - F

Building Overview - Photographs



North Elevation (Classroom Wing) - G



East Elevation - H

Architectural Survey

The exterior skin of Northeast School has brick and a metal panel system, which are in fair to good condition. See Appendix for roof survey report by Garland.

Typical windows are vinyl and are good condition overall. Main entrance doors are aluminum which are in good condition. Additional exterior doors are hollow metal and are in fair condition.

The building interior is in fair to good condition.

The work recommended to address architectural conditions includes:

- Replace torn or damaged window screens
- Provide sealant at all existing vent locations
- Review drainage from roof - currently directly onto ground in front of building or onto walkways
- Refinish columns and metal soffit at Service Area
- Refinish or replace all hollow metal doors and frames
- Replace missing or damaged flashing at metal panels below windows
- Replace metal panel systems - many areas of rusting and sealant is deteriorating or missing from panels
- Refinish vestibule soffits - review MEP narrative for existing light fixtures
- Clean and repoint areas where need at brick walls
- Replace rusting exterior door sidelight frames where significant rusting has developed
- Secure all exterior grates and hatches to prevent hazardous conditions
- Refinish and provide new weatherstripping at all exterior hollow metal doors
- Provide sealant at all areas where brick meets other materials (ie soffits, columns, etc)
- Refinish wood stairs and stage in Gymnasium
- Refinish wood bleachers in Gymnasium
- Repair/Refinish tile in bathrooms
- Repair broken/damaged ceiling tiles
- Access areas with water damage on walls, floors and ceilings
- Repaint handrails as needed
- Repaint walls in areas where they are scuffed.

Structural Survey

The building is typically constructed of steel frame and masonry exterior. In general the building appears to be in good condition structurally. Although observations could not be made of many structural elements without demolition, no dangerous conditions were observed.

The work recommended to address structural conditions includes:

- Repair cracked / damaged brick and concrete foundation

Mechanical Survey

The main heating system is served by steam boilers. Classrooms have perimeter radiation with operable windows. The Gymnasium and Cafeteria are both served by unit ventilators

The work recommended to address mechanical systems conditions includes:

- Heating Plant: The existing building is served by mid-efficiency steam boilers with condensate return system and duplex boiler feed pumps. Boilers are not near the end of their life however recommend

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replacing with high efficiency condensing hot water boilers for increased energy savings. Further we recommend replacing all steam and condensate piping throughout building due to corrosion from steam condensate.

- Ventilation: Provide an energy efficient, code compliant ventilation system that meets present day ASHRAE and building code requirements. This system would include energy recovery to maximize ventilation and energy efficiency.
- Exhaust: Recommend replacement of (9) roof exhaust fans original to building not currently working.
- Cooling: No classroom cooling. Recommend addition of VRF system for heating and cooling in all classrooms areas.
- Controls: Controls are a mix of digital and pneumatic, we recommend replacement of all controls with updated digital control system integrated to centralized building management system.
- Gymnasium unit ventilators and exhaust system are past their useful life and should be replaced. Recommend replacement with single zone variable air volume heating, cooling and ventilation roof top unit with outside air.
- Cafeteria unit ventilators are past their useful life and should be replaced. Recommend replacement with single zone variable air volume heating, cooling and ventilation roof top unit with outside air.
- Admin Office Area unit is past its useful life and should be replaced. Recommend replacement with multi zone variable air volume heating, cooling and ventilation roof top unit with outside air.

Electrical Survey

The utility primary runs underground from the pole to a utility company owned transformer located in a vault below grade, outside the Main Electrical Room. Secondary feeder bus runs from the utility vault to the Main Distribution Switchboard in the Main Electrical Room, in the basement at the southeast corner of building Area 2. There is no Life Safety or Emergency/Optional Standby power to the building.

The work recommended to address electrical system conditions includes:

- Switchboard is more than 50 years old and in poor condition. As such, it is well past it's serviceable lifespan and in need of immediate replacement.
- Distribution equipment that is original to the building is in poor condition and in need of immediate replacement. Branch panelboards and equipment that were installed as part of more recent renovations and / or upgrades, should provide service for another 10-15 years before replacement is necessary.
- PV system equipment is in good condition and should provide reliable service for another 10-15 years before improvements and / or repairs are required.
- There is no evidence of a lightning protection system for the building. Recommend installing a lightning protection system in the immediate future, to safeguard people and property from fire risk and related hazards associated with lightning exposure.

Plumbing Survey

The plumbing system is served through the water service entrance located in the boiler room. Water closet fixtures are both wall hung and floor mounted with manual flush valves. Lavatories sinks are wall hung fixtures with manual faucets. The domestic water in this building is heated using an electric heat pump water heater

The work recommended to address plumbing systems conditions includes:

- Domestic water service and piping is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Domestic Water heater is nearing the end of its useful life and we recommend it be replaced with an electric water heater.
- Sanitary system (above and below grade) is nearing the end of its useful life and we recommend it be

- replaced in its entirety.
- Natural Gas service and system is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Sanitary system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Storm water system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.

Fire Protection Survey

This building is protected by a 6" fire service that originates and enters the building underground inside of the boiler room. This building only has a wet fire protection system with the fire protection risers being in fair condition. In each of the classrooms there are exposed pendant sprinklers, the gymnasium has upright type sprinklers and there are pendant type sprinklers with guards in the basement of the building where the water and fire service enter the building.

The work recommended to address the fire protection system conditions includes:

- Fire service and associated piping will require re-piping due to future renovations and at that time it will be nearing the end of its useful life and we recommend it be replaced in its entirety.

Lighting Survey

The building's interior lighting is comprised of fluorescent fixtures retrofitted with LED lamps. A combination of HID wall packs and LED floods light the building exterior. Pole mounted LED luminaires light driveways and parking areas. Remote battery powered light heads provide lighting for emergency egress at exit doors.

The work recommended to address lighting system conditions includes:

- Lighting systems are old technology fluorescents retrofitted with LED lamps and drivers with wall toggle switches and occupancy sensor controls. As capital funding becomes available, recommend replacing existing lighting and control systems throughout the building with new technology LED fixtures, along with new low voltage controls, for improved efficiency and to comply with current energy code requirements.

Fire Alarm Survey

The building is equipped with an addressable fire alarm system control panel with voice evacuation. The control panel and battery cabinets are located in the main entrance vestibule with a separate voice control panel in the gymnasium, that allows annunciation over the building's speaker/horn-strobe devices.

No improvements or repairs are required for fire alarm systems at this time. Average life expectancy for fire alarm systems is 15 years. System equipment should be updated or replaced in the next 3-5 years to ensure system reliability.

Telecommunications Survey

The telecommunications system is comprised of a telephone backboard and a secondary telecommunications backboard with punch down blocks. Data communications consists of a fiber backbone and a combination of wired outlets and wireless access points located throughout the facility. General telephone utilization for the building is VoIP.

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No repairs or improvements are required for telecommunication system at this time. Upgrades to these systems (i.e. backbone cabling, workstation outlets, etc.) should be anticipated to accommodate new program requirements as they occur.

Security System Survey

The security system is comprised of an access control system made up of card readers located at the main points of entry and at some interior doors. The system also includes surveillance cameras located at various points around the interior and exterior of the building. A hand-free communications device with fixed camera allows communication between the main entry vestibule and Administration desk.

The work recommended to address security system conditions includes:

- Recommend a review of all access controlled doors and end-user operations be performed in the next 1-2 years, or as program needs dictate.
- Recommend a full system assessment be performed to verify all devices are connected and tested for proper operation in the next 1-2 years, or as program needs dictate.
- Recommend additional high definition cameras be added inside the school and any remaining analog cameras replaced with new HD units in the next 1-2 years, or as improvements in technology dictate.
- Recommend installation and implementation of an intrusion detection or silent alarm system within the next year.

Low Voltage Survey

The low voltage system is comprised of program bells for class scheduling and combination analogue clock/speakers in classrooms.

No improvements or repairs for low voltage systems are required at this time. Improvement and / or replacement of these systems is recommended in the next 7-10 years, or as program needs dictate.

International Building Code Survey

Northeast School was evaluated for compliance with the 2022 Connecticut State Building Code, including the 2021 IBC with Connecticut Supplements and Amendments, for Use Group E (Education). This report does not address alterations to the existing building, because the scope of an alteration project has not been defined. In this case, a change of use would be very unlikely.

The work recommended to address IBC code violations includes:

- Install closers on all classroom doors
- Ensure open doors do not obstruct clear corridor width by greater than 50%

NFPA Code Survey

A review of Northeast School's compliance with the NFPA Life Safety Code 2015 was made. The Life Safety Code is a retroactive code for existing buildings and review of applicable systems is required. This building will require updates.

The work recommended to address NFPA code violations includes:

- Ensure all doors located in smoke partitions have complaint smoke seals. All classroom/corridor doors should be smoke sealed.

ADA Compliance Survey

Northeast School was also evaluated based on the Americans with Disabilities Act (ADA), Title II, for public building accessibility. ADA is an act of Congress mandating certain standards for accessibility that are enforceable through the civil courts. Northeast School fails to meet some of these requirements, evident in the "ADA Compliance Survey".

The building was evaluated based on a review of existing documentation, field verification of existing space usage and discussions with building staff to confirm existing space allocation and usage.

The work recommended to address ADA compliance issues includes providing:

- Exterior - Drop Off Area, Landings at doors, Curb Ramp (1), Tactile warnings at cross walks, signage to designate accessible entrance(s), Accessible parking at dedicated faculty parking area.
- Interior - Door Widths, clear width, maneuvering clearances at doors / toilet rooms, signage, protruding objects, stage stairs / railings, classroom sink controls / knee clearances / clear width, 1 set of classroom bathroom that are non compliant.

Site Survey

The site at Northeast School was evaluated. Traffic flow at this facility is good but the building was unoccupied at the time of the survey so a full evaluation of the traffic could not be completed. Walkways are in fair to good condition. Available parking accommodates 36 vehicles, with 4 handicap accessible spaces available. The playing fields consist of an overgrown grassy area and a paved play area. They are in fair to good condition. Playground areas include mulch and rubberized surfaces with metal and plastic equipment.

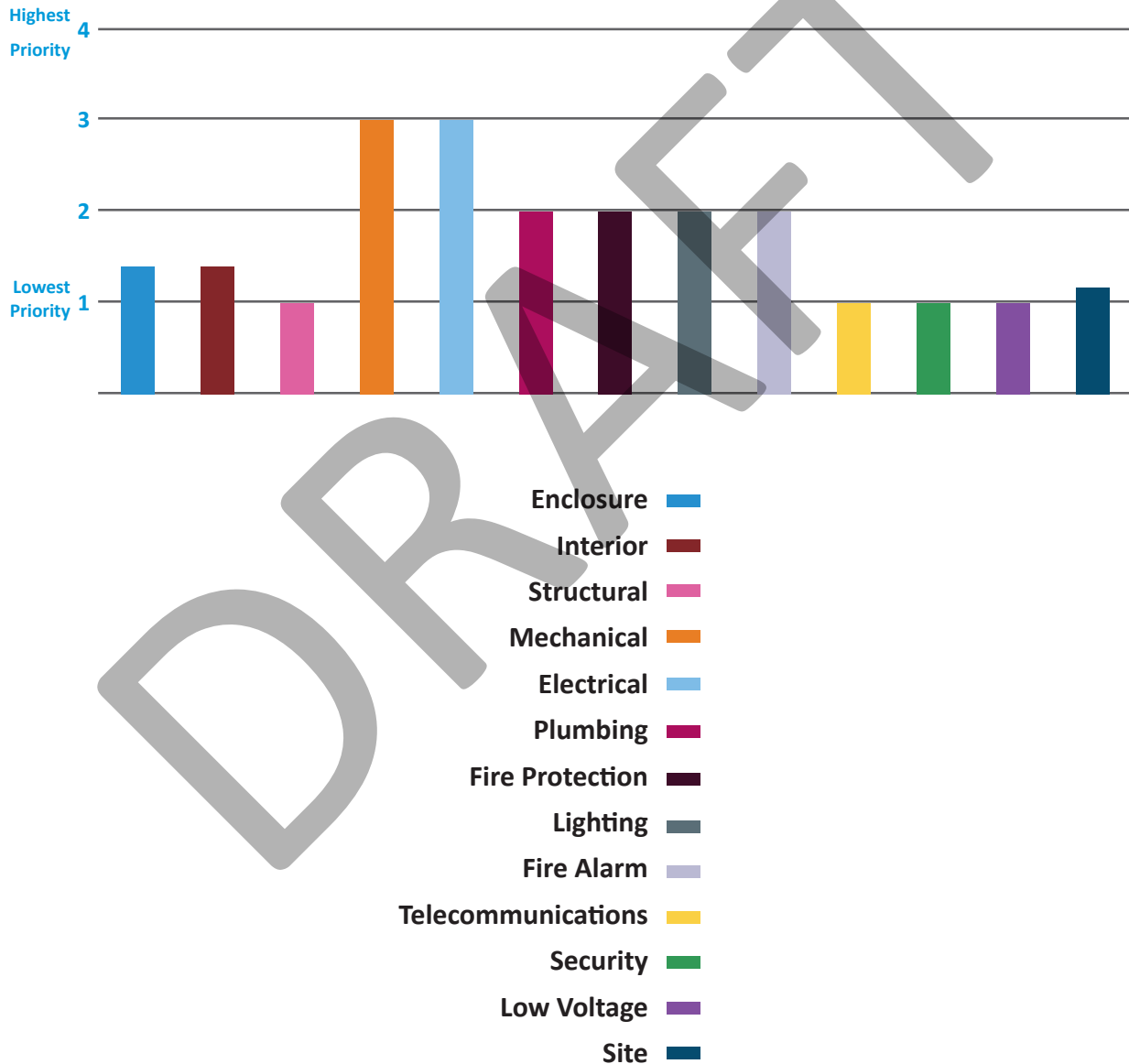
The work recommended to address site conditions includes:

- Provide directional signage and pavement markings for bus and parent drop off.
- Provide signage for delivery areas
- Replace wood barriers at playscapes as they have begun to deteriorate.
- Repair / replace cracked bituminous walkways.
- Review drainage in grassy areas. See Architectural Survey for additional information on building drainage.

Survey Results

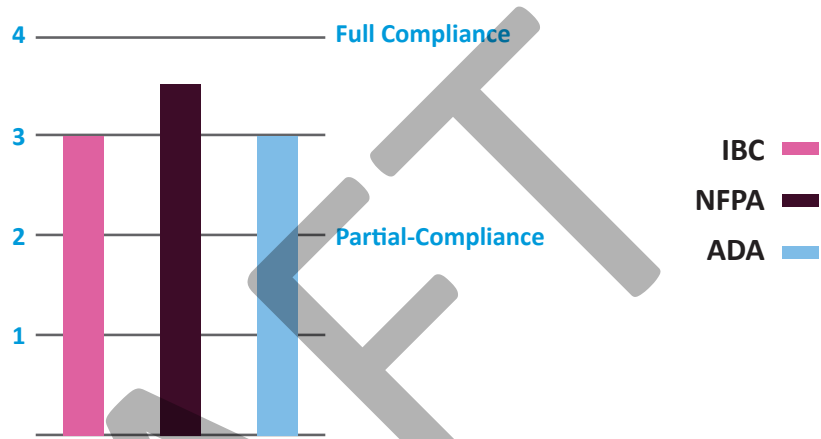
Each of the elements that were reviewed under this assessment was ranked on a scale of 1-4, with a 4 rating equating to the highest priority. Components that received a ranking of 3 should be considered to be moderate priorities, while rankings of 2 and 1 are considered to be low priorities. The following chart graphically presents the survey results (reference Section 4 for a detailed description for each category).

Prioritization of Required Work



The graph below represents the building’s overall conformity with IBC, NFPA and ADA requirements. Compliance was rated on a scale of 1-4, with a 4 rating equating to full compliance. A rating of 2 or under indicates that the building requires moderate to substantial code compliance updates in order to protect the safety of the building’s occupants.

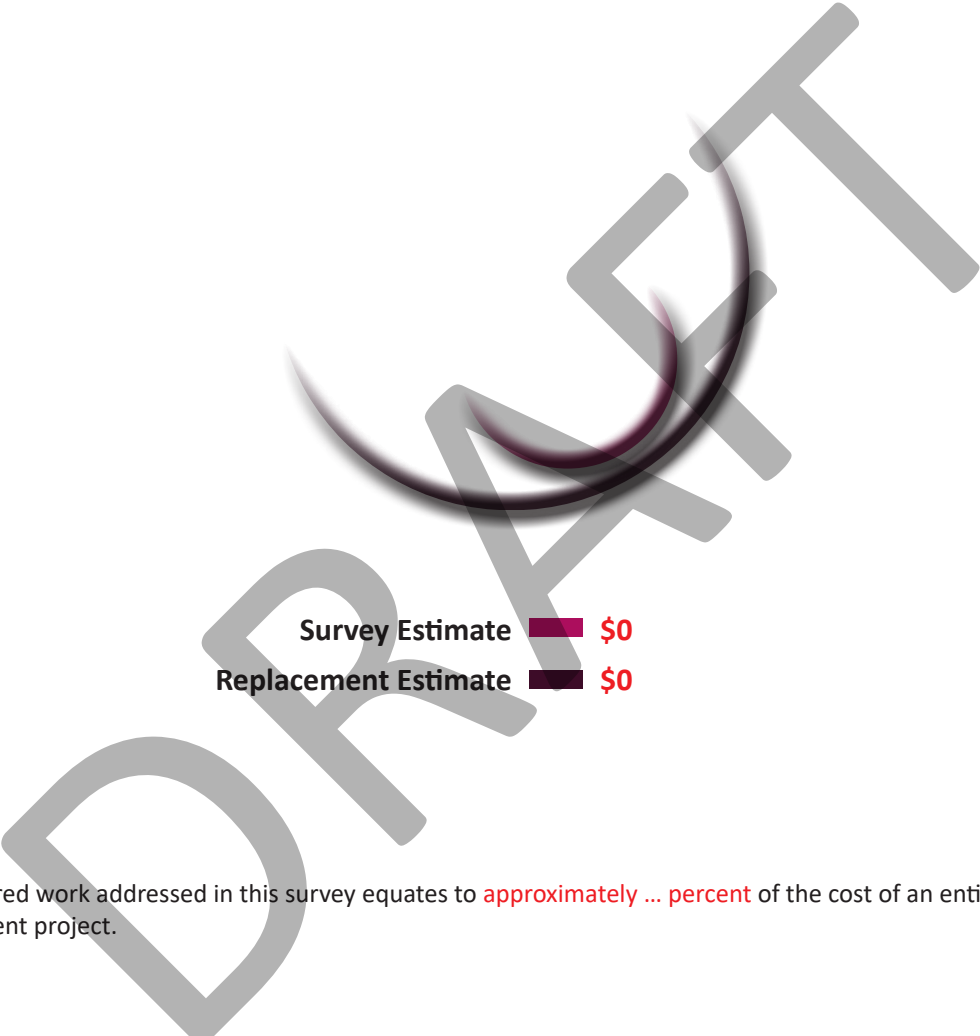
Code Compliance Evaluation





Summary of Recommendations

Opinion of Probable Costs	The estimate of probable costs included in Section 8 of this report is designed as a planning tool for Vernon Public Schools. Estimates do not account for a possible change of use.
Required Work	<p>The estimates reflect bringing the building, in its present configuration, into compliance with current applicable codes and addressing the needs of the various building components (architectural, structural, mechanical / electrical / plumbing / fire protection and site). The projected renovations for these components would upgrade the building to a ... condition.</p> <p>Projected costs are based on 2020 dollars and include no soft costs or contingencies. Based on analysis, over the next 10 years, the required work at this building will cost approximately \$... At xxx square feet, renovations at this building equate to approximately \$... per square foot. This cost-per-square-foot figure falls / does not fall within industry standards for renovations / upgrades of this nature.</p>
Replacement Cost	A similarly constructed building would cost \$... per square foot. Using this figure, the replacement cost for this building is approximately \$..., which follows state standards for structures of this type. The \$... per square foot replacement cost was obtained from R.S. Means Construction Cost Data and current local market conditions for buildings of this type. The estimate includes hard construction costs, demolition costs, construction contingencies, design costs, and other “soft costs”.
State Reimbursement	The municipality’s reimbursement from the State of Connecticut Department of Education for eligible items is xxxx. This would adjust the community’s portion of the renovation costs from \$xxxx to \$xxxx, before taking enrollment and other potential ineligible items into account.

The chart below indicates the estimated value of the required work addressed by the building survey alongside the potential replacement cost. The replacement cost is provided as a guideline for comparative purposes and is based on replacing the building as is, i.e. size and use. Information considered includes the type of structure, year built and existing area for the building.



Survey Estimate  \$0
Replacement Estimate  \$0

The required work addressed in this survey equates to **approximately ... percent** of the cost of an entire building replacement project.

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Section 3 : Architectural & Structural Survey

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Architectural Existing Conditions

This section provides a listing of existing conditions of the various architectural and structural components of the building, followed by summary descriptions. A space utilization plan is provided to identify the current locations / number of spaces available and adjacencies. Photographs of existing conditions are included for clarification purposes, identifying areas that require attention. The floor plans indicate the building layout and are keyed to photograph locations. Recommendations for improvements to the various components are discussed to provide Vernon Public Schools with an overview of the required work.

Northeast School

Plan Drawings	2009 Renovation
Photos	2023 Survey
Date Built	1963
Architect	Renovation by JCJ Architecture
Date(s) Additions / Renovations	2009 Renovation
Construction Classification	2B
Type of Occupancy	Education
Number of Stories	1 Story (plus partial Basement)
Gross Square Feet*	41,500 SF

* Gross Square Footage defined as: The sum of all areas on all floors of a building included within the outside faces of its exterior walls, including all vertical penetration areas, for circulation and shaft areas that connect one floor to another.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Architectural Conditions - Enclosure

Exterior Skin	Material	Condition
Primary Surface	Brick	Fair to Good
Secondary Surface	Metal Panels	Fair to Good
Insulation	Unknown (not visible)	Assumed Good
Features	N/A	N/A
Windows		
Lintel	Assumed Steel	Good
Jamb	Vinyl with Metal Panel / Brick with Vinyl	Good
Sill	Brick with Vinyl / Vinyl with Metal Panel Below	Good
Frame	Vinyl	Good
Glazing	Material or N/A	Good
Sealant	Yes	Fair to Good
Operable	Yes	Good
Exiting	Some	N/A
Doors		
Lintel	Steel	Good
Jamb	Masonry	Good
Sill	Concrete with Metal Threshold	Good
Frame	Aluminum / Hollow Metal	Good / Fair
Door	Aluminum / Hollow Metal	Good / Fair
Glazing	Wired / Tempered	Fair to Good
Flashing	Yes	Fair
Sealant	Yes	Fair
Hardware	Lever / Pull	Fair to Good

Architectural Conditions - Enclosure (continued)

Exterior Ramp(s)	Material	Condition
Ramp	Concrete	Good
Landing	Concrete	Good
Handrail	Metal	Fair to Good

Northeast School has a brick exterior with a metal panel system. The brick is in fair to good condition. A few areas require repointing and cleaning (see photographs for examples). At two different entrances the brick was cracked and should be examined further and repaired. A few areas of the concrete foundation had visible damage and cracking. Existing columns in the Service area had peeling paint. The metal panels need further review - in many areas the sealant and flashing was falling off or damaged. There were also many panels that were rusted and in need of replacement (see photographs for examples).

The windows were overall in good condition. Several screens were damaged or ripped and should be replaced. In a few areas the vinyl sills were pulling away these should be repaired to avoid water infiltration.

The exterior doors were in fair to good condition. The hollow metal doors are showing their age and need to be replaced or refinished. The side lights at these doors were rusted. The door at the Service Area by East Street did not appear to have any sealant between the frame and brick. The doors had a mix of hardware types and some doors had holes indicating where hardware had been changed through the years.

Drainage from the roof typically lands directly at the foundation of the building or onto walkways. Alternate drainage is recommended to avoid water infiltration or slippery hazardous conditions.

Architectural Conditions - Interior

Corridors	Material	Condition
Walls	Brick	Good to Excellent
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel levers, type varies	Good
Flooring	12x12 Vinyl Composition Tile (VCT)	Good
Ceilings	2x4 ACT / Gypsum Soffits	Good
Offices - Main		
Walls	CMU / Brick	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel Lever	Good
Flooring	12x12 VCT	Good to Excellent
Ceilings	2x4 ACT	Excellent
Toilet Rooms		
Walls	CMU / Wall Tile	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel Lever	Good
Flooring	Tile	Good
Ceilings	2x4 ACT	Good
Classrooms		
Walls	Gypsum Textured wall paper / Painted Plywood	Good Fair to Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel Lever	Good
Flooring	VCT	Fair to Good
Ceilings	Painted Insulation	Fair
Art Classroom(s)		
Walls	Gypsum Textured wall paper / Painted Plywood	Good Fair to Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel Lever	Good
Flooring	VCT	Good
Ceilings	Painted Insulation	Fair

Cafeteria		
Walls	Brick	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel Levers	Good
Flooring	VCT	Good
Ceilings	Painted Insulation	Fair
Kitchen		
Walls	Brick / CMU	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel	Good
Flooring	Epoxy	Good
Ceilings	2x4 ACT	Good
Gymnasium		
Walls	Brick / Wood paneling	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel Lever and Push	Good
Flooring	Rubber	Good
Ceilings	ACT	Good
Media Center / Library		
Walls	CMU / Gypsum / Acoustic Wall Panels	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel Levers	Good
Flooring	Carpet Tile	Good
Ceilings	Painted Insulation	Fair to Good
Nurse		
Walls	CMU	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel Lever	Good
Flooring	VCT	Fair to Good
Ceilings	2x4 ACT	Good

Architectural Conditions - Interior (continued...)

The interior of the building is in fair to good condition.

Ceilings throughout are in fair to good condition. The ceilings should be inspected for the cause of the apparent water damage. Painted insulation ceilings have stains, holes and rust markings. The ceilings consist mostly of acoustical ceiling tiles (ACT) and painted insulation. There are visible water damage, cracks and holes in some areas. Refer to photographs for examples.

The Gymnasium has several areas of peeling and discoloration at the ceiling diffusers in the gypsum soffits. This requires further investigation to see where the leaks are originating and touch up paint is needed at many gypsum soffit locations.

Flooring throughout is in good condition throughout. There are some areas with VCT that are in fair to good condition because there is bubbling and cracking. Smaller breakout rooms have carpet tile which is in good condition. Floor tile in some areas have a faded finish and are damaged. Wood gym bleachers and wood stage are in fair condition and need to be refinished. Wood is very worn. Wall base throughout is in good condition but is slightly damaged in a few areas.

The condition of the vertical blinds throughout is in fair to good condition.

Many classroom doors do not have closers. Wood doors need to be refinished since the doors are faded and scratched up.

Gypsum and CMU walls could use paint touch up in several areas. CMU in the Media Center has a crack running through three coursings. This should be investigated.

Structural Existing Conditions

The following is a data summary of the structural conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

The following codes are used throughout this report to identify the condition of various elements.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Structural Conditions - Exterior Condition

	Material	Condition
Enclosure	Masonry	Good
Foundation	Concrete	Good
Footings	Concrete	Assumed Good
Deck	Metal Deck	Good
Exterior Frame	Steel	Good
Other	N/A	N/A

Structural Conditions - Interior Condition

	Material	Condition
Framing	Steel	Good
Walls	Metal Stud / CMU	Good
Ground Floor Slab	Concrete	Good
Flooring System (other levels)	Concrete	Good
Stairs	Steel	Good
Other	N/A	N/A

The structural components of Northeast School were evaluated.

In general, the building appears to be in good condition structurally. Although observations could not be made of many structural elements without demolition, no dangerous conditions were observed.

Architectural & Structural Survey Photographs



1. Location:

South Elevation

Description:

Screen torn and/or damaged - several locations throughout building



2. Location:

South Elevation

Description:

Area of infill at brick facade



3. Location:

South Elevation

Description:

Vinyl sill pulling away from frame - various locations throughout building

Architectural & Structural Survey Photographs



4. Location:

South Elevation

Description:

No sealant around existing vent. Rusting visible from steel lintel



5. Location:

Southeast Elevation

Description:

Drainage from downspout directly onto walkway



6. Location:

South Elevation

Description:

Minor cracking and repair at foundation

Architectural & Structural Survey Photographs



7. Location:

South Elevation

Description:

Discoloration of metal panels likely due to age and weather

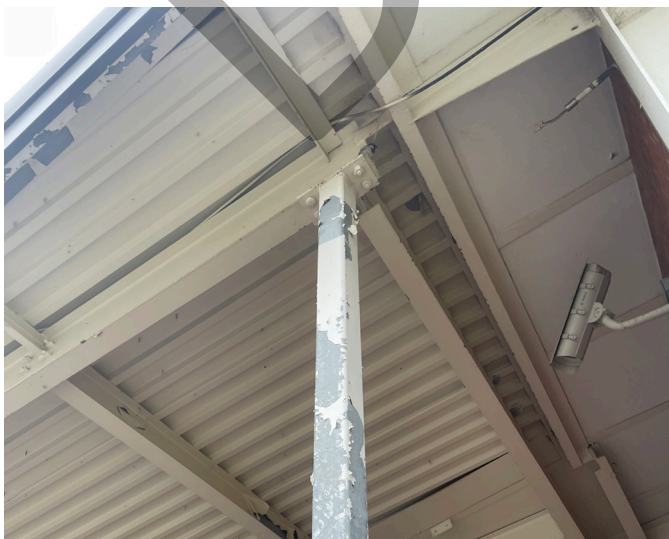


8. Location:

South Elevation

Description:

Windows appear to have a film which is bubbling in several locations.



9. Location:

South Elevation

Description:

Finish peeling from column and roof soffit.

Architectural & Structural Survey Photographs



10. Location:

South Elevation

Description:

Rusting of hollow metal frame. Sealant missing between brick and door frame.



11. Location:

West Elevation

Description:

Caulk/Sealant cracking and missing.



12. Location:

West Elevation

Description:

Cracking in brick - no obvious sign of cause

Architectural & Structural Survey Photographs



13. Location:

West Elevation

Description:

Typical under roof overhang



14. Location:

West Elevation

Description:

Missing and damaged flashing below metal panels



15. Location:

West Elevation

Description:

Typical at many metal panels - sealant is missing or breaking away

Architectural & Structural Survey Photographs



16. Location:

North Elevation

Description:

Underside of soffit needs patching and refinishing. Light fixture is old and needs to be replaced along with frame.



17. Location:

South Elevation

Description:

Window not sitting flush in frame.



18. Location:

South Elevation

Description:

Many panels are rusted and need to be replaced to prevent further deterioration.

Architectural & Structural Survey Photographs



19. Location:

South Elevation

Description:

Typical downspout dispensing water directly to the ground in front of the building.

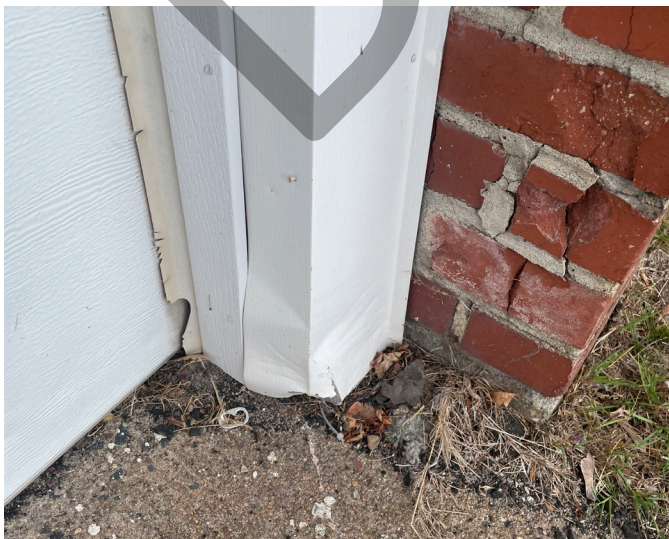


20. Location:

South Elevation

Description:

Efflorescence present on the brick. Repointing is needed in this location.



21. Location:

East Elevation

Description:

Damage to the garage door frame. Weatherstripping needs to be replaced.

Architectural & Structural Survey Photographs



22. Location:

East Elevation

Description:

Water damage to the metal panel, frame and brick.



23. Location:

East Elevation

Description:

Cracking visible at brick



24. Location:

East Elevation

Description:

Significant rusting at exterior doors with sidelights - this is a typical condition throughout the building

Architectural & Structural Survey Photographs



25. Location:

East Elevation

Description:

Grates are a potential hazard for young children. Most are loose and fairly rusted.



26. Location:

North Elevation

Description:

Typical condition at hollow metal doors - finish fading and weatherstripping deteriorating



27. Location:

East Elevation

Description:

Hollow metal door - holes remain from hardware replacement, finish significantly faded, weatherstripping deteriorating.

Architectural & Structural Survey Photographs



28. Location:

East Elevation

Description:

No signage or handrails at ramped area



29. Location:

South Elevation - Vestibule

Description:

Gap between brick and soffit. Soffit needs to be refinished.



30. Location:

Corridor - East

Description:

Paint peeling and chipping off. Needs to be repainted.

Architectural & Structural Survey Photographs



31. Location:

Corridor - East

Description:

Gouge in VCT exploding seafloor underneath.



32. Location:

Corridor - East

Description:

VCT is bubbling and cracking in areas.



33. Location:

Classroom

Description:

Steel rusting over window.

Architectural & Structural Survey Photographs



34. Location:

Classroom

Description:

Painted insulated ceiling has gouges and holes. Repair is needed.



35. Location:

Media Center

Description:

Carpet tile is popping up at door transition and needs repair.



36. Location:

Media Center

Description:

Water damage is seen on the insulation and stained across multiple tiles.

Architectural & Structural Survey Photographs



37. Location:

Media Center

Description:

A square area is seen patched where water damage is seen.

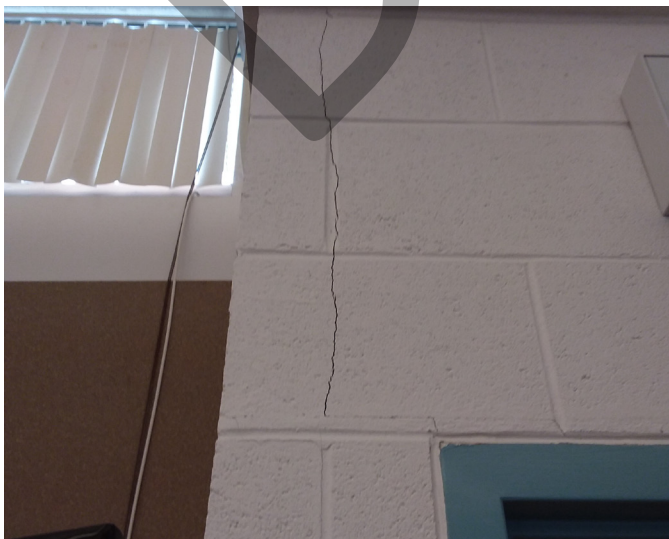


38. Location:

Media Center

Description:

Vertical blinds are damaged and needs replacing.



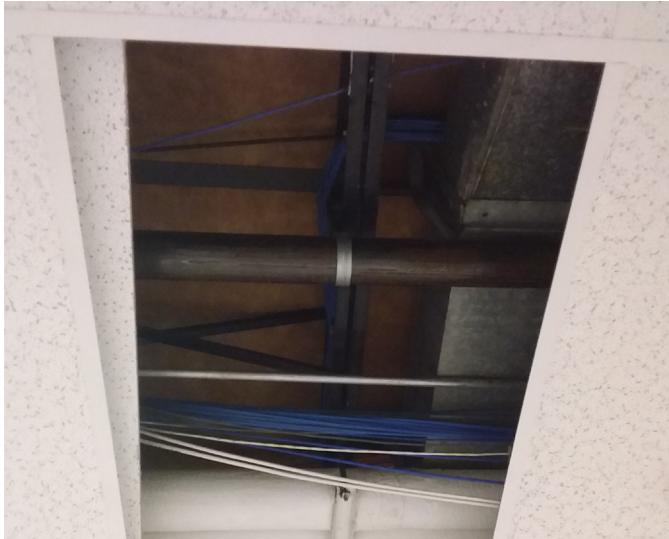
39. Location:

Media Center

Description:

Crack running through 3 coursings of CMU.

Architectural & Structural Survey Photographs



40. Location:

Corridor

Description:

Several ceiling tiles were opened



41. Location:

Main Office Suite

Description:

Wall base appears damaged and stained.



42. Location:

Main Office Suite

Description:

VCT is cracking at transition between rooms.

Architectural & Structural Survey Photographs



43. Location:

Cafeteria

Description:

Installation is stained and peeling in some areas.



44. Location:

Cafeteria

Description:

Radiator has chipped paint and scuff marks. Needs to be repainted.



45. Location:

Cafeteria

Description:

Brick is faded and needs some cosmetic cleaning.

Architectural & Structural Survey Photographs

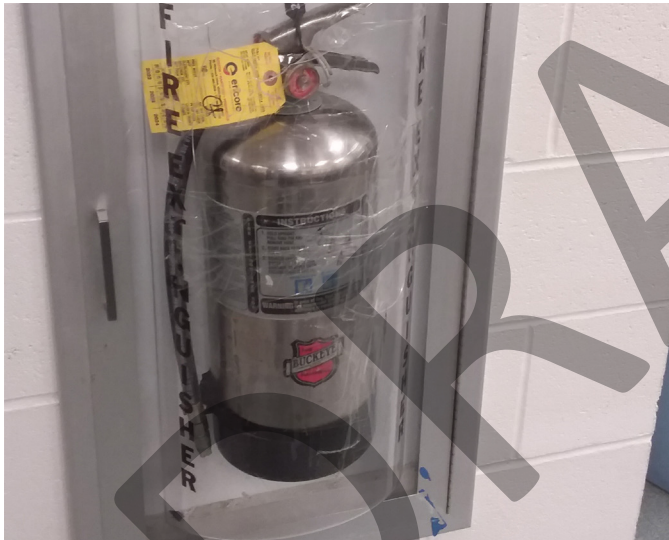


46. Location:

Kitchen

Description:

Epoxy flooring has a large crack running through it.



47. Location:

Kitchen

Description:

Fire extinguisher door is broken and needs repair.



48. Location:

Gymnasium

Description:

Water stain on acoustical wall panels.

Architectural & Structural Survey Photographs



49. Location:

Gymnasium

Description:

Wood bleachers are faded and scratched. Bleachers need to be refinished and repaired.



50. Location:

Gymnasium

Description:

Wood stairs up to stage are faded and scratched. Stairs need to be refinished and repaired.



51. Location:

Gymnasium

Description:

Wood stage floor is faded and scratched. Stairs need to be refinished and repaired.

Architectural & Structural Survey Photographs

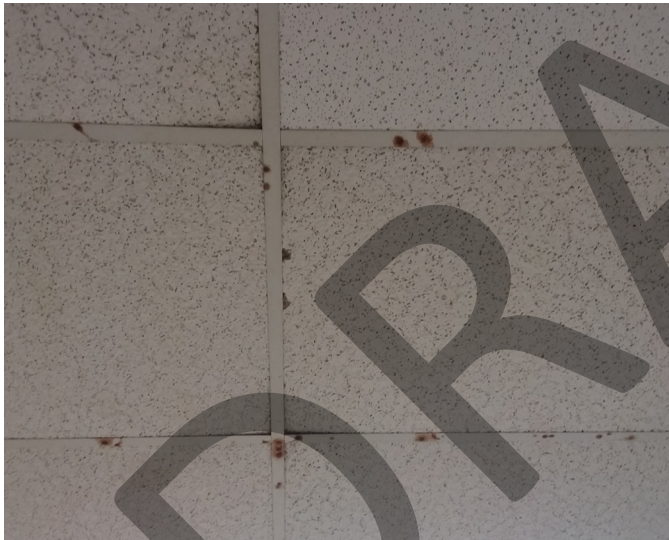


52. Location:

Gymnasium

Description:

Gap between wood door frame and brick.

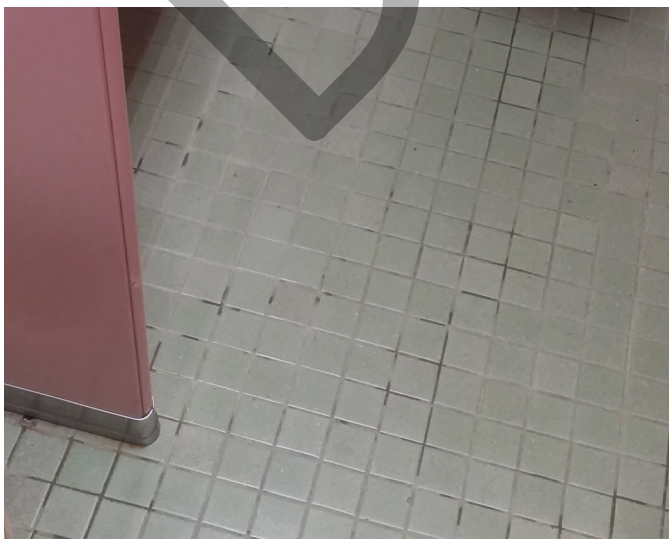


53. Location:

Toilet Room

Description:

Rust on ceiling grid.



54. Location:

Toilet Room

Description:

Floor tile is slightly buckling and the tile finish is faded.

Architectural & Structural Survey Photographs



55. Location:

Vestibule

Description:

Floor tile is very damaged and some tile has been completely torn up.



56. Location:

Corridor - North

Description:

Water staining on brick and deterioration of some of VCT.

Architectural & Structural Photograph Key Plan

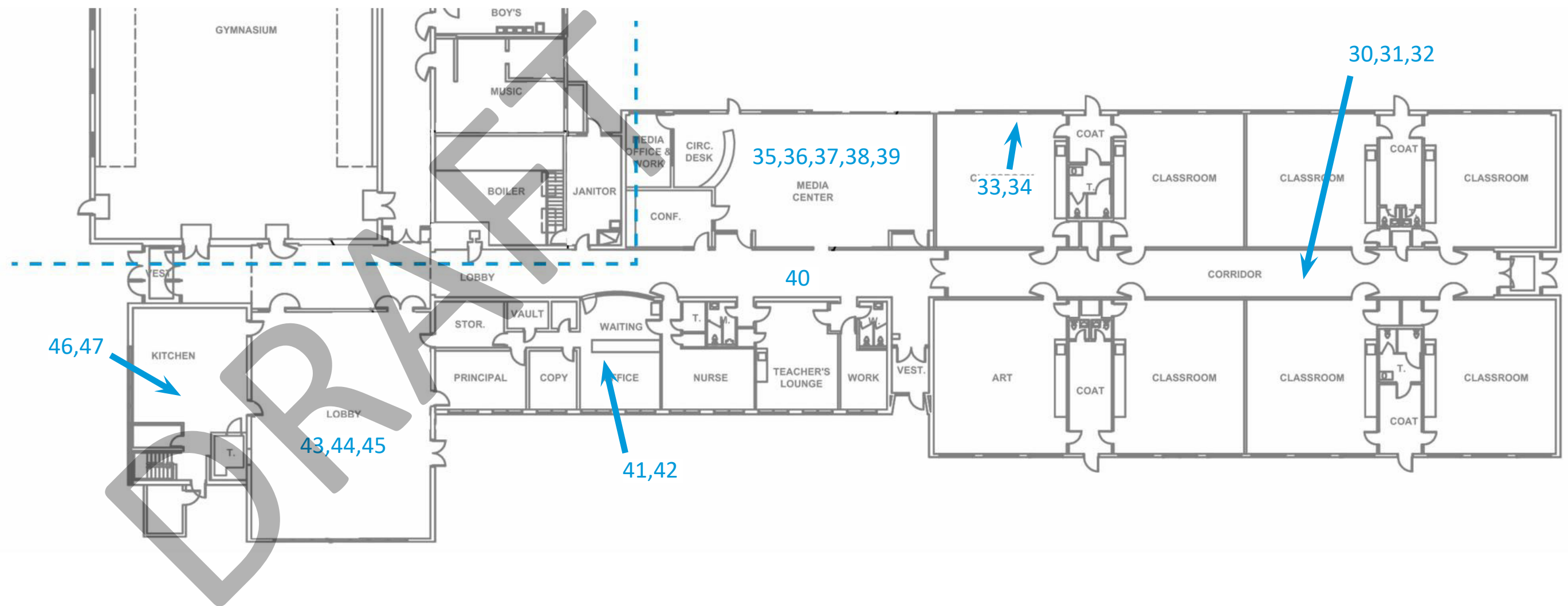
The following plan shows the actual building plan as verified during field surveys. Photographs from the previous pages are keyed into the building plans with numbered arrows at the approximate photograph site and direction from which the photographs were taken.

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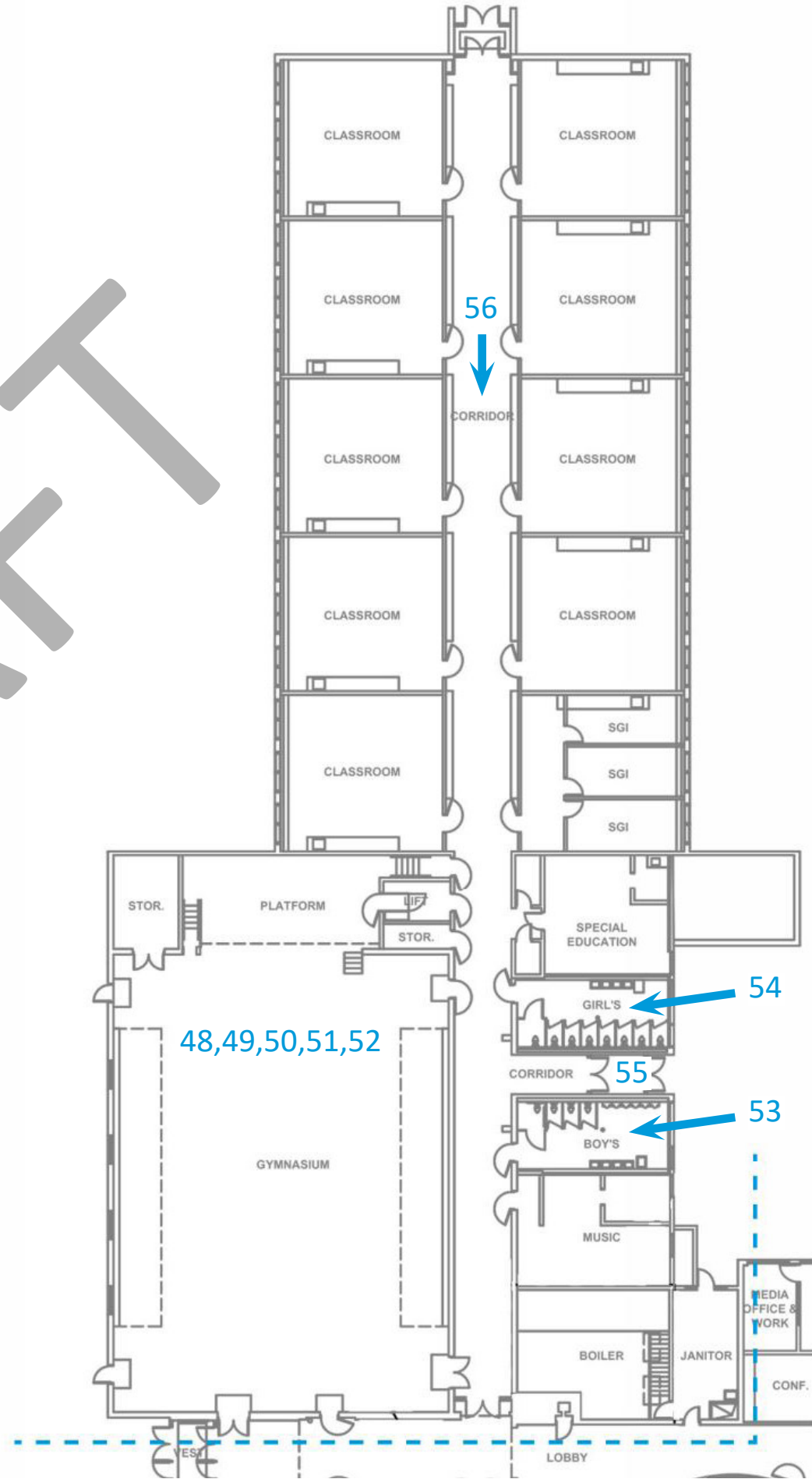


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Architectural & Structural Recommendations

The architectural and structural components of Northeast School are in fair to good condition.

The following represents areas of necessary architectural improvements and / or required work.

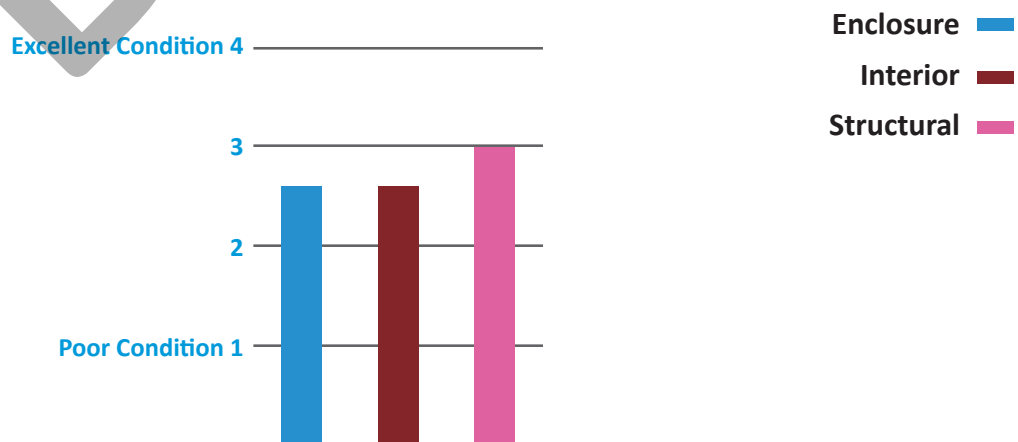
- Replace torn or damaged window screens
- Provide sealant at all existing vent locations
- Review drainage from roof - currently directly onto ground in front of building or onto walkways
- Refinish columns and metal soffit at Service Area
- Refinish or replace all hollow metal doors and frames
- Replace missing or damaged flashing at metal panels below windows
- Replace metal panel systems - many areas of rusting and sealant is deteriorating or missing from panels
- Refinish vestibule soffits - review MEP narrative for existing light fixtures
- Clean and repoint areas where need at brick walls
- Replace rusting exterior door sidelight frames where significant rusting has developed
- Secure all exterior grates and hatches to prevent hazardous conditions
- Refinish and provide new weatherstripping at all exterior hollow metal doors
- Provide sealant at all areas where brick meets other materials (ie soffits, columns, etc)
- Refinish wood stairs and stage in Gymnasium
- Refinish wood bleachers in Gymnasium
- Repair/Refinish tile in bathrooms
- Repair broken/damaged ceiling tiles
- Access areas with water damage on walls, floors and ceilings
- Repaint handrails as needed
- Repaint walls in areas where they are scuffed up.

The following represents areas of necessary structural improvements and / or required work.

- Repair cracked / damaged brick and concrete foundation

Existing Conditions Evaluation:

The elements reviewed under this assessment were ranked on a scale of 1-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 are considered to be in good condition, while rankings of 2 and 1 are considered to be in fair and poor condition, respectively. The following chart graphically presents the results and their expected life spans.



Note: Ratings range from 1 (poor condition) to 4 (excellent condition)

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Section 4 : Mechanical, Electrical, Plumbing & Fire Protection Survey

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4

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M/E/P/FP Existing Conditions

The mechanical / electrical / plumbing / fire protection survey results are presented within this section. Included are a chart of existing components and their conditions, summary descriptions, photographs, plans, and recommendations.

Mechanical

The following is a data summary of the Mechanical system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Mechanical Conditions

System	Condition	Comments
Boilers	Fair	Boilers were observed to be in fair working condition.
Heating System	Fair	Heating system was observed to be in fair working condition. Piping was observed to be partially insulated.
Heating System Pumps	N/A	No Heating System Pumps within System
Roof-Top Units	Fair	Roof top units were observed to be in fair condition serving kitchen and library.
Air Distribution / Ductwork	Good	Ductwork was observed to be clean and in good condition.
Condensate Piping (A/C)	Good	Condensate piping was observed to be in good condition.
Exhaust Fans	Good	Exhaust fans were observed to be clean and in good working condition.
Controls	Good	Controls were observed to be updated in portions of the building and remain pneumatic in others.

Heating system is served by cast iron mid-efficiency steam boilers with condensate system and duplex boiler feed pumps. The system is in fair condition and appears to be from 2008 (15 years old). Cast iron boiler system have an approximately 25 year life expectancy and while not near end of life we would recommend replacing with high efficiency condensing boilers for increased energy savings.

Classrooms have perimeter radiation with operable windows to provide natural ventilation.

Exhaust air is ducted from each room and provided by roof mounted exhaust fans located above

Gymnasium is served by (4) unit ventilators on west wall. Units are comprised of steam heating coil, supply fan,

Mechanical (continued...)

return / outside air damper and pneumatic controls. Units do not currently operate.

Exhaust air is provided by a large forward curve exhaust fan located in mechanical mezzanine above stage. Exhaust ductwork runs over rear of stage and to the front of stage with high wall grilles.

Cafeteria is served by (2) unit ventilators located in space. Units are comprised of steam heating coil, supply fan, return / outside air damper and pneumatic controls. Units do not currently operate.

Kitchen ventilation is provided by a Make-up Air unit and kitchen exhaust fan. Make-up Air unit is comprised of gas fired indirect heating coil, and supply fan. Units are interlocked and turn on by manual switch in kitchen

Administration office areas have perimeter radiation with operable windows to provide natural ventilation.

Media Center is served by a roof top unit locate on roof above. Unit is comprised of heating coil, DX cooling coil, supply fan, outside air damper, and MERV-7 filters.

Controls are a mix of direct digital controls with Building Management System (BMS), pneumatics, and standalone controls and starters. Boiler system, kitchen Make-Up Air unit and Media Center RTU have been integrated into the BMS.

Electrical

The following is a data summary of the electrical system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Electrical Distribution Conditions

System	Condition	Comments
Main Service	Poor	Switchboard is Original to the Building and Past its Serviceable Lifespan.
Power Distribution	Poor	Older Equipment that is Original to the Building is Past its Serviceable Lifespan.
Life Safety Power	N/A	There is No Life Safety Power to the Building.
Emergency Power	N/A	There is No Emergency Power to the Building.
Transformers	N/A	There are No Distribution Transformers in the Building.
Grounding	Fair	Service Equipment Grounding, Where Observed, Appeared Undamaged and In Fair Condition.
Lightning Protection	N/A	There is No Lighting Protection System for the Building.

Power originates at a utility pole located at the southwest side of the facility, in the parking area across from the maintenance entrance. The utility primary runs underground from the pole to a utility company owned 208Y/120V, 3-phase, 4-wire transformer located in a vault below grade, outside the Main Electrical Room. Secondary feeder bus runs from the utility vault to the Main Distribution Switchboard in the Main Electrical Room, in the basement at the southeast corner of building Area 2.

The switchboard is manufactured by Frank Adam Electric Company and consists of a main switch and CT compartment rated for 600A at 208Y/120V, 3-phase. The metering cubicle is arranged cold sequence with the meter mounted on a wall behind the switchboard. The main switch and CT section feed a 600A, 208Y/120V, 3-phase, 4-wire distribution section, which contains branch circuit breakers that feed panels and equipment that are original to the building. Panel "SDP" is tapped off the load side of the main switchboard CT's. This panel was installed as part of electrical renovations done in 2008 and feeds panels in the Kitchen and Media Center. The Main Switchboard is original to the building. As such, it is more than 50 years old and well past its serviceable lifespan.

Branch circuit panelboards vary in age between those original to the building, which date from the early 1960's, to those installed as part of the 2008 renovations. Branch circuit wiring is in EMT/armored cable, where observed. Panels and equipment that are original to the building are in poor condition and in need of replacement.

Electrical (continued...)

There is no Life Safety or Emergency/Optional Standby power to the building.

The PV system is of the grid connected type and does not include battery back-up storage or secondary electrical generation devices. The system utilizes roof mounted solar arrays and produces AC power at 208V into local services via inverters. Disconnects for the PV system are installed on the roof and in the main electrical room. The PV system meter is located outside the maintenance entrance, above the utility transformer vault. All PV system equipment is well maintained and in good condition.

There is no evidence of a lightning protection system for the building.

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Plumbing

The following is a data summary of the plumbing system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Plumbing Conditions

System	Condition	Comments
Water Service	Fair	Service Size 4"
Fixtures	Fair	Wall and Floor Mounted Fixtures, Manual Flush Valves and Faucets
Domestic Cold Water Pipe	Fair	Corrosion Starting to Form on Copper Piping
Domestic Hot Water Pipe	Fair	Electric Water Heater Appears to be in Fair Condition, Corrosion Starting to Form on the Piping
Sanitary & Vent Piping	Fair	Corrosion on Sanitary in Kitchen
Storm Piping	Fair	Piping and Insulation Appear to be in Fair Condition, Roof Drains are in Fair Condition, and Below Grade Piping is Believed to be Original to the Building
Natural Gas Piping	Fair	Service Size 4"
Irrigation	N/A	N/A

The water originates in the building through the water service entrance located in the boiler room of the building. This service will need to be replaced if an additional load is added to the system.

There are both wall hung and floor mounted water closets in each of the bathrooms. Both types of water closets are made from a vitreous china and are equipped with manual flush valves. In this building there are both wall hung and floor mounted urinals. Both types of urinals are made from vitreous china and are equipped with manual flush valves. The lavatories in this building are all wall hung type lavatories made from vitreous china with manual type faucets. There is one lavatory in each bathroom uses a sensor type faucet. In each of the classrooms there is one stainless steel drop-in countertop sink that has a manual type faucet. All plumbing fixtures seen in this building appeared to be in good condition with no signs of any major damage.

The domestic water in this building is heated using an electric heat pump water heater. This water heater is relatively newer as it was installed on 08/27/2018 and appears to be in fair condition with no signs of any damage.

All domestic water, sanitary, and storm piping seen in the building all appeared to be in fair condition with no major

Plumbing (continued...)

signs of any rust or corrosion or any major damage but will need to be replaced if additional loads are added to the building.

The natural gas service and all the natural gas piping seen in the building appeared to be in good condition that showed no signs or any corrosion or damage.

There is no irrigation systems or any irrigation piping seen throughout the building.

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Fire Protection

The following is a data summary of the fire protection system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Fire Protection Conditions

System	Condition	Comments
Fire Service	Fair	Service Size 6"
Backflow Preventer	Fair	Service and Testing Up to Date
Standpipe System	Good	Standpipe in Hallway by Gymnasium
Sprinkler System	Fair	Wet System
Fire Department Connection	Fair	Post Mounted Siamese Connection
Heads	Good	Exposed Pendants in Classrooms, Uprights in Gymnasium, Pendants with Guards in Service Hallway
Piping	Good	Black Steel Piping
Fire Pump	N/A	N/A
Booster Pumps	N/A	N/A

This building is protected by a 6" fire service that originates and enters the building underground inside of the boiler room. Rust can be seen beginning to form on the piping where the service enters the building and leads towards the backflow preventer in the system.

The backflow preventer and all of the fire protection risers located in the boiler room of the building appear to be fair condition with the service and testing of the system being up to date. Service records show testing of the system every year since 2016.

There is a standpipe in this building located in the hallway of the building by the gymnasium and it appears to be in good condition with no signs or any damage or corrosion to the piping.

This building only has a wet fire protection system with the fire protection risers being in fair condition as rust can be seen starting to form on the piping. Black steel piping spreads the water from the boiler room to the sprinklers throughout the building and appears to be in good condition.

Fire Protection (continued...)

In each of the classrooms there are exposed pendant sprinklers, the gymnasium has upright type sprinklers and there are pendant type sprinklers with guards in the basement of the building where the water and fire service enter the building. All of the piping and sprinklers in the building appear to be in good condition with no signs of any damage or corrosion.

This building has a free-standing post-mounted Siamese fire department connection that appears to be in fair condition as it exists with rust forming on the piping that leads up to the connection head. This building does not have a fire pump or any booster pumps in the fire protection system.

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Lighting

The following is a data summary of the lighting system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Lighting Conditions

System	Condition	Comments
General Lighting	Fair	Fluorescent Fixtures Retrofitted with LED Lamps. Lighting Levels Adequate.
Emergency Lighting	Fair	Battery Powered Emergency Light Fixtures in Utility Areas and Along Paths of Egress.
Exit Signs	Good	Battery Powered LED Fixtures at All Exits and Along Paths of Egress, Supplemented with Low Proximity Exit Signs.
Exterior Lighting	Good	LED Exterior Building Mounted Fixtures and Pole Arm Mounted LED Luminaires in Parking Areas.
Lighting Control	Fair	Occupancy Sensors with Manual Override.
Theatrical Lighting	Fair	Adjustable Spotlights and Dimming Control in Auditorium.

Interior lighting fixtures consist mostly of 2'x4' recessed lay-in troffers with parabolic lenses in offices, corridors and public spaces. Fixtures in classrooms are 1'x4' surface mounted with wraparound style lenses. Fixtures in the Gymnasium are pendant mounted LED high-bays with wire-guards. Fixtures in the Administration Office are 2'x4' recessed direct/indirect. All interior fixtures have been retrofitted with LED lamps and drivers and are in fair to good condition. Light levels throughout the facility appeared adequate.

Battery operated emergency lights and remote emergency light heads are used to light egress paths in utility areas, corridors and above exit doors. Emergency fixtures were not tested for operation, but appear correctly installed and maintained.

Exit signs are LED with battery backup. Exit signage in all areas appears in compliance with current codes. All signage appears to be in good condition and operating properly.

A combination of HID wall packs and LED floods light the building exterior. Pole mounted LED luminaires light driveways and parking areas. Remote battery powered light heads provide lighting for emergency egress at exit doors.

Lights in corridors and public spaces are controlled with toggle switches and ceiling mounted occupancy sensors.

Lighting (continued...)

Lights in classrooms are controlled with toggle switches and wall mounted occupancy/vacancy sensors. Offices utilize wall occupancy sensors with manual override. Exterior lights are controlled via timeclock and photocell. No daylighting was observed.

A theatrical lighting system, consisting of adjustable spotlights and dimming control equipment, exists in the Auditorium. It appears in fair working condition with no reported issues.

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Fire Alarm

The following is a data summary of the fire alarm system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Fire Alarm System Conditions

System	Condition	Comments
Fire Alarm Control Panel	Good	Panel Appears Well Maintained and in Good Working Condition.
Initiating Devices	Good	Devices are Installed Properly and Appear in Good Working Condition.
Indicating Devices	Good	Devices Appear Sufficient and in Good Working Condition.
Area of Rescue	N/A	N/A
Voice Evacuation	Good	System Appears Well Maintained and in Good Working Condition.
Elevator Recall	N/A	N/A

The building is equipped with a Simplex 4100 series addressable fire alarm system control panel with voice evacuation. The control panel and battery cabinets are located in the main entrance vestibule with a separate voice control panel in the gymnasium, that allows annunciation over the building's speaker/horn-strobe devices.

Locations of manual pull stations appear compliant. Fire alarm speaker/strobe coverage throughout the building appears sufficient. All fire alarm devices appeared in good working condition and mounted at the correct ADA height. Monitor and control modules for duct smoke detectors were not observed.

The building is equipped with a sprinkler system with supplemental smoke detection devices in corridors, storage areas and electrical rooms, heat detectors in mechanical spaces, tamper and flow alarm switches at the service entrance. All systems appear operational and in compliance.

There is no Area of Rescue call system for the building.

There is no elevator in the building.

Telecommunications

The following is a data summary of the telecommunications system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Telecommunications System Conditions

System	Condition	Comments
Backbone Cabling	Good	Well Maintained with No Visible Damage.
Rack System	Good	Well Maintained with No Visible Damage.
Telecommunication Ground	N/A	None Observed
Telephone Service Entrance	Fair	Equipment that is Original to Building is in Poor Condition but Operational.
Data Horizontal Cabling	Good	Well Maintained with No Visible Damage.
MDFs / IDFs	Good	Well Maintained and Functioning with No Reported Issues.
Pathways	Good	Well Maintained with No Visible Damage.
Coaxial Cable	N/A	None Observed

Telecommunications services originate at a utility pole located at the southwest side of the facility. In the parking area across from the maintenance entrance. Cabling runs underground and enters the building in the basement Main Electrical Room, where the telephone systems equipment backboard is located. This equipment appears original to the building and is in poor condition. A second telecommunications backboard with punch down blocks is located in the Administration area. This equipment is well maintained and is functioning properly with no reported issues.

The data systems rack is located in a work room at the east end of building Area 2, next to the Teacher's Lounge. Data communications consists of a fiber backbone and a combination of wired outlets and wireless access points located throughout the facility. Typical classrooms contain a hardwired data drop approximate to the Teacher's desk and convenience drops that vary in quantity depending on room type. Wireless Access Point (WAP) devices are distributed throughout the facility – one per classroom or office suite and throughout corridors and common areas. All equipment and cabling appeared well maintained and in good condition.

Telecommunication Systems (continued...)

General telephone utilization for the building is VoIP. This system operates through speaker handsets in classrooms and offices, and is tied into the building paging/public address system via ceiling and wall mounted speakers located throughout the facility. Combination analogue clock/ paging speakers are installed in classrooms. All systems appeared operational with no reported issues.

The building appears to contain elements of TV infrastructure at the data systems rack. This could not be confirmed as Video IPTV streaming provisions for the building.

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Security System

The following is a data summary of the security system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5years)

Security System Conditions

System	Condition	Comments
Intrusion Alarm System	N/A	N/A
Video Monitoring	Good	Well Maintained and Functioning with No Apparent Issues.
Access Control	Good	Functioning with No Apparent Issues
Intercom System for Entrance	Good	Not Tested - Appears Operational

The building uses an access control system made up of card readers located at the main points of entry and at some interior doors. Headend equipment is by Altronix and is located in a work room, next to the main data systems rack. Surveillance cameras are located at various points around the interior and exterior of the building. The video system is networked with dedicated HD displays located in the Administration area and Maintenance Office. All systems appear in good condition and functioning properly.

A hand-free communications device with fixed camera, manufactured by Aiphone, allows communication between the main entry vestibule and Administration desk. The system was not tested for operation, but appears functional and in good condition.

There was no evidence of an intrusion detection alarm system for the building.

Low Voltage Systems

The following is a data summary of the low voltage system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Low Voltage System Conditions

System	Condition	Comments
Clock System	Good	Well Maintained with No Issues Reported
Public Address System	Fair	Working Condition with No Issues Reported
Stand-Alone Sound System(s)	Fair	Functioning with No Apparent Issues
Assisted Listening	N/A	N/A

The building uses program bells for class scheduling, controlled via a Simplex digital time control center located in the Administration Office. Combination analogue clock/speakers are installed in classrooms. This system also functions for public address announcements. All systems appear to be in good condition and fully operational.

A stand-alone sound system exists in the Gymnasium/Auditorium, consisting of an equipment rack and PA type speakers on either side of the stage.

There was no evidence of an assisted listening system in the building.

M/E/P/FP Survey Photographs



1. Location:

Boiler Room

Description:

Domestic Water Service



2. Location:

Boiler Room

Description:

Fire Service and Riser

M/E/P/FP Survey Photographs



3. Location:

Boiler Room

Description:

Water Heater



4. Location:

Group Toilet Room

Description:

Toilet Room Fixtures

M/E/P/FP Survey Photographs



5. Location:

Group Toilet Room

Description:

Toilet Room Fixtures



6. Location:

Teachers Lounge

Description:

Wall Hung AC Unit

M/E/P/FP Survey Photographs



7. Location:

Mechanical Room

Description:

Steam Condensate Receiver



8. Location:

Roof

Description:

Ventilation Roof Top Unit



9. Location:

Corridor

Description:

Unit Heater

M/E/P/FP Survey Photographs



10. Location:

Mechanical Room

Description:

Gas Fired Cast Iron Boiler



11. Location:

Classroom

Description:

Classroom Temperature Controls

M/E/P/FP Survey Photographs



12. Location:

Basement Main Electrical Room

Description:

Main Switchboard



13. Location:

Kitchen

Description:

New Replacement Branch Panel boards

M/E/P/FP Survey Photographs



14. Location:

Roof

Description:

PV System Disconnect and Inverters



15. Location:

Main Level

Description:

Typical Corridor Lighting

M/E/P/FP Survey Photographs



16. Location:

Main Level

Description:

Typical Classroom Lighting



17. Location:

Main Level

Description:

Typical Emergency Lighting Fixture

M/E/P/FP Survey Photographs



18. Location:

Main Entry Vestibule

Description:

Fire Alarm Control Panels



19. Location:

Gymnasium

Description:

Fire Alarm Annunciator with Voice Evacuation

M/E/P/FP Survey Photographs



20. Location:

Main Level Data Closet

Description:

Data Systems Rack and Access Control Equipment



21. Location:

Administration Offices

Description:

Telecommunications Equipment Backboard

M/E/P/FP Survey Photographs



22. Location:

Administration Offices

Description:

Security System HD Displays



23. Location:

Building Exterior

Description:

Surveillance Camera with HID Wall Pack
Light Fixture

M/E/P/FP Recommendations

Recommendations for the existing building systems are listed below by trade.

The following represents areas of necessary **mechanical** improvements and / or required work.

- Heating Plant: The existing building is served by mid-efficiency steam boilers with condensate return system and duplex boiler feed pumps. Boilers are not near the end of their life however recommend replacing with high efficiency condensing hot water boilers for increased energy savings. Further we recommend replacing all steam and condensate piping throughout building due to corrosion from steam condensate.
- Ventilation: Provide an energy efficient, code compliant ventilation system that meets present day ASHRAE and building code requirements. This system would include energy recovery to maximize ventilation and energy efficiency.
- Exhaust: Recommend replacement of (9) roof exhaust fans original to building not currently working.
- Cooling: No classroom cooling. Recommend addition of VRF system for heating and cooling in all classrooms areas.
- Controls: Controls are a mix of digital and pneumatic, we recommend replacement of all controls with updated digital control system integrated to centralized building management system.
- Gymnasium unit ventilators and exhaust system are past their useful life and should be replaced. Recommend replacement with single zone variable air volume heating, cooling and ventilation roof top unit with outside air.
- Cafeteria unit ventilators are past their useful life and should be replaced. Recommend replacement with single zone variable air volume heating, cooling and ventilation roof top unit with outside air.
- Admin Office Area unit is past its useful life and should be replaced. Recommend replacement with multi zone variable air volume heating, cooling and ventilation roof top unit with outside air.

The following represents areas of necessary **electrical** improvements and / or required work.

- Switchboard is more than 50 years old and in poor condition. As such, it is well past it's serviceable lifespan and in need of immediate replacement.
- Distribution equipment that is original to the building is in poor condition and in need of immediate replacement. Branch panelboards and equipment that were installed as part of more recent renovations and / or upgrades, should provide service for another 10-15 years before replacement is necessary.
- PV system equipment is in good condition and should provide reliable service for another 10-15 years before improvements and / or repairs are required.
- There is no evidence of a lightning protection system for the building. Recommend installing a lightning protection system in the immediate future, to safeguard people and property from fire risk and related hazards associated with lightning exposure.

The following represents areas of necessary **plumbing** improvements and / or required work.

- Domestic water service and piping is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Domestic Water heater is nearing the end of its useful life and we recommend it be replaced with an electric water heater.
- Sanitary system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Natural Gas service and system is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Sanitary system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Storm water system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.

94 Mechanical, Electrical, Plumbing & Fire Protection Survey

The following represents areas of necessary **fire protection** improvements and / or required work.

- Fire service and associated piping will require re-piping due to future renovations and at that time it will be nearing the end of its useful life and we recommend it be replaced in its entirety.

The following represents areas of necessary **lighting** improvements and / or required work.

- Lighting systems are old technology fluorescents retrofitted with LED lamps and drivers with wall toggle switches and occupancy sensor controls. As capital funding becomes available, recommend replacing existing lighting and control systems throughout the building with new technology LED fixtures, along with new low voltage controls, for improved efficiency and to comply with current energy code requirements.

No improvements or repairs are required for **fire alarm** systems at this time. Average life expectancy for fire alarm systems is 15 years. System equipment should be updated or replaced in the next 3-5 years to ensure system reliability.

No repairs or improvements are required for **telecommunication system** at this time. Upgrades to these systems (i.e. backbone cabling, workstation outlets, etc.) should be anticipated to accommodate new program requirements as they occur.

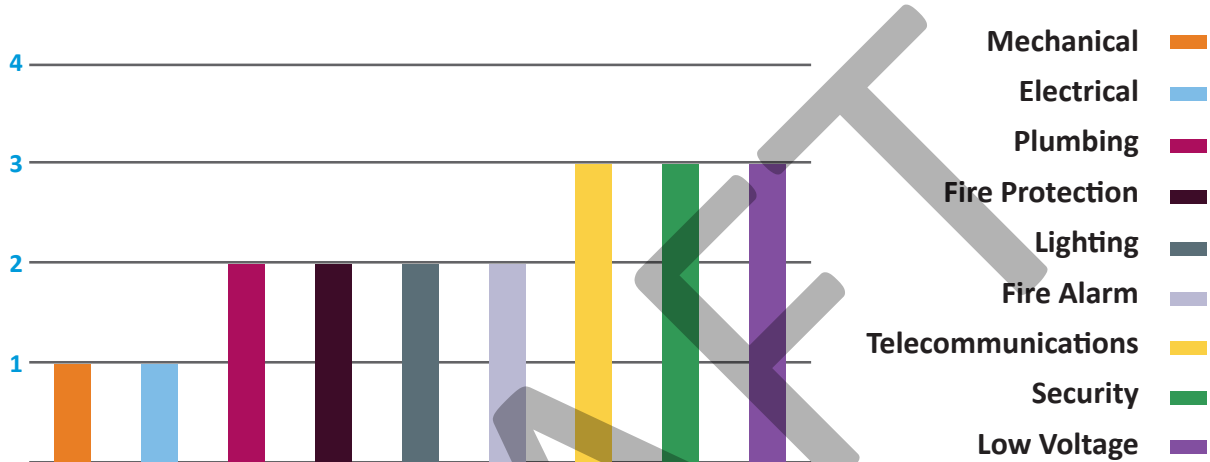
The following represents areas of necessary **security system** improvements and / or required work.

- Recommend a review of all access controlled doors and end-user operations be performed in the next 1-2 years, or as program needs dictate.
- Recommend a full system assessment be performed to verify all devices are connected and tested for proper operation in the next 1-2 years, or as program needs dictate.
- Recommend additional high definition cameras be added inside the school and any remaining analog cameras replaced with new HD units in the next 1-2 years, or as improvements in technology dictate.
- Recommend installation and implementation of an intrusion detection or silent alarm system within the next year.

No improvements or repairs for **low voltage** systems are required at this time. Improvement and / or replacement of these systems is recommended in the next 7-10 years, or as program needs dictate.

Existing Conditions Evaluation:

The elements reviewed under this assessment were ranked on a scale of 1-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 are considered to be in good condition, while rankings of 2 and 1 are considered to be in fair and poor condition, respectively. The following chart graphically presents the results and their expected life spans.



Note: Ratings range from 1 (poor condition) to 4 (excellent condition)

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Section 5 : Code Survey

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IBC Code Survey

This section outlines the results of the code evaluation survey, listing the building's compliance with the IBC code regulations.

Northeast School has been evaluated for compliance with the 2022 Connecticut State Building Code, including the 2021 IBC with Connecticut Supplements and Amendments, for Use Group E (Education). Since the scope of a potential alteration project is not yet defined, this report does not address code compliance with regard to future alterations. A change of use would require code compliance upgrades. Other required code upgrades are contingent upon the nature and extent of a specific alteration and are determined on a case-by-case basis.

Corrective work is required for compliance with IBC, under it's existing use and conditions. The majority of the IBC defines new construction requirements and is not a retroactive code.

IBC Summary Sheet	
Existing Use	Education
Year Constructed	1963
Type of Construction	IIB
% Open Perimeter	100%
Fire Suppression	Partial
Compartmentalization	> 30,000 sf
Fire Resistance Rating of Vertical Opening Enclosures	None
Automatic Alarms	Installed
Automatic Alarms Type	Smoke Detectors
Smoke Control	N/A
Smoke Control Type	N/A
Mixed Use	Separated Use (Education, Assembly)
Dead End	20'
Maximum Exit Access Travel Distance	200'
Number of Stories	1 Story (plus partial Basement)
Floor Area(s)	45,350 sf
Reduction of Area Limitations	None
Corridor Wall Rating	1 Hour
Door Closers	Egress Doors Only
Adequate Exit Routes	Yes
Elevator Controls	N/A
Emergency Lights	All Utility Areas, Along All Paths of Egress

IBC Code Survey (continued...)

Plan Conditions Verified for:	Yes / No
Fire Safety	Yes
Means of Egress	Yes
General Safety	Yes
Handicapped Accessibility	Yes

NFPA Code Survey

This section outlines the results of the code evaluation survey, listing the building's compliance with the NFPA code regulations. Northeast School was evaluated for compliance with NFPA 101 Life Safety Code, 2021. Chapter 13, Existing Assembly Occupancies and Chapter 15, Existing Educational Occupancies, of the NFPA Code apply to this building.

NFPA Code Compliance

A listing of required elements per NFPA 101 code follows:

Classification of Occupancy	Description
Date of Original Construction	1963
Date of Addition(s)	2009 Renovation
Primary Occupancy	Existing Education
Secondary Occupancy	N/A
Mixed Use	Existing Assembly

Fire Regulations	Description	Conforms (Y/N)
Stair Separation	None	Yes
Corridor Separation	30 Min. Smoke Rating	Yes
High Hazard Occupancy	N/A	N/A
Doors		
Width	Exit Doors from Grade 1 Classrooms and Janitors Closet have clear width < 32"	No
Swing Direction	In direction of egress unless serving < 50 persons	Yes
Locks / Latches	Operable from direction of egress	Yes
Exit Hardware	Panic bars/push plates at exit doors	Yes
Closers	Exit/Fire Doors, none located at classrooms	No
Stairs		
Classification	Existing	Yes
Width	2' - 11-1/2"	No
Riser	7"	Yes
Tread	11"	Yes
Guards	>30" Tall, Protected Openings	Yes
Handrails	Extend 1'-0" beyond top and bottom of run	Yes
Enclosure	None	Yes
Horizontal Exits	N/A	N/A
Ramps	-	Yes
Fire Escapes	N/A	N/A

NFPA Code Survey (continued...)

Means of Egress		
Occupant Load	1,820	N/A
Factor	20 Classrooms, 7/15 Assembly	N/A
Area per Floor	Basement - 2,866 sf Main Level - 38,634 sf	Yes
Occupants per Floor	Basement - 8 Main Level - 1,812	N/A
Exit Unit Widths	-	Yes
Number of Exits	12	Yes
Exit Location	-	Yes
Exits through Spaces	Yes	Yes
Dead Ends/Common Travel	Dead End < 50' Common Path of Travel < 100'	Yes
Travel Exit	< 200'	Yes
Discharge	Directly to grade in >50% of cases	Yes
Illumination of Exits	-	Yes
Emergency Lighting	Battery Powered fixtures at utility and egress	Yes
Exit Marking	-	Yes
Fire Protection Features	Description	Conforms (Y/N)
Construction & Compartmentalization		
Construction - Minimum	II(000)	Yes
Requirements	None	N/A
Compartmentalization	<30,000 sf	Yes
Flooring Openings Enclosed	1 Hour	Yes
Floor Openings Unenclosed	N/A	N/A
Concealed Spaces	N/A	N/A
Smoke Protection		
Smoke Barriers	30 min. Smoke Barrier at Classrooms	Yes
Smoke Doors	At doors in smoke barriers	Yes
Smoke Dampers	Not observed	N/A
Penetrations Sealed	Not observed	N/A
Special Protection	Not observed	N/A
Fire Rated Enclosure		
Trash	N/A	N/A
Mixed Use	1 Hour (Assembly)	Yes

NFPA Code Survey (continued...)

Corridors	30 min. smoke rated	Yes
Sprinklers - Entire Building	Yes	Yes
Selected Hazards	N/A	N/A
Other		
Interior Finish	-	Yes
Corridors & Stairwells	-	Yes
Non-Conforming Locations	N/A	N/A
Sprinkler Protection	Description	Conforms (Y/N)
Sprinkler Service	Wet sprinkler system	Yes
Area Serviced	Whole Building	Yes
Pressure	70 PSI Static 55 PSI Residual	Yes
Alarm Valve Size	4"	Yes
Service Size	6" fire service	Yes
Fire Department Connection	Post Mounted Siamese Connection	Yes
Sprinkler Spacing	Standard	Yes

Discharge from Exits		Conforms (Y/N)
	50% required directly to exterior	Yes
	Other through areas on level of discharge with protection	N/A
Building Service & Fire Protection Equipment		Conforms (Y/N)
	Utilities	Yes
	Smoke Control	N/A
	Elevators, Dumbwaiters & Vertical Conveyors	N/A
	Rubbish Chutes, Incinerators & Laundry Chutes	N/A
	Detection, Alarm & Communication Systems	Fire Alarm
	Automatic Sprinklers	Yes

Code Survey Recommendations

The code components of Northeast School are considered partially compliant with IBC and NFPA code requirements. Additional items, that pertain to life safety and ADA accessibility, are addressed under other sections of this report. Some issues are covered by more than one code. Estimates for required work are provided in the Opinion of Probable Costs section of this report.

The following represents areas of necessary improvements and / or required work to meet IBC regulations.

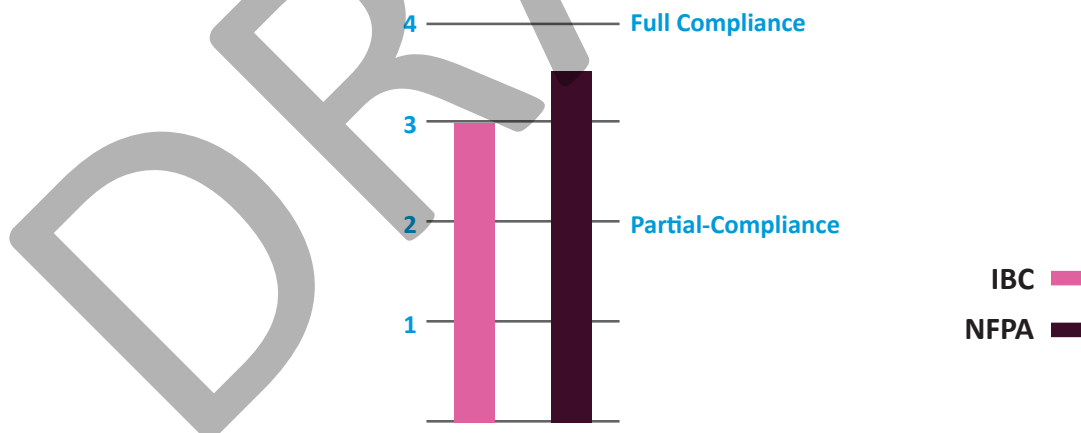
- Install closers on all classroom doors
- Ensure open doors do not obstruct clear corridor width by greater than 50%

The following represents areas of necessary improvements and / or required work to meet NFPA regulations.

- Ensure all doors located in smoke partitions have proper smoke seals. All classroom/corridor doors should be smoke sealed.

Existing Conditions Evaluation:

The graph below represents the building's overall conformity with IBC and NFPA requirements. Compliance was rated on a scale of 1-4, with a 4 rating equating to full compliance. A rating of 2 or under indicates that the building requires moderate to substantial code compliance updates in order to protect the safety of the building's occupants.



Section 6 : ADA Compliance Survey

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ADA Compliance Survey Introduction

This section contains an ADA compliance report, consisting of a list of conditions which fail to meet code requirements, and brief descriptions.

The ADA compliance survey for Northeast School was completed data gathering and fieldwork. The Americans with Disabilities Act is a far-reaching civil rights law comprised of four parts. Title I affects employment practices. Title II addresses government-owned buildings and facilities. Title III is similar to Title II except that it addresses privately owned properties. Title IV addresses federally-regulated telecommunication.

This report solely addresses ADA Title II, and the report may serve as a basis for Vernon Public Schools Barrier Reduction Plan. However, this report does not propose specific design solutions for each ADA violation.

A survey checklist was also prepared during the on-site data collection process. Each survey element contains detailed items that reference specific ADA - Title II requirements from the Federal Register. The survey checklist consists of the following elements:

Item	Section
01	Site Access Route
02	Accessible Parking
03	Curb Ramps
04	Entrances
05	Accessible Route - Interior
06	Ramps
07	Stairs - Exterior
08	Stairs - Interior
09	Elevators
10	Platform Lifts
11	Doors
12	Drinking Fountains
13	Bathroom / Toilets
14	Telephones
15	Signage
16	Storage
17	Alarms
18	Seating & Tables
19	Libraries / Assembly Areas / Cafeteria

ADA Survey Failures

To complete this report the survey team walked through the building to evaluate and record the ADA elements. During this process, the team assessed whether the building “Passed” or “Failed” accessibility requirements. An item may have occurred several times within the building; however, if the item failed in one location only, the element was recorded as a “Fail”. For example, “Handrails” are an item in the ADA checklist under the element “Stairs”. A building may have two or three stairs. Handrails on one stair may fail to meet ADA Guidelines, where the others may meet such guidelines. In this instance, the item “Handrails” would be deemed to have failed to meet ADA Guidelines.

Another critical purpose of the survey is to determine if items that fail are “Readily Achievable.” Although the Americans with Disabilities Act places both an architectural and legal definition to the term, this report focuses only on the architectural issues. The category “Readily Achievable” applies to existing building alterations / renovations and does not apply to new construction. The term “Readily Achievable” may also be defined as technically feasible. For example, a specific item may not be “Readily Achievable” due to existing structural or site conditions.

Finally, the survey team reviewed each ADA – Title II “Failed” item and assessed the extent of failures.

The following report documents the ADA requirements that Northeast School failed to meet. Plan and photograph references, notes and whether or not the item is readily achievable are noted.

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
10	0	302.3	Site Access Route	Floor Surfaces: Openings	Openings in floor surfaces shall not allow passage of a sphere more than ½ inch diameter except as allowed in 407.4.3, 408.4.3, 409.4.3, 410.4 and 810.10. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.	Y	F	4			
14		303.4	Site Access Route	Changes in Level: Ramps	Changes in level greater than ¼ inch (13 mm) in height shall be ramped, and shall comply with 405 or 406	Y	F	8		Curb Ramp (1)	
15		502	Accessible Parking	General	Accessible car and van parking spaces shall comply with Section 502		F				
20	0	503.2	Accessible Parking	Passenger Loading Zones: Vehicle Pull-Up Spaces	Passenger loading zones shall provide a vehicular pull-up space 96 inches (2440 mm) minimum in width and 20 feet (6100 mm) minimum in length.	Y	F	3		None Provided	
21	0	503.3	Accessible Parking	Passenger Loading Zones: Access Aisle	Passenger loading zones shall have an adjacent access aisle complying with Section 503.3. 503.3.1 Location: Access aisles shall adjoin an accessible route. Access aisles shall not overlap the vehicular way. 503.3.2 Width: Access aisles serving vehicle pull-up spaces shall be 60 inches (1525mm) minimum in width. 503.3.3 Length: Access aisles shall be 20 feet (6095mm) minimum in length. 503.3.4 Marking: Access aisles shall be marked so as to discourage parking in them.	Y	F	3			
22	0	402.2	Curb Ramps	Components	Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable portion of the standard.	Y	F	8			
32		404.1	Entrances	Doors, Doorways	Doors and doorways that are part of an accessible route shall comply with Section 404.	Y	F	2,6			

Date Prepared: 7/21/2023

ADA Compliance Survey

Northeast School

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
33		302.1	Access Route Interior	Floor Surfaces: General	Floor surfaces shall be stable, firm, and slip resistant and shall comply with 302.	Y	F	11, 25			
34		302.2	Access Route Interior	Floor Surfaces: Carpet	Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. The pile shall be ½ inch (13 mm) maximum in height. Exposed edges of carpet shall be fastened to floor and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.	Y	F	32			
37		304.4	Access Route Interior	Turning Space: Door Swing	Unless otherwise specified, doors shall be permitted to swing into turning spaces	Y	F	42			
38		305.3	Access Route Interior	Clear Floor Space	The clear floor space shall be 48 inches (1220 mm) minimum in length and 30 inches (760 mm) minimum in width.	Y	F	42		Small Bathrooms	
39		307.2	Access Route Interior	Protruding Objects: Protrusion Limits	Objects with leading edges more than 27 inches (685 mm) and not more than 80 inches (2030 mm) above the finish floor shall protrude 4 inches (100 mm) maximum horizontally into the circulation path. EXCEPTION: Handrails shall be permitted to protrude 4½ inches (115 mm) maximum.	Y	F	12, 36			
41		308.2.1	Access Route Interior	Forward Reach: Unobstructed	Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the finish floor.	Y	F	24			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
42		308.2.2	Access Route Interior	Forward Reach: Obstructed High Reach	Where a high forward reach is over an obstruction, the clear floor space complying with Section 305 shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1220 mm) maximum above the floor where the reach depth is 20 inches (510 mm) maximum. Where the reach depth exceeds 20 inches (510 mm), the high forward reach shall be 44 inches (1120 mm) maximum above the floor and the reach depth shall be 25 inches (635 mm) maximum.	Y	F	14			
43		309.4	Access Route Interior	Operable Parts: Operation	Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum. EXCEPTION: Gas pump nozzles shall not be required to provide operable parts that have an activating force of 5 pounds (22.2 N) maximum.	Y	F	23		Sink Controls	
45		403.5	Access Route Interior	Walking Surfaces: Clear Width	The clear width of an accessible route shall be 36 inches (915mm) minimum. EXCEPTION: The clear width shall be permitted to be reduced to 32 inches minimum for a length of 24 inches maximum provided that reduced width segments are separated by segments that are 48 inches (1220mm) minimum length and 36 inches (915mm) minimum in width.	Y	F	21			

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Date Prepared: 7/21/2023

ADA Compliance Survey

Northeast School

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
49		402.2	Ramps	Components	Accessible routes shall consist of one or more of the following components: walking surfaces with a slope not steeper than 1:20, doors and doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable portions of this standard.	Y	F	2			
73		504.2	Stairways	Treads and Risers	All steps on a flight of stairs shall have uniform riser height and uniform tread depth. Risers shall be 4 inches (100mm) minimum and 7 inches (180mm) maximum in height. Treads shall be 11 inches (280mm) minimum in depth.	Y	F	17		Stage	
75		504.5	Stairways	Nosings	The radius of curvature at the leading edge of the tread shall be ½ inch (13mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall extend 1½ inches (38mm) maximum over the tread or floor below.	Y	F	17			
77		505.2	Handrails	Handrails: Where Required	Handrails shall be provided on both sides of stairs and ramps. EXCEPTION: In assembly seating areas, handrails shall not be required on both sides of aisle stairs, provided with a handrail either at the side or within the aisle.	Y	F	17			
117		404.1	Doors	General	Doors, doorways, and gates that are part of an accessible route shall comply with 404. EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with 404.2.6, 404.2.7, and 404.2.8.	Y	F	18, 20, 30			
118		404.2.1	Doors	Double-Leaf Doors and Gates	At least one of the active leaves of doorways with two leaves shall comply with 404.2.2 and 404.2.3.	Y	F	15, 29			

Prepared by: Friar Architecture, Inc.

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
119		404.2.2	Doors	Clear Width	Doorways shall provide a clear width of 32 inches (815 mm) minimum. Clear opening width of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) in depth at doors and doorways without doors shall provide a clear opening width of 36 inches (915 mm) minimum. There shall be no projections into the clear opening width lower than 34 inches (865 mm) above the floor. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the floor shall not exceed 4 inches (100 mm). EXCEPTIONS: 1. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor. 2. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear opening width shall be permitted for the latch side stop.	Y	F	42			
120		404.2.3	Doors	Maneuvering Clearances	Minimum maneuvering clearances at doors shall comply with 404.2.3 and shall include the full clear opening width of the doorway. Required door maneuvering clearance shall not include knee and toe clearance.	Y	F	39			

Date Prepared: 7/21/2023

ADA Compliance Survey

Northeast School

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
123		404.2.6	Doors	Door Hardware	Handles, pulls, latches, locks, and other operable parts on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching, or twisting of the wrist to operate. Operable parts of such hardware shall be 34 inches minimum and 48 inches maximum above the floor. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides. EXCEPTION: Locks used only for security purposes and not used for normal operation shall not be required to comply with Section 404.2.6.	Y	F	22, 42			
132		604.1	Water Closets	General	Accessible water closets and toilet compartments shall comply with 604. Compartments containing more than one plumbing fixture shall comply with Section 603. Wheelchair accessible compartments shall comply with Section 604.9. Ambulatory accessible compartments shall comply with Section 604.10. EXCEPTION: Water closets and toilet compartments primarily for children's use shall be permitted to comply with 604.11 as applicable.	Y	F	35			
133		604.2	Water Closets	Location	The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches minimum to 18 inches maximum from the side wall or partition. Water closets located in ambulatory accessible compartments specified in Section 604.10 shall have the centerline of the water closet 17 inches minimum and 19 inches maximum from the side wall or partition.	Y	F	43			

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
134		604.4	Water Closets	Seat Height	The seat height of a water closet shall be 17 inches minimum and 19 inches maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position. EXCEPTION: A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with Section 604.4.	Y	F	42			
136		604.7	Water Closets	Dispensers	Toilet paper dispensers shall comply with 309.4. Where the dispenser is located above the grab bar, the outlet of the dispenser shall be located within an area 24 inches minimum and 36 inches maximum from the rear wall. Where the dispenser is located below the grab bar, the outlet of the dispenser shall be located within an area 24 inches minimum and 42 inches maximum from the rear wall. The outlet of the dispenser shall be located 18 inches minimum and 48 inches maximum above the floor. Dispensers shall comply with Section 609.3. Dispensers shall not be of a type that control delivery, or do not allow continuous paper flow.	Y	F	14			
137		604.9.1	Toilet Compartments	General	Wheelchair accessible toilet compartments shall comply with 604.9.	Y	F	34, 37, 41			
139		604.8.1.2	Toilet Compartments	Wheelchair Accessible Compartments: Doors	Toilet compartment doors, including door hardware, shall comply with 404, except that if the approach is to the latch side of the compartment door, clearance between the door side of the stall and any obstruction shall be 42 inches minimum. The door shall be self-closing. A door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the required minimum area of the compartment.	Y	F	37, 41			

Date Prepared: 7/21/2023

ADA Compliance Survey

Northeast School

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
142		604.10.3	Toilet Compartments	Ambulatory Accessible Compartments: Doors	Toilet compartment doors, including door hardware, shall comply with 404, except that if the approach is to the latch side of the compartment door, the clearance between the door side of the compartment and any obstruction shall be 42 inches minimum. The door shall be self-closing. A door pull complying with 404.2.6 shall be placed on both sides of the door near the latch. Compartment doors shall not swing into the required minimum area of the compartment.	Y	F	43			
144		605.2	Urinals	Height and Depth	Urinals shall be the stall-type or shall be of the wall hung type with the rim 17 inches maximum above the floor. Wall hung urinals shall be 13½ inches minimum in depth measured from the outer face of the urinal rim to the wall.	Y	F	13			
145		605.3	Urinals	Clear Floor Space	A clear floor space complying with 305, positioned for forward approach shall be provided.	Y	F	13			
146		605.4	Urinals	Flush Controls	Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.	Y	F	13			
148		308	Mirrors / Accessories	Reach Ranges	Reach ranges shall comply with 308.	Y	F	24			
149		603.3	Mirrors / Accessories	Mirrors	Where mirrors are located above lavatories, a mirror shall be located over the accessible lavatory and shall be mounted with the bottom edge of the reflecting surface 40 inches maximum above the floor. Where mirrors are located above counters that do not contain lavatories, the mirror shall be mounted with the bottom edge of the reflecting surface 40 inches maximum above the floor.	Y	F	14			

Prepared by: Friar Architecture, Inc.

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
151		606.2, 305, 306	Lavatories / Sinks	Clear Floor Space	A clear floor space complying with 305.3, positioned for a forward approach, shall be provided. Knee and toe clearance complying with 306 shall be provided. The dip of the overflow shall not be considered in determining knee and toe clearances. EXCEPTIONS: 1. A parallel approach complying with 305 and centered on the sink, shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided. 2. The requirement for knee and toe clearance shall not apply to a lavatory in a toilet or bathing facility for a single occupant, accessed only through a private office and not for common use or public use. 3. A knee clearance of 24 inches minimum above the floor shall be permitted at lavatories and sinks used primarily by children 6 through 12 years where the rim or counter surface is 31 inches maximum above the floor. 4. A parallel approach complying with 305 and centered on the sink, shall be permitted at lavatories and sinks used primarily by children 5 years and younger. 5. The requirement for the knee and toe clearance shall not apply to more than one bowl of a multibowl sink. 6. A parallel approach complying with Section 305 and centered on the sink, shall be permitted at wet bars.	Y	F	23			
153		606.4, 309	Lavatories / Sinks	Faucets	Faucets shall comply with Section 309. Hand operated metering faucets shall remain open for 10 seconds minimum.	Y	F	23, 42			
154		606.6	Lavatories / Sinks	Exposed Pipes and Surfaces	Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories and sinks	Y	F	42			
184		704.2.2	Telephones	Wheelchair Accessible Telephones: Operable Parts	Operable parts shall comply with Section 309. Telephones shall have push-button controls where such service is available.	Y	F	24			

Northeast School

ADA Compliance Survey

Date Prepared: 7/21/2023

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
186		704.2.4	Telephones	Wheelchair Accessible Telephones: Cord Length	The telephone handset cord shall be 29 inches minimum in length.	Y	F	24			
191		703.1	Signage	General	Accessible signs shall comply with Section 703. Tactile signs shall contain both raised characters and braille. Where signs with both visual and raised characters are required, either one sign with both visual and raised characters, or two separate signs, one with visual, and one with raised characters, shall be provided.	Y	F	22			
192		703.1.1	Signage	Designations	Interior and exterior signs identifying permanent rooms and spaces shall comply with sections 703.1, 703.2, and 703.3. EXCEPTION: Exterior signs that are not located at the door to the space they serve shall not be required to comply with 703.3.	Y	F	6, 10, 22			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
193		703.3	Signage	Raised Characters	<p>Raised characters shall comply with 703.3 and shall be duplicated in braille complying with 703.4.</p> <p>703.3.2 Depth: Raised characters shall be 1/32 inch minimum above their background. 703.3.3 Case: Characters shall be uppercase. 703.3.4 Style: Characters shall be sans serif. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms. 703.3.6 Character Proportions: The uppercase letter "O" shall be used to determine the allowable width of all characters of a font. The width of the uppercase letter "O" of the font shall be 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I" of the font. 703.3.5 Character Height: The uppercase letter "I" shall be used to determine the allowable height of all characters of a font. The height of the uppercase letter "I" of the font, measured vertically from the baseline of the character, shall be 5/8 inch minimum and 2 inches maximum. <u>EXCEPTION:</u> Where separate raised and visual characters with the same information are provided, the height of the raised uppercase letter "I" shall be permitted to be 1/2 inch minimum.</p>	Y	F	6, 10, 22			

Northeast School

ADA Compliance Survey

Date Prepared: 7/21/2023

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
194		703.3	Signage	Raised Characters	703.2.6 Stroke Thickness: The stroke width shall be 15 percent maximum of the height of the uppercase letter "i" measured at the top surface of the character and 30 percent maximum of the height of the uppercase letter "I" measured at the base of the character. 703.3.8 Character Spacing: Character spacing shall be measured between the two closest points of adjacent raised characters within a message, excluding word spaces. Spacing between individual raised characters shall be 1/8 inch minimum measured at the top surface of the characters, 1/16 inch minimum measured at the base of the characters, and 4 times the raised character stroke width maximum. Characters shall be separated from raised borders and decorative elements 3/8 inch minimum. 703.3.9 Line Spacing: Spacing between the baselines of separate lines of raised characters within a message shall be 135 percent minimum and 170 percent maximum of the raised character height.	Y	F	6, 10, 22			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
195		703.4	Signage	Braille	703.4.3 Dimensions: Braille dots shall have a domed or rounded shape and shall comply with Table 703.4.3. 703.4.2 Uppercase Letters: The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms. 703.4.4 Position: Braille shall be below the corresponding text. If text is multi-lined, braille shall be placed below the entire text. Braille shall be separated 3/8 inch minimum from any other raised characters and 3/8 inch minimum from raised borders and decorative elements. Braille provided on elevator car controls shall be separated 3/16 inch minimum and shall be located either directly below or adjacent to the corresponding raised characters or symbols.	Y	F	6, 10, 22			
196		703.4.5	Signage	Installation Height and Location	Braille shall be 48 inches and 60 inches maximum above the floor, measured from the baseline of the braille cell. EXCEPTION: Elevator car controls shall not be required to comply with 703.4.5.	Y	F	6, 10, 22			
197		703.5.2	Signage	Pictograms	Pictograms shall have a field 6 inches minimum in height. Characters or braille shall not be located in the pictogram field.	Y	F	6, 10, 22			
203		902.1	Dining Surfaces and Work Surfaces	General	Accessible dining surfaces and work surfaces shall comply with Section 902. EXCEPTIONS: Dining surfaces and work surfaces primarily for children's use shall be permitted to comply with Section 902.5.	Y	F	23			

122 ADA Compliance Survey

Date Prepared: 7/21/2023

ADA Compliance Survey

Northeast School

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
204		902.2	Dining Surfaces and Work Surfaces	Clear Floor Space	A clear floor space complying with Section 305, positioned for a forward approach, shall be provided. Knee and toe clearance complying with Section 306 shall be provided. EXCEPTIONS: 1. At drink surfaces 12 inches or less in depth, knee and toe space shall not be required to extend beneath the surface beyond the depth of the drink surface provided. 2. Dining surfaces that are 15 inches minimum and 24 maximum in height are permitted to have a clear floor space complying with Section 305 positioned for a parallel approach.	Y	F	23			
206		902.5	Dining Surfaces and Work Surfaces	Dining Surfaces and Work Surfaces for Children's Use	Accessible dining surfaces and work surfaces primarily for children's use shall comply with 902.5. EXCEPTION: Dining surfaces and work surfaces that are used primarily by children ages 5 and younger shall not be required to comply with Section 902.5 where a clear floor space complying with Section 305 is provided for a parallel approach. 902.5.1 Clear Floor Space: A clear floor space complying with Section 305, positioned for forward approach, shall be provided. Knee and toe clearance complying with Section 306 shall be provided, EXCEPTION: A knee clearance 24 inches minimum above the floor shall be permitted. 902.4.2 Height: The tops of tables and counters shall be 26 inches minimum and 30 inches maximum above the floor.	Y	F	23			
207		802.1	Assembly Areas	General	Wheelchair spaces and wheelchair space locations in assembly areas with spectator seating shall comply with Section 802. Team and player seating shall comply with Section 802.2 through 802.6.	Y	F	19		Bleachers	

Prepared by: Friar Architecture, Inc.

Date Prepared: 7/21/2023

ADA Compliance Survey

Northeast School

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
215		802.3	Assembly Areas	Wheelchair Spaces: Width	A single wheelchair space shall be 36 inches minimum in width. Where two adjacent wheelchair spaces are provided, each wheelchair space shall be 33 inches minimum in width.	Y	F	19			
219		802.7	Assembly Areas	Companion Seats	A companion seat, complying with Section 802.7, shall be provided beside each wheelchair space.	Y	F	19			

Prepared by: Friar Architecture, Inc.

ADA Survey Photographs



1. Location:

Side walk -West

Description:

No tactile warning at designated school crosswalk to provide indications to the visually impaired.



2. Location:

Exterior Door - West

Description:

The landing provided does not have the proper width for an accessible door.



3. Location:

Bus Loop

Description:

Provide a designated Passenger Loading Zone / Drop Off Area at main entrance drive.

ADA Survey Photographs



4. Location:

Exterior -North

Description:

The gap between concrete landing and asphalt walkway is greater than 1/2" at door to classroom.



5. Location:

Walkway -West

Description:

No tactile warning strip at crosswalk to provide indications to the visually impaired



6. Location:

Main Entrance

Description:

Main Entrance needs accessible signage. All other entrances should be designated and/or direct visitors to the proper entrance.

ADA Survey Photographs



7. Location:

Exterior Door - South

Description:

The exterior landing is not the proper depth from the exit door.



8. Location:

Exterior

Description:

The site access sidewalk does not have a curb ramp with a tactile warning strip.

ADA Survey Photographs



9. Location:

Exterior -South

Description:

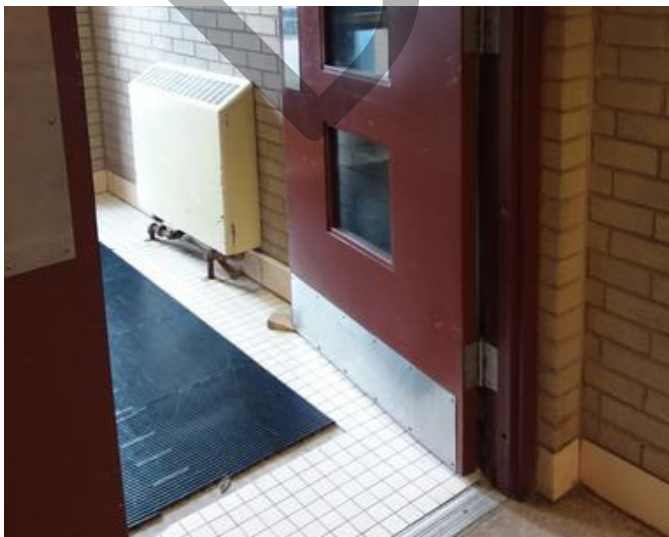
The exterior landing is not the proper depth from the exit door.



10. Location:

Description:

The signage does not indicate the entrance is accessible or direct visitors to the front entrance to the building.



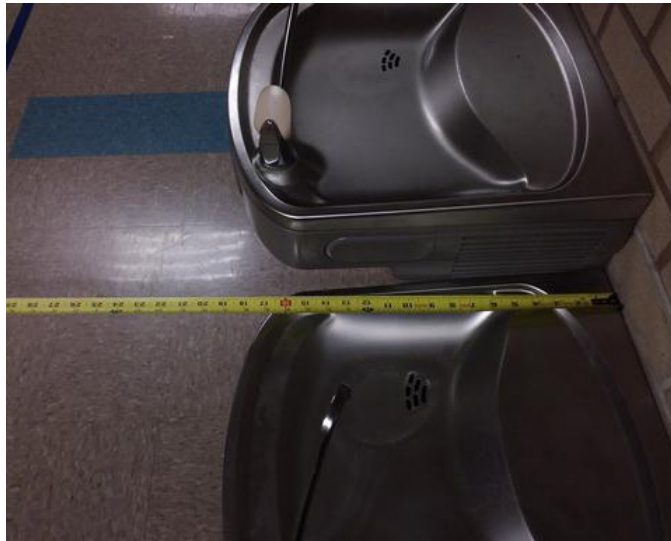
11. Location:

Vestibule

Description:

The vestibule mat is not secured to the floor creating a trip hazard.

ADA Survey Photographs



12. Location:

Corridor

Description:

The drinking fountain creates a protruding object within the building's corridor.



13. Location:

Boys Restroom

Description:

The urinals are very old and do not provide the proper height, screens, and accessible width.



14. Location:

Boy Restroom

Description:

The height of the operable part of the soap dispenser is greater than 48 inches.

ADA Survey Photographs



15. Location:

Gymnasium

Description:

One of the door leaves is required to be a 36" wide leaf.



16. Location:

Gymnasium

Description:

Exit signs for exiting should not be mounted to the door



17. Location:

Gymnasium -stage

Description:

Stairs leading to stage do not have railings on either side of the stair, consistent stair tread widths and riser heights.

ADA Survey Photographs



18. Location:

Gymnasium - stage

Description:

The clear opening width leading to stairs is 28". The opening should be as wide as the stair, a 36" wide door opening or a 34" clear cased opening.

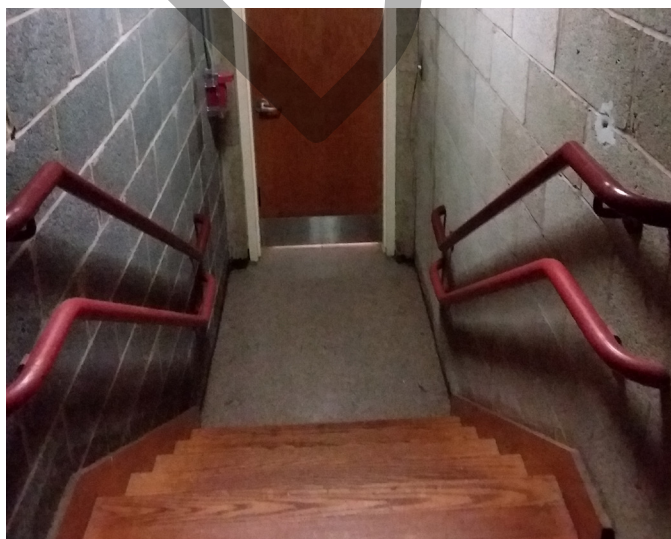


19. Location:

Gymnasium -

Description:

Bleachers need to be upgraded or replaced to provide accessible seating areas.



20. Location:

Gymnasium - Stage stairs

Description:

The exit door is not provided with the proper width or push clearance at the egress door.

ADA Survey Photographs



21. Location:

Door from stage to Corridor

Description:

The clear width of the door does not meet r to stage stairs measuring 31"



22. Location:

Office Suite

Description:

The entrance door is not provided with room signage.

ADA Survey Photographs

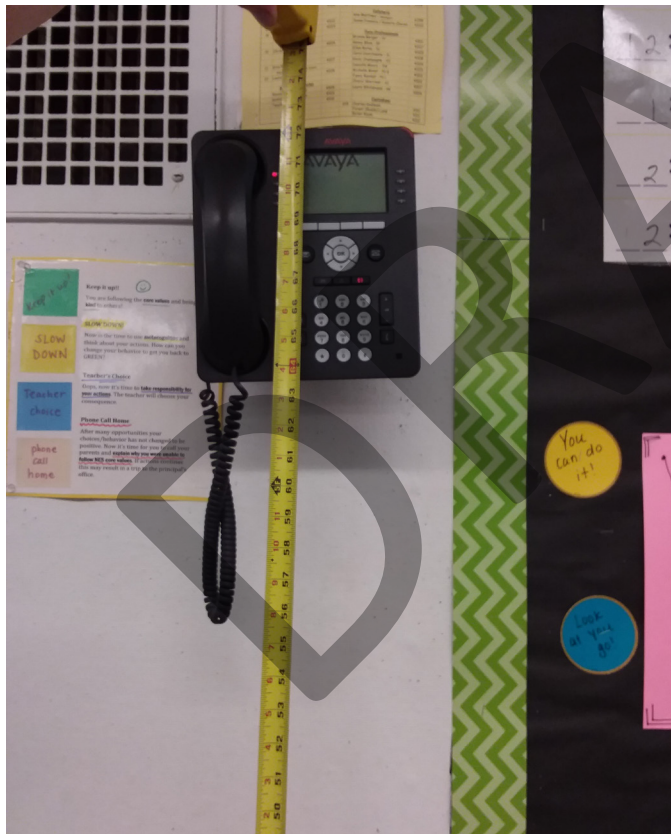


23. Location:

Typical Classroom

Description:

Sink is not provided with knee clearance for accessibility and the controls are non compliant.



24. Location:

Typical classroom

Description:

Accessible reach ranges need to comply, the telephone / intercom is greater than the maximum height.

ADA Survey Photographs



25. Location:

Vestibule

Description:

The vestibule mat is not secured to the floor creating a trip hazard.



26. Location:

Kitchen

Description:

The maneuvering clearance at the entrance door to the servery is not compliant due to the location of the serving counter.



27. Location:

Kitchen

Description:

The clear width of the passage is less than the required. The current clearance restricts access to an exit.

ADA Survey Photographs



28. Location:

Description:

The installation of lockers within the toilet room inhibit the maneuvering clearances within the toilet room.



29. Location:

Cafeteria

Description:

One of the door leaves is required to be a 36" wide leaf.



30. Location:

Storage

Description:

Typical of many of the accessory doors throughout the building, the minimum door opening width is non compliant.

ADA Survey Photographs

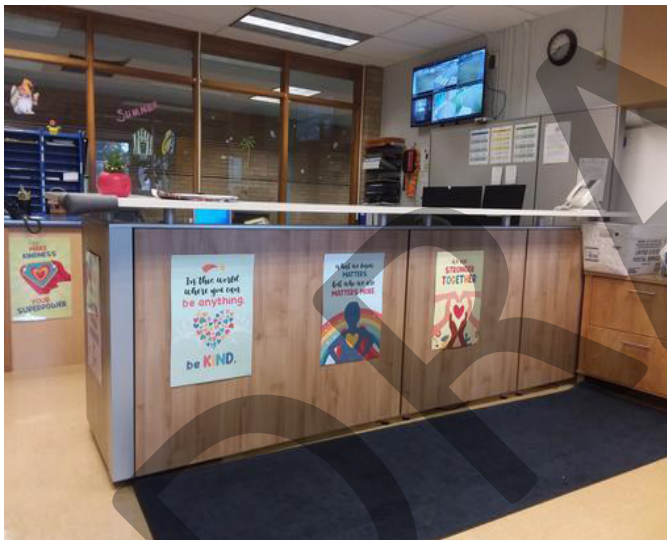


31. Location:

Reception Area

Description:

The pull clearance at the door is restricted by the reception area casework.



32. Location:

Reception Area

Description:

The height of the counter is above the maximum height allowable for accessibility. A 36" wide lower portion of the counter is not provided. The mat needs to be secured to the floor.



33. Location:

General office

Description:

The push / pull clearance at the door is restricted by the casework.

ADA Survey Photographs



34. Location:

Description:

The location of grab bar at rear wall is non compliant.

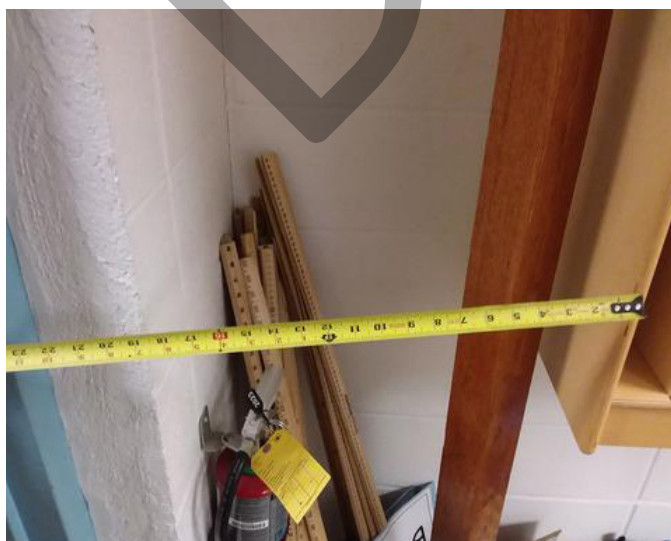


35. Location:

Nurse's Room

Description:

The installation of a storage cabinet and a cot restrict accessibility to the toilet.



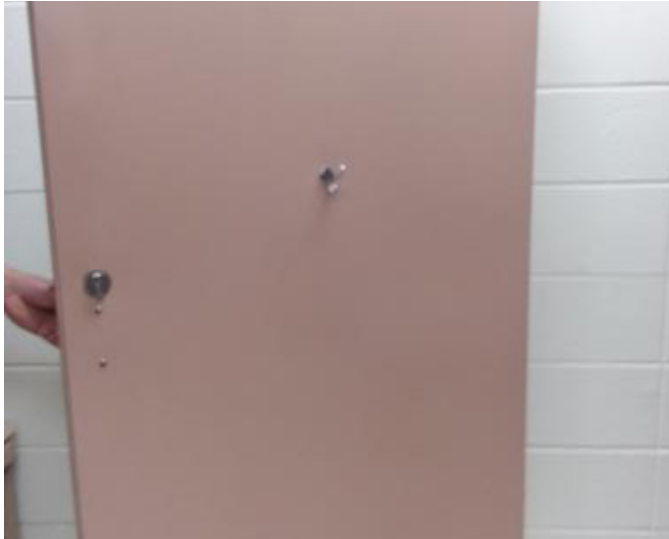
36. Location:

Teachers Lounge

Description:

The installation of the mail boxes impedes the access to the entrance/ exit door. The mail boxes are a protruding object, due to its location within the maneuvering clearance for the door.

ADA Survey Photographs



37. Location:

Womens Restroom

Description:

ADA stall missing required handle / pull on the interior of the stall door.



38. Location:

Description:

The movable grab bar at the rear wall is no longer required per the latest code.



39. Location:

Classroom / Exit Vestibule

Description:

The required pull clearances have not been provided.

ADA Survey Photographs



40. Location:

Typical Classroom

Description:

Many of the older sinks within the classrooms do not provide the proper knee clearances and lever handles.

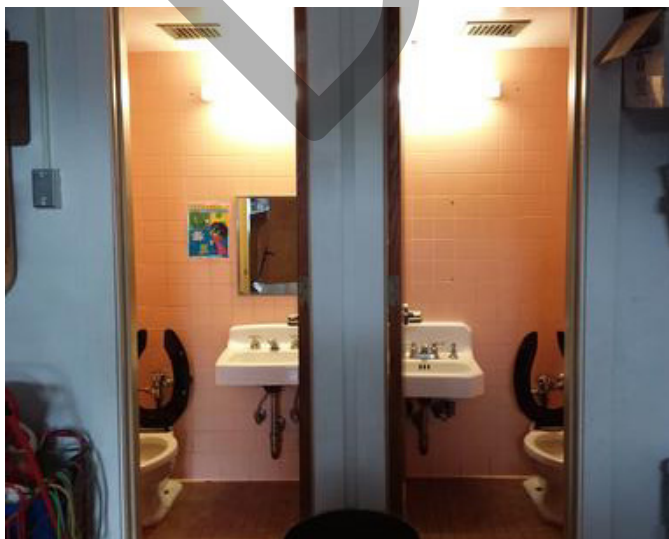


41. Location:

Restroom

Description:

The handle for the accessible stall door needs to be replaced.



42. Location:

Restroom

Description:

These two bathroom located off the classrooms are not accessible.

ADA Survey Photographs



43. Location:

Restroom

Description:

The toilet within the ambulatory accessible stall is not properly located within the stall.



44. Location:

Corridor

Description:

Designated handicap accessible lockers need to be provided.

ADA Survey Photograph Key Plans

The following plan shows the actual building plan as verified during field surveys. Photographs from the previous pages are keyed into the building plans with numbered arrows at the approximate photograph site and direction from which the photographs were taken.

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Northeast School

Site Plan

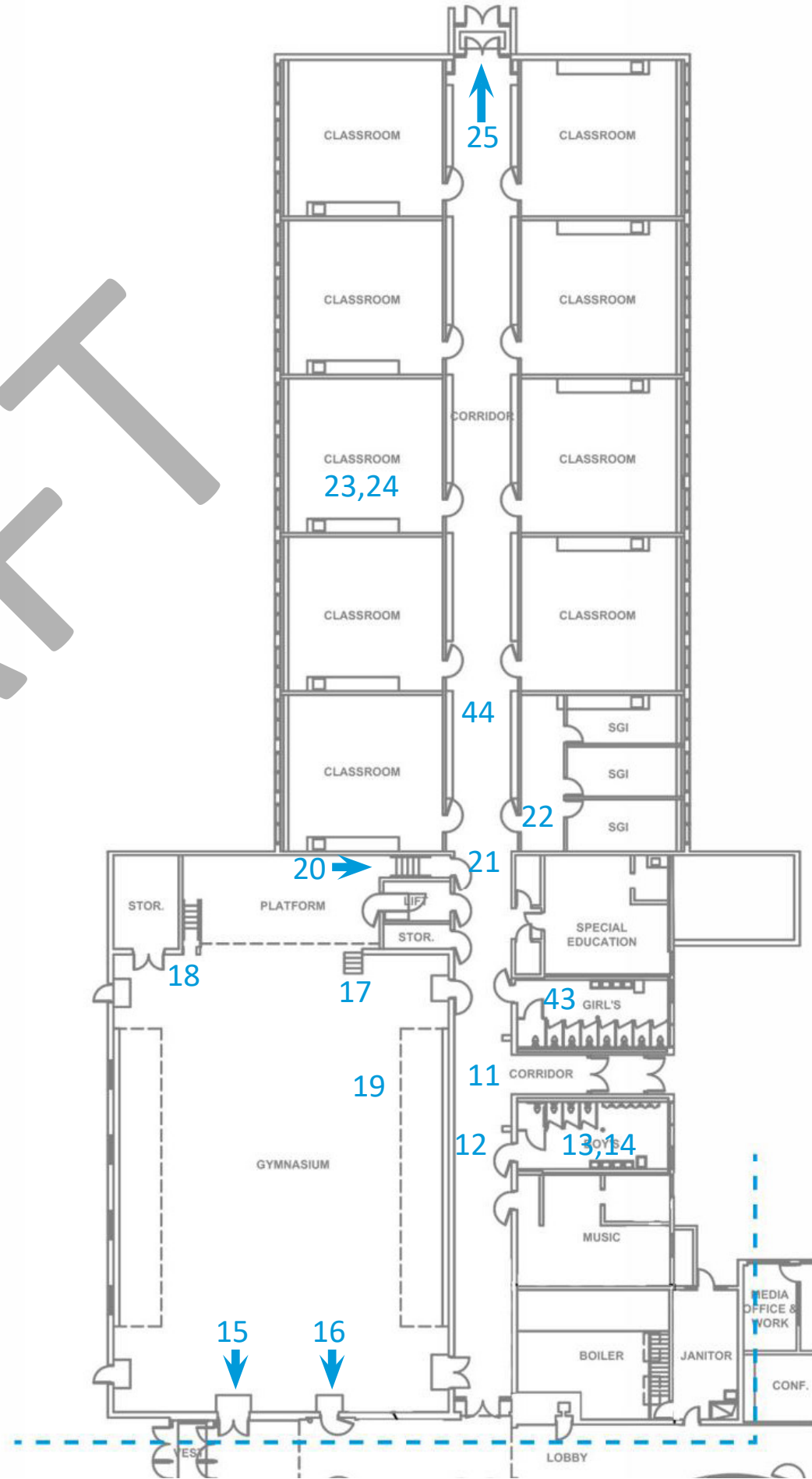


ADA Survey

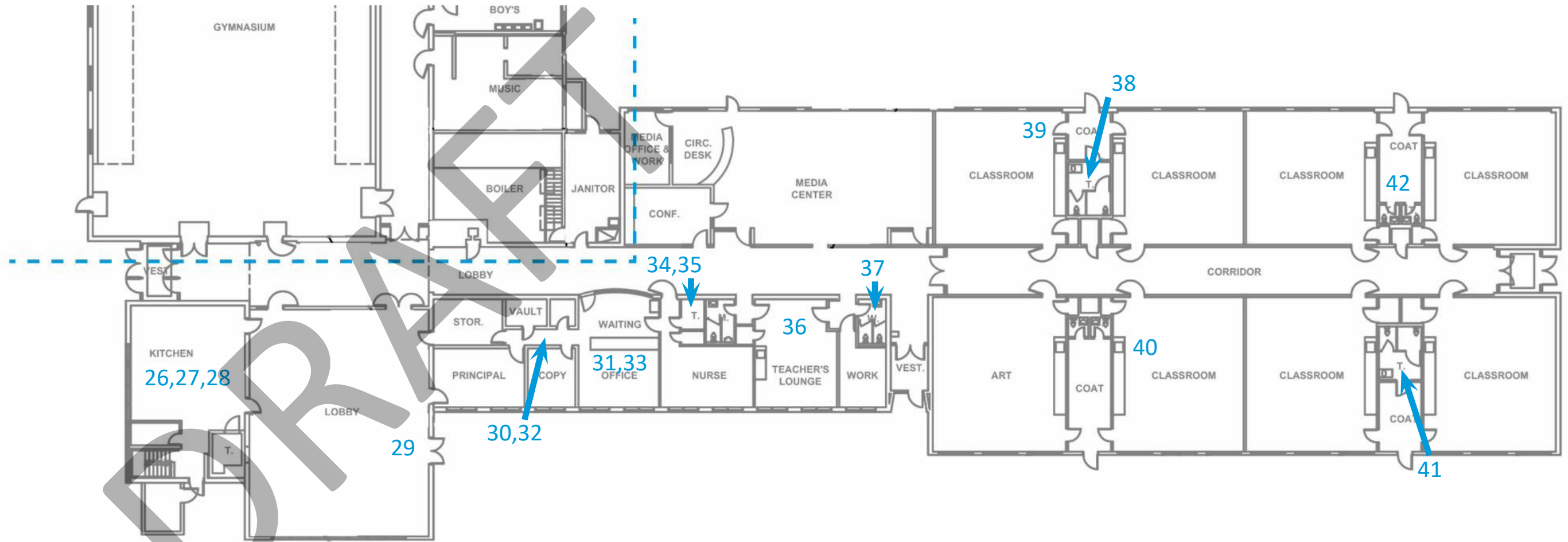


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ADA Survey Recommendations

Northeast School as also evaluated based on the Americans with Disabilities Act (ADA), Title II, for public building accessibility. ADA is an act of Congress mandating certain standards for accessibility that are enforceable through the civil courts. Northeast School fails to meet some of these requirements, evident in the “ADA Compliance Survey”.

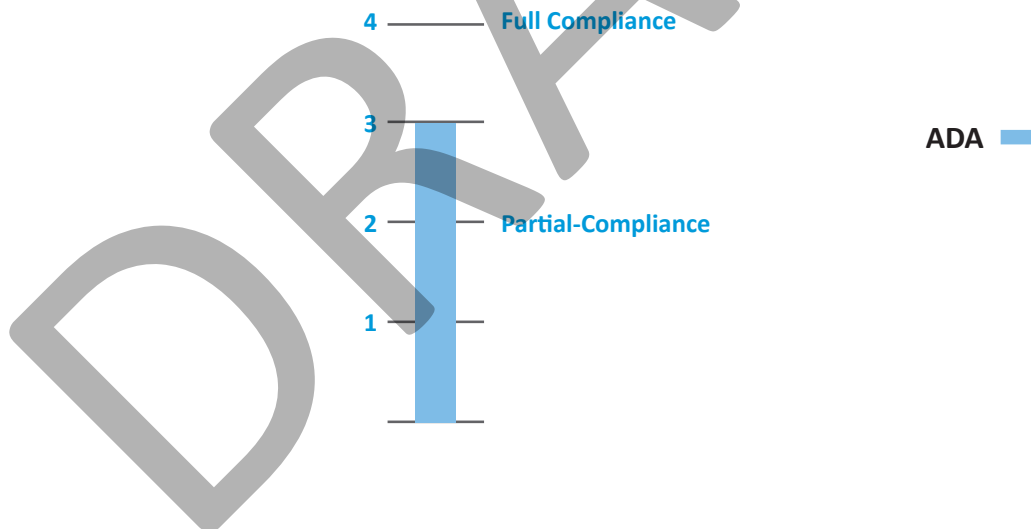
The building was evaluated based on a review of existing documentation, field verification of existing space usage and discussions with building staff to confirm existing space allocation and usage.

The work recommended to address ADA compliance issues includes providing:

- Exterior - Drop Off Area, Landings at doors, Curb Ramp (1), Tactile warnings at cross walks, signage to designate accessible entrance(s), Accessible parking at dedicated faculty parking area.
- Interior - Door Widths, clear width, maneuvering clearances at doors / toilet rooms, signage, protruding objects, stage stairs / railings, classroom sink controls / knee clearances / clear width, 1 set of classroom bathroom that are non compliant.

Existing Conditions Evaluation:

The graph below represents the building’s overall conformity with ADA requirements. Compliance was rated on a scale of 1-4, with a 4 rating equating to full compliance. A rating of 2 or under indicates that the building requires moderate to substantial code compliance updates in order to protect the safety of the building’s occupants.



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Section 7 : Site Survey

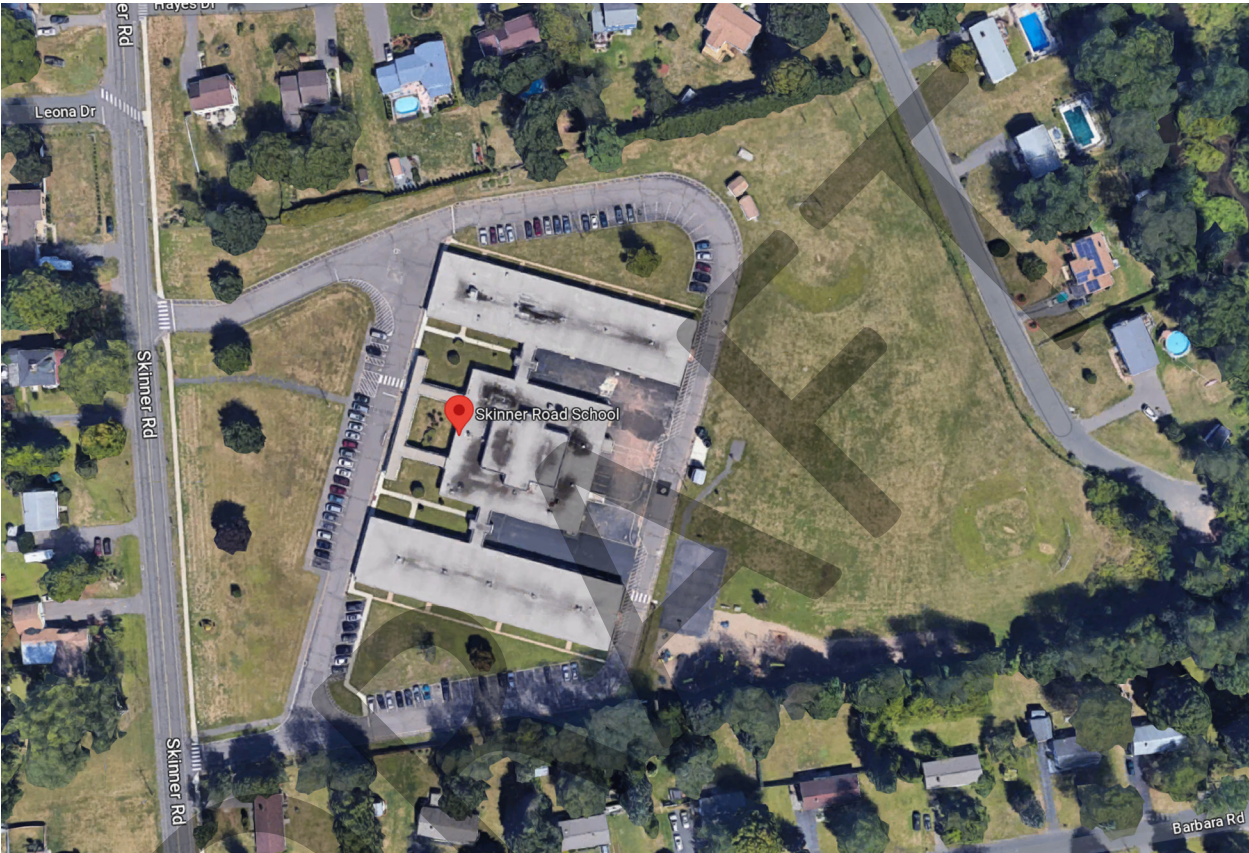


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Existing Site Conditions

This section provides a listing of existing conditions followed by summary descriptions for the site components. A site plan is provided along with photographs of existing conditions that identify areas requiring attention. Existing site utilities are also identified. Recommendations for site improvements are discussed to provide Vernon Public Schools with an overview of the required work.



Map Data: Google

Northeast School

Plan Drawings	2009 Renovation
Photos	2023 Survey
Date Built	1963
Site / Civil & Landscape Architect	Diversified Technology Consultants & Ferrero Hixon Associates (2009 Renovation)
Date(s) Additions	2009 Renovation
Zone	R-15
Gross Area (site)	11.87 Acres

The following is a data summary of the site conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Site Conditions

The following codes are used throughout this report to identify the condition of various elements.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

	Material	Condition
Entry Drive		
Primary Surface	Bituminous	Good
Curbs	Bituminous	Good
Striping	Minimal	Good
Signage	Minimal	Good
Walkways		
Primary Surface	Bituminous	Fair
Curbs	Bituminous	Fair to Good
Handicap Access	Varies - See ADA Report	Fair
Parking		
Total Spaces	36 spaces available - ongoing construction	Good
Designated Handicap Spaces	4	Good
Primary Surface	Bituminous	Good
Curbs	Bituminous	Good
Striping	Yes	Good
Signage	Yes (minimal)	Good
Fields/Play Areas		
Field(s)	Grass - Soccer and Baseball	Fair to Good
Play Area(s)	Bituminous with some stripping	Fair
Play Scape(s)	Metal and Plastic on Mulch or Rubber	Good
Planting/Features		
Plant Beds	Yes	Good
Trees/Shrubs	Yes	Good
Special Features	Front Entry Sign	Good

Service Drive/ Loading Area		
Primary Surface	Bituminous	Good
Curbs	Bituminous	Good
Striping	None	NA
Signage	None	NA

The following is a summary of the site survey of this building.

Item	Summary
Site Lighting	Surface mounted exterior lighting at vestibule soffits. These fixtures should be replaced with LED fixtures. Wall mounted light fixtures on the building facade. See MEP Survey for utility information.
Driveways/Walkways	The entry of the parking lot does not have any lane designation or directional signage.
Parking	Parking striping is in good condition. Directional signage for bus and parent drop off is recommended. Ongoing construction was covering an area of existing parking by Route 30.
Topography	Mostly flat
Drainage	Drains in grass areas are set higher than grade level.
Field/Play Areas	The play fields are overgrown. The paved play area painting designations are fading and minimal. The playscapes appear to be in good condition. The older child playscape has a mulched surface while the younger child playscape has a rubberized surface.
Plantings	Decorative planting at School signs. Trees along East Road grass area and along adjacent residential properties.
Service Area	No signage to indicate service areas.

Site Survey Photographs



1. Location:

Entry from Route 30

Description:

No lane striping or directional signage.



2. Location:

Entry from Route 30

Description:

Minimal signage at entry. Ongoing construction at time of survey.



3. Location:

South Elevation

Description:

Area appears to be used for deliveries but there is no clear designation with signage or ground markings.

Site Survey Photographs



4. Location:

West Elevation Entrance

Description:

Walkway entry has been repaired and sloped



5. Location:

West Elevation Entrance

Description:

Walkway has been patched in several areas - grass is beginning to grow in the cracks



6. Location:

West Elevation

Description:

Cracked bituminous walkway - several locations

Site Survey Photographs



7. Location:

West Elevation

Description:

Drain sits higher than grade level



8. Location:

North Paved Area

Description:

Single basketball hoop in bituminous paved area - assumed to be play area for kids as there are no designated parking spaces.



9. Location:

Playscape

Description:

Appears to be in good condition.
Mulched area around the playscape with wood barriers.

Site Survey Photographs



10. Location:

North Elevation

Description:

Missing signage



11. Location:

North Paved Area

Description:

Possible area for deliveries and/or loading - no signage present

Site Survey Photographs



12. Location:

Play area

Description:

Mulched walkway is in need of clean up
- no accessible entrance to play area



13. Location:

Playscape

Description:

Wood barriers in fair condition.



14. Location:

Front Loop

Description:

Lacking directional signage or ground
markings.

Site Photograph Key Plan

The following plan shows the actual building plan as verified during field surveys. Photographs from the previous pages are keyed into the building plans with numbered arrows at the approximate photograph site and direction from which the photographs were taken.

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Northeast School

Site Plan



Site Survey



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Site Recommendations

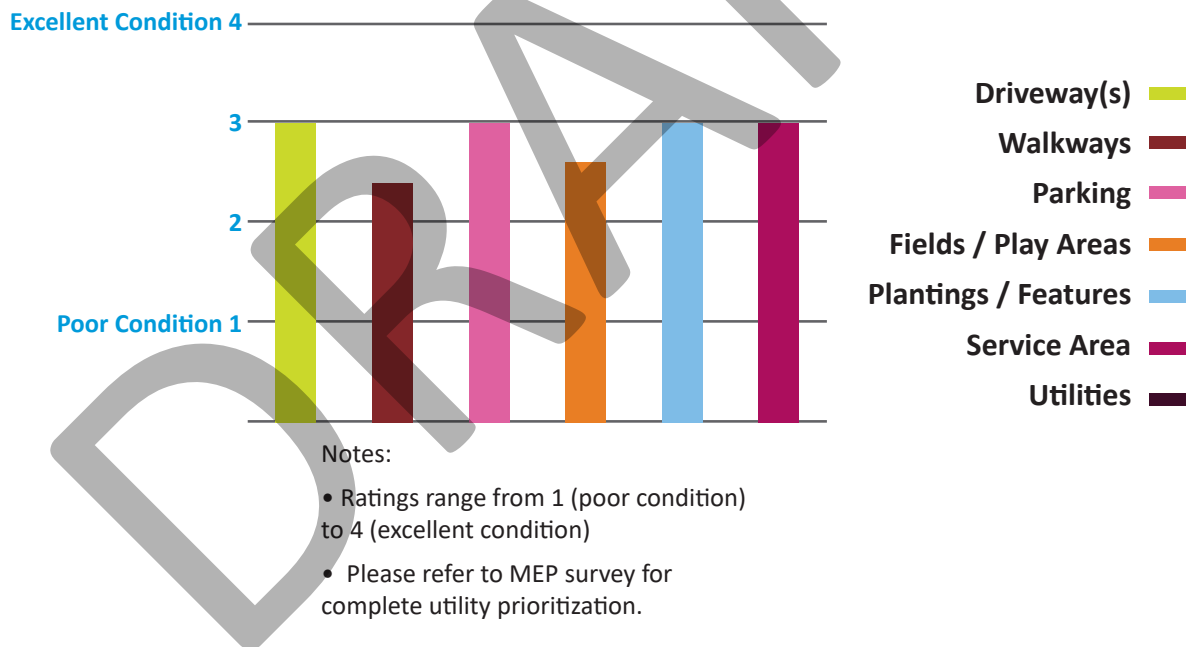
The site components of Northeast School are in fair to good condition.

The following represents areas of necessary site improvements and / or required work.

- Provide directional signage and pavement markings for bus and parent drop off.
- Provide signage for delivery areas
- Replace wood barriers at playscapes as they have begun to deteriorate.
- Repair / replace cracked bituminous walkways.
- Review drainage in grassy areas. See Architectural Survey for additional information on building drainage.

Existing Conditions Evaluation:

The elements reviewed under this assessment were ranked on a scale of 1-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 are considered to be in good condition, while rankings of 2 and 1 are considered to be in fair and poor condition, respectively. The following chart graphically presents the results and their expected life spans.



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Section 8 : Opinion of Probable Costs

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8

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Opinion of Probable Costs

This section provides an estimate of probable costs for the work required to bring the building into compliance with applicable codes and meet safety requirements. Non-code related items are also included to identify the costs associated with meeting suitable architectural, structural and site standards. The estimates for this work are compared to the cost of replacing the existing structure.

The following opinion of probable costs was developed utilizing data obtained by conducting a survey of the existing building as well as knowledge of upgrades required at similar facilities and industry standards. The estimate was generated on the basis of a 20-year life expectancy for all building elements. The need for the building to be provided with the same features and upgrades as a typical building was taken into account. This estimate can be used as a tool to help facilitate prudent fiscal decisions relating to future projects at Northeast School.

The estimate of work required at Northeast School is based on meeting current applicable code and safety requirements. Non-code related items necessary to meet suitable architectural standards for occupancy are also included. Both unit and square-footage prices were utilized to prepare the estimate, based on Means Building Construction Cost Data and recent bid data. The itemized ADA Compliance Survey Information estimates were used as a basis in determining the costs related to ADA compliance. Items were reviewed for duplicity.

The estimate includes the following modifications:

- XXXX
- XXXX
- XXXX
- XXXX
- XXXX
- XXXX
- XXXX

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Section 9 : Appendix

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9

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Appendix

This section contains miscellaneous items that support information provided within this report and is included for reference.

This appendix includes the following items:

- Roof Survey Report - Garland
- AHERA Six Month Periodic Surveillance

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Facility Summary

Client: Vernon Public School District

Facility: Northeast School



Facility Data

Address 1	69 East Street
City	Vernon
State	Connecticut
ZIP	06066
Type of Facility	School
Square Footage	44,600
Contact Person	Mr. Mark Rizzo

Asset Information

Name	Date Installed	Square Footage	Roof Access
Roof	2015	44,600	Ladder Needed

Information

Year Installed	2015	Square Footage	44,600
Slope Dimension	1/4:12"	Eave Height	15
Roof Access	Ladder Needed	System Type	Gravel Surface BUR



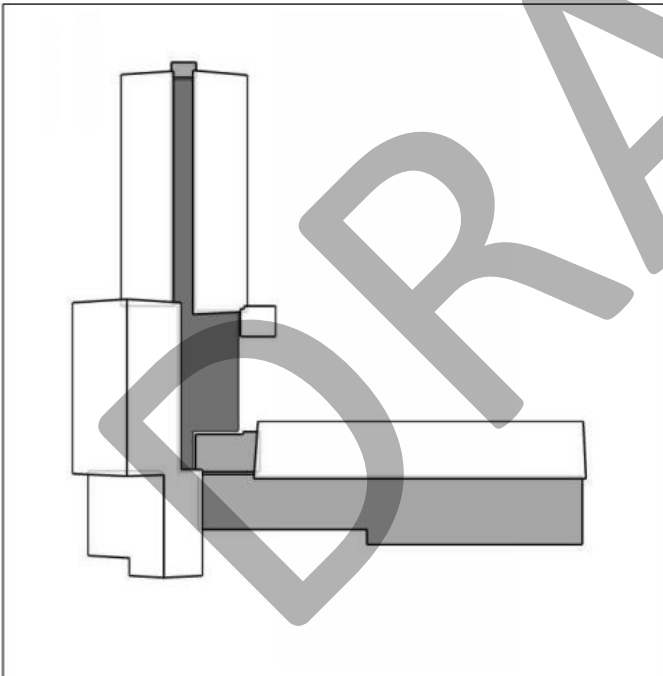
ROOF MEASUREMENT REPORT

69 East Street, Vernon, CT 06066

Report Contents



Images	1
Length Diagram.....	4
Pitch Diagram.....	5
Area Diagram	6
Penetrations Diagram	7
Notes Diagram	8
Property Info.....	9
Report Summary.....	10



In this 3D model, facets appear as semi-transparent to reveal overhangs.

Report Details

Date:	02/28/2013
Report:	5464574

Roof Details

Total Area:	44,593 sq ft
Total Roof Facets:	11
Predominant Pitch:	2/12
Number of Stories:	Unknown
Total Ridges/Hips:	174 ft
Total Valleys:	0 ft
Total Rakes:	427 ft
Total Eaves:	1,781 ft
Total Penetrations:	33
Total Penetrations Perimeter:	449 ft
Total Penetrations Area:	382 sq ft

Report Run By:

Contact:	Jeremy Cogdill
Company:	The Garland Company, Inc.
Address:	3800 East 91St Cleveland OH 44105
Phone:	802-598-2974

Contact Us:



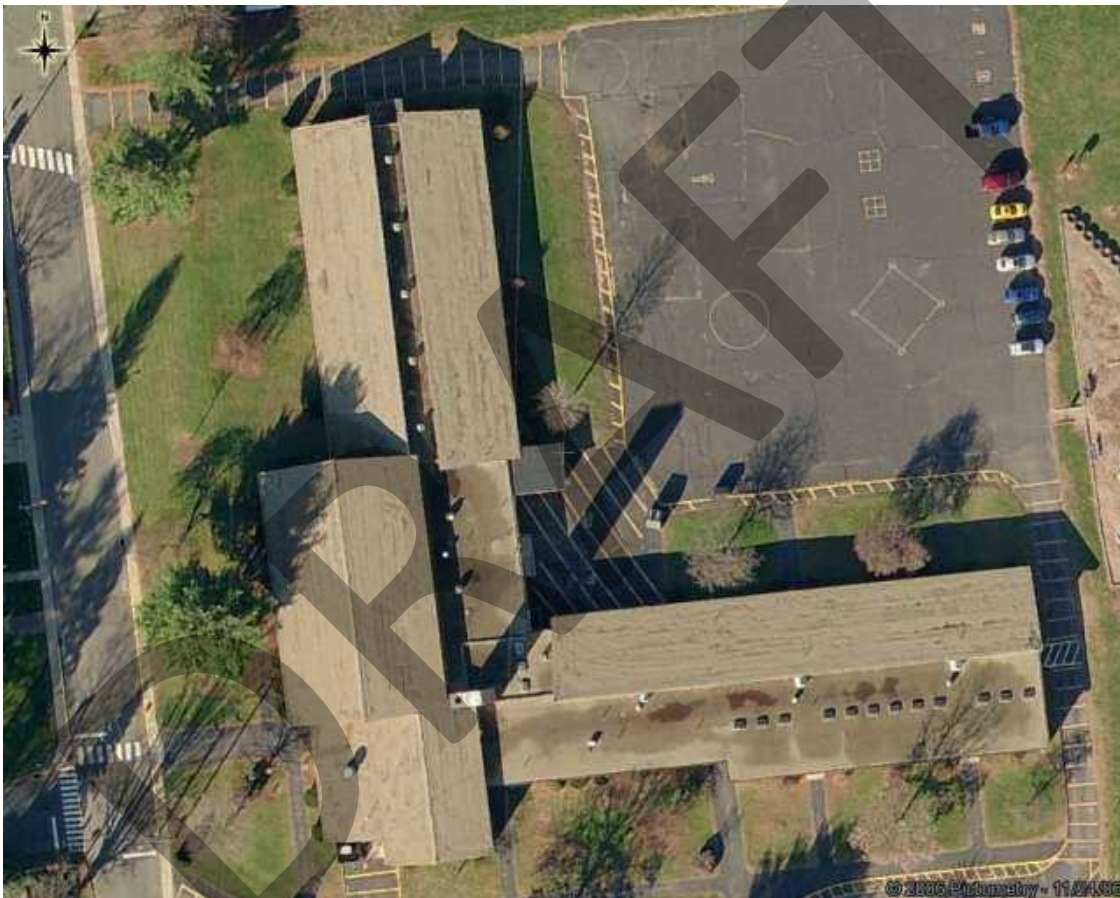
Jeremy Cogdill
Territory Manager - Southern & Eastern CT
The Garland Company, Inc.
m: (802) 598-2974
p: (860) 204-1006
e: Jcogdill@garlandind.com
s: www.garlandco.com



ROOF MEASUREMENT REPORT

REPORT IMAGES

The following aerial images show different angles of this structure for your reference.



Top View

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ROOF MEASUREMENT REPORT

REPORT IMAGES



North View



East View

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ROOF MEASUREMENT REPORT

REPORT IMAGES



South View



West View

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LENGTH DIAGRAM

Lengths: Ridges = 174 ft
Hips = 0 ft

Valleys = 0 ft
Rakes = 427 ft

Flashing = 902 ft
Step flashing = 82 ft

Eaves
Parapet

106
143
151
147
16
33
34
34
34
34
19
22
75
108
110
34
34
34
29
92
40
36
201
206
42
133
104
19
24
22
26
52
46
23
49
96

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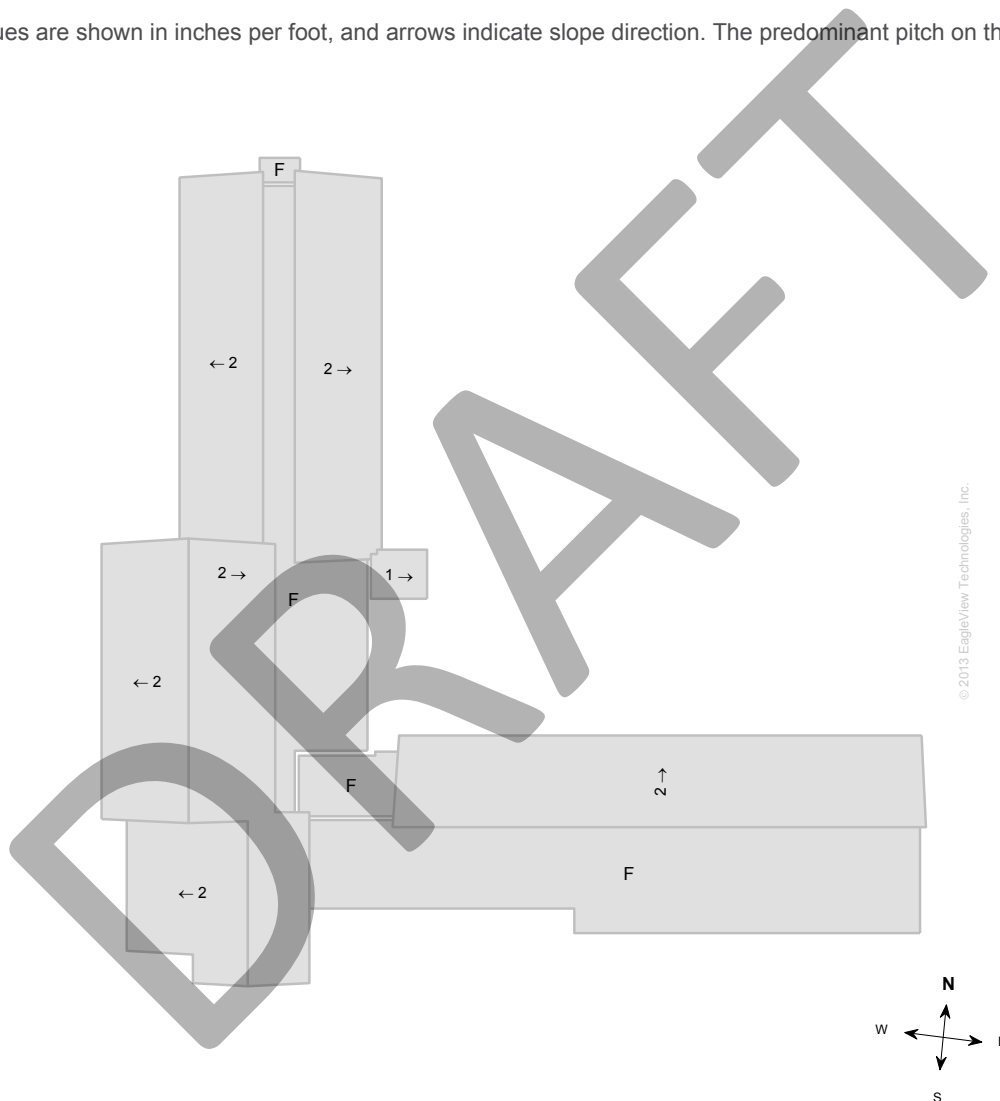
4



ROOF MEASUREMENT REPORT

PITCH DIAGRAM

Pitch values are shown in inches per foot, and arrows indicate slope direction. The predominant pitch on this roof is 2/12.



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Note: This diagram contains labeled pitches for facet areas larger than 20 square feet. In some cases, pitch labels have been removed for readability. Gray shading indicates flat, 1/12 or 2/12 pitches. If present, a value of "F" indicates a flat facet (no pitch).

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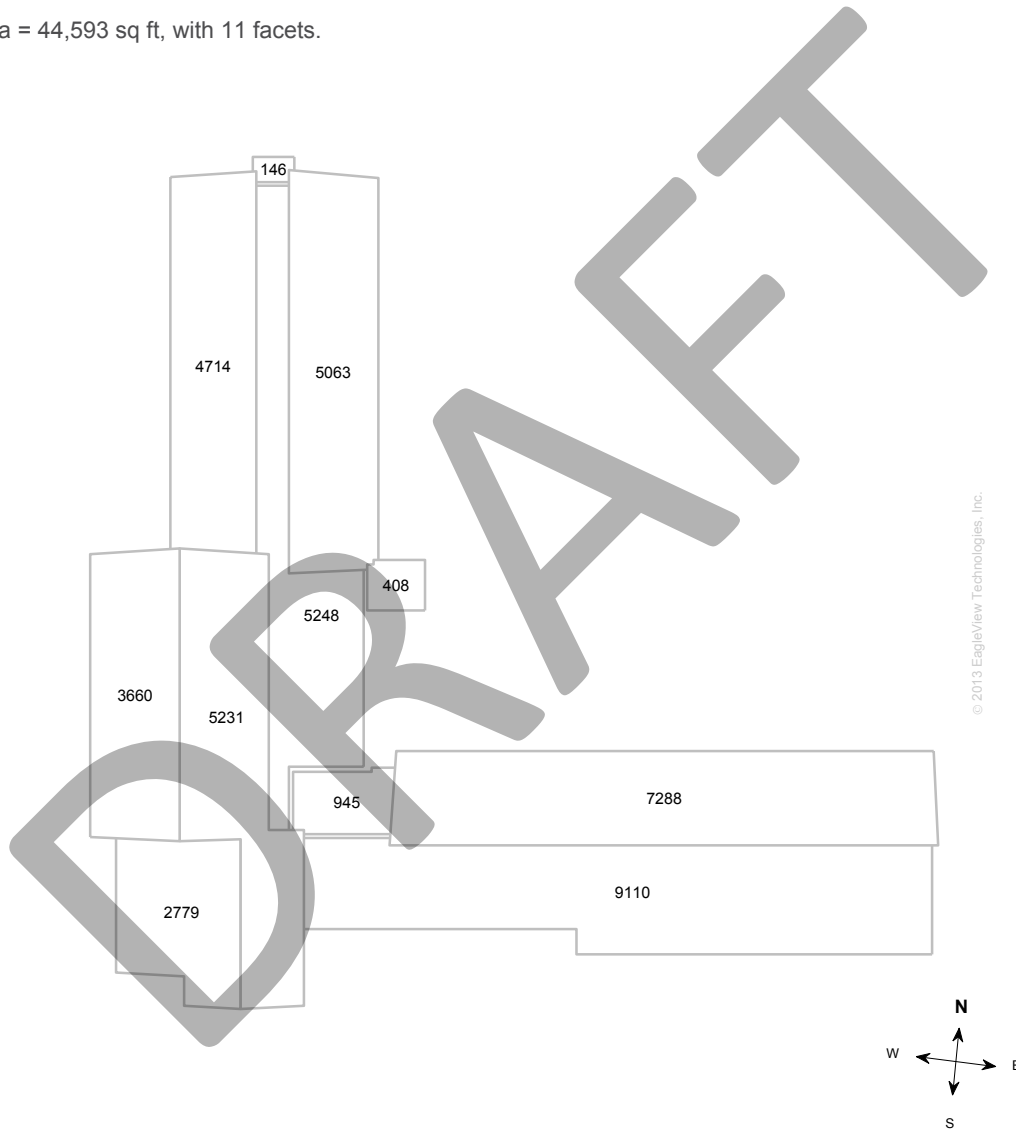
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ROOF MEASUREMENT REPORT

AREA DIAGRAM

Total Area = 44,593 sq ft, with 11 facets.



Note: This diagram shows the square feet of each roof facet (rounded to the nearest foot). The total area in square feet, at the top of this page, is based on the non-rounded values of each roof facet (rounded to the nearest square foot after being totaled).

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ROOF MEASUREMENT REPORT

PENETRATIONS

Penetrations Notes Diagram

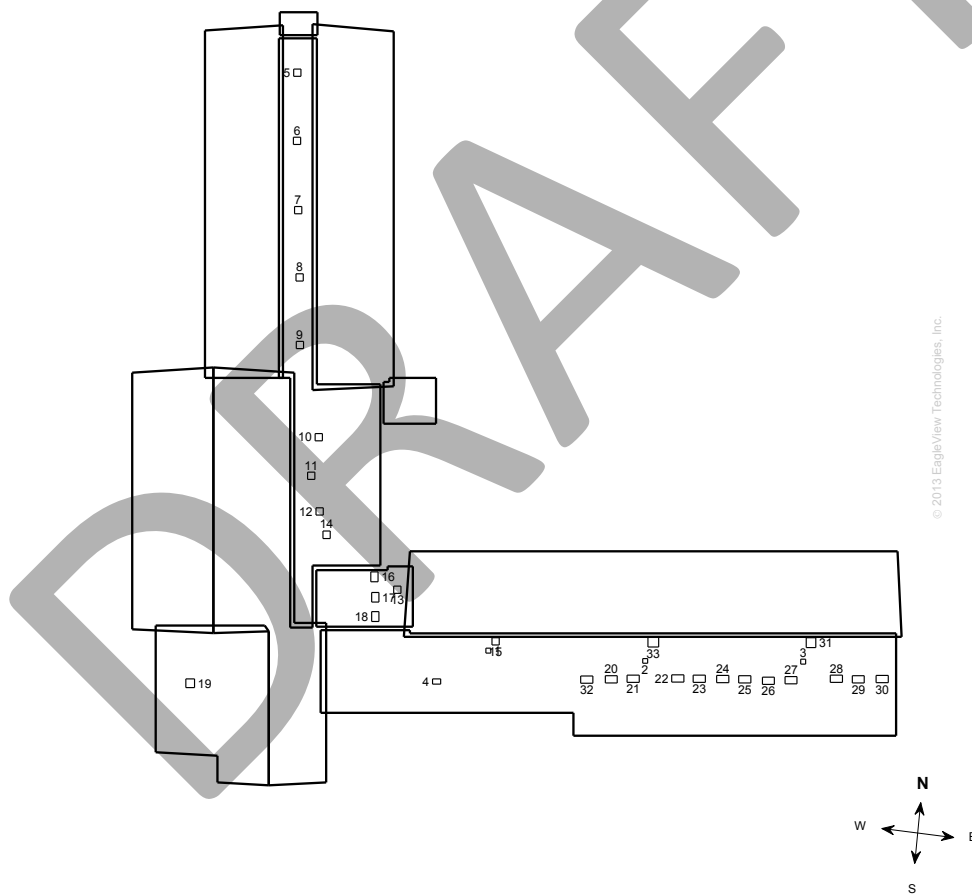
Penetrations are labeled from smallest to largest for easy reference.

Total Penetrations: 33

Total Penetrations Perimeter = 449 ft

Total Penetrations Area: 382 sq ft

Total Roof Area Less Penetrations = 44,211 sq ft



Note: Any measured penetration smaller than 3x3 feet may need field verification. Accuracy is not guaranteed. The total penetration area is not subtracted from the total roof area.

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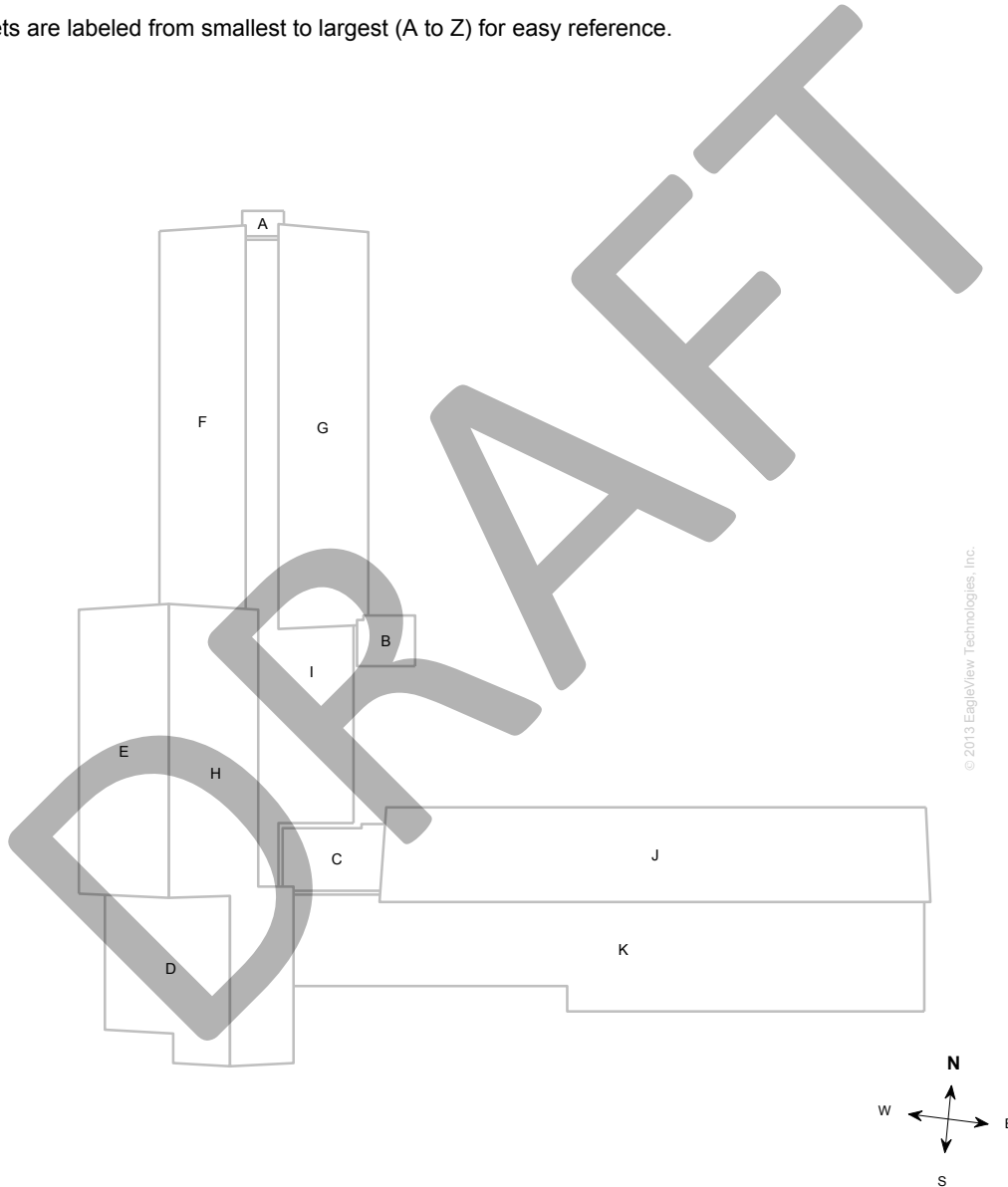
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ROOF MEASUREMENT REPORT

NOTES DIAGRAM

Roof facets are labeled from smallest to largest (A to Z) for easy reference.



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ROOF MEASUREMENT REPORT

Property Info



Property Location

Longitude = -72.4309790

Latitude = 41.8615860

Online map of property:

http://maps.google.com/maps?f=g&source=s_q&hl=en&geocode=&q=69+East+Street,Vernon,CT,06066

Property Info

Year Built: 1954

Effective Year Built: N/A *

Last Known Roof Permit: N/A

**Effective Year Built is when the property's major components were revised to meet that year's code..*



Weather Data

Last Hail Event: 6/22/2012

Hail Count: 7 †

†Last hail event is the date of the last recorded hail event (greater than or equal to 3/4") within a one-mile radius. Hail count is the number of recorded hail events (greater than or equal to 3/4") within a one-mile radius in the past three years.



Notes

This was ordered as a commercial property. It was reported to be single structure. There were no changes to the structure in the past four years.

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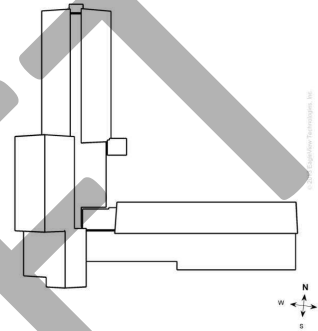
ROOF MEASUREMENT REPORT

REPORT SUMMARY

Below is a measurement summary using the values presented in this report.

Lengths, Areas and Pitches

Ridge	174 ft (2 Ridges)
Hips	0 ft (0 Hips)
Valleys	0 ft (0 Valleys)
Rakes*	427 ft (16 Rakes)
Eaves/Starter**	1,781 ft (24 Eaves)
Drip Edge (Eaves + Rakes)	2,208 ft (40 Lengths)
Parapet Walls	0 ft (0 Lengths)
Flashing	902 ft (18 Lengths)
Step Flashing	82 ft (3 Lengths)
Total Area	44,593 sq ft
Total Penetrations Area	382 sq ft
Total Roof Area Less Penetrations	44,211 sq ft
Total Penetrations Perimeter	449 ft
Predominant Pitch	2/12



Total Roof Facets = 11

*Rakes are defined as roof edges that are sloped (not level).

** Eaves are defined as roof edges that are not sloped and level.

Areas per Pitch

Roof Pitches	0/12	1/12	2/12
Area (sq ft)	15449.1	407.6	28736
% of Squares	34.6%	0.9%	64.4%

The table above lists each pitch on this roof and the total area and percent (both rounded) of the roof with that pitch.

Waste Calculation Table

Waste %	0%	10%	12%	15%	17%	20%	22%
Area (sq ft)	44,593	49,052	49,944	51,282	52,174	53,512	54,403
Squares	445.9	490.5	499.4	512.8	521.7	535.1	544.0

This table shows the total roof area and squares (rounded up to the nearest decimal) based upon different waste percentages. The waste factor is subject to the complexity of the roof, individual roofing techniques and your experience. Please consider this when calculating appropriate waste percentages. Note that only roof area is included in these waste calculations. Ridge, hip, valley, and starter lengths may require additional material.

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Photo Report

Client: Vernon Public School District

Facility: Northeast School

Roof Section: Roof

Report Date: 03/16/2023

Title: Visual Inspection

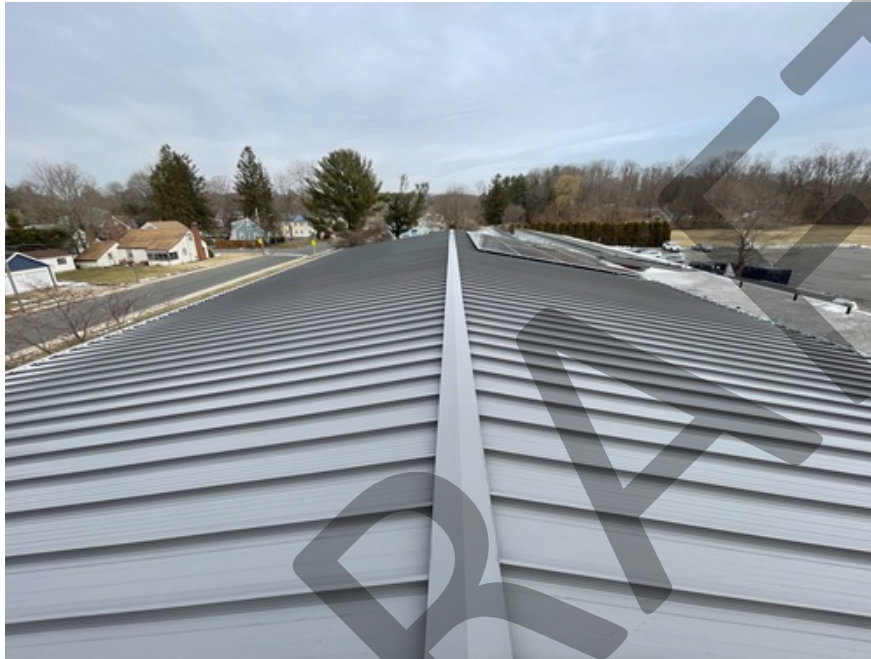


Photo 1

Overview of the metal section



Photo 2

Solar section overview



Photo 3

Open condition- Flashing



Photo 4

**Through Fastened bott-
Sealing recommended**



Photo 5

**Open condition- Exposed
fasteners**



Photo 6

Open condition- Window metal trim- Consistent throughout



Photo 7

Recommend a splash block and Sealing masonry



Photo 8

Open condition- Curb flashing on unit

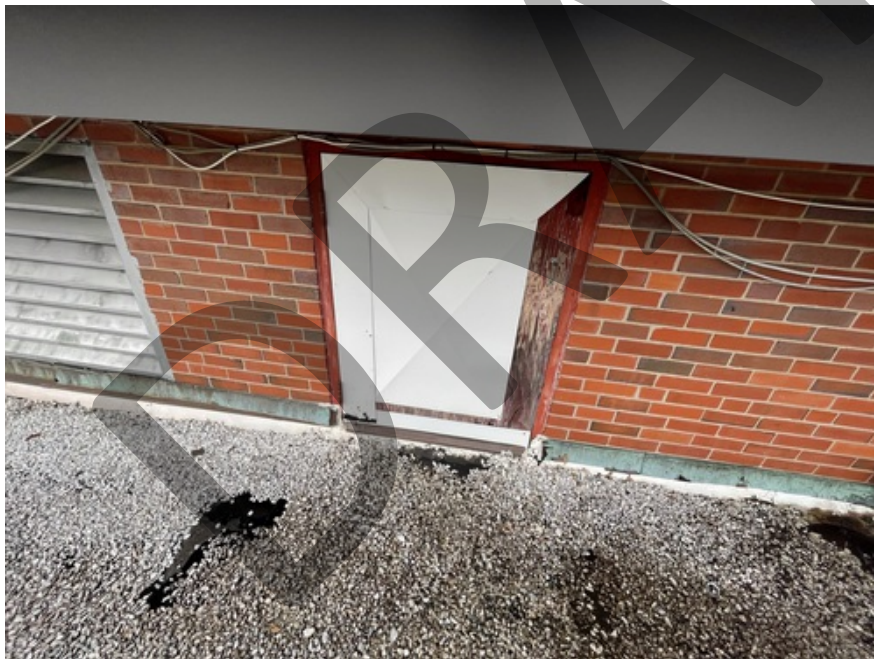


Photo 9

Open condition- Exposed wooden door



Photo 10

Open condition- Metal trim transition- Resealing recommended



Photo 11

Overview of the Low Slope roof sections



Photo 12

Open condition- Perimeter flashing need some attention



Photo 13

Open condition- Exposed masonry- Chimney is recommended to be sealed and or wall paneled



Photo 14

Splash Block needed to prevent membrane wear



Photo 15

Exposed felts- UV protectant recommended



Photo 16

**Overview of the rear
membrane sloped section**



Photo 17

**Open condition- Curb
flashings starting to show
signs of weathering**



Photo 18

**Open condition- Pitch boxes are open-
Consistent throughout**

DRAFT

AHERA SIX MONTH PERIODIC SURVEILLANCE

Northeast School

69 East Street

Vernon, CT 06066

Page 1 of 1

MATERIAL DESCRIPTION	LOCATION(S)	PREVIOUS CONDITION	CHANGE IN CONDITION (Y/N)	COMMENTS
Pipe fitting insulation	Bathroom wet walls, pipe chases within classrooms	No damage	N	Accessible material was Removed 2009. Inaccessible material presumed within wall cavities Known ACM
Concealed 9" floor tile and associated mastic	Limited – beneath millwork	No damage	N	Material is inaccessible and assumed in good condition. Known ACM
Transite wall panels	Classrooms 1 -8, 21, Vestibule 1103,	No damage	N	Material in good condition Classroom walls and partial media center heater cabinets abated summer 2009. Remains behind classroom bookcases, gym heater cabinets and partial in media center heater cabinets Known ACM
Transite cabinet panels and radiator backing	All Classrooms	No damage	- Class 3 bookcase radiation damage	Material in presumed in good condition. Classroom walls and partial media center heater cabinets abated summer 2009. Remains behind classroom bookcases, gym heater cabinets and partial in media center heater cabinets Known ACM

SURVEILLANCE CONDUCTED BY

Brandon McClure

DATE 3-17-23