Facility Study and Master Plan

Maple Street School

20 Maple St, Vernon, CT 06066

SUMMER 2023

FRIAR

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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

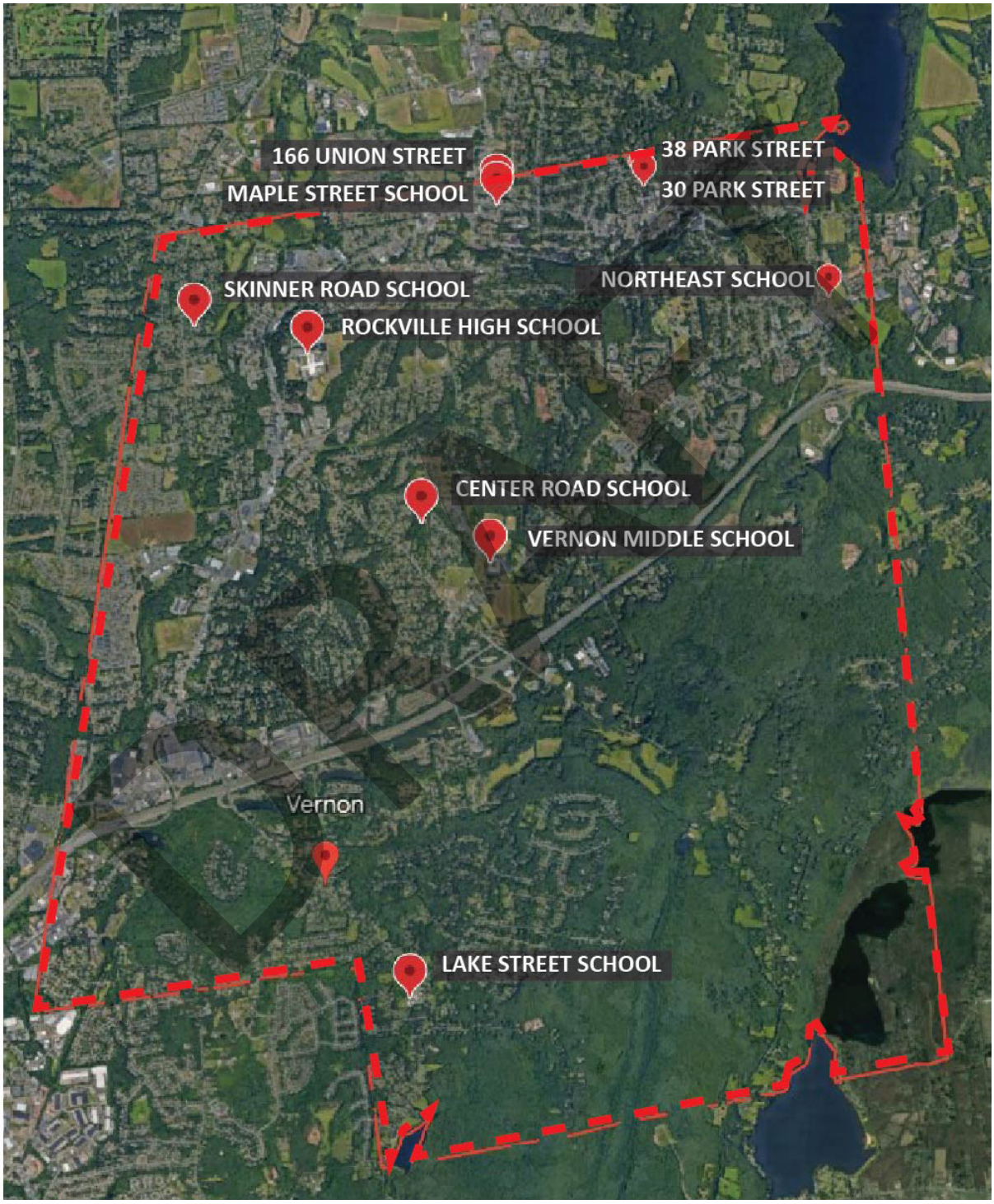
The purpose of this study is to provide the client with an understanding of the current challenges and in the near future, a comprehensive view of the range of possible options with cost implications, and a means to reach consensus on the best possible solution to those challenges.

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.

Maple Street School

Stories	3 Stories
Area	39,920 sf
Address	20 Maple St, Vernon, CT 06066
Original Construction	1925 (98 years old at time of survey)
Addition(s) / Renovations	1965 Addition; 1987 Alterations; 2008 Alterations
Grades	K to 5th
Condition	Fair
Description	This is a masonry school building with both wood and steel structures.

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

West Elevation - A

North Elevation - B

Building Overview - Photographs

North Elevation - C

South Elevation - D

Building Overview - Photographs

East Elevation - E

East Elevation (Gymnasium) - F

Building Overview - Photographs

East Elevation - G

South Elevation - H

Architectural Survey

The exterior skin of Maple Street School is brick, which is in fair condition.

Typical windows and consist of aluminum and wood; exterior doors are a variety of wood, aluminum and hollow metal. The windows and doors are in fair to good condition. The exterior sealants of the doors and windows are in poor to fair condition.

The building interior is in fair condition.

The work recommended to address architectural conditions includes:

- Remove leaves and debris from downspouts and gutters. Repair or replace any damaged downspouts and rusted boots.
- Replace damaged exterior doors and rusted door frames.
- Remove and replace sealant at windows
- Replace damaged window screens
- Replace damaged gaskets and weatherstripping at exterior doors.
- Scrape and repaint wood window frames. Replace rotted frames to match existing.
- Remove mold and mildew from exterior foundation and brick
- Remove exposed wires. Cap and return to source.
- Scrape and refinish exterior overhang/soffits
- Provide cornerguards at all gypsum wall corners
- Replace all damaged ceiling tiles
- Floor and wall base is maintained but past its useful life.
- Repair damage / holes at interior walls

Structural Survey

The original portion of the building is typically constructed of a wood frame with masonry exterior. The addition is masonry and steel construction. The foundation is concrete.

The work recommended to address structural conditions includes:

- Repair cracked / damaged brick at exterior of the building. Repoint as needed.
- Address efflorescence and clean brick.

Mechanical Survey

The heating system is comprised hot water boilers and pumps that are in fair condition. Classrooms have perimeter radiation with operable windows and wall mounted split air conditioners. The Gymnasium has a dedicated roof top unit

The work recommended to address mechanical systems conditions includes:

- Heating Plant: The existing building is served by (2) mid-efficiency hot water boilers. The boilers are 14 years old, and while not at the end of life, we would recommend replacing with high efficiency condensing boilers for increased energy savings.
- Hot water pumps are nearing end of life and are recommended to be replaced in kind.
- 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: The existing building exhaust diffusers within classrooms were observed to be obstructed by ceilings. System may be abandoned in place. We recommend a new exhaust system be provided with proper coordination to ceiling.
- Cooling: Classrooms are cooled from window ac units. Recommend replacement of window ac units with VRF system for heating and cooling in all classrooms areas.
- Controls: Recommend replacement of all controls with updated digital controls integrated to centralized building management system.
- Cafeteria unit is past its 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

Power originates at a utility pole located on Maple Street at the front of the building, across from the main entrance. Secondary feeders run underground from a pole mounted utility transformer and enter a main service disconnect switch located in the basement main electrical room. There is no Life Safety or Emergency Standby power.

The work recommended to address electrical system conditions includes:

- Service distribution gear is in good condition. No improvements or repairs are required at this time. Expected service life is 20 years before replacement is necessary.
- Branch panelboards that are original to the building are in poor condition and in need of immediate replacement. Branch panelboards that were installed as part of more recent renovations and / or upgrades, should provide service for another 20 years before replacement is necessary.
- 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 consists of both floor and wall mounted water closets with manual flush valves. The lavatories are wall hung with both sensor and manual type faucets. Water his heated by a natural gas fired water heater located in the boiler room.

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 a high-efficiency gas-fired 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

The building is fire protected by a 4" fire service entering the building in the basement of the school. There are a mix of upright, exposed pendant and concealed pendants throughout the building. The building does not have any fire pumps or any booster pump in the fire protection system.

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

- Fire service and associated piping is nearing the end of its useful life and we recommend it be replaced in its entirety.

Lighting Survey

The interior building lighting consists of fluorescent fixtures retrofitted with LED lamps. A combination of HID and LED wall packs light the building exterior and parking areas.

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 is located in the basement main electrical room with separate voice control panels in the Gymnasium, that allow annunciation over the building's speaker/horn-strobe devices

No improvements or repairs are required at this time. Average life expectancy for fire alarm systems is 15 years. System equipment should be updated or replaced in the next 7-10 years to ensure system reliability.

Telecommunications Survey

The telecommunications system is comprised of a main data systems rack located in a storage room on the main level. A small wall-mounted data rack on the second floor receives a fiber backbone cable from the main systems rack to serve data requirements for classrooms on that level. Combination analogue clock/ paging speakers are installed in classrooms.

No improvements or repairs are required 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. Surveillance cameras are 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. There was no evidence of an intrusion detection alarm system for the building.

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 program bells for class scheduling, controlled via a programmable timer located in the Administration Office. Combination analogue clock/speakers are installed in classrooms which also function for public address announcements.

No improvements or repairs 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

Maple Street 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 door closers on all classroom doors
- Maintain clear path of egress
- Resolve areas where corridor clear space is intruded on. Low head clearance in several areas due to pipes or sprinkler heads.
- All crawl space openings need to be protected w/ rated door openings.
- Door thresholds, door landings, exit stair treads and risers from the lower level at the original building.

NFPA Code Survey

A review of Maple Street 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:

- Stairs leading to basement from main level are not enclosed at the basement level. Rating is not continuous.

ADA Compliance Survey

Maple Street 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. Maple Street 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:

- The main entrance for this building is not accessible. Implement signage at all non-accessible entrances pointing towards the nearest accessible entrance.
- Main lobby desk was designed with accessible counter top in mind, but mechanically attached monitors are positioned at this location, remove these mechanically attached monitors to provide the required 36" of counter space.
- Relocate telephones so that all operable components are located below a maximum of 48" above the floor.
- Insulate all exposed plumbing at sinks intended to be used as accessible sinks.
- Modify door hardware for coat storage rooms to remove knob based hardware. Replace with hardware that is operable without tight gripping or rotating of the wrist.
- Modify existing door locations to ensure that proper clear distance is given along all accessible routes. Multiple locations within the facility do not have proper clear distance on latch side of door in pull side approaches.
- Update all non-compliant door hardware.
- Update all toilet rooms currently not on an accessible level.
- Relocate existing signage to provide 18"x18" clear space centered on the signage.
- Replace any signage in the building that does not meet accessible requirements. In corridors signage must be placed on the latch side of doors, have contrasting text and background colors, and have braille characters. Almost all signage on the lower floor does not meet these requirements.
- Provide the appropriate amount of accessible drinking fountains based on the population of the school.
- Provide wing walls at existing drinking fountains that are not recessed in a wall cavity.
- Provide floor mounted railings surrounding elements in corridors that protrude below 80" above the floor level.
- Modify existing benches in Toilet Rooms to meet the 24" depth requirements.
- Install new elevator/lift to provide accessible route to both the cafeteria and lower & upper educational wings. Currently there is no accessible route within the facility to these critical program spaces. Accessible exiting will also be required after installing access to these levels.
- Provide an accessible exterior route complete with signage, van accessible space, bus drop off, and a loading zone.
- Provide elevator and lifts to provide full accessibility to the building.

Site Survey

The site at Maple Street School was evaluated. Parking is severely lacking on site at this school. There majority of parking is located across the street at a separate facility. Available street parking accommodates 6 vehicles, with one handicap accessible space available at the rear of the building. The walkways are in fair to good condition. The stair at the rear of of the building is in poor condition. The playing fields consist of grassy areas for soccer, a basketball court and one small baseball field and are in fair condition. Playground areas include a metal playscape with swings. A paved area at the back of the building has striped areas indicating it is used for play and/or gym classes.

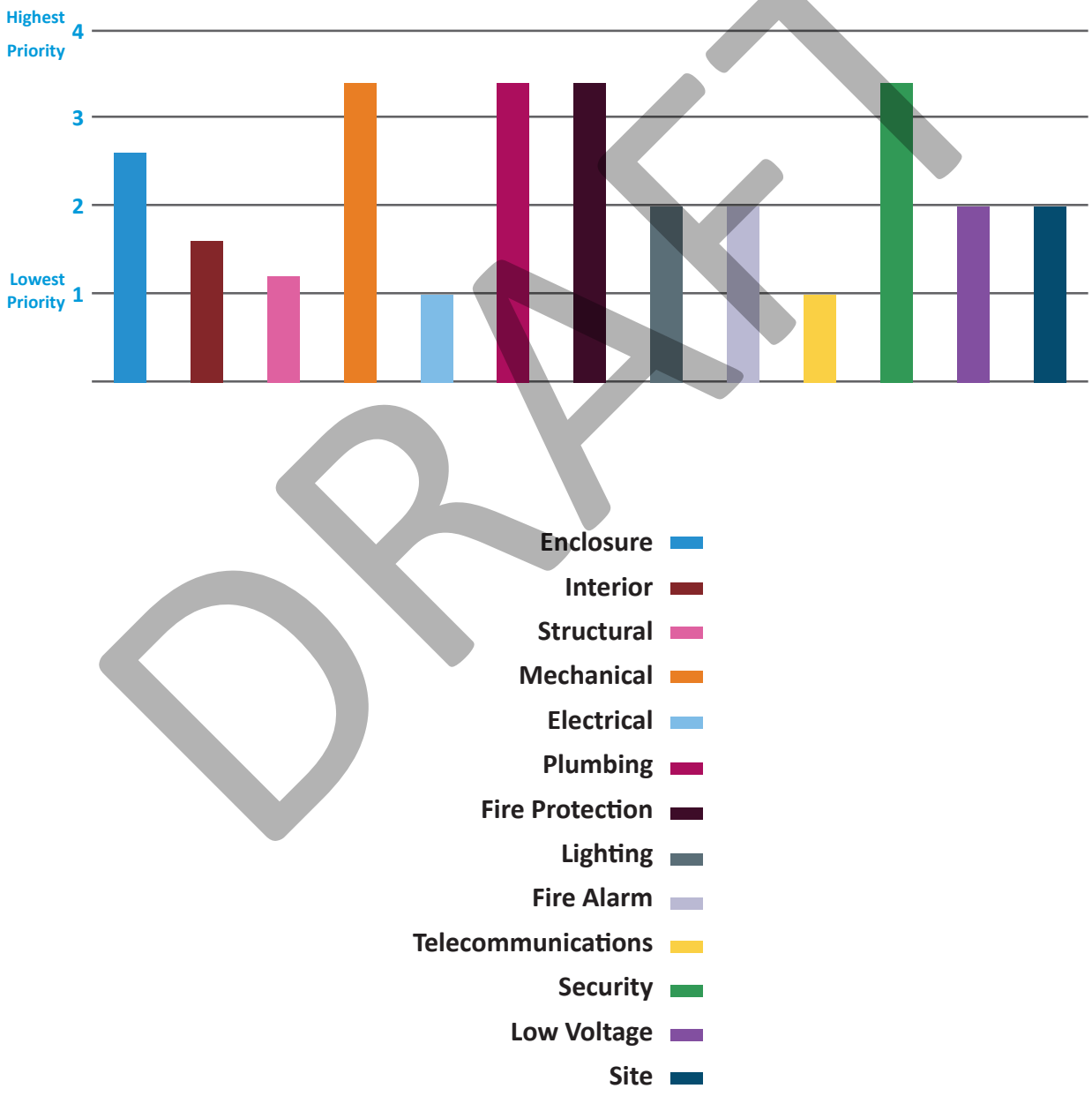
The work recommended to address site conditions includes:

- Replace faded signage
- Pull back overgrown walkway at Kitchen service entrance and repave walkway. Provide signage to clearly indicate service entrance(s).
- Clean out drains throughout the site and replace as needed
- Repair/replace crumbling concrete stairs adjacent to southeast play area
- Replace wooden picnic table
- Cut back vegetation overgrowth
- Provide signage and barrier at South field play area
- Provide directional signage at main entry drive
- Provide signage indicating additional parking across the street

Survey Results

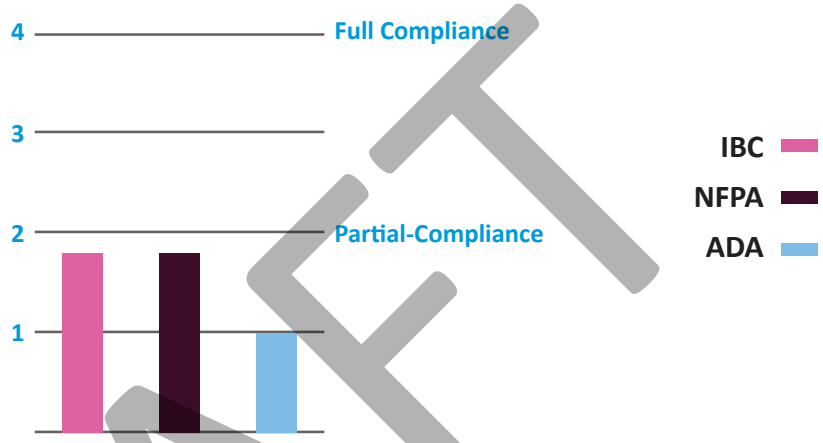
Each of the elements that were reviewed under this assessment was ranked on a scale of 1-4, with a 4 rating equating to the highest priority. Components that received a ranking of 3 should be considered to be moderate priorities, while rankings of 2 and 1 are considered to be low priorities. The following 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.

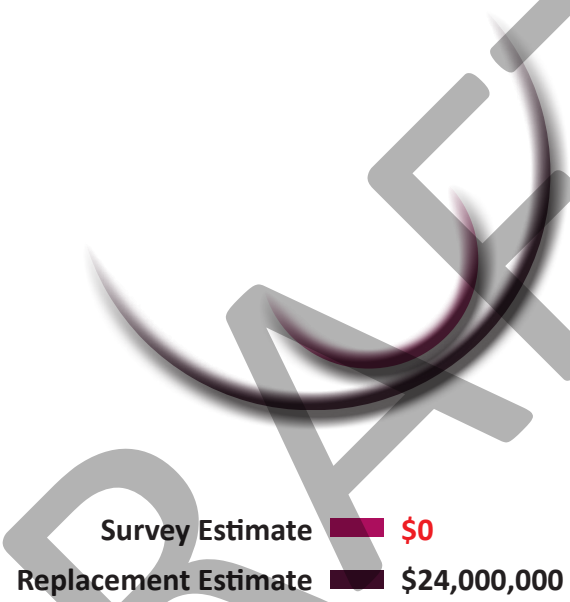
Code Compliance Evaluation



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	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 good to excellent condition. Projected costs are based on 2023 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 39,920 square feet, renovations at this building equate to approximately $... per square foot. This cost-per-square-foot figure does not fall within industry standards for renovations / upgrades of this nature.
Replacement Cost	A similarly constructed building would cost $600 per square foot. Using this figure, the replacement cost for this building is approximately $24,000,000, which follows state standards for structures of this type. The $600 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.



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

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.

Maple Street School

Plan Drawings	2008 Alterations
Photos	2023 Survey
Date Built	1925
Architect	JCJ Architecture (2008 Alterations)
Date(s) Additions / Renovations	1965 Addition; 1987 Alterations; 2008 Alterations
Construction	II-B
Type of Occupancy	Education
Number of Stories	3 Stories
Gross Square Feet*	39,920 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
Secondary Surface	Metal Fascia	Fair
Insulation	Unknown	Assumed Good
Windows		
Lintel	Steel	Good
Jamb	Masonry	Good
Sill	Masonry	Good
Frame	Wood Aluminum	Fair Good
Glazing	Insulated, Wired , Frosted	Good to Fair
Sealant	Yes	Poor to Fair
Operable	Yes	Good
Exiting	Varies	N/A
Doors		
Lintel	Steel	Fair
Jamb	Masonry	Good
Sill	Concrete with Metal Threshold	Good
Frame	Hollow Metal Wood Aluminum	Good Fair Good
Door	Hollow Metal Aluminum	Fair Good
Glazing	Tempered	Good
Flashing	Yes	Good
Sealant	Yes	Fair
Hardware	Stainless Steel	Good

Architectural Conditions - Enclosure (continued)

Exit Stairs	Material	Condition
Tread	Concrete	Poor to Fair
Riser	Concrete	Poor to Fair
Landing	Concrete	Good
Handrail	Metal	Fair
Exit Ramp		
Ramp	Concrete	Fair
Landing	Concrete	Poor
Handrail	Unpainted metal	Good

Maple Street School has a brick exterior that is in fair condition. Some areas of repointing are required as well as cleaning of effloresence.

The metal gutters, downspouts and boots are in fair to poor condition. Many of the boots are very rusted. There are visible areas where the gutters are cracked or damaged. The downspouts need to be replaced in several locations and the storm system should be flushed.

The windows are in fair condition. Most of the wood frames have peeling paint and some of the exposed wood is beginning to rot. Many of the window screens were torn and need to be replaced. The sealants around the windows need to be replaced throughout the school. The joints on the transluctent fiberglass windows need to be sealed to prevent leaks.

The exterior doors are in fair to good condition. Doors with glazing require replacement of the weatherstripping and gasketing. Many of the frames are rusting. An overhead door to a Storage Room is in fair to poor condition.

The main entrance has concrete step with metal rails. The north side of the site has a concrete ramp leading to a Kitchen entrance. The south side of the building has an exterior concrete stair leading down to the Cafeteria. Refer to the Site and ADA Surveys for additional information on the exterior stairs and ramps.

The Appendix includes a roof report which documents the existing conditions. It is recommended to replace all areas of Built-Up Roofing due to its age and areas of infiltration, as well as repairs to all areas of flashing.

Architectural Conditions - Interior

Corridors	Material	Condition
Walls	Gypsum / Brick / Plaster Foundation	Fair Good
Doors & Frames	Wood, hollow metal frame (Main Office) Wood, wood frames (Classrooms)	Good Fair
Door Hardware	Stainless Steel, type varies	Good
Flooring	VCT	Good
Ceilings	Gypsum / 2x2 ACT / 2x4 ACT	Fair to Good
Interior Stairs		
Walls	Gypsum / Plaster CMU	Fair Good
Treads	Rubber Concrete (Basement)	Good Fair to Good
Risers	Metal / Concrete (Basement)	Fair to Good
Landing(s)	Rubber / Tile / VCT Concrete (Basement)	Good Fair to Good
Handrails	Metal	Good
Ceilings	Gypsum / Plaster 2x4 ACT	Fair to Good Good
Main Office		
Walls	Gypsum / Plaster	Fair
Doors & Frames	Wood, Hollow Metal Frame	Fair to good
Door Hardware	Stainless Steel Lever	Good
Flooring	Carpet	Good
Ceilings	Gypsum	Good
Toilet Rooms		
Walls	CMU, Tile / Plaster	Good Fair
Doors & Frames	Wood / Hollow Metal & Wood Frames	Good
Door Hardware	Stainless Steel	Good
Flooring	Tile	Good
Ceilings	2x4 ACT / Cement Wood Fiber (Upper Level only)	Good
Classrooms		
Walls	Gypsum / Plaster / Brick (Basement) / CMU	Good
Doors & Frames	Wood, wood frames	Fair
Door Hardware	Stainless Steel, levers	Good

Flooring	Wood / Carpet	Fair
Ceilings	Gypsum / 2x4 ACT Cement Wood Fiber (Upper Level only)	Good Good to Fair
Art Classroom(s)		
Walls	Gypsum / Plaster	Fair
Doors & Frames	Wood, wood frame	Good
Door Hardware	Stainless Steel	Good
Flooring	VCT	Good
Ceilings	2x4 ACT	Fair
Office Suite - Main Level		
Walls	Gypsum	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel	Good
Flooring	Wood	Fair
Ceilings	2x4 ACT / Hard Ceilings	Excellent
Cafeteria		
Walls	CMU / Gypsum	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel	Good
Flooring	VCT	Good
Ceilings	9x9 tile	Good
Kitchen		
Walls	CMU / Storefront Glazing	Good
Doors & Frames	Wood, wood frame / Hollow metal, hollow metal frame	Good
Door Hardware	Stainless Steel, type varies	Good
Flooring	Quarry Tile / VCT	Good
Ceilings	2x4 ACT	Good
Gymnasium		
Walls	Gypsum / Plaster / Wall Pads	Fair
Doors & Frames	Wood, wood frame / Hollow metal, hollow metal frame	Good
Door Hardware	Stainless Steel, type varies	Good
Flooring	Wood	Good
Ceilings	Gypsum / Some exposed structure	Good

Media Center / Library		
Walls	Gypsum / Plaster	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel	Good
Flooring	Carpet	Good
Ceilings	2x4 ACT	Good

The interior of Maple Street School is in fair to good condition overall.

The ceilings in the building varies in material throughout. The upper level classrooms have a cement wood fiber ceilings which appears to be in good condition.

The majority of interior doors are wood. They appear to be original to the building and are showing their age. Many have gouges and scrapes on them. The windows have wood trim and appear to be in fair to good condition.

The walls typically are in fair to good condition but are damaged in some areas. Corner guards are recommended at all outside gypsum corners. See photographs for areas of damage. The toilet rooms typically have tiled walls and floors and many of the tiles are chipped or damaged. It is recommended that all damaged tile be replaced as they can become sharp and pose as a safety hazard.

Wall base is peeling and chipping in several locations but is overall in fair to good condition.

Handrails at stair locations need to be refinished. The stair risers and nosing are chipped and scraped.

Plastic laminate (PLAM) casework is in fair to good condition but there are areas where the PLAM is damaged and needs to be fixed.

There is no elevator or lift in this building.

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	Fair
Foundation	Concrete	Good
Footings	Unknown (Not Visible)	Assumed Good
Deck	Unknown	Assumed Good
Exterior Frame	Masonry	Fair
Other	N/A	N/A

Structural Conditions - Interior Condition

	Material	Condition
Framing	Wood (original), Steel	Good to Fair-------
Walls	Wood Stud (original), Metal Stud	Good
Ground Floor Slab	Concrete	Good
Flooring System (other levels)	Wood / Steel	Good
Stairs	Concrete / Steel	Good

The structural components of Maple Street 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.

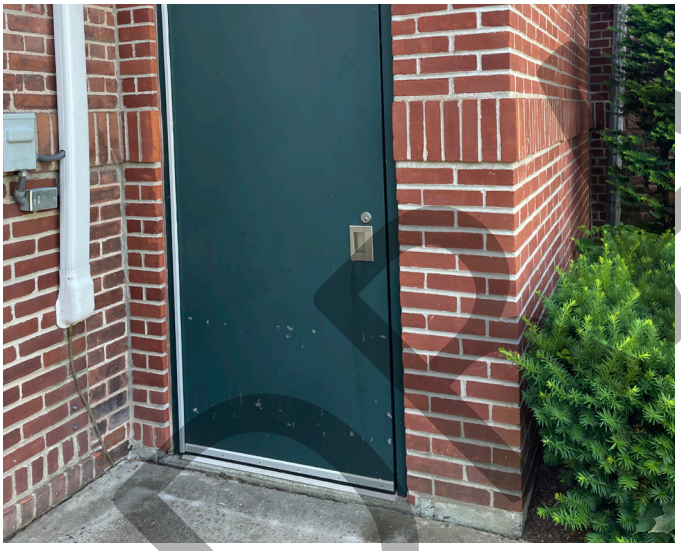
Architectural & Structural Survey Photographs

1. Location:

West Elevation

Description:

Damaged downspout and rusted boot



2. Location:

West Elevation

Description:

Damage at lower portion of door - typical in this area

3. Location:

West Elevation

Description:

Window sealant cracked and deteriorating

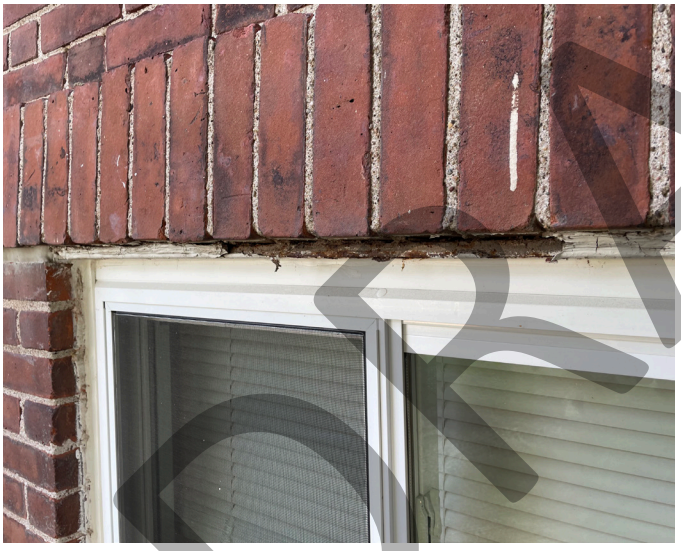
Architectural & Structural Survey Photographs

4. Location:

West Elevation

Description:

Downspout clogged with leaves and debris



5. Location:

West Elevation

Description:

Wood frame deteriorated. Sealant cracking.

6. Location:

West Elevation

Description:

Window screens torn and damaged. Wood frame at windows is peeling

Architectural & Structural Survey Photographs

7. Location:

West Elevation

Description:

Downspout coming part. Roof fascia finish faded and discolored

8. Location:

West Elevation

Description:

Lower portion of door damaged. Concrete pad deteriorating around edges.

9. Location:

North Elevation

Description:

Existing window frame has been repainted many times - paint is peeling away and sealant is next to non-existent.

Architectural & Structural Survey Photographs

10. Location:

North Elevation

Description:

Paint peeling from wood frames - Typical condition

11. Location:

Northwest Elevation

Description:

Exposed wires at overhead service door

12. Location:

Northwest Elevation

Description:

Soffit peeling and rusting

Architectural & Structural Survey Photographs

13. Location:

Northwest Elevation

Description:

Moss and mildew build up on foundation

14. Location:

North Elevation

Description:

Deterioration of door frame visible in several locations

15. Location:

South Elevation

Description:

Peeling paint from wood window frames - typical throughout wood frames

Architectural & Structural Survey Photographs

16. Location:

South Elevation

Description:

Damage to wood door frame visible

17. Location:

South Elevation

Description:

Sealant falling away from window frame

18. Location:

South Elevation

Description:

Weatherstripping falling away from exterior door

Architectural & Structural Survey Photographs

19. Location:

South Elevation

Description:

Seal falling away from existing aluminum door.

20. Location:

East Elevation

Description:

Wood frame's paint has peeled away and wood is beginning to rot.

21. Location:

East Elevation (Gymnasium)

Description:

Damaged brick

Architectural & Structural Survey Photographs

22. Location:

East Elevation

Description:

Roof fascia discolored due to age and water.

23. Location:

East Elevation

Description:

Window vandalized night prior. Team on site fixing and replacing the damaged window.

24. Location:

South Elevation

Description:

Efflorescence visible at the bottom of brick facade

Architectural & Structural Survey Photographs

25. Location:

South Elevation

Description:

Soffit and fascia finish faded due to age.

26. Location:

South Elevation

Description:

Vent pulling away from facade

27. Location:

South Elevation

Description:

Sealant and/or what appears to be wood head are deteriorated.

Architectural & Structural Survey Photographs

28. Location:

South Elevation

Description:

Sealant missing and falling off window sill. Deteriorated wood frame

29. Location:

South Elevation

Description:

Deteriorated wood frame

30. Location:

South Elevation

Description:

Cracked and damaged gutter

Architectural & Structural Survey Photographs

31. Location:

Basement - Kitchen

Description:

Quarry tile has what appears to be rusting and some cracking.

32. Location:

Basement - Kitchen

Description:

Stain and marks on ceiling tile.

33. Location:

Basement - Cafeteria

Description:

Acoustic tiles are damaged and not secured properly.

Architectural & Structural Survey Photographs

34. Location:

Basement - Cafeteria

Description:

Wood wall base is chipped and deteriorating.

35. Location:

Basement - Cafeteria

Description:

CMU wall base is chipping and needs repair.

36. Location:

Basement Corridor

Description:

VCT is scratched and marked up.

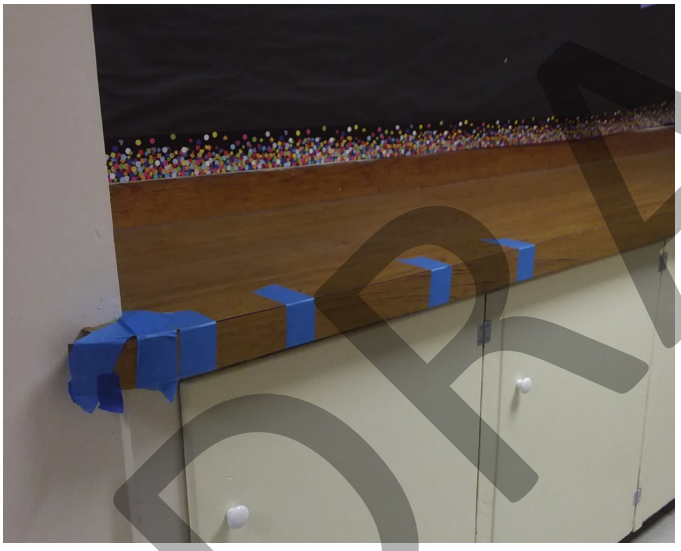
Architectural & Structural Survey Photographs

37. Location:

Basement Corridor

Description:

Wall base is missing and damaged.



38. Location:

Basement Corridor

Description:

Plastic laminate counter edge-band is popping off and needs repair.

39. Location:

Basement Classroom

Description:

Stained ceiling tile.

Architectural & Structural Survey Photographs

40. Location:

Basement Corridor

Description:

VCT is ripped up and exposed sub floor.

41. Location:

Basement Corridor

Description:

42. Location:

Basement Corridor

Description:

Foundation wall has paint chipping.

Architectural & Structural Survey Photographs

43. Location:

Basement Classroom

Description:

Ceiling Tile stained.

44. Location:

Basement Classroom

Description:

Paint on bricks is fading.

45. Location:

Basement

Description:

Wall base is chipped and scratched.

Architectural & Structural Survey Photographs

46. Location:

Basement

Description:

Hole in wall needs repair.

47. Location:

Basement

Description:

Ceiling paint peeling and needs ro be touched up.

48. Location:

Basement

Description:

Paint and gypsum chipping on corner.

Architectural & Structural Survey Photographs

49. Location:

Basement

Description:

Bottom of wall damaged and wall base peeling off.

50. Location:

Basement

Description:

VCT is discolored and finish is wearing away.

51. Location:

Basement

Description:

Hole in ceiling needs repair.

Architectural & Structural Survey Photographs

52. Location:

Main Level Corridor

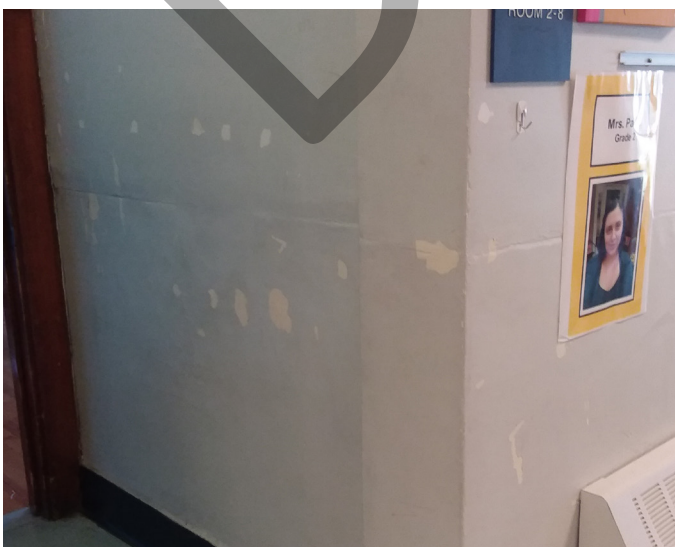
Description:

53. Location:

Main Level Corridor

Description:

VCT is bubbling and showing cracking.



54. Location:

Main Level Corridor

Description:

Dents and damage to walls.

Architectural & Structural Survey Photographs

55. Location:

Main Level Corridor

Description:

Apparent water damage to ceiling.

56. Location:

Main Level Toilet Room

Description:

Counter top chipped and bubbling.

57. Location:

Stair

Description:

Paint chipping at railing

Architectural & Structural Survey Photographs

58. Location:

Lobby

Description:

Transition faded and worn.

59. Location:

Lobby

Description:

Wall base broken and needs repair.

60. Location:

Main Level Toilet Room

Description:

Countertop severely damaged and chipped and bubbling in other areas.

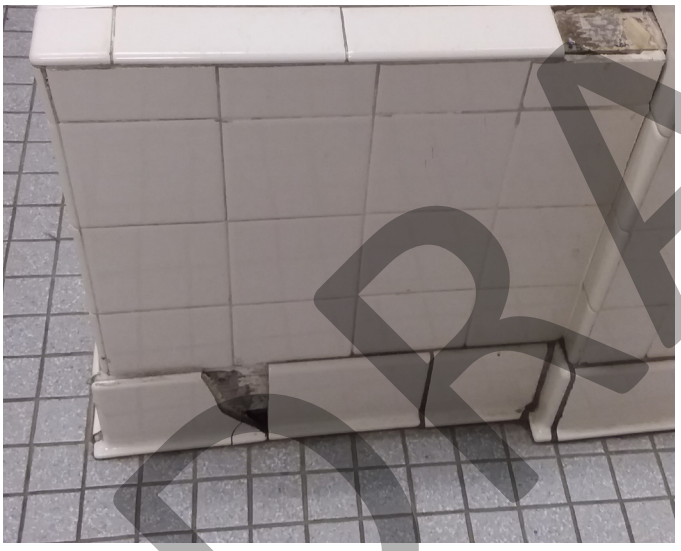
Architectural & Structural Survey Photographs

61. Location:

Main Level Toilet Room

Description:

Hole in wall that needs repair.



62. Location:

Main Level Toilet Room

Description:

Broken and cracked tiles need to be replaced.

63. Location:

Main Level Corridor

Description:

VCT by exit door is completely ripped up and needs to be replaced.

Architectural & Structural Survey Photographs

64. Location:

Main Level Corridor

Description:

Wall/ wall base crumbling and cracking.

65. Location:

Upper Level Toilet Room

Description:

Chipped floor and wall tile. The radiator also seems rusted and the paint is chipped.

66. Location:

Upper Level Toilet Room

Description:

Chips in wall tile.

Architectural & Structural Survey Photographs

67. Location:

Upper Level Corridor

Description:

Water damage seen on ceiling tile

Architectural & Structural Photograph Key Plan

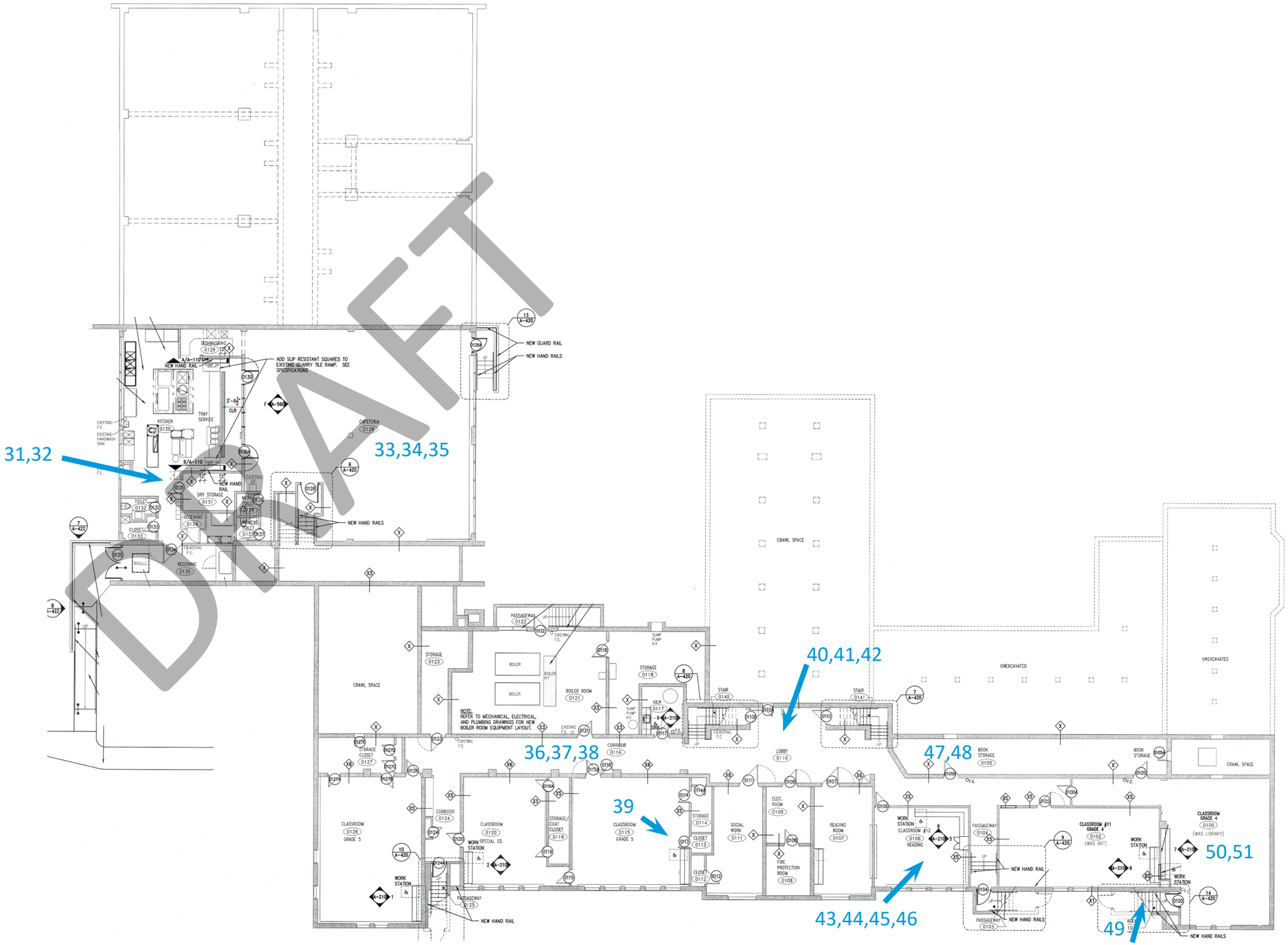
The following plan shows the actual building plan as verified during field surveys. Photographs from the previous pages are keyed into the building plans with numbered arrows at the approximate photograph site and direction from which the photographs were taken.

Arch/Struc Survey

Maple Street School

Site Plan

FRIAR



Maple Street School

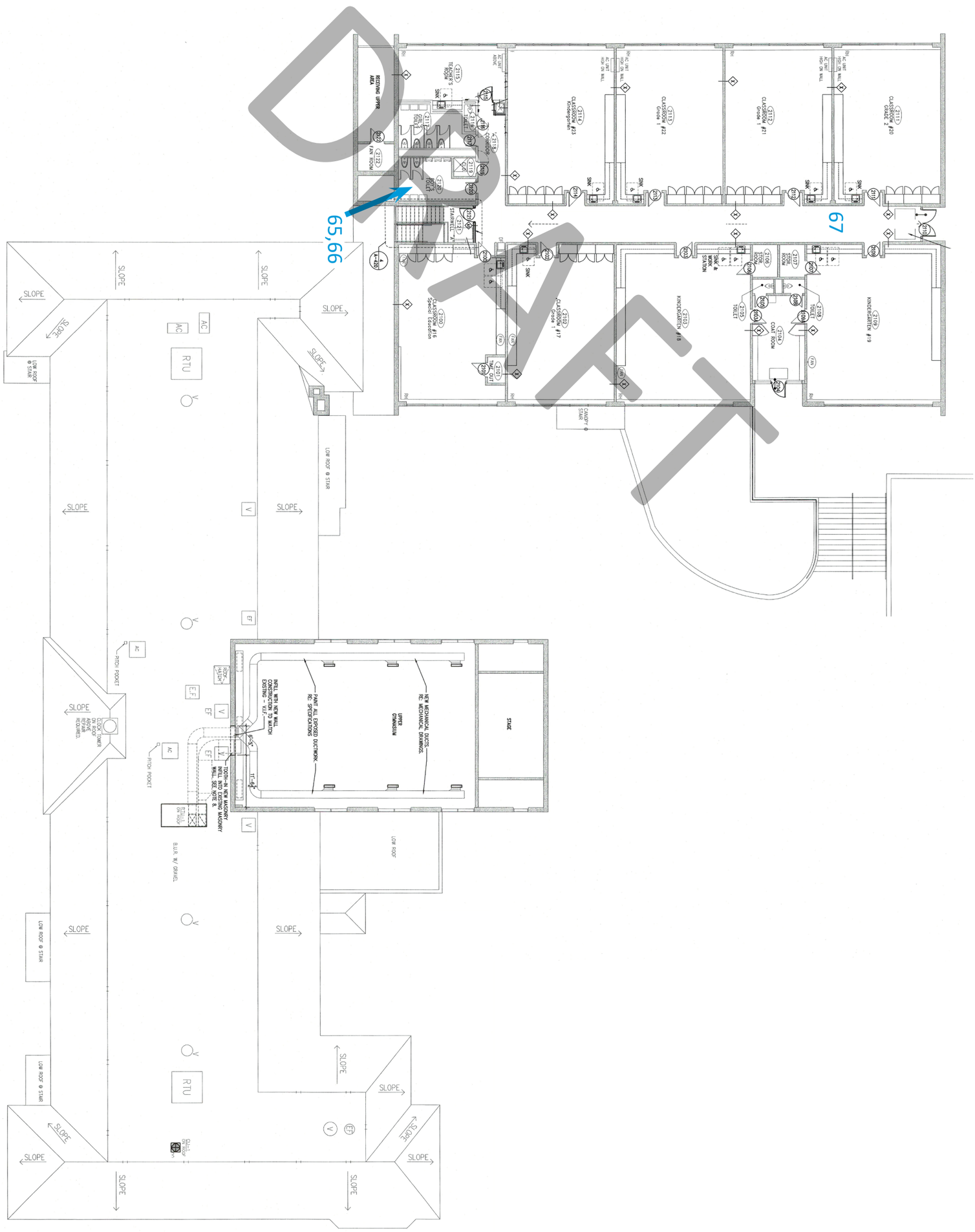
Lower Level

FRIAR

Maple Street School

Main Level

FRIAR



Maple Street School

Upper Level

Arch/Struc Survey

Architectural & Structural Recommendations

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

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

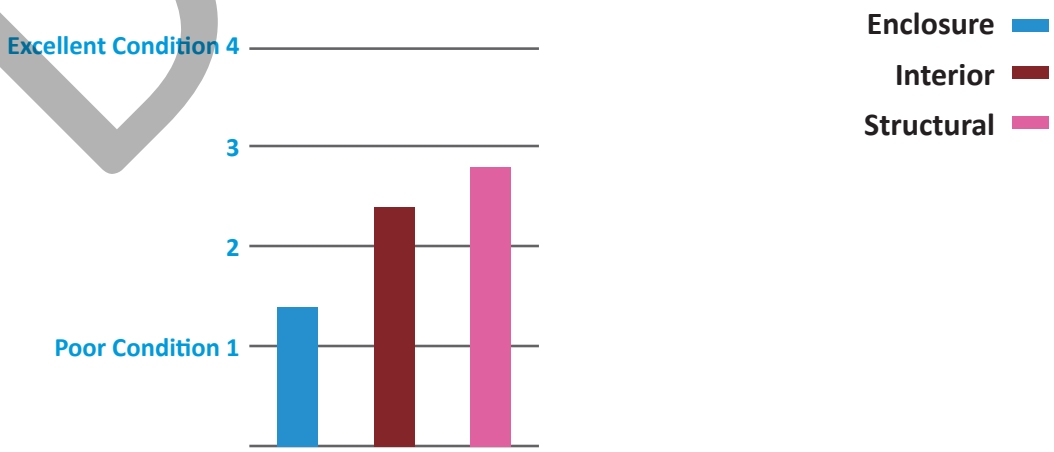
- Remove leaves and debris from downspouts and gutters. Repair or replace any damaged downspouts and rusted boots. Flush storm system.
- Replace damaged exterior doors and rusted door frames.
- Remove and replace sealant at windows
- Replace damaged window screens
- Replace damaged gaskets and weatherstripping at exterior doors.
- Scrape and repaint wood window frames. Replace rotted frames to match existing.
- Remove mold and mildew from exterior foundation and brick
- Remove exposed wires. Cap and return to source.
- Scrape and refinish exterior overhang/soffits
- Provide cornerguards at all gypsum wall corners
- Replace all damaged ceiling tiles
- Floor and wall base is maintained but past its useful life.
- Repair damage / holes at interior walls
- Replace Built-Up Roofing and repair all flashing.

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

- Repair cracked / damaged brick at exterior of the building. Repoint as needed.

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.



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

4

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 condition with visible signs of repair and some corrosion.
Heating System	Fair	Heating system piping is original to the building and observed to insulated, clean, and in fair condition.
Heating System Pumps	Fair	Heating system pumps were observed to be in fair condition.
A/C Roof-Top Units	Fair	Most split systems on roof were observed to be towards the end of their life, some units have been replaced with new heat pump systems.
Air Distribution / Ductwork	Good	Exposed ductwork was observed to be clean and in good condition. Diffusers were observed to require cleaning.
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 in good operational condition.

Heating system is served by cast iron mid-efficiency hot water boilers and pumps. The system is in fair condition and appears to be from 2009 (14 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 and wall mounted split air conditioners with washable dust filter. Some classrooms have portable air conditioners installed with washable dust filters. Operable windows provide natural ventilation.

Mechanical (continued...)

All classrooms have an exhaust air grille high on wall. Most have been obstructed with ACT ceiling installed. No flow was observed at grilles during survey.

An addition area was added with (8) upper level classrooms. These classrooms have perimeter radiation with operable windows and window air conditioner units. Operable windows provide natural ventilation.

All addition area classrooms have exhaust duct with gooseneck into room. Gravity exhaust ventilators are located on roof above.

Gymnasium ventilation is provided by 12.5 Ton roof top unit located on Admin area roof. Unit is comprised of 240 MBH gas fired 2 stage indirect heating unit, DX cooling, supply fan, outside air hood, and MERV-7 filters. Unit provides mixed outside air with supply air under all conditions.
Cafeteria has perimeter radiation with operable windows to provide natural ventilation

Administration area is served by split air handling unit located in attic. Unit is comprised of DX cooling coil, supply air fan, and MERV-7 filters. Unit does not provide ventilation air. Office areas have operable windows to provide natural ventilation air

Computer Lab area is served by split air handling unit located in attic. Unit is comprised of DX cooling coil, supply air fan, and MERV-7 filters. Unit does not provide ventilation air.

Media Center ventilation is provided by split air handling unit located in attic. Unit is comprised of DX cooling coil, supply air fan, outside air damper, and MERV-7 filters.

Controls are primarily direct digital controls with Building Management System. System controls operation and scheduling of all units expect general exhaust fans.

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	Good	Switchgear is Well Maintained and in Good Condition.
Power Distribution	Good	Majority of Distribution Equipment is in Good Condition.
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	Good	Service Equipment Grounding, Where Observed, Appeared Undamaged and in Good Condition.
Lightning Protection	N/A	There is No Lightning Protection System for the Building.

Power originates at a utility pole located on Maple Street at the front of the building, across from the main entrance. Secondary feeders run underground from a pole mounted 208V, 3-phase utility transformer and enter a main service disconnect switch located in the basement main electrical room.

Distribution gear is manufactured by Siemens and consists of a main switch and CT cabinet rated for 600A at 208Y/120V, 3-phase. The metering is arranged cold sequence with the meter mounted on a wall next to the main disconnect switch. The main switch and CT section feeds a 600A, 208/120V, 3-phase, 4-wire main distribution panel "MDP". Panel "MDP" contains branch circuit breakers that feed panels and equipment located throughout the building at 208/120V.

Branch circuit panelboards are mostly of recent vintage and in good condition. Branch circuit wiring is in EMT/ armored cable, where observed.

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

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

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", Piping Showing Signs of Rust
Fixtures	Good	Wall and Floor Mounted Toilets, Manual Flush Valves and Faucets
Domestic Cold Water Pipe	Fair	Corrosion Starting to Form on Copper Piping
Domestic Hot Water Pipe	Fair	Gas Fired Water Heater Appears in Fair Condition, Corrosion Starting to Form on the Piping
Sanitary & Vent Piping	Fair	Corrosion on Sanitary in Kitchen
Storm Piping	Fair	Pipe Fittings Dented in Gymnasium 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 building.
Natural Gas Piping	Fair	2" Service Size, Rust Forming on Piping
Irrigation	N/A	N/A

The water originates in the water service room in the underground basement of the building. The piping that makes up this water service appeared to be in fair condition as rust was beginning to form on the piping.

The water closets in this building are both floor mounted and wall hung and both types are made from a vitreous china and are equipped with manual flush valves. The urinals in this building are also both wall hung and floor mounted and are also equipped with manual flush valves. The lavatories in this building are all wall hung with there being two-bay pre-fabricated lavatory systems with sensor type faucets and also wall hung vitreous china lavatories with manual type faucets. The sinks in the classrooms and the cafeteria are made of stainless steel and have manual type faucets. All of the fixtures seen appeared to be in good condition with no signs of any major damage.

The domestic water piping seen in this building appeared to be in fair condition with corrosion being seen starting to form on the some of the piping near the water heater.

The domestic water in this building gets heated by the natural gas fired water heater located inside of the boiler

Plumbing (continued...)

room. This water heater is newer as it was built in 2016 and appears to be in fair condition with little signs of any major damage to the unit.

The majority of the sanitary piping seen in the building appeared to be in fair condition however, corrosion can be seen on the drainage piping in the kitchen, especially under the three bay sink used for dishwashing.

The storm piping in the building appeared to be in fair condition as multiple pipe fittings inside of the gymnasium were seen to be damaged. Roof drains and the piping connections to the roof drains appeared to be in fair condition.

The natural gas piping seen inside of the building appeared to be in fair condition with no signs of any major damage or corrosion

This building does not have any irrigation systems or piping.

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 4", Rust Covering Elbow
Backflow Preventer	Fair	Service and Testing Are Up to Date
Standpipe System	Good	Standpipe in Hallway
Sprinkler System	Fair	Wet and Dry System
Fire Department Connection	Fair	Post Mounted Siamese Connection. Rust Forming on Post Up to Head
Heads	Fair	Uprights, Pendants, Concealed Pendants, Uprights with Guards
Piping	Fair	Black Steel Piping, Escutcheon Not Connected To Wall In Some Places
Fire Pump	N/A	N/A
Booster Pumps	N/A	N/A

This building is fire protected by a 4" fire service entering the building in the basement of the school. This service is fair condition as rust is beginning to cover the elbow fitting where the service comes into the building and leads toward the backflow preventer.

The system's backflow preventer and fire protection risers appear to be in good condition with no damage seen on the risers. Service and testing appears to be up to date with testing records showing that the system was tested every year since 2016.

In the front of the building is the fire department connection which is a free-standing post-mounted Siamese type fire department connection. This seemed in fair condition as the post leading up to the connection head had rust covering this pipe.

There are upright type sprinkler heads with guards in the gymnasium of the building, there are exposed pendant sprinklers in the basement of the building and there are concealed pendants in the rest of the classrooms on the main and upper level of the school. It was noted that there were some guards missing from the upright sprinkler heads in the gym and some covers missing from the concealed pendant type sprinkler heads.

Fire Protection (continued...)

The black steel piping that spread the water throughout the building appeared to be in fair condition, however some of the pipe escutcheons that connect to the wall were falling off.

This building does not have any fire pumps or any booster pump in the fire protection system.

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 and Staff 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 and HID Exterior Building Mounted Wall Packs. Remote Emergency Battery Lights at Exit Doors.
Lighting Control	Fair	Occupancy Sensors with Manual Override.
Theatrical Lighting	N/A	N/A

Interior lighting fixtures consist mostly of 2'x2' surface mounted with prismatic lenses in main floor corridors and public spaces and 2'x2' recessed troffers with prismatic lenses in lower floor corridors and classrooms. Fixtures in main floor classrooms are 1'x4' surface mounted with wraparound style lenses. Fixtures in the Gymnasium are pendant mounted LED high-bays with wire-guards. All interior fixtures have been fitted 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 corridors, stairwells 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 and LED wall packs light the building exterior and parking areas. Remote dual-head emergency battery fixtures provide light for emergency egress.

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

There is no theatrical lighting system in the building.

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	Fair	System Appears in Fair Working Condition with No Reported Issues.
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 4010 series addressable fire alarm system control panel with voice evacuation. The control panel is located in the basement main electrical room with separate voice control panels in the gymnasium, that allow annunciation over the building's speaker/horn-strobe devices. A remote annunciator panel is located in the main entry vestibule.

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.

The Area of Rescue call system control panel is located in the main entrance vestibule with a call for assistance station located at the 2nd floor landing in Stair "A".

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	Fair	Minimal – Observed at Telephone Equipment Backboard Only.
Telephone Service Entrance	Fair	Fairly Well Maintained with No Visible Damage.
Data Horizontal Cabling	Good	Well Maintained with No Visible Damage
MDFs / IDFs	Good	Well Maintained with No Visible Damage
Pathways	Good	Well Maintained with No Visible Damage
Coaxial Cable	N/A	N/A

Telecommunications services originate at a utility pole located on Maple Street, across from the main 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 to be functioning properly and in fair condition.

The main data systems rack is located in a storage room on the main level. A small wall-mounted data rack on the second floor receives a single-mode fiber backbone cable from the main systems rack to serve data requirements for classrooms on that level. 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.

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	Functional and in Good Working Condition

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 the server 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 a dedicated HD display located in the Administration area. 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.

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 programmable timer 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.

There is an equipment rack in the Administration Office that functions connected to speakers throughout the building that functions as both a PA and stand-alone sound system. Rack Equipment is by Rauland.

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

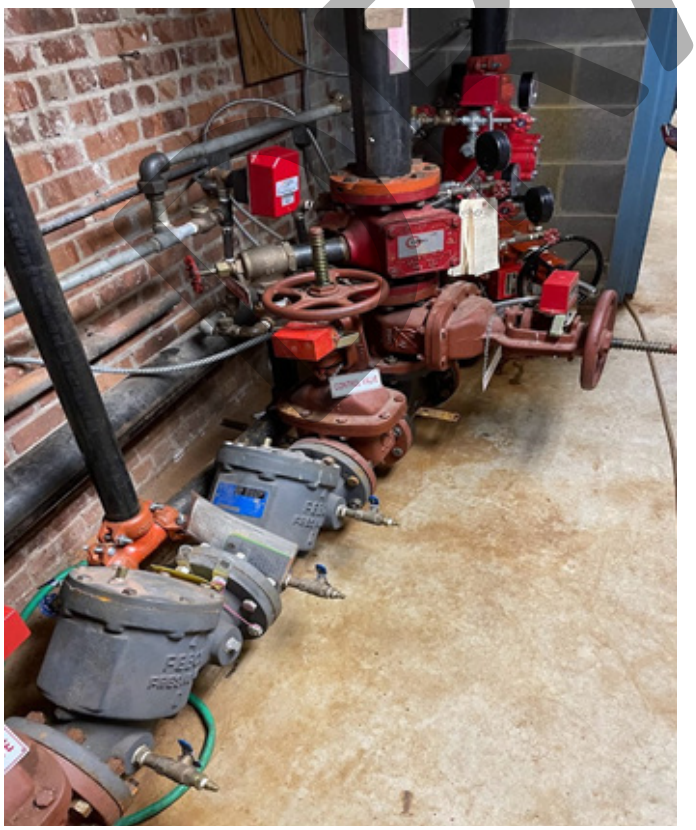
M/E/P/FP Survey Photographs

1. Location:

Basement

Description:

Domestic Water Service



2. Location:

Mechanical Room

Description:

Fire Service and Riser

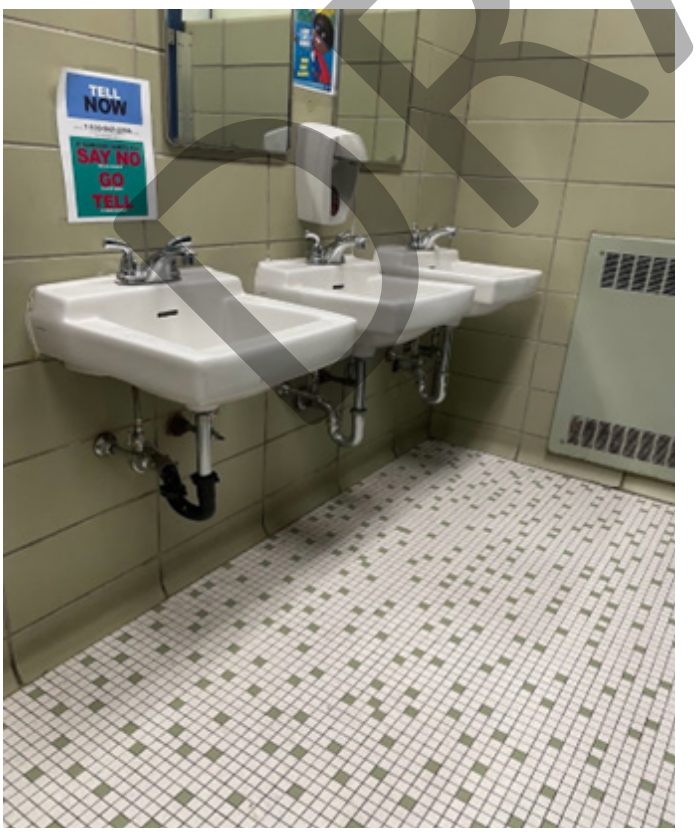
M/E/P/FP Survey Photographs

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:

Roof

Description:

Roof Top Kitchen Exhaust Fan

M/E/P/FP Survey Photographs

7. Location:

Roof

Description:

Split System Roof Top Condensing Units

8. Location:

Mechanical Room

Description:

Cast Iron Gas Fired Boilers

M/E/P/FP Survey Photographs

9. Location:

Classroom

Description:

Split System AC Unit in Classroom

10. Location:

Mechanical Room

Description:

Hydronic Pumping System

M/E/P/FP Survey Photographs

11. Location:

Building Exterior

Description:

Daikin Split AC Condensing Unit

12. Location:

Roof

Description:

Gymnasium Ventilation Roof Top Unit

M/E/P/FP Survey Photographs

13. Location:

Basement Main Electrical Room

Description:

Main Switch, CT and Distribution

14. Location:

Basement Main Electrical Room

Description:

Main Distribution Panel

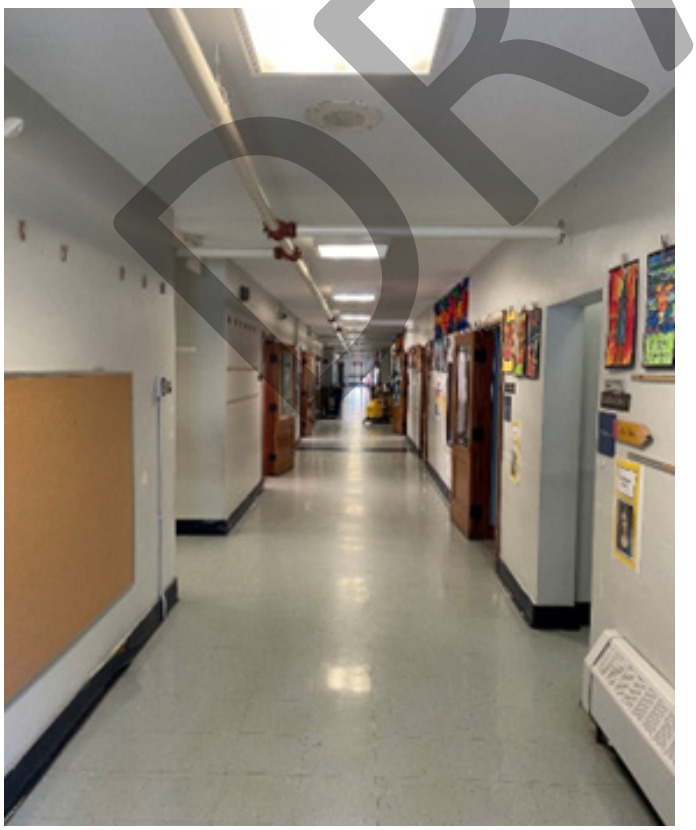
M/E/P/FP Survey Photographs

15. Location:

Main Level Data Closet

Description:

Branch Panelboard



16. Location:

Main Level

Description:

Typical Corridor Lighting

M/E/P/FP Survey Photographs

17. Location:

Main Level

Description:

Typical Classroom Lighting

18. Location:

Main Level

Description:

Typical Emergency Lighting Fixture

M/E/P/FP Survey Photographs

19. Location:

Basement Main Electrical Room

Description:

Fire Alarm Control Panel

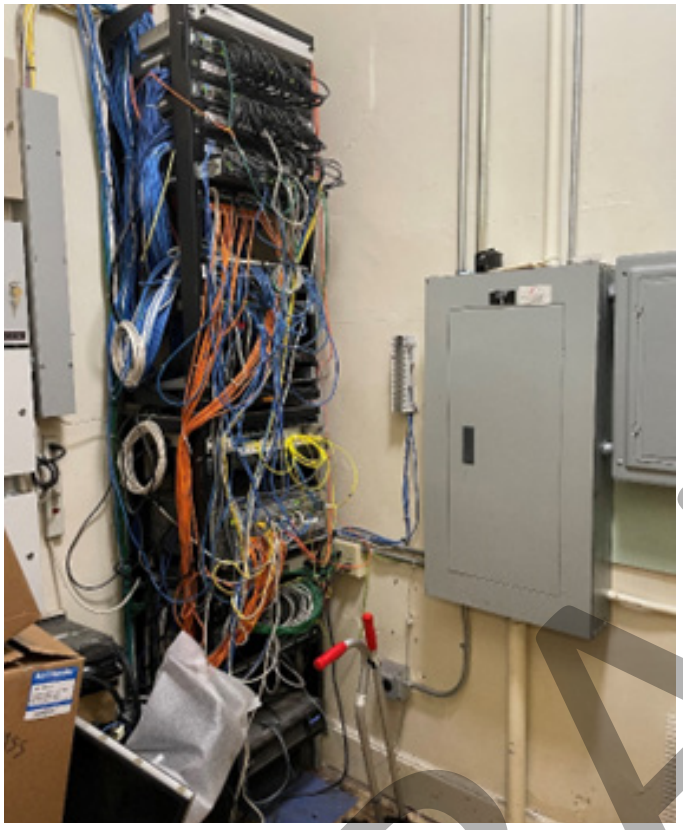
20. Location:

Main Entry Vestibule

Description:

Area of Refuge Control Panel

M/E/P/FP Survey Photographs



21. Location:

Main Level Data Closet

Description:

Data Systems Rack

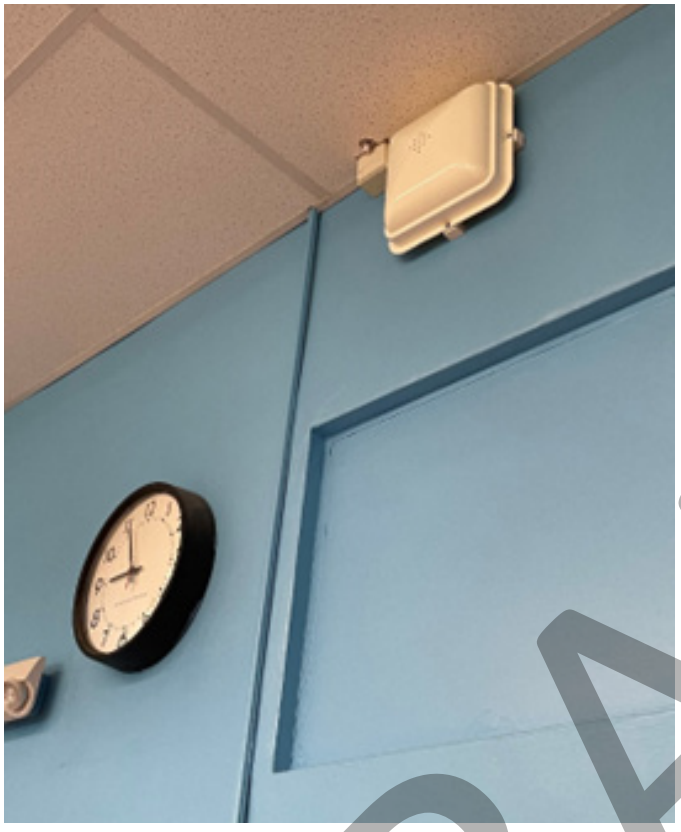
22. Location:

Main Level

Description:

Typical VoIP Wall Phone

M/E/P/FP Survey Photographs

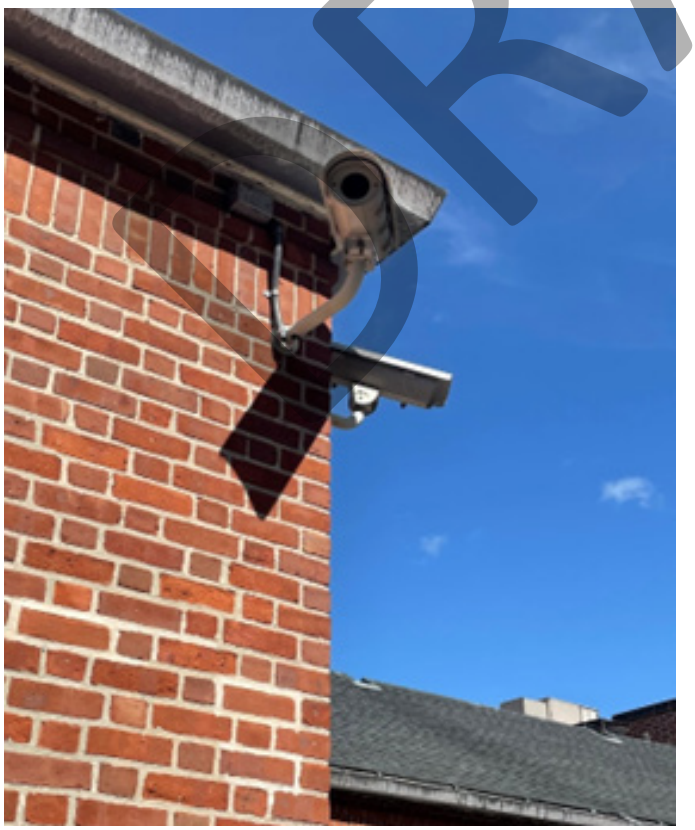


23. Location:

Classroom

Description:

Wireless Access Point



24. Location:

Building Exterior

Description:

Surveillance Cameras

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 (2) mid-efficiency hot water boilers. The boilers are 14 years old, and while not at the end of life, we would recommend replacing with high efficiency condensing boilers for increased energy savings.
- Hot water pumps are nearing end of life and are recommended to be replaced in kind.
- 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: The existing building exhaust diffusers within classrooms were observed to be obstructed by ceilings. System may be abandoned in place. We recommend a new exhaust system be provided with proper coordination to ceiling.
- Cooling: Classrooms are cooled from window ac units. Recommend replacement of window ac units with VRF system for heating and cooling in all classrooms areas.
- Controls: Recommend replacement of all controls with updated digital controls integrated to centralized building management system.
- Cafeteria unit is past its 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.

- Service distribution gear is in good condition. No improvements or repairs are required at this time. Expected service life is 20 years before replacement is necessary.
- Branch panelboards that are original to the building are in poor condition and in need of immediate replacement. Branch panelboards that were installed as part of more recent renovations and / or upgrades, should provide service for another 20 years before replacement is necessary.
- 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 a high-efficiency gas-fired 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.

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

- Fire service and associated piping is 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.

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

- No improvements or repairs are required at this time. Average life expectancy for fire alarm systems is 15 years. System equipment should be updated or replaced in the next 7-10 years to ensure system reliability.

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

- No improvements or repairs are required 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.

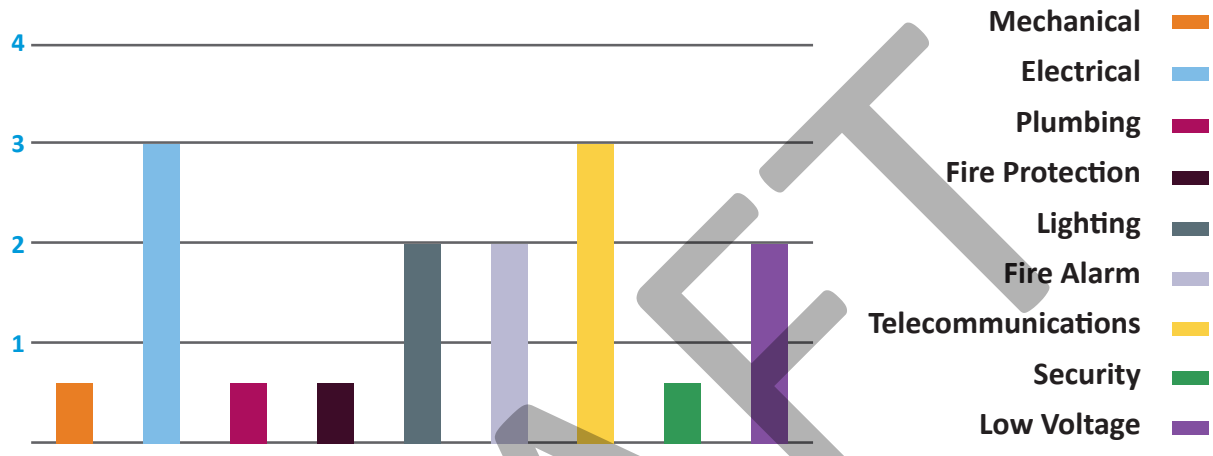
- Recommend a review of all access controlled doors and end-user operations be performed in the next 1-2 years, or as program needs dictate.
- Recommend a full system assessment be performed to verify all devices are connected and tested for proper operation in the next 1-2 years, or as program needs 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.

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

- No improvements or repairs 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)

Section 5 : Code Survey

5

IBC Code Survey

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

Maple Street 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	1925, 1965 Addition; 1987 Alterations; 2008 Alterations
Type of Construction	IIIB (Original), IIB (Addition)
% Open Perimeter	89%
Fire Suppression	Complete NFPA13 System
Compartmentalization	< 30,000 sf
Fire Resistance Rating of Vertical Opening Enclosures	1 Hour
Automatic Alarms	Installed
Automatic Alarms Type	Smoke Detectors
Smoke Control	None
Smoke Control Type	N/A
Mixed Use	Separated Use (Education, Assembly)
Dead End	<20'
Maximum Exit Access Travel Distance	<200'
Number of Stories	3 Stories
Floor Area(s)	13,375 sf (Lower), 16,982 sf (Main), 9,563 sf (Upper)
Reduction of Area Limitations	None
Corridor Wall Rating	30 Min Smoke Rating, Fire Rating not required due to NFPA 13 Sprinkler
Door Closers	All classrooms, all exit doors and doors along egress route
Adequate Exit Routes	Several egress routes are not accessible and do not provide areas of refuge
Elevator Controls	N/A
Emergency Lights	Battery Powered Fixtures in utility rooms, staff areas, and along entire path 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. Maple Street 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	1925
Date of Addition(s)	1965 Addition; 1987 Alterations; 2008 Alterations
Primary Occupancy	Existing Education
Secondary Occupancy	N/A
Mixed Use	Existing Assembly

Fire Regulations	Description	Conforms (Y/N)
Stair Separation	1 Hour (Enclosed)	Yes
Corridor Separation	30 Min. Smoke Rating	Yes
High Hazard Occupancy	N/A	N/A
Doors		
Width	32" Minimum Clear Width	Yes
Swing Direction	In Direction of Egress unless serving < 50 Persons	Yes
Locks / Latches	Operable from direction of Egress	Yes
Exit Hardware	Panic Hardware at Exit Doors	Yes
Closers	Exits/Fire Doors/ All Classrooms	Yes
Stairs		
Classification	Existing	Yes
Width	42"	Yes
Riser	7"	Yes
Tread	11"	Yes
Guards	>30" tall, protected openings	Yes
Handrails	Do not extend 1'-0" past bottom of run	No
Enclosure	Unenclosed at basement level	No
Horizontal Exits	N/A	N/A
Ramps	N/A	N/A
Fire Escapes	N/A	N/A

NFPA Code Survey (continued...)

Means of Egress		
Occupant Load	-	Yes
Factor	20 Classrooms, 7/15 Assembly	Yes
Area per Floor	13,375 sf (Lower), 16,982 sf (Main), 9,563 sf (Upper)	N/A
Occupants per Floor	375 (Lower), 617 (Main), 304 (Upper)	N/A
Exit Unit Widths	-	Yes
Number of Exits	9	Yes
Exit Location	-	Yes
Exits through Spaces	No	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 emergency light fixtures in utility and staff areas and along paths of egress	Yes
Exit Marking	Battery powered LED fixtures at all exits and along paths of egress, supplemented with low proximity exit signs	Yes
Fire Protection Features	Description	Conforms (Y/N)
Construction & Compartmentalization		
Construction - Minimum	III(200) and III(000)	Yes
Requirements	None	N/A
Compartmentalization	<30,000 sf	Yes
Flooring Openings Enclosed	1 Hour	No
Floor Openings Unenclosed	-	No
Concealed Spaces	N/A	N/A
Smoke Protection		
Smoke Barriers	30 Min Rated at Corridors	Yes
Smoke Doors	At smoke barriers	Yes
Smoke Dampers	Not observed	N/A
Penetrations Sealed	Not observed	N/A
Special Protection	N/A	N/A
Fire Rated Enclosure		

NFPA Code Survey (continued...)

Trash	N/A	N/A
Mixed Use	-	Yes
Corridors	30 Min. smoke rated	Yes
Sprinklers - Entire Building	Yes	Yes
Selected Hazards	N/A	N/A
Other		
Interior Finish	-	Yes
Corridors & Stairwells	-	No
Non-Conforming Locations	N/A	N/A
Sprinkler Protection	Description	Conforms (Y/N)
Sprinkler Service	Wet and Dry sprinkler system	Yes
Area Serviced	Whole Building	Yes
Pressure	115 PSI Static 95 PSI Residual	Yes
Alarm Valve Size	4”	Yes
Service Size	4” 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	Yes
Building Service & Fire Protection Equipment	Conforms (Y/N)
Utilities	Yes
Smoke Control	N/A
Elevators, Dumbwaiters & Vertical Conveyors	Accessible Lift
Rubbish Chutes, Incinerators & Laundry Chutes	N/A
Detection, Alarm & Communication Systems	Fire Alarm
Automatic Sprinklers	Yes

Code Survey Recommendations

The code components of Maple Street School are considered not 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.

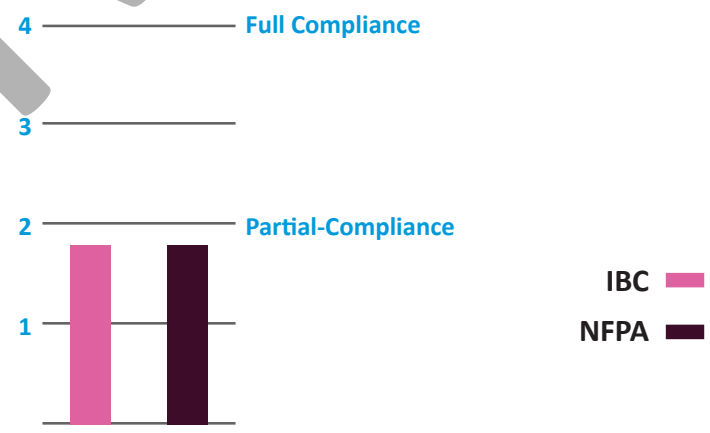
- Install door closers on all classroom doors
- Maintain clear path of egress
- Resolve areas where corridor clear space is intruded on. Low head clearance in several areas due to pipes or sprinkler heads.
- All crawl space openings need to be protected w/ rated door openings.
- Door thresholds, door landings, exit stair treads and risers from the lower level at the original building.

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

- Stairs leading to basement from main level are not enclosed at the basement level. Rating is not continuous.

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

6

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 Maple Street School was completed after 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 Maple Street School failed to meet. Plan and photograph references, notes, and whether or not the item is readily achievable are included.

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
6	0	403.5.1	Site Access Route	Walking Surfaces: Changes in Level: Clear Width at Turn	Where the accessible route makes a 180 degree turn around an element which is less than 48 inches wide, clear width shall be 42 inches minimum approaching the turn, 48 inches minimum at the turn and 42 inches minimum leaving the turn. EXCEPTION: Where the clear width at the turn is 60 inches minimum compliance with 403.5.2 shall not be required.	Y	F	31			
11	0	403.3	Site Access Route	Walking Surfaces: Slope	The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48	Y	F	34			
14		303.4	Site Access Route	Changes in Level: Ramps	Changes in level greater than ½ inch (13 mm) in height shall be ramped, and shall comply with 405 or 406	Y	F	31			
15		502	Accessible Parking	General	Accessible car and van parking spaces shall comply with Section 502	Y	F	38		No Van Accessible	
16	0	502.2	Accessible Parking	Vehicle Spaces	Car parking spaces shall be 96 inches minimum in width. Van parking spaces shall be 132 inches minimum in width. Car and Van parking spaces shall be marked to define the width. EXCEPTION: Van parking spaces shall be permitted to be 96 inches minimum in width where the access aisle is 96 inches minimum in width.	Y	F	38		No Van Accessible	
32		404.1	Entrances	Doors, Doorways	Doors and doorways that are part of an accessible route shall comply with Section 404.	Y	F	33			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
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	19			
35		303.2	Access Route Interior	Changes in Level: Vertical	Changes in level of ¼ inch (6.4 mm) maximum in height shall be permitted to be vertical.	Y	F	27			
37		304.4	Access Route Interior	Turning Space: Door Swing	Unless otherwise specified, doors shall be permitted to swing into turning spaces	Y	F	5, 23, 26			
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	26			
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	8, 15			
40		307.4	Access Route Interior	Protruding Objects: Vertical Clearance	Vertical clearance shall be 80 inches (2030 mm) minimum. Rails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm). The leading edge of such rails or barrier shall be located 27 inches (685 mm) maximum above the finish floor. EXCEPTION: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor.	Y	F	8, 15			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
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	2			
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	4, 25			
44		403.3	Access Route Interior	Walking Surfaces: Slope	The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48	Y	F	18, 29			
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) minimumin length and 36 inches (915mm) minimum in width.	Y	F	12, 17, 26			
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	14, 18, 19, 29, 31, 33, 34, 37			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
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	14, 33			
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	33, 37			
78		505.3	Handrails	Handrails: Continuity	Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs or ramps shall be continuous between flights or runs. EXCEPTION: Handrails shall not be required to be continuous in aisles serving seating where handrails are discontinuous to provide access to seating and to permit crossovers within the aisles.	Y	F	33, 37			
86		505.10	Handrails	Handrails: Extensions	Handrail shall extend beyond and in the same direction of stair flights and ramp runs in accordance with 505.10. EXCEPTIONS: 1. Continuous handrails at the inside turn of stairs and ramps.2. Handrail extensions are not required in aisles serving seating where the handrails are discontinuous to provide access to seating and to permit crossovers within aisles. 3. In alterations, full extensions of handrails shall not be required where such extensions would be hazardous due to plan configuration.	Y	F	33			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
87		505.10.2	Handrails	Handrails: Top Extension at Stairs	At the top of a stair flight, Handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the landing nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.	Y	F	33			
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	4, 5, 23, 25, 26, 27			
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	17, 25, 26, 27			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
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	5, 17, 23, 25, 26			
121		404.2.4	Doors	Thresholds	If provided, thresholds at doorways shall be ½ inch (13 mm) maximum in height. Raised thresholds and changes in level at doorways shall comply with 302 and 303. EXCEPTION: An existing or altered thresholds shall be permitted to be ¾ inch maximum in height provided that the threshold has a beveled edge on each side with a maximum slope of 1:2 for the height exceeding 1/4inch.	Y	F	27, 31			
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	4, 25			
128		602.1	Drinking Fountains	General	Accessible drinking fountains shall comply with 307 and 602	Y	F	7			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
129		602.2, 305, 306	Drinking Fountains	Clear Floor Space	A clear floor space complying with Section 305, positioned for a forward approach to the drinking fountain, shall be provided. Knee and toe space complying with Section 306 shall be provided. The clear floor space shall be centered on the drinking fountain. EXCEPTIONS: 1. Drinking fountains for standing persons. 2. Drinking fountains primarily for children's use shall be permitted where the spout outlet is 30 inches maximum above the floor, a parallel approach complying with Section 305 is provided and the clear floor space is centered on the drinking fountain.	Y	F	7			
130		602.4	Drinking Fountains	Spout Height	Spout outlets of wheelchair accessible drinking fountains shall be 36 inches maximum above the floor. Spout outlets of drinking fountains for standing persons shall be 38 inches minimum and 43 inches maximum above the floor.	Y	F	7			
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	22, 26			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
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	22, 26			
137		604.9.1	Toilet Compartments	General	Wheelchair accessible toilet compartments shall comply with 604.9.	Y	F	22			
138		604.9.2.1	Toilet Compartments	Wheelchair Accessible Compartments: Size	Toilet compartments shall comply with Section 604.9.2.1 or 604.9.2.2 as applicable.	Y	F	39			
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	39			
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	20			
145		605.3	Urinals	Clear Floor Space	A clear floor space complying with 305, positioned for forward approach shall be provided.	Y	F	20			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
150		603.4	Mirrors / Accessories	Coat Hooks and Shelves	Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be 40 inches minimum and 48 inches maximum above the floor.	Y	F	24, 25			
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 considerd 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 that 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	11, 13, 26			
152		606.3	Lavatories / Sinks	Height	The front of lavatories and sinks shall be 34 inches maximum above the floor, measured to the higher of the rim or counter surface. EXCEPTIONS: 1. 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 shall not be required to comply with 606.3.2.	Y	F	21			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
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	3, 21			
172		609.4	Grab Bars	Position of Grab Bars	Grab bars shall be installed in a horizontal position, 33 inches minimum and 36 inches maximum above the floor measured to the top of the gripping surface or shall be installed as required by Items 1 through 3. 1. The lower grab bar on the back wall of a bathtub shall comply with Section 607.4.1.1 or 607.4.2.1. 2. Vertical grab bars shall comply with Sections 604.5.1, 607.4.1.2.2, 607.4.2.2 and 608.3.1.2. 3. Grab bars at water closets primarily for children's use shall comply with Section 609.4.2.	Y	F	39			
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	2			
186		704.2.4	Telephones	Wheelchair Accessible Telephones: Cord Length	The telephone handset cord shall be 29 inches minimum in length.	Y	F	2			
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 viaual and raised characters, or two separate signs, one with visual, and one with raised characters, shall be provided.	Y	F	6, 16, 25, 27, 28, 33, 35			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/ Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
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	25, 28			
193		703.3	Signage	Raised Characters	Raised characters shall comply with 703.3 and shall be duplicated in braille complying with 703.4. 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. EXCEPTION: 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.	Y	F	35			

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 wiyhin a message shall be 135 percent minimum and 170 percent maximum of the raised character height.	Y	F	35			

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	16, 27			
199		305.3	Storage	Clear Floor Space	The clear floor space shall be 48 inches minimum in length and 30 inches minimum in width.	Y	F	24			
200		308	Storage	Reach Ranges	Reach ranges shall comply with Section 308.	Y	F	30			
201		309	Storage	Operable Parts	Operable parts required to be accessible shall comply with Section 309.	Y	F	25			
202		702.1	Alarms	General	Accessible audible and visible alarms and notification appliances shall be installed in accordance with NFPA 72 listed in Section 105.2.2, be powered by a commercial light and power source, be permanently connected to the wiring of the premises electric system, and be permanently installed.	Y	F	23			
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	18		Cafeteria - No Access	

Date Prepared: 8/3/2023

ADA Compliance Survey

Maple Street 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	30			
221		904.5	Cafeterias	Food Service Lines	Counters in food service lines shall comply with Section 904.5	Y	F	18			
222		904.5.1	Cafeterias	Self-Service Shelves and Dispensing Devices	Self-service shelves and dispensing devices for tableware, dishware, condiments, food and beverages shall comply with Section 308	Y	F	18			

ADA Survey Photographs

1. Location:

Main Office

Description:

Lower, accessible portion of countertop is not clear.

2. Location:

Principal Office

Description:

Operable components of telephone are located above the minimum 48”.

3. Location:

Boys Toilet Room

Description:

Plumbing beneath sinks is uninsulated. Typical at most toilet room locations.

ADA Survey Photographs

4. Location:

Classroom

Description:

Door hardware for door leading to coat storage requires tight gripping to operate.

5. Location:

Classroom

Description:

Latch side clearance on Pull side of door does not meet minimum requirement of 18”

6. Location:

Corridor

Description:

Signage is located in an inaccessible area, does not have 18” of clear width centered on the signage.

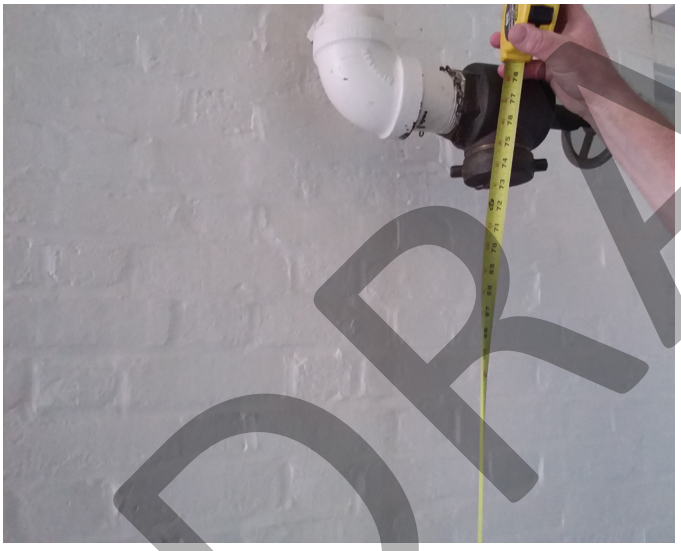
ADA Survey Photographs

7. Location:

Corridor

Description:

Drinking fountain does not have clear width or height required to pull under.



8. Location:

Corridor

Description:

Pipe extends below the maximum of 80” above floor level, presenting protruding object at potential head level.

9. Location:

Gymnasium

Description:

Accessible lift is not reviewable. Lift must be operable and have proper clearances.

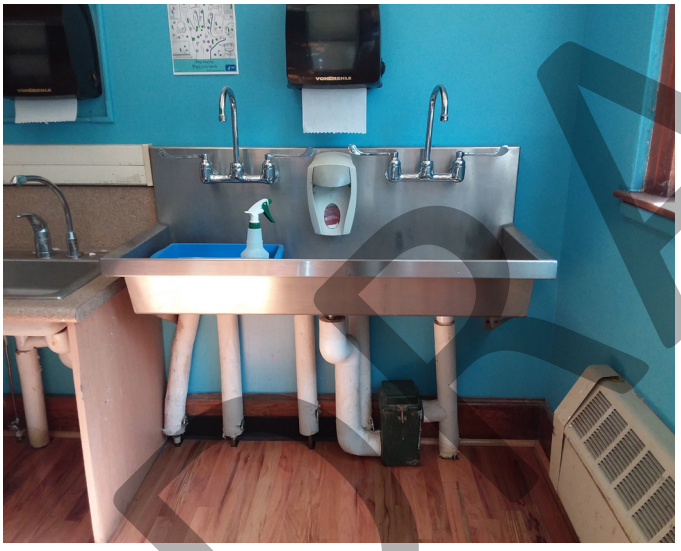
ADA Survey Photographs

10. Location:

Girls Toilet Room

Description:

Accessible bench does not meet depth requirement of 24”.



11. Location:

Classroom

Description:

Proper toe clearance is not achieved by this accessible sink.

12. Location:

Classroom

Description:

Corridors within this smaller classroom wing do not meet required clear distance. Doors and Openings do not meet standards either.

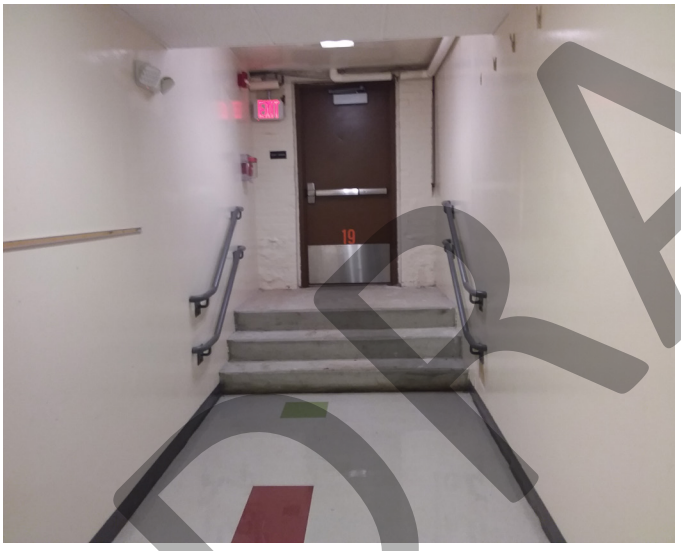
ADA Survey Photographs

13. Location:

Nurse Toilet Room

Description:

The floor mounted cabinet unit heater impedes the front approach to the sink.

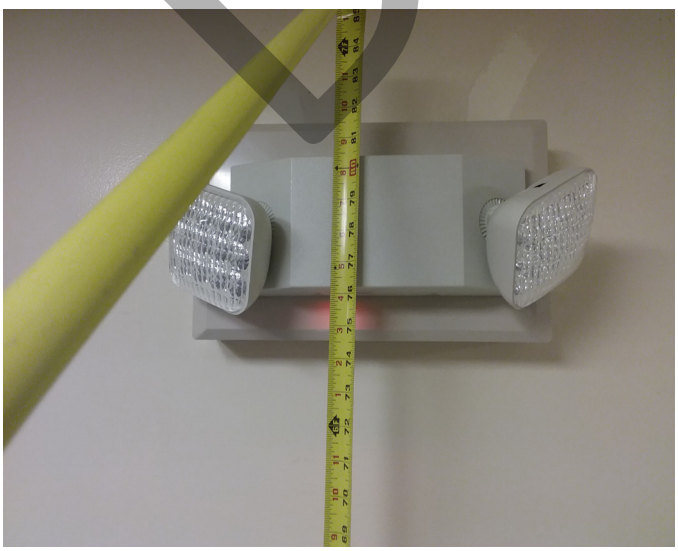


14. Location:

Lower Level Corridor

Description:

All exits from this level requires traversing multiple stairs. No area of refuge provided.



15. Location:

Lower Level Corridor

Description:

Emergency lighting proturdes greater than 4” into travel path and sits lower than the required 80” above the floor level.

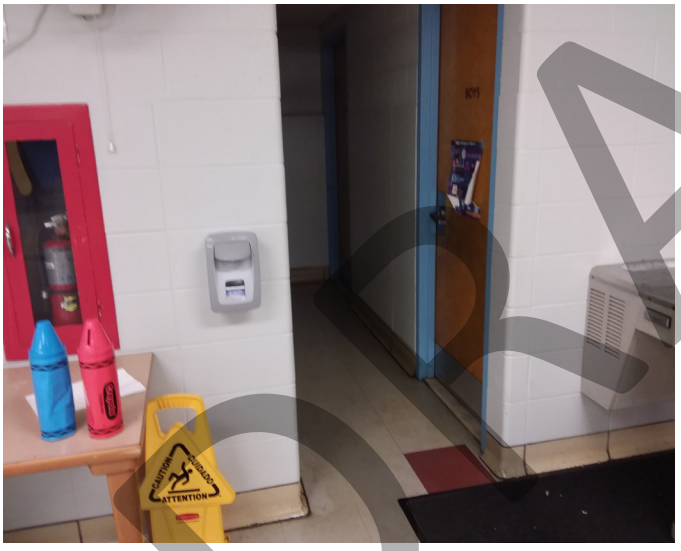
ADA Survey Photographs

16. Location:

Cafeteria

Description:

Signage does not have braille characters.



17. Location:

Cafeteria - Toilet Rooms

Description:

Improper signage to indicate toilet rooms. The clear width of hallway and door openings do not allow access.

18. Location:

Cafeteria

Description:

Only method of accessing the cafeteria from within facility is not accessible.

ADA Survey Photographs

19. Location:

Main / Visitors Entrance

Description:

Stairs to the Main Office, Principal's Office, Main Corridor. The mat in the lobby is not fixed.

20. Location:

Boys Toilet Room

Description:

Urinals are non compliant.

21. Location:

Boys Toilet Room

Description:

The sinks are non compliant.

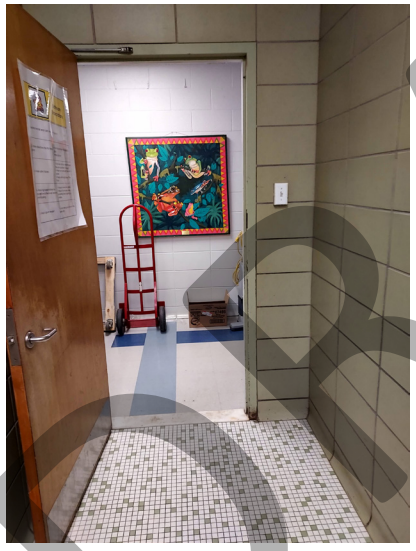
ADA Survey Photographs

22. Location:

Boys Toilet Room

Description:

The toilet stalls are non compliant.

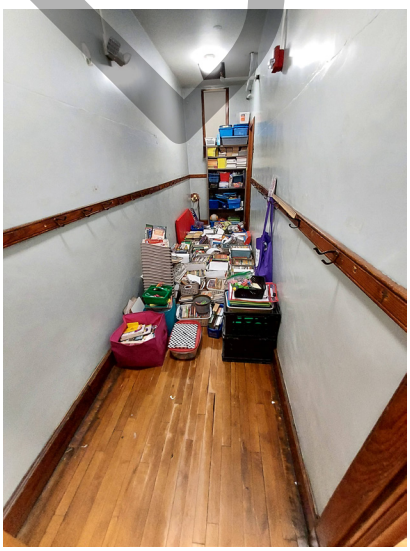


23. Location:

Boys Toilet Room

Description:

The clearance at the pull side of the door is non compliant



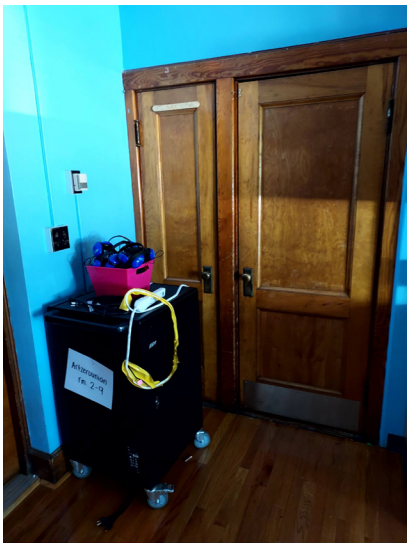
24. Location:

Classroom - Coat Room

Description:

The coat room is not accessible due to the doors to the rooms.

ADA Survey Photographs



25. Location:

Classroom - Closet Doors

Description:

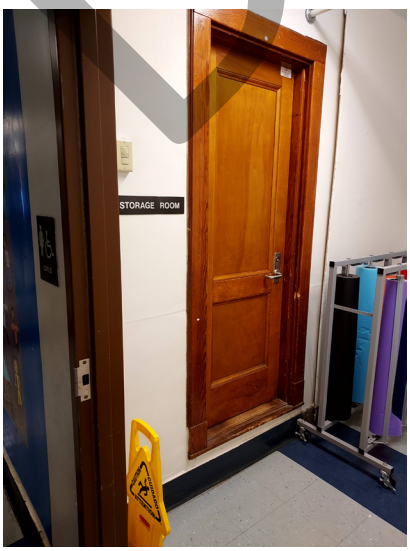
The door width and door hardware are non compliant

26. Location:

Principals Office

Description:

The bathroom is not accessible.



27. Location:

Storage Room

Description:

The door threshold, width and hardware are non compliant

ADA Survey Photographs

28. Location:

Gym

Description:

The doors located off the Gymnasium are not labeled. One is possibly the Physical Ed Office.

29. Location:

Cafeteria Exit

Description:

The updated exit stairway does not provide the Cafeteria with an accessible exit.

30. Location:

Library

Description:

The check out desk needs to be dedicated for that purpose. The storage shelves are not all accessible. A dedicated seating and work space area is not included.

ADA Survey Photographs

31. Location:

Exterior - Corridor Exit

Description:

Height of transition from landing to grade is greater than 3/4”.

32. Location:

Site - Playground Access

Description:

Ramp leading to playground exceeds maximum length. Does not satisfy landing requirements at change in direction.

33. Location:

Site - Main / Visitors Entrance

Description:

Main Entrance does not have signage indicating closest accessible entrance. Accessible parking, loading zone or drop off area is not close to this entrance. See Photo #19 for vestibule.

ADA Survey Photographs

34. Location:

Bus Loading Zone

Description:

Access from the bus drop to the accessible entrance is non compliant. Accessible parking, loading zone or drop off area is not close to the main entrance.

35. Location:

South Entrance

Description:

The signage directs visitors to the Main / Visitors Entrance which is not accessible.

36. Location:

North Side off Union Street

Description:

This accessible ramp leads to the Kitchen service area.

ADA Survey Photographs

37. Location:

Site Stair

Description:

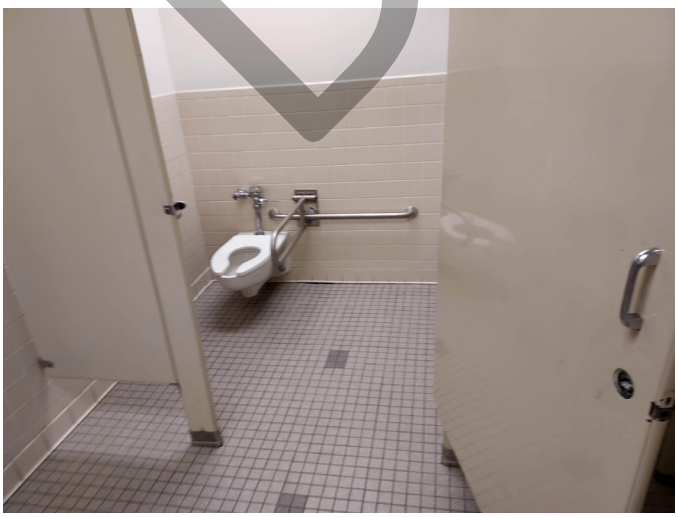
Stair provides access up and around building perimeter. The lack of handrails and distance between handrails do not comply.

38. Location:

Accessible Parking Space

Description:

The only accessible parking space for the building. The space is located at the back of the building, signage to find this space is lacking. A van accessible, loading zone or drop off area are not available.



39. Location:

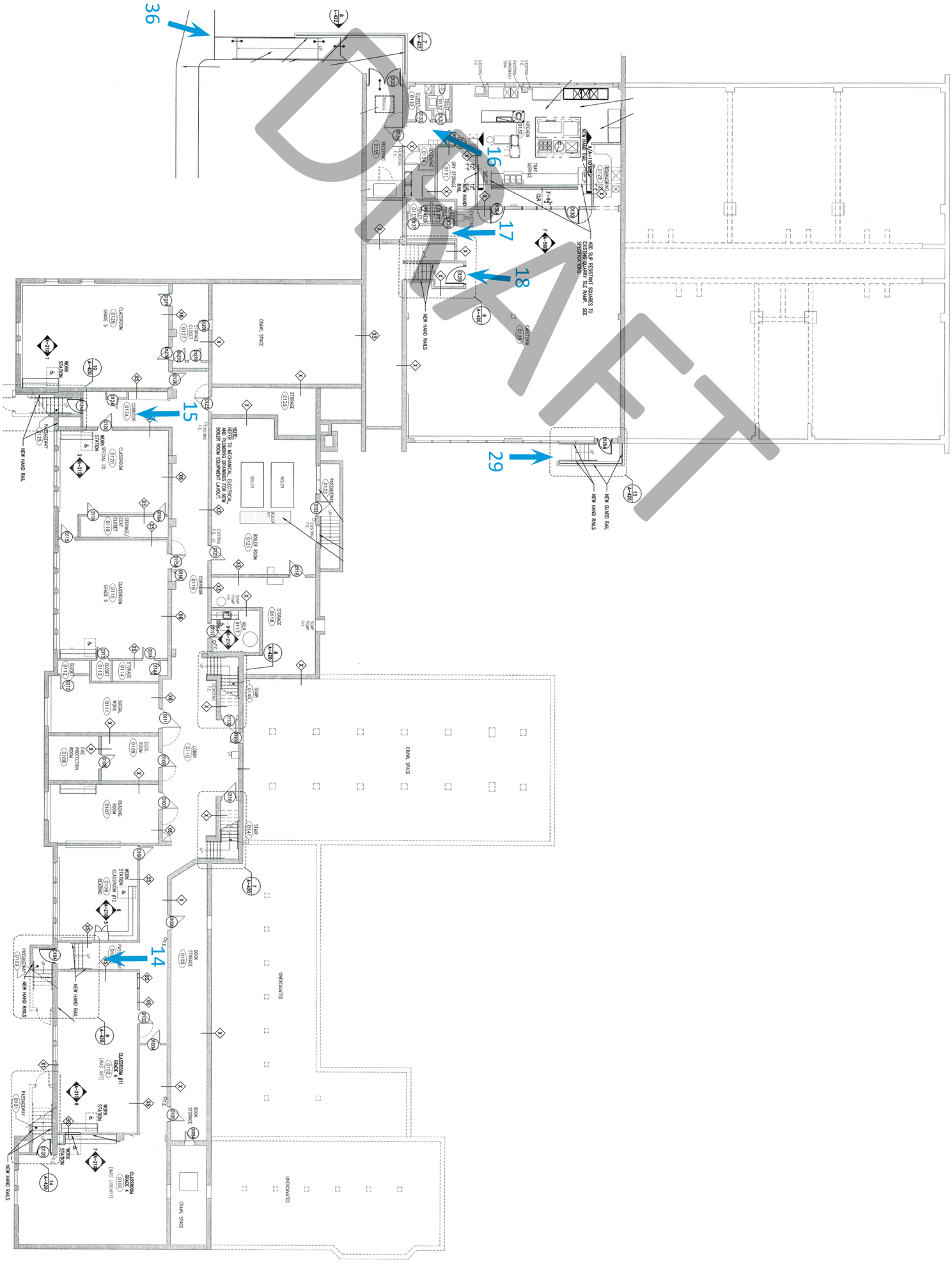
Accessible toilet stall

Description:

The stall door does not have the required pulls. The grab bar at the back wall is non-compliant, the swing down grab bar is n longer required.

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.



FRIAR

Maple Street School

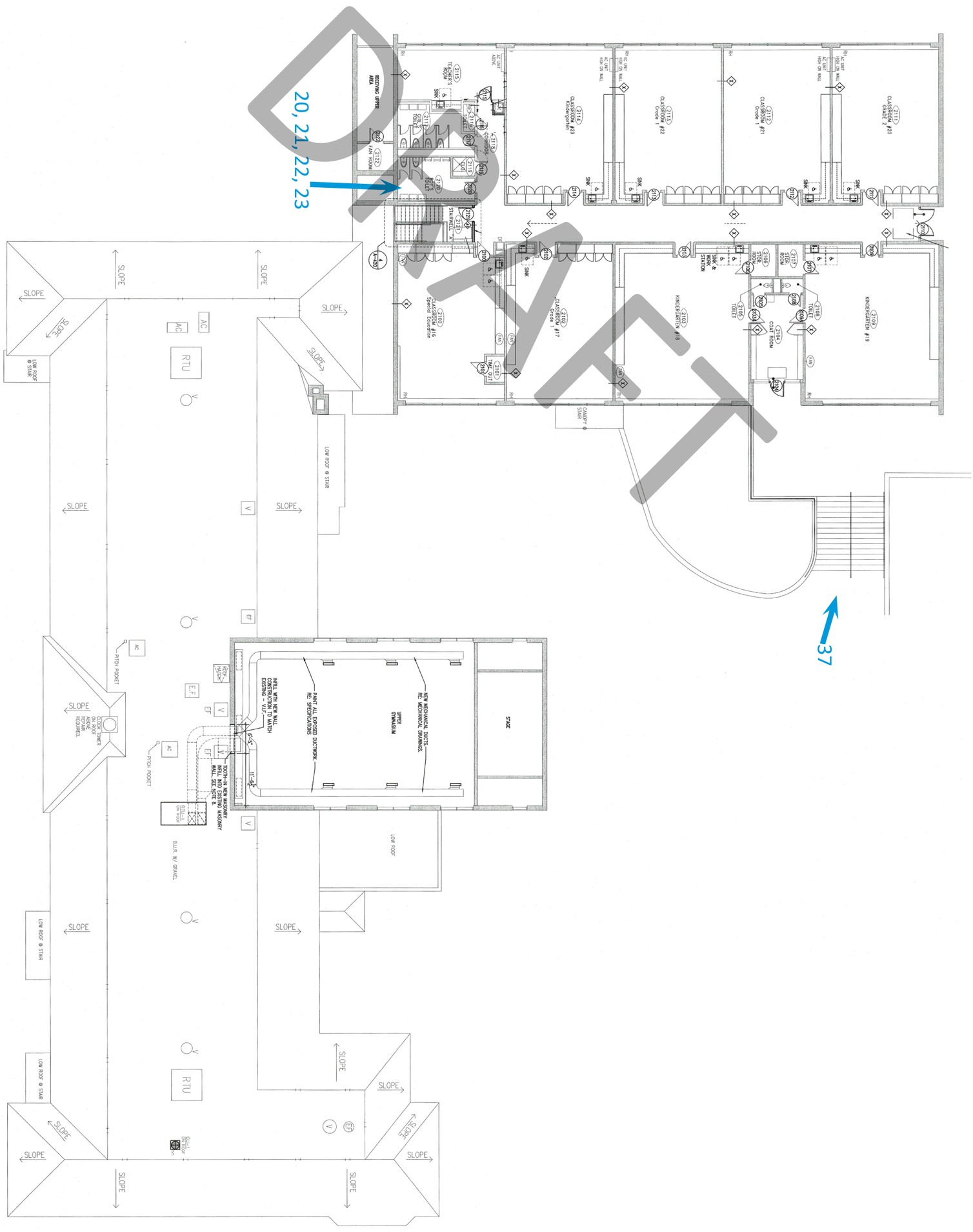
Lower Level Plan

ADA Survey

Maple Street School

Main Level Plan

FRIAR



Maple Street School

Upper Level Plan

ADA Survey

ADA Survey

Maple Street School

Site Plan

FRIAR

ADA Survey Recommendations

Maple Street 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. Maple Street School fails to meet many of these requirements, evident in the "ADA Compliance Survey".

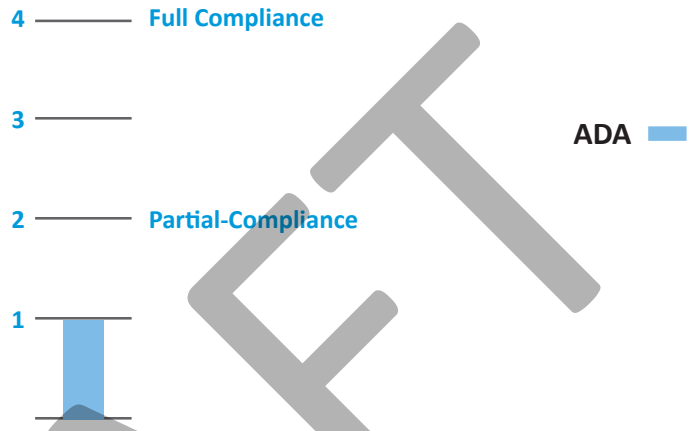
The building was evaluated based on a review of existing documentation, field verification of existing space usage and discussions with building staff to confirm existing space allocation and usage.

The work recommended to address ADA compliance issues includes:

- The main entrance for this building is not accessible. Implement signage at all non-accessible entrances pointing towards the nearest accessible entrance.
- Main lobby desk was designed with accessible counter top in mind, but mechanically attached monitors are positioned at this location; remove these mechanically attached monitors to provide the required 36" of accessible counter space.
- Relocate telephones so that all operable components are located below a maximum of 48" above the floor.
- Insulate all exposed plumbing at sinks intended to be used as accessible sinks.
- Modify door hardware for coat storage rooms to remove knob based hardware. Replace with hardware that is operable without tight gripping or rotating of the wrist.
- Modify existing door locations to ensure that proper clear distance is given along all accessible routes. Multiple locations within the facility do not have proper clear distance on latch side of door in pull side approaches.
- Update all non-compliant door hardware.
- Update all toilet rooms currently not on an accessible level.
- Relocate existing signage to provide 18"x18" clear space centered on the signage.
- Replace any signage in the building that does not meet accessible requirements. In corridors signage must be placed on the latch side of doors, have contrasting text and background colors, and have braille characters. Almost all signage on the lower floor does not meet these requirements.
- Provide the appropriate amount of accessible drinking fountains based on the population of the school.
- Provide wing walls at existing drinking fountains that are not recessed in a wall cavity.
- Provide floor mounted railings surrounding elements in corridors that protrude below 80" above the floor level.
- Modify existing benches in Toilet Rooms to meet the 24" depth requirements.
- Install new elevator/lift to provide accessible route to both the cafeteria and lower & upper educational wings. Currently there is no accessible route within the facility to these critical program spaces. Accessible exiting will also be required after installing access to these levels.
- Provide an accessible exterior route complete with signage, van accessible space, bus drop off, and a loading zone.
- Provide an elevator and wheelchair lifts to provide full accessibility to all portions of the building.

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.



Section 7 : Site Survey

7

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

Maple Street School

Plan Drawings	2008 Alterations
Photos	2023 Survey
Date Built	1925
Site / Civil & Landscape Architect	Diversified Technology Consultants & Ferrero Hixon Associates (2008 Alterations)
Date(s) Additions	1965 Addition; 1987 Alterations; 2008 Alterations
Zone	NR-10
Gross Area (site)	2.7261 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	Concrete	Good
Striping	Yes	Fair
Signage	Yes	Fair
Walkways		
Primary Surface	Concrete, Asphalt	Fair
Curbs	Concrete	Good
Signage	Yes	Good
Handicap Access	Yes	Good
Parking		
Total Spaces	6 - Street Parking along Maple Street	Fair
Designated Handicap Spaces	1	Fair
Primary Surface	Bituminous	Good
Curbs	Concrete / Bituminous	Good
Striping	Yes	Good
Signage	Minimal	Fair
Fields/Play Areas		
Field(s)	Grass	Fair
Play Area(s)	Bituminous	Fair
Play Scape(s)	Mulch / Rubberized Material	Fair
Planting/Features		
Plant Beds	Yes	Good
Trees/Shrubs	Yes, Various Types	Good
Special Features	Flag Pole with Stone Pavers	Good

Service Drive/ Loading Area		
Primary Surface	Bituminous / Concrete	Fair
Curbs	Bituminous / Concrete	Good
Striping	Yes	Good
Signage	Minimal	Fair

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

Item	Summary
Site Lighting	Only exterior wall mounted fixtures were seen at the time of the survey. See MEP Survey for additional utility information.
Driveways/Walkways	The driveway was in good condition but lacked in directional indicators. The southeast paved area has one handicap parking spot but is also used as additional play area. The concrete stair leading from the upper classroom wing and the play area needs to be replaced due to crumbling concrete stair treads. The walkways were a variety of bituminous and concrete. The walkway leading down to the Kitchen entrance needs to be replaced.
Parking	The main drive way onto the site is located to the south of the building. Street parking is located at the west of the building on Maple Street. There is one handicap parking space on the east side of the building adjacent to paved play area. Additional parking was found across the street on a separate site.
Topography	The site slopes up from Maple Street to the building. The rear of the building has a retaining wall and exterior stair that leads down to a paved play area. There is a retaining wall along the main entry drive. The play fields and playscape are above the retaining wall.
Drainage	Drainage is dispersed throughout the site and in general needs to be cleaned of debris.
Field/Play Areas	There are soccer, basketball and baseball fields to the south end of the building. A metal playscape is located adjacent to the grass fields. A paved play area on the east side of the building is indicated by markings on the pavement.
Plantings	There are various plantings along Maple and Union Street.
Service Area	There are a few areas that appear to be service areas but there is no signage indicating such. Bollards block off an area at the east of the building. A ramp leads down to a door on the east side of the building.
Special Features	At the main entrance to the building there is a small area with stone pavers and flag pole.

Site Survey Photographs

1. Location:

West Elevation

Description:

Example of on site drainage

2. Location:

North Elevation

Description:

Signage along Union Street is faded

3. Location:

North Elevation

Description:

Exterior Ramp leading to Kitchen. The concrete finish is worn and the grass area has overtaken the path. Grate for drainage needs to be cleaned out.

Site Survey Photographs

4. Location:

East Drive

Description:

Drain clogged with leave and debris.

5. Location:

South Elevation - Exterior Stair

Description:

Exterior concrete stair with metal handrail. Handrail finish is faded. See ADA report for additional information.

6. Location:

South Elevation - Exterior Stair

Description:

Concrete tread severely damaged.

Site Survey Photographs

7. Location:

Southeast Play Area

Description:

Vegetation is overtaking the metal fencing.

8. Location:

South Elevation - Exterior Stair

Description:

Stair leading to the Cafeteria. Areas where old posts were need to be infilled. The finish on the concrete face is falling away.

9. Location:

Southeast Play Area

Description:

Wooden picnic table is damage and needs to be repaired or replaced.

Site Survey Photographs

10. Location:

South Fields

Description:

Bituminous sloped area leading to fields. No signage or barriers to stop vehicles from entering the area

11. Location:

South Playscape

Description:

Combination of mulch and rubberized surface at playscape

12. Location:

South Fields

Description:

Signage letter is faded.

Site Survey Photographs

13. Location:

Entry Drive

Description:

Limited signage and no directional markings on the ground.

14. Location:

Maple Street

Description:

Limited parking along Maple Street. Parking is across the street at 166 Union Street - see 166 Union Street report for additional parking information.

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.

Site Survey

Maple Street School

Site Plan

FRIAR

Site Recommendations

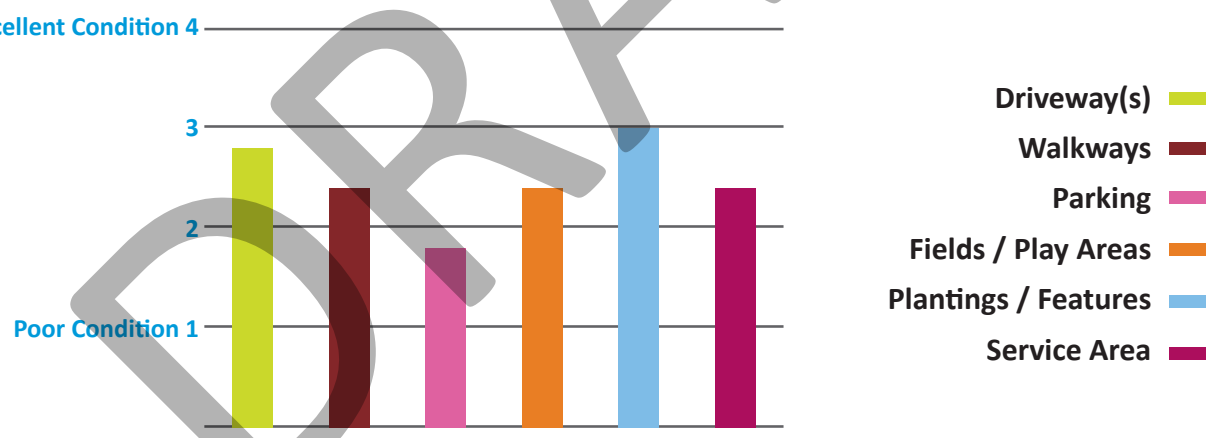
The site components of Maple Street School are in fair condition.

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

- Replace faded signage
- Pull back overgrown walkway at Kitchen service entrance and repave walkway. Provide signage to clearly indicate service entrance(s).
- Clean out drains throughout the site and replace as needed
- Repair/replace crumbling concrete stairs adjacent to southeast play area
- Replace wooden picnic table
- Cut back vegetation overgrowth
- Provide signage and barrier at South field play area
- Provide directional signage at main entry drive
- Provide signage indicating additional parking across the street

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.



Notes:

- Ratings range from 1 (poor condition) to 4 (excellent condition)
- Please refer to MEP survey for complete utility prioritization.

Section 8 : Opinion of Probable Costs

8

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 Maple Street School.

The estimate of work required at Maple Street 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

Section 9 : Appendix

9

Appendix

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

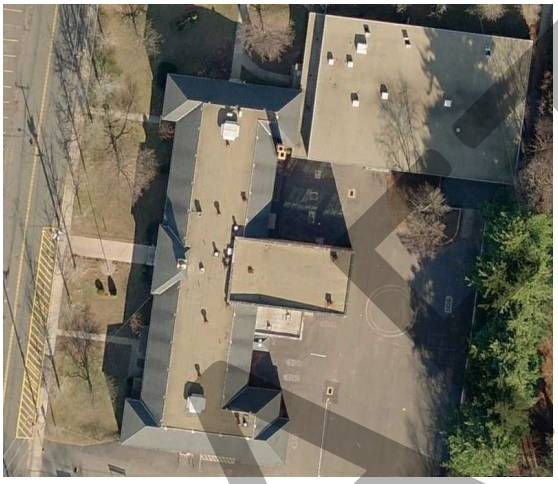
This appendix includes the following items:

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

Facility Summary

Client: Vernon Public School District

Facility: Maple Street School



Facility Data

Address 1	20 Maple Street
City	Vernon
State	Connecticut
ZIP	06066
Type of Facility	School
Square Footage	29,425
Contact Person	Mr. Mark Rizzo

Asset Information

Name	Date Installed	Square Footage	Roof Access
Low Slope Section's	Unknown	20,350	Internal Roof Hatch

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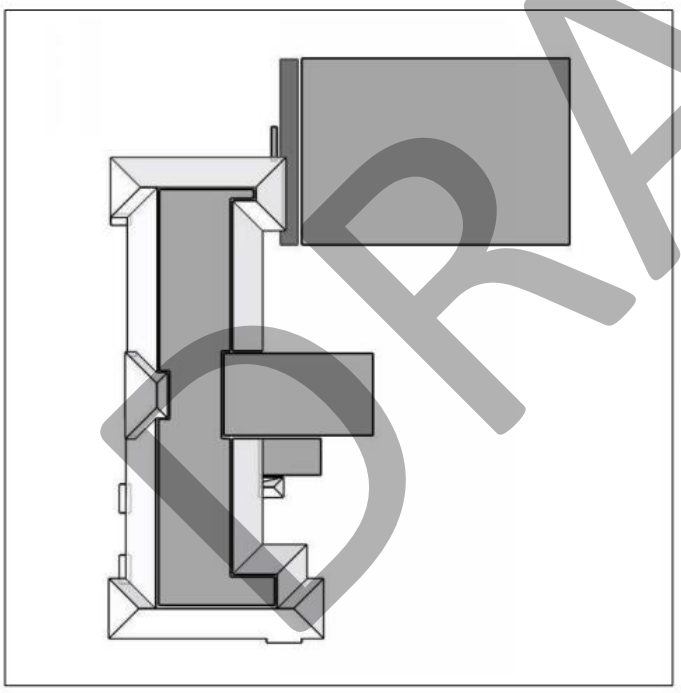
ROOF MEASUREMENT REPORT

20 Maple Street, Vernon, CT 06066

Report Contents



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

Report Details

Date:	02/28/2013
Report:	5464573

Roof Details

Total Area:	29,429 sq ft
Total Roof Facets:	33
Predominant Pitch:	0/12
Number of Stories:	>1
Total Ridges/Hips:	292 ft
Total Valleys:	144 ft
Total Rakes:	26 ft
Total Eaves:	1,187 ft
Total Penetrations:	38
Total Penetrations Perimeter:	472 ft
Total Penetrations Area:	466 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:

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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

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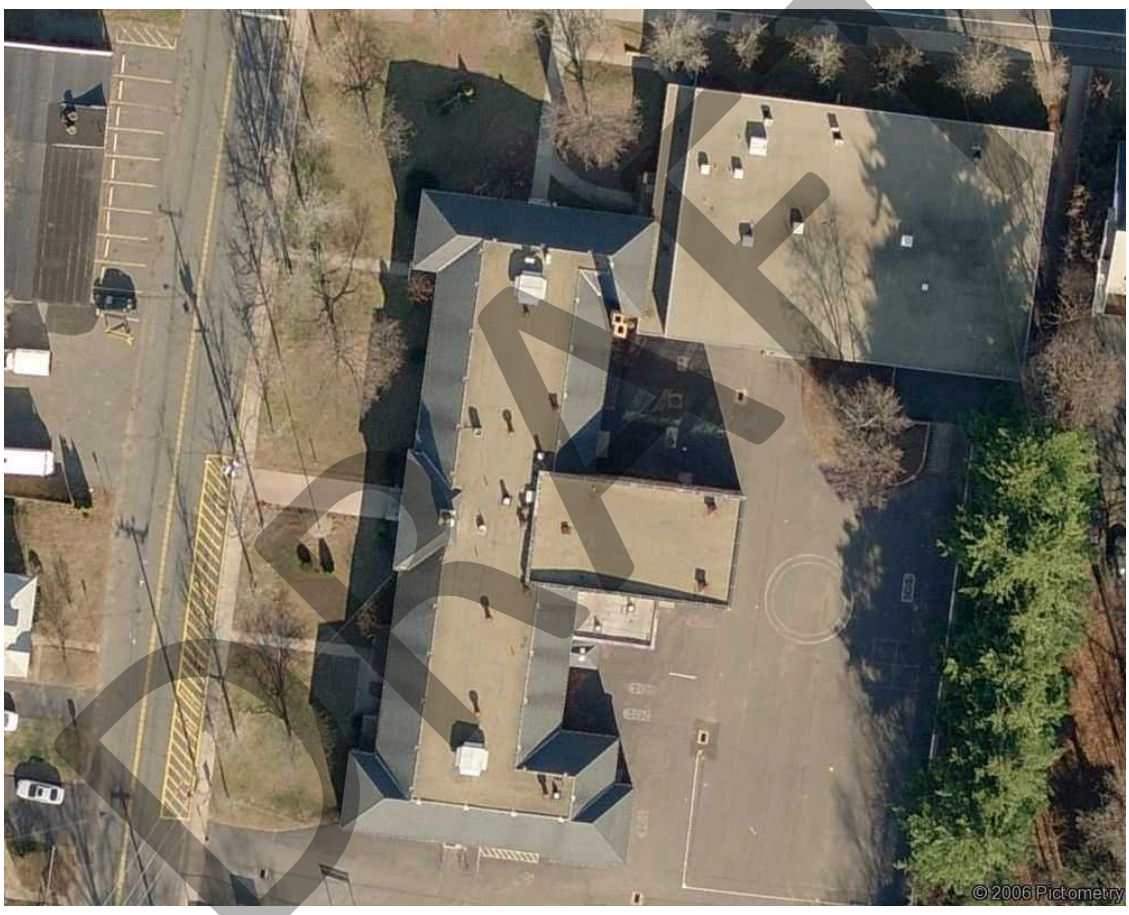
ROOF MEASUREMENT REPORT

REPORT IMAGES

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

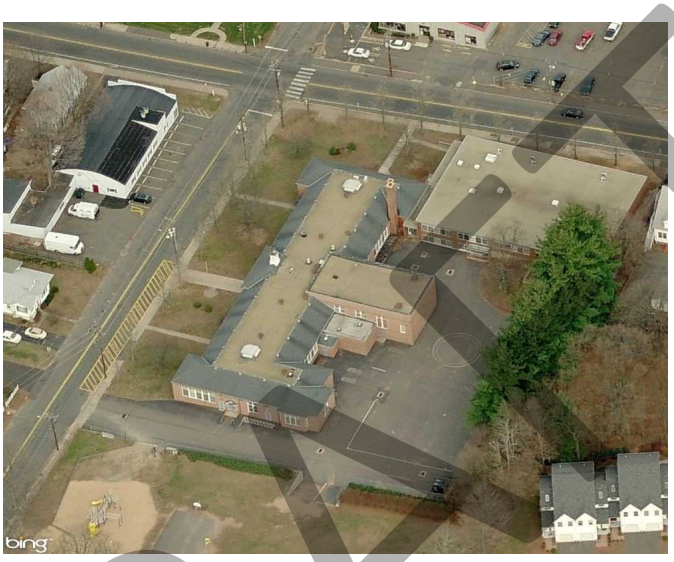


Top View

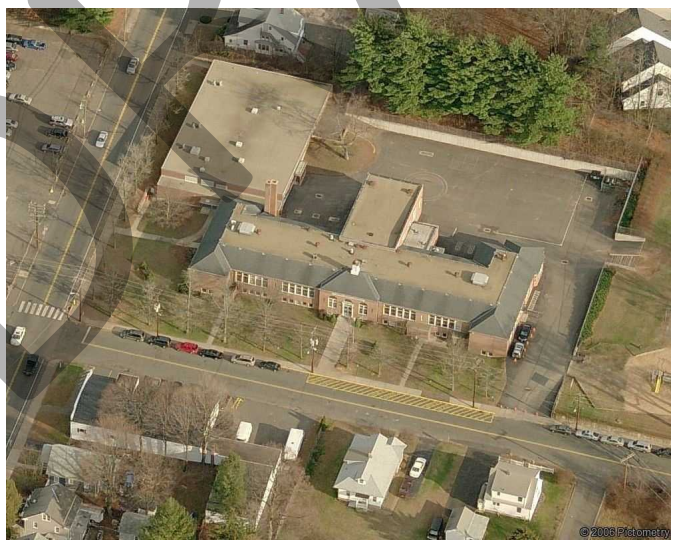
GARLAND since 1895

ROOF MEASUREMENT REPORT

REPORT IMAGES



North View



East View

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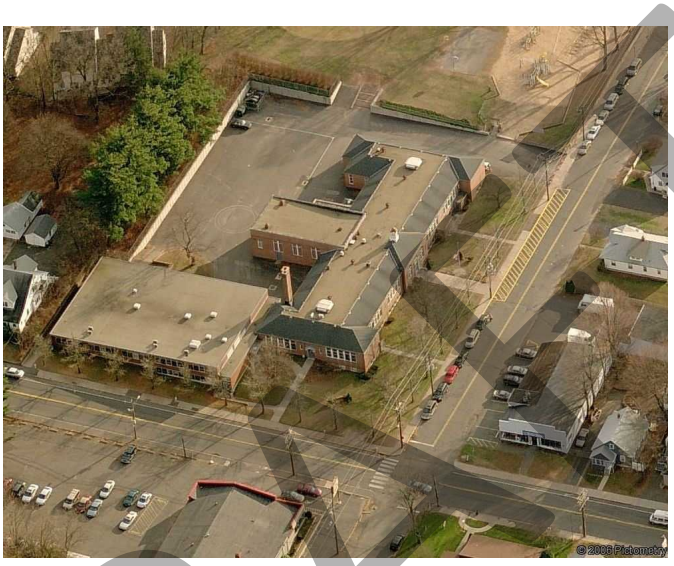
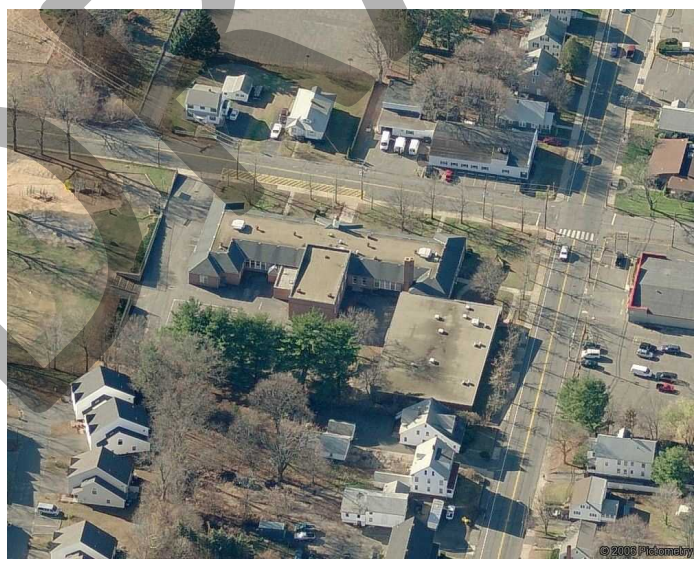
ROOF MEASUREMENT REPORT

REPORT IMAGES



South View



West View

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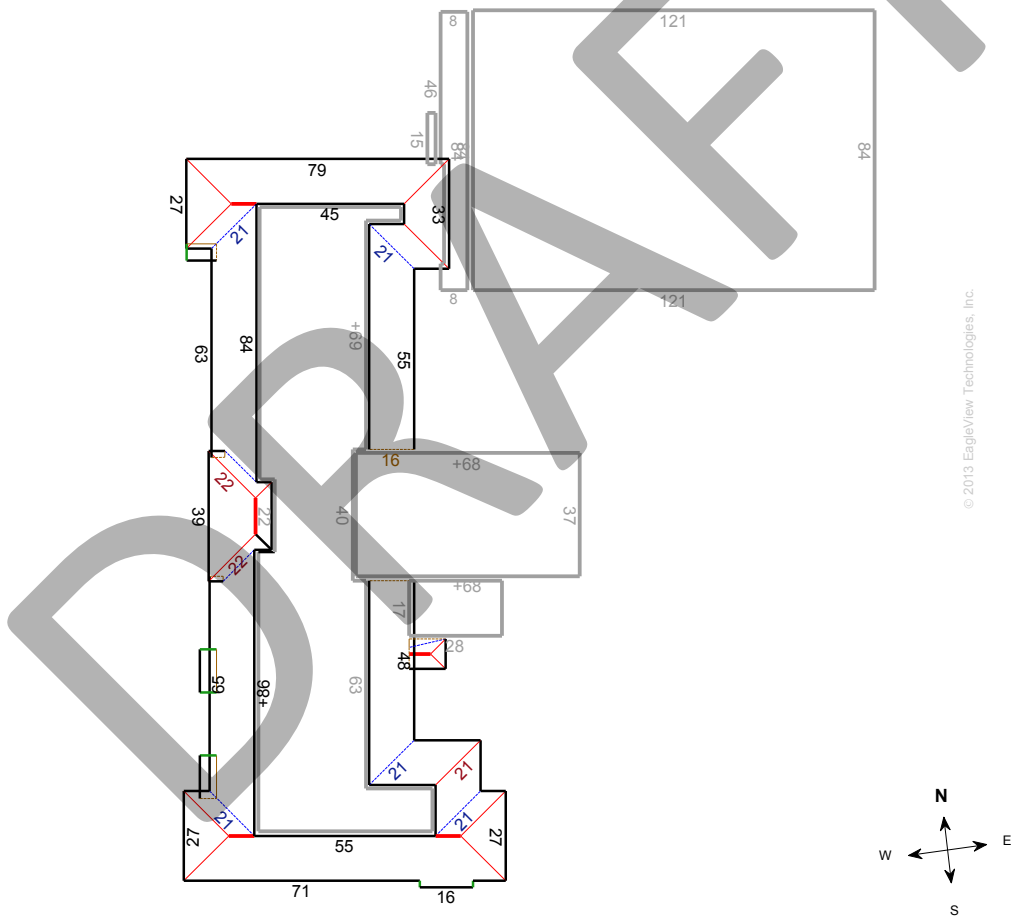
ROOF MEASUREMENT REPORT

LENGTH DIAGRAM

Total Line Lengths: Ridges = 41 ft | Valleys = 144 ft | Flashing = 41 ft | Eaves = 1,187 ft
Hips = 251 ft | Rakes = 26 ft | Step flashing = 70 ft | Parapets = 1,447 ft



Note: This diagram contains segment lengths (rounded to the nearest whole number) over 5 feet. In some cases, segment labels have been removed for readability. Plus signs preface some numbers to avoid confusion when rotated (e.g. +6 and +9).

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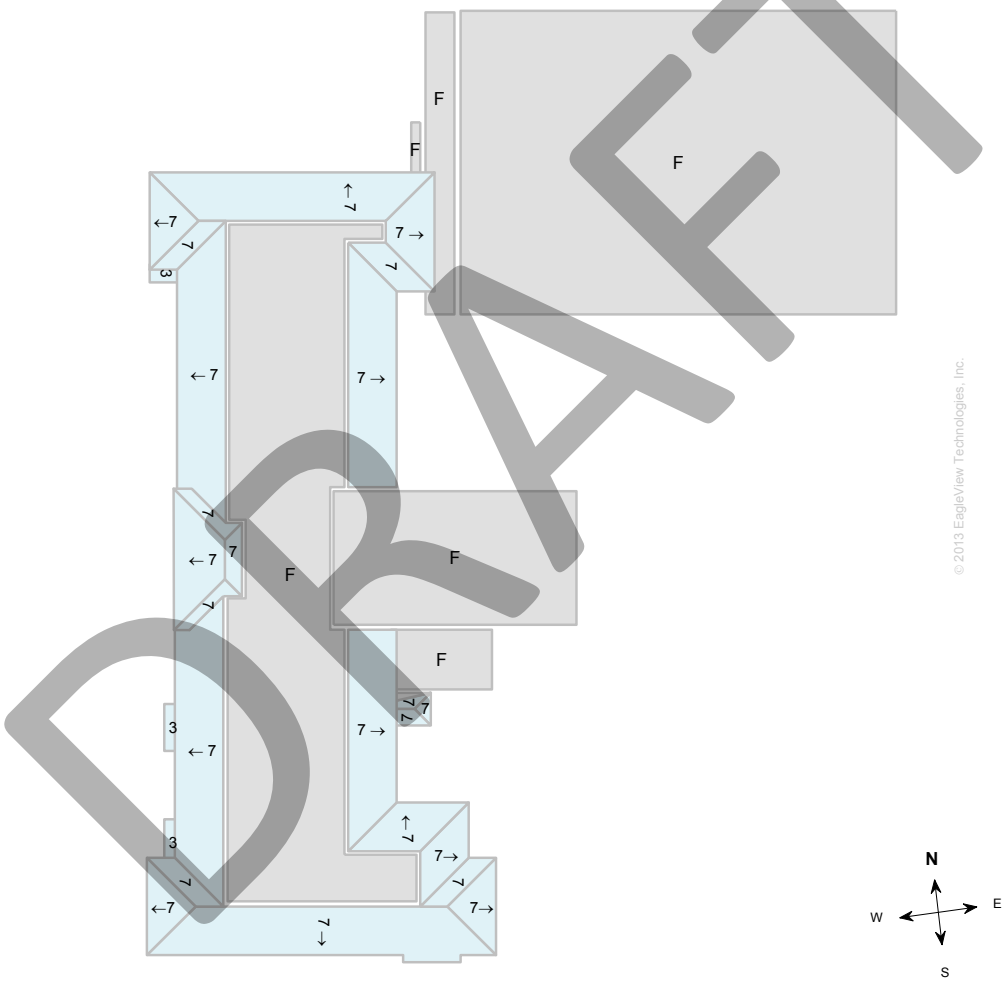
ROOF MEASUREMENT REPORT

PITCH DIAGRAM

Pitch values are shown in inches per foot, and arrows indicate slope direction. The predominant pitch on this roof is 0/12.



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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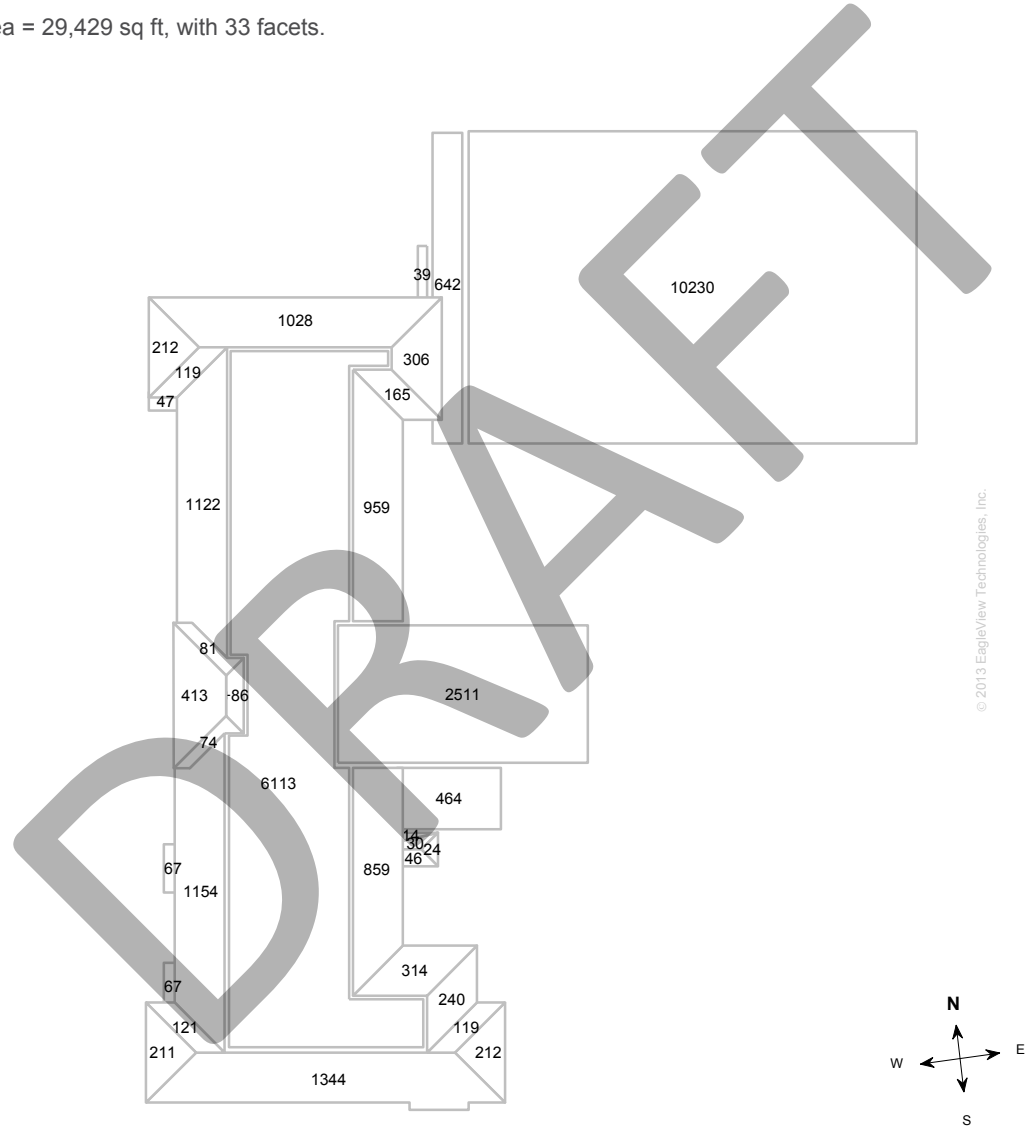
ROOF MEASUREMENT REPORT

AREA DIAGRAM

Total Area = 29,429 sq ft, with 33 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

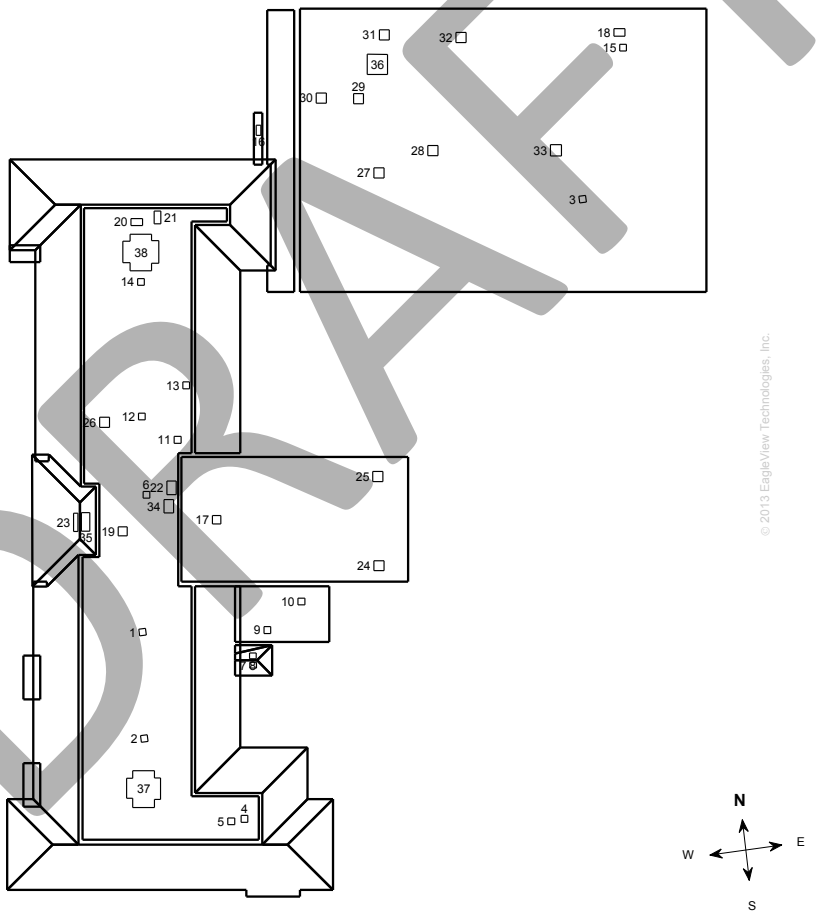
PENETRATIONS

Penetrations Notes Diagram

Penetrations are labeled from smallest to largest for easy reference.

Total Penetrations: 38
Total Penetrations Perimeter = 472 ft

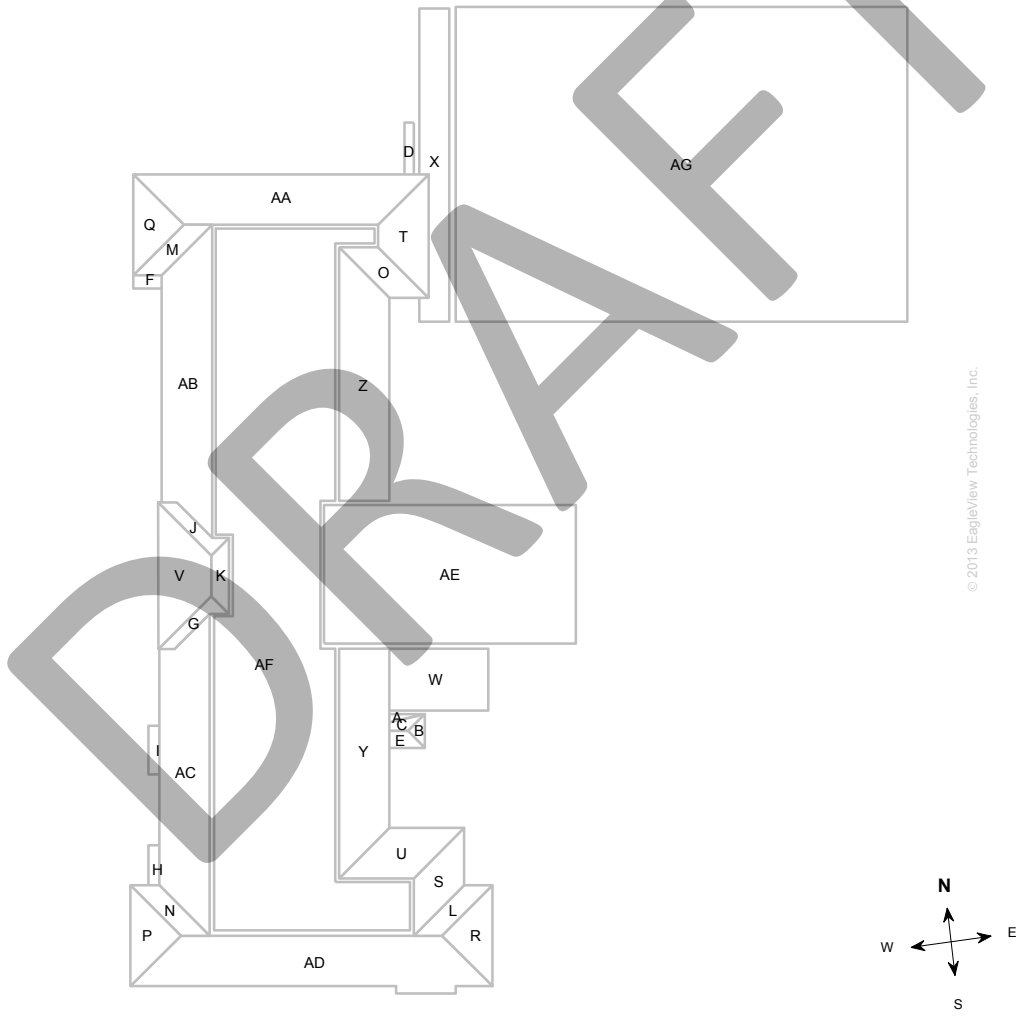
Total Penetrations Area: 466 sq ft
Total Roof Area Less Penetrations = 28,963 sq ft



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.

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 = -72.4622483 Latitude = 41.8678371

Online map of property:
http://maps.google.com/maps?f=g&source=s_q&hl=en&geocode=&q=20+Maple+Street,Vernon,CT,06066

Property Info

Year Built: 1924

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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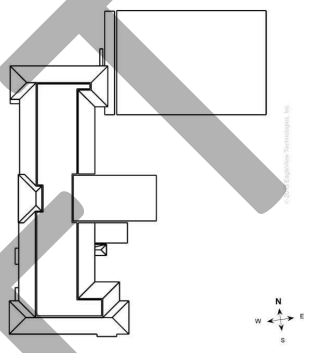
ROOF MEASUREMENT REPORT

REPORT SUMMARY

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

Lengths, Areas and Pitches

Ridge.....41 ft (5 Ridges)
Hips .....251 ft (14 Hips)
Valleys.....144 ft (8 Valleys)
Rakes* .....26 ft (6 Rakes)
Eaves/Starter** .....1,187 ft (41 Eaves)
Drip Edge (Eaves + Rakes) .....1,213 ft (47 Lengths)
Parapet Walls.....1,447 ft (39 Lengths)
Flashing .....41 ft (6 Lengths)
Step Flashing.....70 ft (9 Lengths)
Total Area .....29,429 sq ft
Total Penetrations Area.....466 sq ft
Total Roof Area Less Penetrations .....28,963 sq ft
Total Penetrations Perimeter.....472 ft
Predominant Pitch.....0/12



Total Roof Facets = 33

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	2/12	3/12	7/12
Area (sq ft)	19997.7	14	180.5	9236.6
% of Squares	68%	0%	0.6%	31.4%

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)	29,429	32,372	32,960	33,843	34,432	35,315	35,903
Squares	294.3	323.7	329.6	338.4	344.3	353.1	359.0

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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ROOF MEASUREMENT REPORT

Parapet Calculation Table

Wall Height (ft)	1	2	3	4	5	6	7
Vertical Wall Area (sq ft)	1447	2894	4341	5788	7235	8682	10129

This table provides common parapet wall heights to aid you in calculating the total vertical area of these walls. Note that these values assume a 90 degree angle at the base of the wall. Allow for extra materials to cover cant strips and tapered edges.

Penetration Table	1-15	16	17	18	19	20	21	22-30	31	32
Area (sq ft)	4	4.1	6.2	7.3	7	7.3	7.6	9	10.9	11.5
Perimeter (ft)	8	8.8	10	10.8	11	11	11.6	12	13.2	13.6

	33	34	35	36	37	38
Area (sq ft)	11.5	8.1	16.2	36.2	93	97.9
Perimeter (ft)	13.8	13.8	16.8	24.1	42	43.5

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.

Construction Details

Client: Vernon Public School District

Facility: Maple Street School

Roof Section: Low Slope Section's

Information			
Year Installed	Unknown	**Square Footage**	20,350
Slope Dimension	1/4:12"	**Eave Height**	35
Roof Access	Internal Roof Hatch	**System Type**	Gravel Surface BUR

Photo Report

Client: Vernon Public School District
Facility: Maple Street School
Roof Section: Low Slope Section's

Report Date: 03/23/2023
Title: Visual Inspection & Core

Photo 1

Overview of the northeast most low slope section

Photo 2

Overview of the front west facing low slope section

Photo 3

Overview of the wooden plank decking below the original school section

Photo 4

View of the mineral modified section- mid-level- Clogged drain and minor ponding

Photo 5

Exposed felts and scrim- Consistent throughout- UV Degradation

Photo 6

Overview of the south east facing side- Many exposed flashings and potentially obsolete equip

Photo 7

Drain grate openings larger than the pea gravel- Will cause a clogged drain- Screen recommended

Photo 8

Vertical flashings failing- Consistent throughout- Failed seam mastic

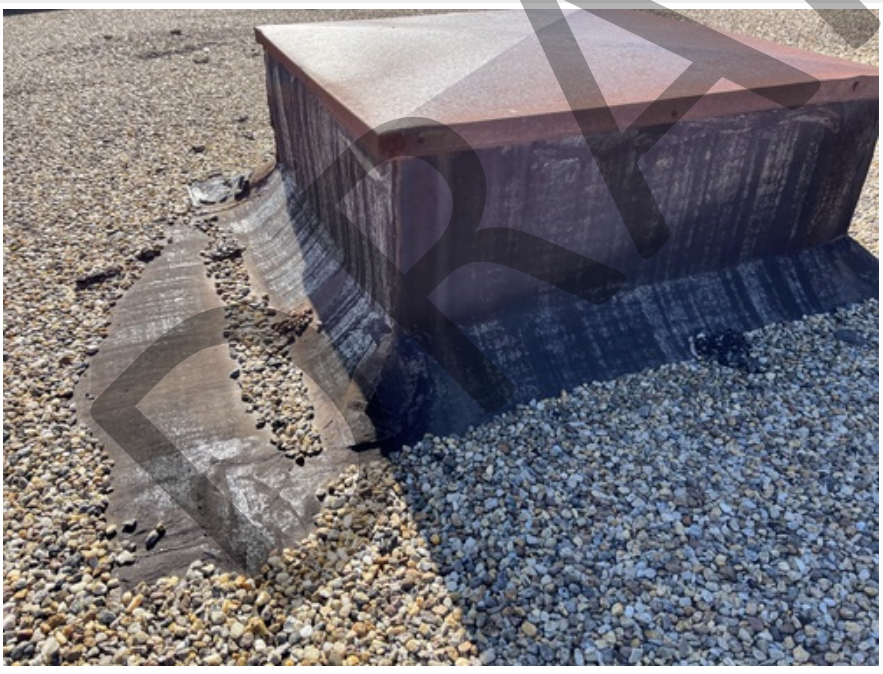

Photo 9

Obsolete curbs- Removal recommended when next reroof happens

Photo 10

Improper shingle transition- 30" Minimum for snow drifts

Photo 11

Overview of the largest LS section

Photo 12

Failed previous repairs- Consistent throughout

Photo 13

Open condition- Kalwall window joints open

Photo 14

Connector roof- Poor drainage and exposed masonry- Leaks in this area were reported

Photo 15

Open condition- Masonry needs repointing, sealing or to be wall paneled and covered from the elements

Photo 16

Open condition- Failed perimeter flashing ply- Consistent throughout- No primer on metal

Photo 17

Open condition- Failed and improper previous repairs- Area of reported leaking

Photo 18

Exposed membrane to UV- Non reinforced flashing seams

Photo 19

Open condition- Failed pitch boxes- Consistent throughout

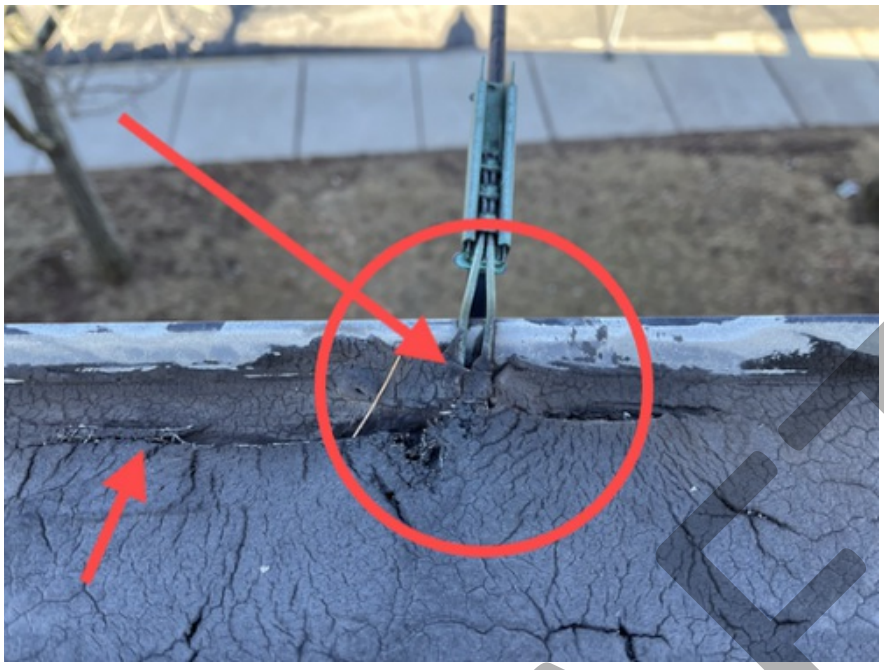

Photo 20

Open condition- Wire tension cable attached directly through the membrane and its pulling the flashing apart

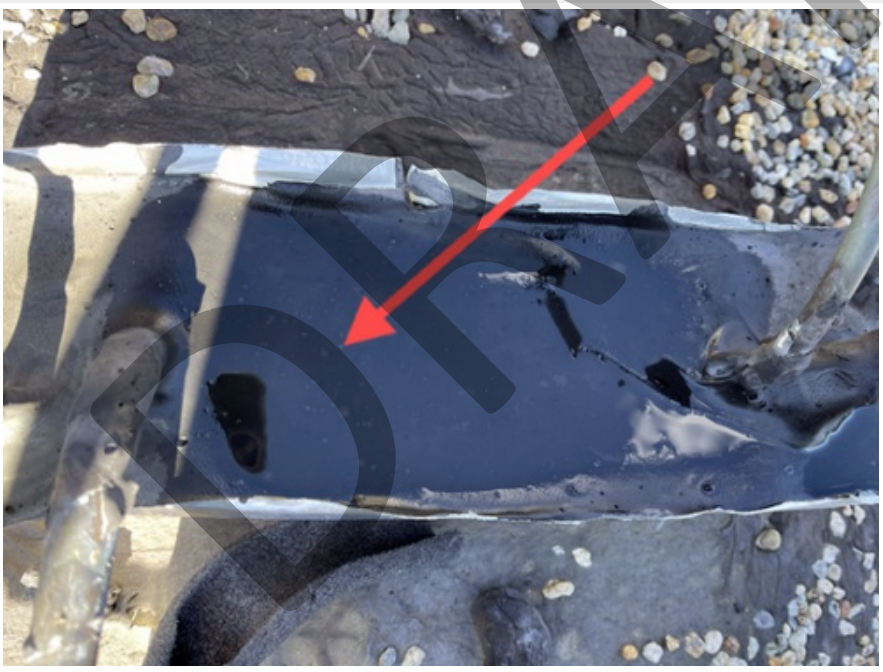

Photo 21

Improper previous repairs- Pitch box holding water- Foil was never removed

Photo 22

Open condition- Failing perimeter flashing

Photo 23

<u>Core Cut</u>: 4 or 5 ply BUR - Failing interply adhesive

Photo 24

<u>Core Cut:</u> Perlite used as coverboard- Results were dry

Photo 25

<u>Core Cut:</u> View of the tectum deck below

Photo 26

<u>Core Cut:</u> Two ply hot mopped VB layer

Photo 27

Core Cut: System layers - 1" Iso, 2" Iso, 1/2" Perlite coverboard

VCMS
Chris → 860-869-0040

AHERA SIX MONTH PERIODIC SURVEILLANCE
Maple Street School
20 Maple Street
Vernon, CT 06066

MATERIAL DESCRIPTION	*LOCATION(S)*	*PREVIOUS CONDITION*	*CHANGE IN CONDITION (Y/N)*	*COMMENTS*
Concealed 9" floor tile and associated mastic	Basement Wall Cavity (Under Wall)	No damage	N	Material is inaccessible. Removed under cabinets and millwork 2009. *Known ACM*
Pipe fitting insulation	Outdoor Storage Room, Storage Closet 0127, Corridor 1129 Heaters,	No damage	N	Material assumed to be present within wall/ceiling cavities. *Known ACM*
Transite ceiling panels	Incinerator Room 0123	No damage	N	Material ~~in good~~ condition Boiler room ceiling removed in 2009 *Known ACM*
Original Blackboard Glue Daubs	Room 15 ~~18-21~~ → Room 1-8 3-3 thru 3-6 now	No damage	N	Material is inaccessible. Located under new white boards *Presumed*

SURVEILLANCE CONDUCTED BY Brendan McClure **DATE** 3-17-23