Willington Public Schools Master Plan & Facilities Needs Assessment



For

Center School Hall Memorial School

DRAFT REPORT

April 2024

Report By:



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TAB 1.0 EXECUTIVE SUMMARY

TBD



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TAB 2.0 DEMOGRAPHIC & ENROLLMENT PROJECTIONS

2.1 – NESDEC Report: TBD (Provided by Town)

2.2 – Enrollment & Capacity Analysis: TBD

Section 1: Center School

Section 2: Hall Memorial School



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TAB 3.1 EXISTING CONDITIONS EVALUATION

Center School

Section 1: Overview



1.0 - Introduction

Center School is located at 12 Old Farms Road in Willington, CT. The building is a 28,401 Gross Square Foot (G.S.F.) PK-4 educational facility. Originally constructed in 1952, there have been several additions to the primary school building over the years, with the most recent addition being in 1980. This project added 11,400 G.S.F. of academic space to the existing school. The below evaluation is based on an in-person site walk through, reviews of the building systems/ components, as well as discussions with Town representatives, School Administration & Faculty.

The existing building is a mostly single-story structure with several sections on different elevations throughout the school. The building is broken up into 2 main academic wings and a central programing core. The school is comprised of 16 classrooms, a library, a cafeteria, a kitchen administrative office and a multi-purpose room. Miscellaneous Code, Accessibility, and Finish upgrades have been performed throughout the years, but much work is still needed to meet current Building Code & Educational Design requirements. This study does not address the educational program requirements.

The following is a matrix of references to the existing conditions.

| 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) | |



2.0 Background

This Facilities Condition Assessment and Code Review Study focuses on the future needs of the Town of Willington and their public schools. The purpose is to provide Willington Public Schools with an understanding of the challenges facing Center School a 74 year old building and 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.











Priority: 3

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Section 2: Facilities Evaluation

1.0- Site & Utilities

1.1 - Parking Priority: 1

There are approximately 63 parking spaces on site with overflow/additional parking at the gravel lot north of the building. The overall parking count is adequate for the school. This gravel lot was originally designed for overflow parking but has become a more permanently used lot. This lot is not properly drained, leveled, striped or accessible. There is a set of stairs created to get from the lot to the North side of the school, however an accessible route has not been provided.



Bituminous paved driveways at the south parking lot are in fair condition. The south parking lot will need to be resurfaced in the next three to five years and signage needs to be updated. The storm drainage is inadequate, and a detention system should be provided. Any reorganization of the south lot for improvements to the site circulation requires improvements to the entire site. ADA access from the south lot to the nearest building access should be addressed so that all students have a similar travel path.

1.3 – Paving – North Lot **Priority: 1**

The north parking gravel lot needs to be paved and updated as a full use lot with provisions for storm drainage. This will require an appropriate soil base, grading, paving, striping, curbing, sidewalks and ADA access. ADA access from the north lot to the nearest building access should be addressed so that all students have a similar travel path.

1.4 – Site Circulation Priority: 1

Site circulation is poor with multiple areas for student drop and pick-up. Between the north parking lot, south parking lot and accessible parking directly off Old Farms Rd there are multiple entrances and egresses into the school which is not preferred for security and creates confusion during peak and off hours. Walkways for the south parking lot are typically concrete and are in fair condition but do not meet code and ADA regulations. There is no emergency vehicle access around the building with the west side being mostly inaccessible. This creates further complications because the maintenance office and storage for the building are located on the West side making deliveries to the school difficult. There is no loading dock or designated loading area further











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compromising deliveries and safety. The overall site circulation and accessibility plan should be reimagined to meet the intent of the codes.

1.5 – Sidewalks & Pathways

Priority: 1

Concrete paths and walkaways present around the building and are in fair to good condition. There is no ADA Accessible walkways to the main entrance from the North parking lot. The sidewalks do not meet ADA requirements for landings, slope, handrails, and drainage. Accessible entrance ramps require lighting, a canopy and maintenance from the elements. Access from the south parking lot to the south building entrance is by stairs only which needs to be repaired or replaced.

1.6 – Site Accessibility

Priority: 1

There are multiple concerns with the accessibility at the Center School site. The gravel parking area North of the building is not accessible. Although two handicap parking spaces have been added in front of the school in its own pulloff area, the accessible route does not meet the accessibility code and design criteria. The building access at the bus drop off to the south entrance is a stair resulting in an inaccessible entry. Students with mobility disabilities who take the bus must walk outside traversing the building to get to the main entrance and further to access the north academic wing, The stairs are in poor condition and need to be repaired or replaced. A new stair and ramp should be provided for accessibility. As there is no internal wheelchair access, individuals with mobility challenges who are going to the north academic wing must access the building from an exterior ramp that is not ADA code compliant. The current code requires the accessible route to be protected from the elements. accessible loading zone and Van parking must be provided at the main entrance.

1.7 – Emergency Site Access

Priority: 1

There is no emergency vehicle access around the building. Fire and police access around the building is typically provided around the building for security and safety reasons.

1.8 – Site Lighting

Priority: 1

There is a combination of building mounted light fixtures, pole mounted shoe box lighting fixtures throughout site. There are light fixtures mounted on street power/telephone poles at Old Farms Road. Limited parking lot lighting was observed. It is recommended that site parking and pathway lighting be added that will meet security and building







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code minimum lighting level with the emergency redundancy requirements per the current code.

1.9 – Playfields / Playscapes

Priority: 1

A baseball field, paved basketball area, grass play area and a playscape are provided on site. Grass and bituminous areas are in good condition and playground mulching should be replaced. Accessible paved walkways are provided from the south parking lot to each of the play areas, however an accessible route to the baseball diamond should be provided.



1.10 – Site Stairs

Priority: 1

Site Stairs are in poor condition. Visible cracking is seen on concrete stairs throughout the site. The Stairs can be repaired in some locations. It is recommended that the bus loop stair and north parking stairs be replaced.



1.11 – Site Ramps

Priority: 1

Site Ramps are in fair condition, with visible cracking seen on concrete pathways throughout site. Significant elevation changes are present throughout the site and the ramps do not meet the accessibility criteria. Additional ramps should be provided at the north and south access points to the building.



<u>1.12 – Fencing</u>

Priority: 1

Sections of the site perimeter fencing should be replaced, and other sections should be repaired. Additional fencing should be provided between the car park and the fields.

1.13 – Site Signage

Priority: 1

Site and exterior building signage need to be evaluated in accordance with the guidelines for accessibility. Exterior security signage should be provided.



Priority: 1

Site grading, drainage and storm water retention plan needs to be evaluated and a new land-use and state DEEP compliant system installed.



Priority: 2

Access to the service areas for the Kitchen, Mechanical spaces, and storage is limited and is routed through the student play scape and paved play areas. A dedicated service route should be provided.



Priority: 1

The oil tank should be replaced with a DEEP approved





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tank. Anticipate the cost of contaminated soils in the estimated cost.

1.17 - Water and Fire Service

Priority: 1

The water service lines enters the site from Old Farms Road and are served by the localized public town of Willington water district. Water lines are in good condition. Additional connections will be required for a fire sprinkler system. Pumps and storage will depend on the available pressure.

1.18 - Gas Service

Priority: TBD

1.19 – Sanitary Service

Priority: 1

4" sanitary line from original building is tied into the 5" line from the 1980 addition. The site is retained in the 1980 Addition to allow access from the main level and provide an underground area for the 7000 gal. septic tank to field galleries. There is approximately a 1-story drop in grade. The existing system should be replaced with a system with the fields located in the baseball field.

Overall Site/ Utilities Recommendations

- Provide site accessible routes, accessible van parking and handicap parking.
- Provide additional lighting, storm drainage, fencing, sidewalk and curbing at South Parking Lot. Milling and resurfacing of the lot will be needed in the future.
- Update septic system and associated field/galleries.
- Provide a new dumpster and recycling area.
- Provide a new bus loop and drop off area.
- Renovate overflow parking lot new paving, curbing, striping, etc.
- Review life expectancy of existing fuel oil tank.
- Provide additional storm water managements systems.
- Provide emergency vehicular access around the entire building perimeter.



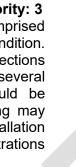
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2.0 - Building Envelope

2.1 - Exterior Walls

Priority: 3

Masonry – The building exterior is primarily comprised of brick and concrete masonry units that are in fair condition. There are large areas of failing / spalling brick and sections where the masonry needs to be repointed. There are several locations where there are visible cracks that should be repointed or replaced. The sealant around the building may contain PCB's, an assumption based on the installation timeframe. The sealants around windows and penetrations should be replaced as potential Hazmat.



2.2 - Exterior Walls

Priority: 2

Masonry – There are several locations where there are visible cracks that should be repointed and sections of the brick should be replaced.







2.3 - Exterior Walls

Priority: 1

Masonry – The masonry at the chimney is in poor condition and should be addressed immediately.

2.4 – Exterior Walls

Priority: 2

Concrete – Visible portions of the raised concrete foundation in some areas show signs of cracking and spalling. The concrete foundation is showing signs of deterioration at several of the outside corners. These areas should be monitored for movement and refinished to prevent further deterioration due to freeze/thaw cycles.

2.5 – Exterior Doors

Priority: 1

Exterior doors are hollow metal and are in poor condition. Many of the door frames have rusted over time at the bases due to the heavy salt needed during the winter time. This has caused poor sealing of the doors into the building. Based on security criteria this work should be given a high priority. Sensors should be added for security

2.6 – Exterior Doors for Security Vestibule Priority: 1

Exterior doors are hollow metal and are in poor condition and there is no secure vestibule. The main entrance doors for student and parent entrances should be part of a secure vestibule with school guard glass and appropriate security hardware.



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2.7 – Windows

The windows in the North wing are original to the building and have passed their life expectancy. Frames are deteriorating, they are not thermally broken, paint is coming off them, they are single pane glass and operable windows which do not fully close or seal properly. The large scale of the windows within the room also cause heavy drafts and heating loads for the building. The exterior sealants for these windows have also completely failed. These windows should be replaced.



2.8 – Windows

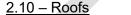
Priority:3/1 (1980's) Typical windows for the South wing consist of aluminum framed windows. Although the windows are not thermally efficient, they are in fair condition. Chalking of the paint finish as well as general warping of the frames are starting to show due to their age. The exterior sealant at these windows was recently replaced and is in good condition. A typical warranty on windows is 10 to 15 years. Due to the condition and energy inefficiency of these windows it is recommended that they are replaced when the 1950's wing windows are replaced.



2.9 – Roofs

Priority:1 (1980s) The EPDM single-ply roofing sections at the 1980 addition are in fair condition and are approaching the 20-year life expectancy for a roofing system. Additionally, many of the trim areas are still the original wood soffits and trim. These areas are peeling and beginning to show the signs of

Priority:1(1950's)



Priority:3 (1950s)

The EPDM single-ply roofing installed at the 1952-54 classroom wing is relatively new having been installed in the past 5 years. This roof area is also relatively clean with only roof drains and vents.

deterioration and will need to be replaced.



2.11 – Hazmat

Priority: 1

The Board of Education should commission a comprehensive Hazmat and Abatement assessment to identify all possible hazmat sources present within the building prior to proceeding with any exterior or interior building replacement work.



2.12 – Thermal Performance

Priority: N/A

Without existing or as built construction documents for the original school construction or destructive investigation, it



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is difficult to determine the exact thermal performance of the entire building envelope. However, given the construction vintage of the building it is reasonable to suspect that the current thermal performance is poor and does not meet the Energy Code requirements. Overall current thermal performance could be enhanced but would require significant rework of the exterior façade or build out within the interior of the building. Roof and window replacement will improve the overall thermal performance.

2.13 - Solar Panels

Priority: 5 The State department of education office of school construction grants encourages the installation of solar panels at schools. There are other utility options that could be considered for the installation of renewable energy systems.

2.14 - Canopies Priority: 1

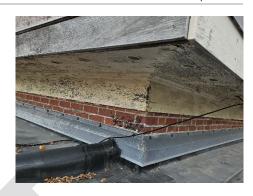
Protection from the elements should be considered at the entrances to the buildings. Current codes require appropriate lighting and maintenance of stairs and ramps to the school. However, it at the discretion of the local official to determine if the accessible route to the main entrance should be protected.

2.15 – Canopies Priority: 5

Protection from the elements should be considered for the entrance to the buildings. It is recommended that canopies are provided at Bus pickup and drop off areas.

Overall Building Envelope Recommendations

- Replace windows, frame, and sealant in original building.
- Install emergency exit windows in the entire building.
- Repair of foundation especially outside corners
- Brick re-pointing, repair and replacement
- Replace the EPDM roof system over the lower addition.
- Repair and replace roof coping / trim
- Repair and repoint chimney brick specifically
- Clean roof drains







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Tab – 3.1 Existing Conditions Evaluation



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3.0 - Building Interior

3.1 - Floors

Priority:1 (asbestos)
Priority: 3 (other floors)

Flooring throughout the school is a mix of vinyl tile, porcelain tile, carpet tile, rubber tile, and vinyl sheet. The conditions vary throughout the school. The original building still has some of the existing floor tile which is likely asbestos floor tile. The VAT and mastic should be abated and removed from the school. There are many areas of cracked and chipped vinyl flooring that should be removed and replaced. Similarly there are rubber stair treads that are cracked or missing pieces causing a tripping hazard along the stair route.



Interior walls of the school are a mix of CMU, brick, plaster and gypsum. The CMU walls are generally in good condition with the exception of some areas that have seen settling and cracking. Plaster walls similarly have areas of cracking and settling. Areas where the walls are cracked should be repaired and monitored. Brick and gypsum walls appear to be in good condition throughout the building interior with select areas requiring minor attention and repair due to damage.

3.3 – Ceilings Priority: 2

Ceilings throughout the school are predominantly acoustic ceiling tiles in 2x2 or 2x4 format. Throughout the school there are many tiles that are damaged, do not fit within the ceiling grid correctly, stained from water damage, and are generally of an old vintage of tile. These older tiles also have a lower acoustic rating than the tiles that are available today which helps achieve the acoustical requirements within the instructional spaces. Many of the ceiling tiles are reaching their end-of-life stage and should be replaced. The ceilings should be replaced if a sprinkler and/or HVAC project is undertaken.

<u>3.4 – Doors/ Hardware</u> Priority: 1

Doors within the school are predominantly wood slab with metal or fiberglass exterior doors. The wood doors are generally in good repair although are showing their age. The door hardware is not the standard hardware that is used for schools or classrooms these days and has been modified in the field which results in security and fire safety concerns. This hardware while functional should be replaced with hardware that provides locking, closing and access restriction required under a security intrusion protocol. Shutters should be provided at the vision lites.











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<u>3.5 – Lavatories</u> Classrooms

Priority: 1

The lavatories are a mix of new and old fixtures throughout the building. Drinking fountains in some areas have been replaced recently and are in good condition. Other spaces such as the classrooms have sinks that are of original vintage and are in poor condition showing signs of leaks, countertop failure and some have been shut off completely.



3.6 – Lavatories – Drinking Fountains

Priority: 4

The lavatories are a mix of new and old fixtures throughout the building. Drinking fountains in some areas have been replaced recently and are in good condition. Replacement of individual units should be noted in an ongoing maintenance, repair and replacement schedule.



3.7 – Natural Light Classroom Shades

Priority: 4

Most spaces throughout the school have natural light through typical windows. The original building of the school has counter to ceiling original windows which can cause excessive heat in the summer or cooling in the winters resulting in the shades being drawn for most of the year. Improved shades in the school that help filter out the harsh sun will still allowing filtered light and views to the exterior would be beneficial to preserving natural light into the spaces. Replacement of the thermally inefficient windows will resolve the thermal comfort issues.



3.8 – Natural Light

Priority: 4

Most spaces throughout the school have natural light through typical windows. Roof skylights also provide natural light to the hallways. Although there are no identified leaks, the skylights are close to the end of their functional life and should be replaced when this building area is reroofed.



3.9 – Acoustics Priority: 2

Building acoustics are heavily reliant on the acoustical ceiling tiles in the ceilings. Most walls are masonry or plaster and provide no acoustic absorption. While the acoustical ceiling tiles help absorb sound. The existing ceiling tiles are not as effective as the new tiles available today. Replacement of the ceiling tiles would help reduce the sound and reverberation within the classroom to help meet the acoustic standards required of instructional classrooms. Wall between cafeteria and art classroom is not acoustically rated and sound transfers freely between the rooms.

3.10 – Acoustics

Priority: 1

The wall between cafeteria and art classroom is a folding



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partition tht is in disrepair and has been permanently closed. This partition does not provide the required acoustical rating for the art classroom and sound transfers freely between the rooms which is disruptive when students are at lunch. A rated partition should be provided in this location.

3.11 – Millwork/ Cabinets ADA

Priority: 1

Millwork throughout the school is predominantly from the original build out of the school. The cabinets are in disrepair and have exceeded their useful life. Most millwork is damaged, broken, or ineffective for the need of today's learning environments. Classrooms with sinks in them utilized plastic laminate countertops which show water damage and delamination around the sinks. The millwork configuration does not meet ADA requirements.

3.12 – Millwork/ Cabinets

Priority: 2

Millwork throughout the school is predominantly from the original build out of the school. It is in disrepair and has exceeded its useful life. Most millwork is damaged, broken, or ineffective for the need of today's learning environments. Classrooms with sinks in them utilized plastic laminate countertops which show water damage and delamination around the sinks. The millwork configuration does not meet ADA standards.

<u>3.13 – Gymnasium</u>

Priority: 5

The gymnasium is used by the school and the community. The gym is in good condition although small for the size of the school. With all CMU walls and a metal deck ceiling provides and no acoustic absorption panels to help mitigate sound the acoustics are very poor.

3.14 – Assembly

Priority: N/A

There are no additional assembly areas outside of the gymnasium and cafeteria.

3.15 – Cafeteria

Priority: 3

The cafeteria is relatively small, there is no windows in the space for natural light. It also doubles as a storage area and servery space for the kitchen. The original design for the building incorporated a folding partition in this space which has since been infilled. This folding partition allowed for the space to be flexible depending on the students being served. The infill appears to be a stud wall and does not have an acoustic rating to separate between the cafeteria and the art room next door. Due to this when the cafeteria is in use the noise travels to the adjacent classroom and causes disruption.







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3.16 – Kitchen Priority: 1

The kitchen is undersized by today's standards and by the number of students it serves. The servery line as well as refrigeration storage is brought out into the cafeteria space which further reduces the usable space within the cafeteria to house students. There is also no dedicated bathroom or changing facility for the kitchen staff. The size of the kitchen and equipment impact the quality food service program. The kitchen does not meet ADA requirements and



A full building analysis should be conducted for the school identifying all lead paint, asbestos and PCB containing materials as part of the hazmat plan. Some VAT has been removed due to water damage, however there are additional areas that need remediation. Hazmat must be identified in the replacement of windows, floor tiles and pipe insulation. The hazmat allowance identified in the capital improvements budget is for the abatement of these items.

3.13 – Fire/ Smoke Ratings **Priority: 1**

The existing building does not have a sprinkler system which does not meet the current building code for educational occupancies. Although the corridor walls and doors are rated the door hardware modifications do not meet fire / smoke rating requirements.

3.14 – Internal Courtyards There are no internal courtyards for this building.

Overall Interior Recommendations

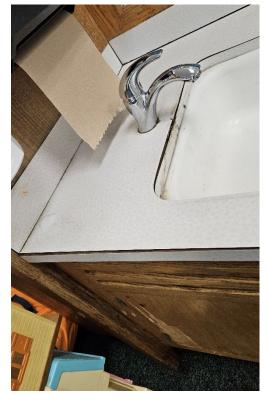
- Replace tile flooring as deterioration continues.
- Replace door hardware.
- Replace ceiling tiles.
- Replace Millwork.
- Upgrade acoustics.
- Replace classroom shades.







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Tab – 3.1 Existing Conditions Evaluation

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4.0 - Interior ADA Accessibility

4.1 – Bathroom and Sink Accessibility

Priority: 1

Some of the lavatories & bathrooms located within the school have been updated over time, however this work was mainly focused on plumbing fixture replacement, not on finishes or accessibility. Some bathrooms have been updated throughout the years to meet current Accessibility Codes, however; several bathrooms still need renovations/reconfigurations to make them fully accessible. Operational clearances throughout the spaces should be reviewed.

4.2 – Childrens Fixtures

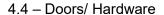
Priority: 2

Most bathrooms have been configured and installed with the proper childrens fixture heights. The quantity and location of faculty / adult height bathrooms and unisex toilets should be reviewed based on the current student enrollment.

4.3 – Drinking Fountains

Priority: 1

In general, it appears that the drinking fountains throughout the building have been replaced with ADA compliant water coolers, with integral bottle filler stations. Based on the size of the building, it seems that the total number of drinking fountains provided is inadequate and more fixtures are needed to meet current plumbing fixture requirements. It was also observed that there were no dual height drinking fountains which is required to address standing height accessible code requirements.



Priority: 2

Doors are generally in poor condition but most hardware appears to have been updated to meet ADA grasping requirements. The doors been modified to prevent latching which creates a fire code violation. Some doors do not meet the push / pull strength requirement for accessible doors.

4.5 – Interior Signage

Priority: 2

The room signage needs to be updated and additional wayfinding signage added.

4.6 - Elevator

Priority: 1

There is no elevator or lift within the building, which results in individuals in wheelchairs no to be able to traverse or access the entire building. Wheelchair access to the north wing is only possible by leaving the building and re-entering from a secondary entrance. An elevator must be provided.







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<u>4.7 – Stairs</u> **Priority: 2**

Stair treads are damaged and present a safety / egress hazard. Stairs at west side of building near gym have settled or structurally shifted causing treads to not be flat and flush further exaggerating the safety / egress issue.

4.8 – Ramps **Priority: 5**

The interior Ramps in South wing appear to meet accessibility requirements.

<u>4.9 – Gymnasium</u> **Priority: 5**

Gymnasium space is accessible. However, the bleachers are not accessible. The locker rooms and other support spaces do not meet ADA clearance requirements.

4.10 – Assembly Priority: 5

There is no official designated assembly area in the school.

4.11 – Stage/ Platform Priority: 5

There is no stage / platform in the school.

<u>4.12 – Typical Classrooms</u> **Priority: 4**

Typical classrooms spaces are accessible although there is no accessible route to reach the north wing classrooms or the one instructional space below the gymnasium. Millwork within the classrooms vary based on repairs throughout the years but generally do not meet all the requirements for ADA accessibility.

4.13 – Accessible Exits Priority: 1

Accessible exits have been improved over the years but do not meet the accessibility requirements. The north side door has a step down directly outside the door resulting in one accessible egress. The grading should be modified in this area to provide an accessible exit / entrance with a side walk to the public way. The stair at the end of the corridor outside the gym is not enclosed nor does it have an area of refuge. The distance down this corridor appears to be right at the maximum allowed.

4.14 – Site ADA Requirements Priority: 1

There are numerous concerns regarding the site accessibility, which are detailed in the 2017 report by Friar Associates. It is our recommendation that all the items identified in the report be addressed as a priority 1 concern.

5.0 - Building Systems









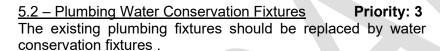
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5.0 - Plumbing General

Priority: 3 The building is served by a 2" domestic water service line from the main located on Old Farms Road. Domestic hot water heating for the entire building is provided from an oil-fired hot water heater. Typical plumbing fixtures are manually operated. Water coolers with bottle filling stations were observed in corridors. A new sanitary tank and pump was installed 3 years ago. There is a six inch line to the 7000 gallon septic tank. Currently, the storm drainage system connects into the sanitary/sewer system. The flat portions of the roofs utilize internal roof drains. The kitchen has a 3-bay pot sink, dish washer and grease waste interceptor system. There are no floor drains in bathrooms. The custodial closets do not have eyewash stations. There are several hose bibs located around the building, and there is no irrigation system.



Priority: 3 A general maintenance program should be established for the repair and replacement of plumbing components throughout the building.



5.3 - Emergency Eyewash

Priority: 1 An Emergency eyewash must be installed in each maintenance workshop and custodial closets..

5.4 – Plumbing Insulation of Hot Water Lines **Priority: 1** All hot water lines should be insulated.

5.5 – Fire Protection

Priority: 1 The building is not equipped with a fire protection system. Sprinkler system are required in all educational facilities.

5.6 - Fire Alarm/ Smoke Detection Priority: 5

The building contains an addressable Siemens fire alarm system, which was installed in the Summer of 2023. Fire alarm device coverage throughout the building consists of smoke detectors, manual pull stations, horn strobes, etc. Some of the fire alarm devices appear to be a mixture of new and old devices, connected to the new system.

5.7- Heating (Building)

The building is equipped with a 2000 MBH oil-fired steam boiler. There is a steam-to-hot water shell and tube heat exchanger within the main mechanical room, mounted on the

















Priority: 3 / 2



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wall. The boiler system serves a mix of hydronic radiators and unit ventilators as well as steam radiators. There is no glycol in the hot water loop, which has resulted in issues with freezing coils in unit ventilators. The boiler system appears to be in fair condition but is operating past its useful life. The heating distribution come from two circulation pumps in the boiler room. The insulation is in fair condition and should be replaced when the overall system is updated.



Priority: 3 / 2



5.8 – Heating (Localized)

Space heating is provided in areas of the building, including but not limited to offices, classrooms, meeting rooms, etc. through the use of either hydronic baseboard or unit ventilators or steam radiators. Some classrooms had the unit ventilators recently replaced. Some classrooms experience noise issues with the steam radiators as well as classrooms overheating due to lack of control. Larger meeting spaces are served by outdoor or indoor air handling units with hydronic heating coils.





5.9 – Ventilation

Ventilation is provided in classrooms through the use of unit ventilators. Unit ventilators are a mix of ceiling mounted and floor mounted units. Units are provided with an outside air damper and hot water coil. No cooling is provided through the unit ventilators. Classrooms have exhaust grilles, which are connected to roof mounted exhaust fans to exhaust the ventilation air supplied to classrooms. Other spaces, such as the café, art teacher lounge and media center are supplied with ventilation air through packaged rooftop units. Packaged rooftop units are provided with hot water heating and DX cooling. The gym is provided with ceiling hung air handling units that have outdoor air connections that were replaced in 2016. The units provide heating through a hot water coil and ventilation air.





5.10 - Air Conditioning

Priority: 2/1

There is no centralized air conditioning system for the building. Some classrooms are equipped with portable window AC units. There is no cooling in the main IT room, connected to the media center. There is a transfer duct into the IT room from the media center to provide some level of conditioned air. The media center is equipped with a 1-to-1 split system an integral condensing unit for air conditioning, but was reported to not be functioning properly. Centralized air-conditioning should be considered for occupant comfort and potential mold control.





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5.11 – HVAC Controls

Priority: 1

The building primarily uses pneumatic controls. There is an air compressor located within the main mechanical room of the building, used to pressurize this system. The boiler system is controlled using an electronic direct digital control (DDC) system, via a Delta System controller, located within the main mechanical room.

5.12 – Electrical Service

Priority: 3 The building is equipped with a 600A, 208/120V, 3-Phase, 4-Wire main electrical service and is equipped with a main circuit breaker and feed-through lugs that serve branch panelboards mounted adjacent to the main switch. The main service panelboard is manufactured by Square D. The main service equipment appears to be in fair condition. There are no grounding test wells or grounding rods visible around the building and the existing building does not have any lightning protection.

5.13 – Electrical Distribution

Priority: 3 The panelboard distribution throughout the building is a combination of panelboards manufactured by Square D and General Electric (GE). Panelboards appear to be in fair condition. The original wiring is installed in conduit and is being utilized. Due to alack of receptables power strips are being utilized in numerous locations.

5.14 - Lighting - Interior

Priority: 3 Most lighting throughout the building utilizes T8 fluorescent lamps. Typical corridors contain recessed 2'x2' troffers, typical

classrooms contain recessed 2'x4' troffers. Suspended high bay 1'x4' fixtures are used in the gymnasium while suspended 4' utility strip fixtures are used in utility/storage spaces without ceilings. Lighting controls consist of ceiling mounted occupancy sensors in corridors, wall mounted occupancy sensors in classrooms.

5.15 – Lighting – Exterior

Priority: 3 Exterior lighting consists mostly of building-mounted wall packs above egress doors and "shoe-box" style parking garage pole lights. Fixtures utilize fluorescent lamps. South parking Metal Halide and north lot is LED style lighting??

5.16 – Lighting – Emergency

Priority: 3















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Emergency lighting throughout the building is achieved through the use of dual-head "bug-eye" style battery fixtures. Emergency lighting coverage should be reviewed for compliance. Exit signs are provided with integral battery backup.

5.17 - Generator Priority: 2

The building is not equipped with a permanently installed generator. It utilizes a mobile/roll-up style generator for providing backup power to the boiler system. There is a 50A outlet on the exterior of the building that the generator plugs into and a manual transfer switch in the main electrical room. This system will not come online automatically upon loss of power. A new permanent generator for the full building is recommended.







6.0 - Technology

6.1 – Classroom Technology

Typical classrooms contain Promethean intelligent boards, as well as a Front Row video conferencing/sound system. There is also a PhonicEar speech reinforcement system in most classrooms, but we were informed this system is inactive.





6.2 – Assembly Technology None Observed

6.4 - Intercom/ Public Address

6.3 – Building WiFi Priority: 5

Wireless access points manufactured by Aruba were observed throughout the building. There was also an exterior wireless access point for the outdoor classroom/flex space. We were not made aware of any issues regarding WiFi coverage.



Priority: 3

Priority: 5

Priority: N/A

The intercom/PA and master clock system is a Bogen Multicom 2000 system with wall mounted paging/clock speakers in typical classrooms. The head end equipment is located within the main IT room, adjacent to the media center.



6.5 - Clocks/ Bells See 6.4 above.



6.6 - Phones/ Data **Priority: 3**

The building is equipped with a fiber service and abandoned analog phone service. Typical classrooms contain wall mounted phones by the entrance to the room with a PA system interconnection switch.





be added.

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7.0 - Building Security

7.1 – Secured Entrance Vestibule

Priority: 1 The main entrance to the building contains a video entry station with integral card reader. The main entrance to the Center School utilizes a video and audio intercom interface (AlPhone) that allows communication between the Main Office visitors entering into the building. The video image appears on a dedicated camera screen and phone at the reception desk. The inside set of vestibule doors are not secured once an individual enters, allowing anyone to go throughout the school without checking in at the main office. Additionally, there is no transaction window between the main office and the vestibule, which is typical for a secure vestibule that meets school security and safety standards. The existing AIPhone system is in good condition. An intrusion detection system for the building could not be verified. A secure vestibule can be developed by moving the inside wall of the vestibule, installing new doors and security hardware and a secure transaction window. A door from the vestibule into the main office will also



Exterior doors should remain locked during the day and should have a monitoring system installed to notify administration when a door is left open or unlocked.

Priority: 1 7.3 – Operable Windows

Windows in the North wing are original and due to age and deterioration are hard to operate and shift. Due to this condition, window can remain open or unlocked allowing for easier access into the building. These windows should be replaced not only for being past their life expectancy but also for the security risks they provide.

7.4 - Security Cameras - Interior **Priority: 5**

The building is equipped with both interior and exterior cameras, manufactured by Avigilon. The camera system is only 2 years old. The main entrance to the building contains a video entry station with integral card reader. There is also an intrusion detection system, installed 3 years ago, consisting of security keypad, motion sensors, duress button/silent alarm, etc.

7.5 – Security Cameras – Exterior Priority: 5

The building is equipped with both interior and exterior cameras,





Priority: 4/5

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manufactured by Avigilon. The camera system is only 2 years old.

8.0 - Building Structure

8.1 – Overall Building Structure

We were informed that the original building (the northern wing, also known as the "upper wing") was constructed in 1952 with the northern two rooms added in approximately 1954. The roof framing appeared to be wood, with brick veneer exterior walls on the east and west sides, and CMU along the northern elevation [see Photo No. 1 and Photo No. 2]. It is assumed the interior corridor walls are bearing walls and the entire wing

appears to be bearing on a conventional cast-in-place concrete foundation system.

The remainder of the school (also known as the "lower wing") was constructed circa 1978. It typically consists of metal roof deck supported by open web steel joists, masonry bearing walls, and also bearing on a conventional cast-in-place concrete foundation system.

We did observe a small spalled upper area of foundation wall at an exterior corner [see Photo No. 3], but it does not appear to compromise the integrity of the main structure. The void can be repaired with a mortar based repair product.

The roofs, which are typically flat, have several different levels with slight pitches to drains and scuppers and roofing insulation pitching towards roof drains [see Photo No. 4 and Photo No. 5].

We were informed that occasionally there are leaks around the chimney. Viewed from the roof level we observed some cracks in the exterior vertical brick surface of the chimney [see Photo No. 6 and Photo No. 7]. Where there are cracks and spalling in the mortar joints, it should be repointed. Where cracks extend thru individual bricks, the bricks should be replaced. The entire chimney should be checked for plumbness. From our brief cursory visit, it is not clear what is causing the deficiencies. It



1: Partial Northern and Western Elevation



2: Partial Northern and Eastern Elevation



3: Partial Exterior Elevation - Spalled Corner of Concrete Foundation



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can be localized settlement or expansion/contraction movement as a result of thermal changes, including freeze-thaw cycles. If the masonry chimney is to remain repairs should be made, provisions should be considered to reduce the future rate of deterioration (e.g., a silane and siloxane waterproofing blend may be an option to protect the masonry surface) and periodic monitoring and maintenance is critical.

We were able to observe the underside of the gym roof framing as viewed from grade [see Photo No. 8]. The deck and open web steel joists appeared to be in satisfactory condition

at the time of our visit. However, any considerations to add rooftop equipment on the gym roof will require a structural analysis and may require potentially costly field welded reinforcement if the capacity of the existing framing is exceeded.

In a random area where ceiling tiles were partially removed in a "lower wing" classroom, we observed metal roof deck supported on open web steel joists, and the joists appeared to

be bearing on CMU masonry wall [see Photo No. 9]. The framing appeared to be in satisfactory condition at the time of our visit.

In a random area where ceiling tiles were partially removed in an "upper wing" attic space, we observed wood roof planks supported on sawn lumber 2x framing [see Photo No. 10]. In this area the portions of the wood appeared to be discolored. It may be a result of moisture infiltration. Conditions should be further inspected. Water can damage the wood fibers and potentially reduce their structural capacity. Repairs should be made as required. Water infiltration issues should be addressed and provisions should be made to permit periodic monitoring.

During our walkthrough we observed a suspended steel wire cable that appears to be suspended from an open web steel joists [see Photo No. 11]. If this has not been analyzed and reviewed by an engineer, our office recommends verifying the design tributary loads on this structural member, size and capacity of the member, where the cable is connected to the structural member, and maximum concentrated loads potentially suspended from the cable (including dynamic loads).



4: Partial View of Roof (Looking Northeast)



5: Partial View of Roof (Looking East)



6: Close-Up of Southern Chimney Elevation Roof (Looking North)



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In lower level storage, security, and mechanical rooms we observed concrete I-joists supporting the floor above [see Photo No. 12, Photo No. 13, and Photo No. 14]. No deficiencies were noted during our very limited observations. If loads on or suspended below this framing is to be changed/increased, a more detailed structural review should be considered.

The cast-in-place concrete slab on grade in the mechanical room [see Photo No. 15] has some random cracks and the surface roughened in areas. However, the slab appeared to be functioning normally as a hardened floor surfaced.

Evidently there are underground tunnels in portions of the building. It is assumed that they were used for passage of utilities (one of the tunnels ends in the mechanical room). We observed the top access in one area [see Photo No. 16]. The tunnels are constructed out of reinforced cast-in-place concrete. We did not enter/view the length of the tunnels. At

the access entry we did notice that the floor of the tunnel is not a concrete surface.

During our walkthrough we observed interior stairs with nine risers (including a landing) and a partial height CMU wall [see Photo No. 17]. The possibility of modifying this area was discussed, including possibly adding a lift. The structure in this area would have to be reviewed in greater detail (including possibly evaluating soil conditions).

A deficiency at one of the interior stairs was brought to our attention [see Photo No. 18]. Some portions of the treads are sagging/depressed. A more detailed investigation is recommended, including reviewing the soil if the stairs are bearing on grade.

And, as a footnote, storage of some carpet rolls was observed supported on a framed ledge while walking down a set of interior stairs [see Photo No. 19]. If it has not been already, our office recommends reviewing the structural capacity of this framing and people should be protected from loose storage materials overhead.



7: Close-Up of Western Chimney Elevation Above Roof (Looking East)



8: Underside of Gym Roof Framing



9: Underside of Wood Roof Framing in 1952 Upper Wing



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10: Underside of Typical Classroom Roof Framing in 1978 Wing





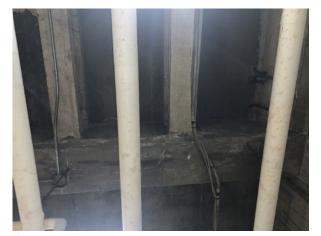
12: Underside of Concrete Floor Framing Above Storage



13: Underside of Concree Floor Framing Above Security Area



15: Partial View of Slab-On-Grade in Mechanical Room



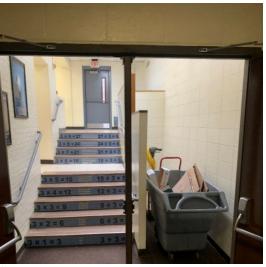
124: Underside of Concrete Floor Framing Above Mechanical Room



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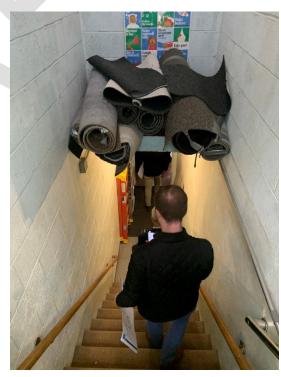
13: View of Tunnel Access Opening / Pit Floor



17: Split Level Interior Stairs Between 1952 & 1978 Winas



14: Partial View of Existing Interior Stair by Southern Entrance



159: Interior Stairs Accessing Lower Level



Section 3: Summary





TAB 3.2 EXISTING CONDITIONS EVALUATION

Hall Memorial School

Section 1: Overview



Hall Memorial School located at 111 River Road (Rt 32) in Willington; CT is a 63,016 Gross Square Foot (G.S.F.) educational facility. Originally constructed in 1922, the primary school building has been added onto over the years, with the most recent addition being in 1980. The below evaluation is based on in person site walk through, reviews of the below building systems/ components, as well as discussions with Town representatives, School Administration & Faculty.

The existing building is a three-story building with an assembly occupancy. There is one hydraulic elevator, which serves all three levels of the building. The elevator has both front and rear doors to serve the gym level along with the other levels of the building. Installed as part of the 1980 Addition, the elevator is not up to current standards and will need to be renovated sometime in the near future. Code, Accessibility, and Finish upgrades have been performed throughout the years, but much work is still needed to meet current Building Code & Educational Design requirements.

The following is a matrix of references to the existing conditions.

| 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) |



Section 2: Facilities Evaluation

3.0 - Site & Utilities

1.1 - Parking Priority: 1

Available parking accommodates 62 vehicles, with two handicap accessible spaces available. There is an overflow parking to the east of the building with approximately 50 spaces. These parking spaces are in poor - fair condition. The overflow lot has become a regularly used lot and is used more frequently than the Western lot located behind the school due to its proximity to the main entrance. Despite a designated crosswalk and flashing lights, the traffic and site lines on Route 32 does present a problem for anyone who is crossing RT-32. More parking and Accessible van loading zones should be provided on the school site.



Paving throughout the site is in fair-poor condition and should be monitored for repair and replacement in the near future. The pavement from the designated handicapped parking spaces to the upper north parking area leading to the ramp is non-compliant.

<u>1.3 – Site Circulation</u> **Priority: 1**

Site circulation is poor due to tight site, significant elevation changes and the location of Route 32 through the site. The overflow parking has become a main parking lot and used regularly however, its location across Route 32 with short view angles for oncoming traffic poses a serious safety issue for pedestrians crossing the street to enter the school. Similarly, the larger lot to the east for a vehicular loop is not near the main entrance and is at the lower level of the school due to the sloped grading. The lower lot is also the bus pickup and drop-off loop while parent pickup and drop-off occurs in the overflow parking lot.

1.4 – Sidewalks & Pathways Priority: 1

The main entrance level is at an elevation that is approximately thirty feet higher than the rear parking lot of the building. There are no sidewalks accessing the rear lot from the main level. The ADA access ramp to the school from River Road is in need of immediate repair and the accessible route from the handicapped parking spaces is noncompliant.

<u>1.5 – Site Accessibility</u> Priority: 1

The site topography results in a thirty-foot elevation difference from the front of the school to the rear parking lot and fields. This condition results in some significant challenge for site ADA accessibility. The







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accessibility report included in the 2017 Friar report identified all the deficiencies in detail.

1.6 – Emergency Access

Priority: 1

Emergency access should be provided around the entire building. This would require a second access point River Road south of the current access to the rear parking lot.

1.7 – Site Lighting

Priority: 1

Exterior lighting consists mostly of building-mounted wall packs above egress doors and around the rear of the building. At the front of the building, there are surface-mounted square downlights and emergency single-head fixture mounted in the exterior soffit. There are shoe box light fixtures in the rear parking lot. Additional redundant lighting is required at all egress ramps and pathways.

1.8 - Playfields/ Playscapes

Priority: 4

The playfields are in good condition but do not support all the program sports for the school. There are no walks providing ADA access to the baseball field. The play structure is in fair condition and should be updated in the near future. A new/updated play surface should be provided at the play structures.

1.9 – Site Stairs Priority: 1

The main entrance stair to the original 1922 building is in need of repair. Wood stairs at the fields need to be replaced. There are several exit/egress doors with a six-inch step to the exterior walk that results in an inaccessible condition.

1.10 - Site Ramps

Priority: 1 The main entrance ramp to the original 1922 building is in need of

repair. Exits at the cafeteria and the south academic wing leads to a sloped walkway that exceed the slope requirements and should be designed/graded to meet the requirements of a ramp in some locations.

1.11 - Fencing **Priority: 1**

The existing fencing is in poor Condition and should be replaced. This is a safety concern.

1.12 – Site Signage Priority: 1

Additional site directional signage should be provided. This will be based on the any reconfiguration of the site..

1.13 – Site Drainage

Priority: 1

The storm drainage is primarily through a surface runoff to the river on the west of the site. The eastern section of the site drains to Route 32 and the road drainage. The roof drains are connected to the sanitary system. Some storm water is piped underground to flare riprap



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Priority: 5

Priority: 1

outlets on the west side of the site. Storm water management with detention needs to be provided.

1.14 – Site Service Area

Priority: 3 The service access to the building is on the north side of the building with freestanding storage buildings. This is the delivery location for all supplies and kitchen foodservice deliveries. The grade outside the service doors is sloped. The dumpsters and recycling bin are located is this area. A clear path for pedestrian and service vehicle traffic should be defined and building emergency egress path should be provided with appropriate lighting.

<u>1.15 – Oil T</u>ank Priority: 1

The oil tank should be replaced and an allowance carried for potential contaminated soils..

1.16 - Water Service & Fire

The main service originates from a main at Route 32. A fire sprinkler service line should be provided for the fire protection system.

Priority: NA 1.12 – Gas Service

There is no gas on site.

1.13 – Sanitary Service

There are two septic tanks and leaching fields. The original building tank and field are in poor condition and the 1980 addition tank and fields are in good condition.

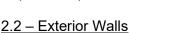


2.0 - Building Envelope

2.1 – Exterior Walls

Priority: 1/3

Brick – The building exterior primarily is comprised of brick and concrete masonry units that in general are in fair condition. Portions of the building masonry have been damaged throughout the years and should be repointed and/or replaced. There are also areas of spalling brick that should be reviewed and repaired. Some elevations show signs of dirt, vegetative growth (indicating potential water infiltration), and tar from roofing repairs that are recommended to be cleaned. Masonry expansion sealant joints have deteriorated over the years and are recommended to be replaced. Similarly the granite steps outside the front entry have settled and shifted. The stairs are not compliant with building codes. These should be removed and reset on proper foundation to maintain the required slope, rise and run of an egress stair.



Priority: 1/3

Brick – The front entry masonry is showing signs of significant water infiltration and damage repairs have been made over the years but full reconstruction of walls will be needed to fully correct the moisture issue. The wood cornice must be repaired and repainted.



Priority: 2

CMU – Concrete masonry backup seems to be in good condition with minimal repairs needed. Expansion and control joints should be replaced.



Priority: 1/3

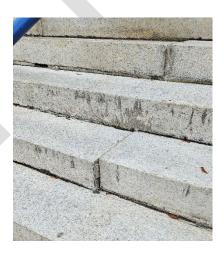
Concrete – Visible portions of the raised concrete foundation in some areas show signs of cracking and spalling that should be patched and repaired. A concrete ramp was added to the north side of the building to provide an accessible entry point to the school. This ramp has heavily deteriorated and has several sections that have been patched. This ramp will require heavy repair in order to bring it back to an acceptable condition for ADA compliance.



Priority: 2

Exterior doors throughout the building have sporadically been upgraded/ replaced over the years. Some hollow metal doors / frames appear to have significant damage and show visible signs of rusting. Door and hardware systems around the building vary and it would be recommended to replace all exterior door systems to address security, accessibility, and thermal performance code requirements. It is our recommendation that all exterior doors and hardware be









replaced.

<u>2.6 – Secure Vestibule Main Entrance</u> Priority: 1

The main entrance is only accessible by a stair. To meet ADA requirements a ramp should be provided to this location. A secure vestibule should be provided at this location for direct access and sight-lines from the administrative offices. A second secure vestibule should be provided at the rear of the building where the public accesses the assembly space. The alternative would require moving the location of the main offices.



The windows were replaced with aluminum dual pane systems, throughout the building during the last major renovation in 1980. These windows while an upgrade from the original windows do not appear to be thermally broken and are not as efficient as current window systems. Similarly the exterior aluminum finish has faded and started chalking which will further deteriorate over time. While functional now replacement will be needed in coming years.

<u>2.8 – Roofs</u> **Priority: 1**

The roofs are a mix of flat membrane roofing and gabled shingle roofing which is over the original portion of the building. Both have reached their end of life and are in need of replacement. Leaks through the roof are consistent and require patching and repair work regularly.

2.9 – Hazmat Priority: 1

The Board of Education should commission a comprehensive Hazmat and Abatement assessment to identify all possible hazmat sources present within the building prior to proceeding with any exterior or interior building replacement work.

<u>2.10 – Thermal Performance</u> Priority: 3

Without existing or as built construction documents for the original school construction or destructive investigation, we are unable to determine the thermal performance of the entire building envelope. However, given the vintage of the building it is reasonable to suspect that the current thermal performance does not meet the current Energy Code requirements for continuous insulation. Overall thermal performance could be enhanced but would require significant work within the building by furring out of walls to accommodate additional insulation.

<u>2.11 – Solar Panels</u> Priority: 5

The State department of education office of school construction grants encourages the installation of solar panels









at schools. There are other utility options that could be considered for the installation of renewable energy systems.

<u>2.12 – Canopies</u> Priority: 1

Protection from the elements should be considered at the entrances to the buildings. Current codes require appropriate lighting and maintenance of stairs and ramps to the school. However, it at the discretion of the local official to determine if the accessible route to the main entrance should be protected.

<u>2.13 – Canopies</u> Priority: 5

Protection from the elements should be considered for the entrance to the buildings. It is recommended that canopies are provided at Bus pickup and drop off areas.



























3.0 - Building Interior

<u>3.1 – Floors</u> **Priority: 3 / 4**

Flooring throughout the building varies with a mix of vinyl tile, carpeting, hardwood flooring, and ceramic tile. Many of the areas are showing signs of wear. Replacement is needed with the carpeted areas which are typically showing the heaviest wear. Proper entry mat materials and walk off lengths are recommended at the entry to the building. Corridors that currently have carpeting should be replaced with a lower maintenance floor finish such as linoleum tiles. Ceramic tiles within the bathroom have been damaged and are missing. These areas should be replaced.



Classroom walls are typically CMU block throughout the school with some areas also having a gypsum furred out finish. Within the original 1922 building there are also areas with plaster walls. The condition of the CMU and gypsum walls appear to be in good condition with minimal issues. The plaster walls particularly in the media center show the most wear and deterioration. There is also staining and damage shown from roof leaks over the years. These areas should be repaired and replaced.

3.3 – Ceilings Priority: 2

Ceilings throughout the school are predominantly acoustic ceiling tiles. Portions of the original building also have the original plaster ceilings and trim. The plaster ceilings and trim have been damaged over the years and show pealing paint and water damage. These should be repaired and replaced. Similarly many of the ceiling tiles show staining from roof leaks as well as sagging and improper grid placement. The age of the ceiling tiles also point to a lower rated acoustical property that does not reach the levels of todays new ceiling tiles. It is recommended to replace damaged ceiling tiles and grids that no longer remain plum and flush. It is also recommended to look into replacement of all ceiling tiles to received a higher acoustic rating in the classrooms to better meet the acoustical ratings required. Since classroom walls and floors are all hard surfaces the ceiling tiles provide the most sound absorption of these rooms.

3.4 – Doors/ Hardware

Priority:1

Door hardware seems to be sporadically replaced over a period of as the hardware is damaged or no longer functional. This has resulted in an array of different types of hardware some accessible some not. Similarly, classroom hardware does not contain the security locks that have become typical for schools these days. Hardware has also been modified in









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the field which may prevent the fire / smoke ratings of the doors.

<u>3.5 – Lavatories</u> Priority: 1/5

Lavatories have been partially upgraded over the years but still have some original finishes and fixtures. These have exceeded their end of life and should be replaced. Similarly the spacing, accessibility, and layout of the bathrooms is not to todays codes and should be reconfigured and updated to meet the latest code requirements.

3.6 – Natural Light Priority:1/5

Most classroom learning spaces have access to natural light however original window openings have been infilled with brick reducing the amount of natural light into the spaces. Additionally, some spaces used for instruction have minimal at grade clearstory windows or no windows at all such as the cafeteria.

3.7 – Acoustics Priority: 2

Classroom acoustics are a concern with the predominantly hard floor and wall surfaces and the older ceiling tiles. Due to the CMU classroom walls transmission between most classrooms should be less. Certain areas such as the band room which opens to the gymnasium is separated by an old folding partition which does not meet the acoustic requirement separation. Unit ventilators further compromise the acoustic levels in instructional spaces.

3.8 – Millwork/ Cabinets ADA Priority: 1

Millwork / Cabinets throughout the school have exceeded their useful life and are in need of replacement. Many cabinets are broken, do not work properly, or are inadequate for storing materials used in todays classrooms. Similarly the laminate countertops are damaged and delaminating. Update spaces for ADA accessible cabinets.

3.9 – Millwork/ Cabinets Priority: 1

Millwork / Cabinets throughout the school have exceeded their useful life and are in need of replacement. Many cabinets are broken, do not work properly, or are inadequate for storing materials used in todays classrooms. Similarly the laminate countertops are damaged and delaminating. Replacement of all the millwork and cabinets in the school is recommended to provide efficient and proper storage for the spaces.

3.10 – Gymnasium Priority: 2

The gymnasium appears to be in good condition. The











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Priority: 2

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general size is smaller than we typically see for new schools but is in good condition and should be functional for the school. The band room opens up into the gymnasium to provide a stage. The acoustic separation between these two potentially loud environments most likely does not meet the requirements for todays schools. Lighting for the stage area versus the gymnasium is inadequate.

3.11 – Locker Rooms

Locker rooms for the gymnasium are beginning to show extended wear and damage. Replacement of finishes, lockers and proper clearances will be needed in the future.

3.12 – Assembly Priority: 2

Gymnasium: The gymnasium is the only assembly type space. Since its predominant use is for a gymnasium it is lacking the lighting, sound and acoustic enhancements needed for a proper assembly or stage performance.

3.13 – Assembly Priority: 2

Media Center: The media center is located in the original part of the building and has many period details and

ornamentation. Unfortunately, these architectural details have been damaged over the years due to water infiltration and many pieces of trim, molding or skylights are in need of repair. Similarly the space originally was designed as an auditorium / stage area. Due to the transformation of this space into a media center there is an inefficiency of space use as well as inappropriate layouts dictated by the structure of the building that has placed offices and storage spaces in bad circulation zones. These spaces would ideally be relocated to proper office spaces.

3.14 – Cafeteria/ Kitchen Priority: 2

<u>Cafeteria:</u> The cafeteria is located in the interior of the building on the lower level. Due to its location there is no natural light into the space. The space is functional for its needs however acoustics are a concern due to the brick walls.

<u>3.15 – Cafeteria/ Kitchen</u> **Priority: 2**

<u>Kitchen:</u> The kitchen is relatively small and internal to the building. The size can limit the availability of types of food and how quickly students can be served. The location requires an overlap between deliveries and students as the deliveries need to be wheeled through the corridors. Servery lines and coolers are stayed out in the cafeteria space due to the lack of kitchen space which further reduces the area in the cafeteria for students seating. The kitchen space does not meet ADA











clearances.

<u>3.16 – Hazmat</u> **Priority: 1**

A full building analysis should be conducted for the school identifying all lead paint, asbestos and PCB containing materials as part of the hazmat plan. Some VAT has been removed due to water damage, however there are additional areas that need remediation. Hazmat must be identified in the replacement of windows, floor tiles and pipe insulation. The hazmat allowance identified in the capital improvements budget is for the abatement of these items.

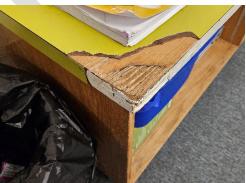
3.13 - Fire/ Smoke Ratings

Priority: 2/1

Current code requires schools to have a sprinkler system as well as certain fire and smoke separations. Due to the age of the school not all of these requirements are met. It appears certain corridors are rated however door hardware modifications could compromise these ratings. The ratings are not consistent throughout the building due to the age of additions / renovations. The entire building should be brought up to a consistent fire and smoke rating as required by current code.



















Priority: 2

Priority: N/A

Priority: 1





4.0 - Interior ADA Accessibility

4.1 - Lavatory & Toilet Accessibility

In general, the lavatories & gang bathrooms located within the school have had mixed updates throughout the existence of the school. Somebathrooms have been updated throughout the years to meet current Accessibility Codes. However, the gang bathrooms would need to be significantly reconfigured to meet accessible clearances. Certain areas have access to an accessible bathroom but others appear to be past the distance required due to the limited amount of bathrooms that are accessible.

4.2 – Childrens Fixtures N/A

4.3 – Drinking Fountains

Priority: 1 In general, it appears that the drinking fountains throughout the building have started to be replaced with ADA compliant water coolers, with integral bottle filler stations. Based on the size of the building, it seems that the total number of drinking fountains provided is 'light' and that more would be needed in order to meet current plumbing fixture requirements. It was also observed that there were no dual height drinking fountains which is required to address standing height accessible code requirements.

4.4 - Doors/ Hardware

Doors are generally dated but most hardware appears to have been updated to meet ADA grasp ability. They have been modified to not latch properly and may not meet the push / pull strength requirement for accessible doors. Door hardware should be replaced with the doors. Similarly many of the secondary cabinet or closet doors still utilize older hardware which does not meet current ADA requirements. These will need to be replaced.

4.5 – Interior Signage

Priority: 2 Provide ADA code compliant directional signage in the corridors and signage for instructional spaces.

4.6 - Elevator Priority: 1

There is an existing single elevator that connects all the different levels of the current building however it is dated. The location of the elevator allows it to reach each floor, however navigating through the school is difficult and not direct. Not only does it require lots of travel to get back to the elevator, it also forces students using it to traverse through the gym to make it to other classrooms. The interior dimensions and controls should be further reviewed to confirm if they can











meet the requirements of today's codes. Future space reconfiguration should consider direct access to the elevator.

<u>4.7 – Stairs</u> **Priority: 1**

Due to the varying elevations of the building, there are many different sets of stairs throughout. Most stairs appear to be in good condition and are wide enough to accommodate accessible clearances through them however they do not incorporate areas of refuges in them. Since the building is not sprinklered areas of refuge are needed for accessible egress paths throughout the school.

<u>4.8 – Ramps</u> **Priority: 5**

There are several ramps throughout the building to help navigate different elevation changes. The ramps in the corridors appear to provide sufficient slope, handrails and landings. There is a ramp within a room that not only take up a large portion of the space don't appear to have the landing requirement in front of the door, full handrails on both sides as well as edge protection. This ramps should be renovated to provide current code required elements.

4.8 – Gymnasium/Locker Rooms Priority: 2

The gymnasium space is accessible through the elevator. The space in general appears to meet current requirements with the exception of the bleachers which don't appear to have accessible seating areas.

4.9 – Assembly Gym & Stage Priority: 5

See gym comments above as that is the only assembly space.

4.10 – Typical Classrooms Priority: 2

In general typical classroom are accessible throughout the building. Some would need some adjustments to doors to make sure the push/pull clearances are met. The built in millwork is not fully ADA compliant. Updates have been made at various areas throughout the years, but wholistically the millwork needs to be replaced and made accessible.

4.11 – Accessible Exits Priority: 1

Most exits of the building are not flush with grade or occur within a stairwell making accessibility a major concern throughout. It appears the widths of these stairs and steps are wide enough however there don't appear to be designated areas of refuge within the stairwells. Fire ratings, sprinklers and areas of refugee should be reviewed or added to make sure occupants are protected in these areas where steps need to be traversed.













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4.12 – Site ADA Requirements

Priority: 1

There are numerous concerns regarding the site accessibility, which are detailed in the 2017 report by Friar Associates. It is our recommendation that all the items identified in the report be addressed as a priority 1 concern.





5.0 - Building Systems

5.0 – Plumbing General

The building is served by a 2" domestic water service. Domestic hot water heating is provided from an oil fired residential style boiler serving an indirect storage tank (roughly 420 gallons). The boiler is a System 2000 and appears to be in fair condition. Typical plumbing fixtures are sensor operated, but some manually operated fixtures were observed as well. Water coolers with bottle filling stations were observed in corridors. There are (2) 6" sanitary lines that feed into septic tank. Pitched and flat roofs with downspouts and gutters. Internal roof drains on gym and classroom wings. The kitchen has a 3-bay pot sink, dish washer and grease waste interceptor system. There are no floor drains in bathrooms.



Priority: 3



5.1 – Plumbing General

A general maintenance program should be established for the repair and replacement of plumbing components throughout the building.

5.2 – Plumbing Water Conservation Fixtures **Priority: 3** The existing plumbing fixtures should be replaced by water conservation fixtures.

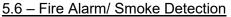
5.3 – Emergency Eyewash

Priority: 1 An Emergency eyewash must be installed in each maintenance workshop and custodial closets...

Priority: 1 5.4 – Plumbing Insulation of Hot Water Lines All hot water lines should be insulated.

5.5 – Fire Protection

Priority: 1 The existing buildings fire protection system is a limited area coverage system, supplied from the domestic water service. This service was for the existing paint remove, but this system has since been abandoned. Gate valves and flow switches monitored by the fire alarm system were observed, but there was no backflow preventer. It is recommended for a full NFPA 13 compliant sprinkler system to be installed throughout the buildina.



The building contains an addressable Siemens fire alarm system, which was installed in the Summer of 2023. Fire alarm device coverage throughout the building consists of smoke detectors, manual pull stations, horn strobes, etc. There is a voice evacuation system integral to the control panel that can annunciate over the fire alarm devices within the gymnasium. Some of the fire alarm devices appear to be a mixture of new





Priority: 5







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and old devices, connected to the new system. The building is also equipped with an elevator recall system, consisting of smoke detectors outside each elevator landing.

5.7 – Heating (Building)

Priority: 1

The building is equipped with (2) 2000 MBH oil-fired boilers. The boilers appear to be original to the building and are exceeding their useful life. Hot water from the boilers is distributed throughout the building by a set of pumps. The hot water serves perimeter radiation, cabinet unit heaters as well as hot water coils in air handling units





















5.8 – Heating (Localized)

Priority: 3

Space heating is provided in classrooms through the use of hydronic unit ventilators and baseboard radiation fed from the boiler system. Some classrooms had the unit ventilators recently replaced. The gymnasium has a heating and ventilation only unit.

<u>5.9 – Ventilation</u> **Priority: 1**

Ventilation is provided in classrooms mostly through the use of unit ventilators. Some select classrooms are ventilated using rooftop units. Offices, kitchen, gym and library have their own rooftop units. The library is provided with heating and cooling through the rooftop unit while all other rooftop units are heating and ventilation only. Even though the classrooms have ventilation through unit ventilators, they lack the proper filtration required by current code.

5.10 – Air Conditioning

Priority: 2 \ 1

There is no centralized air conditioning system for the building, with the exception of the library. The library is served by a packed rooftop unit with onboard DX cooling. There are a few spaces equipped with split type units with outdoor condensing

units and indoor evaporators. Some classrooms are equipped with portable window or floor-mounted AC units.

5.11 – HVAC Controls

Priority: 2

The building primarily uses pneumatic controls. There is an air compressor located within the main mechanical room of the building, used to pressurize this system. The boiler system is controlled using an electronic direct digital control (DDC) system, via a Siemens controller, located within the main mechanical room.





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5.12 - Electrical Service

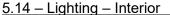
The building is equipped with a 1200A, 208/120V, 3-Phase, 4-Wire main electrical service. The main service panelboard is manufactured by Square D and is equipped with a main circuit breaker and distribution breakers. The main service equipment appears to be in fair condition.

5.13 - Electrical Distribution

Priority: 2

Priority: 3

The panelboard distribution throughout the building is primarily manufactured by Square D. Panelboards appear to be in fair condition. Some panelboards were observed to have spaces (no circuit breakers) covered with electrical tape. These should be properly protected. The power system should be upgraded to meet current needs.



Priority: 2

Most lighting throughout the building utilizes fluorescent lamps. Typical spaces contain recessed 2'x2' or 2'x4' troffers. Suspended high bay 1'x4' fixtures are used in the gymnasium, pendant mounted direct/indirect linear fixtures are used in the library. Lighting controls consist mostly of ceiling mounted occupancy sensors, where applicable. Lighting control device coverage appears to be inadequate in many locations.

5.15 – Lighting – Exterior

Priority: 1

Exterior lighting consists mostly of building-mounted wall packs above egress doors and around the back-side of the building. At the front of the building, there are surface-mounted square downlights and emergency single-head fixture mounted in the exterior soffit.

5.16 – Lighting – Emergency

Priority: 1

Emergency lighting throughout the building is achieved through the use of dual-head "bug-eye" style battery fixtures. Other spaces such as the library utilize pendant light fixtures with integral battery packs. Emergency lighting coverage should be reviewed for compliance. Exit signs are provided with integral battery backup.

5.13 – Generator

Priority: 4

The building is equipped with a 200kW diesel generator manufactured by Cummins with automatic transfer switch that provides backup power to the main electrical service (full-building backup). The generator and transfer switch appear to be in fair condition. The generator enclosure is showing signs of rusting along the top of the enclosure.























6.0 - Technology

6.1 – Classroom Technology

Priority: 5

Typical classrooms contain Promethean intelligent boards. No complaints were brought to our attention at the time of the visit with regards to classroom technology.



6.2 – Assembly Technology

Priority: 1

None Observed



Wireless access points manufactured by Aruba were observed throughout the building. We were not made aware of any issues regarding WiFi coverage.



6.4 – Intercom/ Public Address

Priority: 3

The intercom/PA system is a Bogen Multicom 2000 system with wall mounted paging/clock speakers in typical classrooms. The head end equipment is located within the main IT room, adjacent to the main office.



6.5 - Clocks/ Bells

Priority: 3

There is a Standard time clock programmable controller located within the main office. We were not made aware of any issues with the timeclock system, but it appears to be an obsolete system.



6.6 - Phones/ Data

Priority: 3

The building is equipped with a fiber service and abandoned analog phone service. Typical classrooms contain wall mounted phones by the entrance to the room with a PA system interconnection switch.



7.0 - Building Security

7.1 – Secured Entrance Vestibule

Priority: 1

The main entrance to the building contains a video entry station with integral card reader A secure vestibule should be created to allow visitors to be kept in a secure area while administration is able to verify their identity and reason for visiting. The main entrance is also not accessible so anyone visiting that can not use steps has to enter at the North side of the building requiring administration to leave their area and meet them.







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7.2 - Secured Building Exits

Priority:1

Exterior doors should remain locked during the day and should have a monitoring system installed to notify administration when a door is left open or unlocked.

7.3 – Operable Windows

Priority: 4

Windows throughout the building have been replaced during previous renovations and provide latching and locking for security purposes. Upgraded glazing types should be reviewed to provide additional protection in select high risk areas.





7.4 - Security Cameras - Interior

Priority: 5

The building is equipped with both interior and exterior cameras, manufactured by Avigilon. The camera system is only 1-2 years old. The main entrance to the building contains a video entry station with integral card reader. There is also an intrusion detection system, installed around 3 years ago, consisting of security keypad, motion sensors, duress button/silent alarm, etc.

<u>7.5 – Security Cameras – Exterior</u> See 7.4 above. **Priority: 5**

Priority: 1/3



8.0 - Building Structure

8.1 – Overall Building Structure

On December 5, 2023, our office made a brief walkthrough the existing Hall Memorial School located at 111 River Road in Willington, Connecticut [see Photo No. 1]. This report provides limited cursory visual observations of the existing structure. No existing structural drawings were available for us to view, and

most of the structure was concealed by wall, floor and ceiling finishes. No destructive testing was performed during our visit.

We were informed that the original building was constructed in the 1920's (northern end) with building additions added in the 1980's.

We were able to observe the underside of the gym roof framing as viewed from grade [see Photo No. 2]. The deck, open web steel joists, and steel beams appeared to be in

satisfactory condition at the time of our visit. We did observe

suspended climbing ropes attached to the same beam below the roof deck. If this has not been analyzed and reviewed by an engineer, our office recommends verifying the design of the roof framing where the ropes are connected, including potential maximum simultaneous concentrated loads (including dynamic loads). Any considerations to add rooftop equipment or replace existing with heavier units on the gym roof will require a structural analysis and may require potentially costly field welded reinforcement if the capacity of the existing framing is exceeded.

The original sloped roof and attic space consists of sawn

lumber sloped 2x rafters and attic floor, all supported on a full depth steel roof truss system [see Photo No. 3 and Photo No. 4]. Our observations were very limited. At the time of our visit we did not see any obvious signs of structural deficiencies. If loads on or suspended below this framing are to be changed/increased, a more detailed structural review should be considered (time consuming field verifications and analysis would likely be required for any significant new loads).

In general, the exterior brick veneer surface appeared to be in satisfactory condition based on very limited visual



1 : Front River Road Elevation



2: Underside of Gym Roof Framing



16: Partial View - Sloped Roof / Attic Framing



17: Close -Up View Attic Truss Framing Connection





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observations. It appeared there was some repointing and/or brick infill at some time [see Photo No. 5]. However, updated repointing and periodic monitoring and maintenance is recommended.

The condition of existing exterior steel lintels over door and window openings varied. In some cases the flexible joint between the lintel and underside of brick veneer was cracked and in poor condition [see Photo No. 6]. Our office recommends repairing all of the joints (water infiltration during

freeze-thaw cycles can cause damage from expansion and contraction).

In another location we noticed the paint coating on the steel lintels peeling and oxidizing [see Photo No. 7]. This corrosion of the structural steel is an electrochemical process that requires simultaneous presence of moisture and oxygen. If not addressed properly the structural integrity of the steel can be compromised. Our office would recommend removing all loose mill scale, loos rust, loose paint, and other loose detrimental foreign matter by chipping, scraping, sanding, and wire brushing. All exposed steel should be recoated with an approved exterior grade zinc-rich coating system.

We briefly entered the school's existing lower level boiler room. The roof structure (floor above) appeared to be reinforced cast-in-place concrete with concrete beams or possibly concrete encased structural steel framing [see Photo No. 8]. The condition of the underside of concrete should be inspected. Any potential loose or spalled concrete should be

repaired with an approved compatible repair mortar.

We observed some questionable structural elements. The header and steel lintel into a masonry shaft appeared to be showing signs of deterioration/oxidation [see Photo No. 9].

This condition and other similar lintels should be reviewed and repaired as required.



5: Partial Exterior Elevation View of Brick Masonry Veneer



18: Close-Up of a Lintel Over an Exterior Window



19: Close-Up View of Underside of an Exterior Lintel



8: Underside of Floor Framing Above Boiler Room



There were also some spalled mortar joists and random cracks visible along the interior surface of the boiler room and shaft walls [see Photo No. 10 and Photo No. 11].

The plumbness and condition of all brick masonry should be reviewed. Deficiencies should be noted and repaired accordingly.

Grade drops down towards the back of the school. Some portions of the exterior concrete foundation surface are exposed above grade (and may have been parged in some locations). We observed random cracks and spalls along the exterior concrete surface [see Photo No. 12]. All areas should be investigated and repaired accordingly. Continued monitoring and maintenance is critical.



10: Mechanical Room Masonry Shaft (looking up)



20: Door Opening Lintel in Boiler Room



211: Interior Face of Interior Boiler Room Exterior Wall



1222: Cracked Exterior Face of Existing Foundation Wall



Section 3: Summary





TAB 4.1 FACILITIES NEEDS ASSESSMENT

4.1 – EVALUATION MATRIX OVERVIEW: TBD

- 4.2 Center School Overview
- 4.3 Hall Memorial School Overview
- 4.4 Evaluation Matrix Summary













TAB 4.1 EVALUATION MATRIX OVERVIEW

School Evaluation Criteria

As part of the overall building evaluation, the below mentioned design criteria has been used to provide a priority ranking system. This ranking system will be used to evaluate each schools existing conditions, and create a longterm maintenance and repair plan for the school.

Recommendations and comments noted within this report have been made in comparison to the Codes & Standards listed to the right. These recommendations are not fully vetted conditions, but general assumptions as compared to these standards & guidelines. Prior to the commencement of any corrective action, a comprehensive sudy should be performed by the Town and Board of Education to ensure that all applicable codes depending on the corrective work being performed are being adhered to.

| CODES & STANDARDS EVALUATED AGAINST | | | |
|---|------|--|--|
| International Building Code (IBC) | 2021 | | |
| IBC Connecticut Supplement | 2022 | | |
| International Mechanical Code | 2021 | | |
| International Plumbing Code | 2021 | | |
| International Energy Conservation Code | 2021 | | |
| CT Accessibility Code (A117.1) | 2017 | | |
| Connecticut Fire Code 2021 | | | |
| CT School Construction Standards & Guidelines 2016 | | | |
| Note: recommendations provided are referencing the above-mentioned codes & standards. A comprehensive evaluation depending on the work being performed is recommended prior to the commencement of any corrective work. | | | |

Ranking System:

Priority Rank 1: Urgent Priority (0-1 year)

Items ranked as a Priority 1 are considered Urgent, and are expected to require attention in the immediate future. Items such as this most likely relate to current or expected failures of systems, or encompass health and life safety related issues. Items marked as a 5 should look to be addressed as soon as possible.

Priority Rank 2: High Priority (1-3 years)

Items ranked as a Priority 2 are considered a High Priority items, that should be corrected within a reasonable amount of time after highest priority items referenced above. Items in this category may be associated with high priority maintenance issues, high priority code issues or accessibility issues. Maintenance issues are expected to have a useful lifespan of 1-3 years.

Priority Rank 3: Moderate Priority (3-5 years)

Items ranked as a Priority 3 are considered Moderate Prioroity items that should be completed after above ranked items are addressed. Items in this category pertain to general mainteanance items, or



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items expected to have a useful lifespan of 3-5 years remaining. Some finish/ appearance related items may be present in this category that are expected to need updating in this timeframe.

Priority Rank 4: Moderate Priority (5-10 years)

Moderate Prioroity items that should be completed after above ranked items are addressed. Items in this category pertain to general mainteanance items, or items expected to have a useful lifespan of 5-10 years remaining. Some finish/ aesthetic related items may be present in this category that are expected to need updating in this timeframe, but should continue to be monitored on a regular basis.

Priority Rank 5: Low Priority (10+ years)

Items ranked as a Priority 5 are considered Low Priority item. These items may include ongoing maintenance and aesthetic issues that are not in current need of replacement, but should continue to be monitored on a regular basis. These items are expected to have a useful lifespan of 10+ years as long as proper maintenance is provided.

| | Ranking System | | |
|------------------|--------------------------------|--|--|
| Rank Description | | | |
| 1 | Urgent Priority (0-1 year) | | |
| 2 | High Priority (1-3 years) | | |
| 3 | Moderate Priority (3-5 years) | | |
| 4 | Moderate Priority (5-10 years) | | |
| 5 | Low Priority (10+ years) | | |



TAB 4.2 EVALUATION MATRIX SUMMARY

Center School Overview - TBD





TAB 4.3 EVALUATION MATRIX SUMMARY

Hall Memorial School Overview - TBD





TAB 4.4 EVALUATION MATRIX SUMMARY

| | Hall |
|----------------------|----------|
| | Memorial |
| Center School | School |
| | |

1.0 Site & Utilities

| | - | | |
|------|------------------------|-----|-----|
| 1.1 | Parking | TBD | TBD |
| 1.2 | Paving | TBD | TBD |
| 1.3 | Site Circulation | TBD | TBD |
| 1.4 | Sidewalks/ Pathways | TBD | TBD |
| 1.5 | Site Accessibility | TBD | TBD |
| 1.6 | Exterior Lighting | TBD | TBD |
| 1.7 | Playfields/ Playscapes | TBD | TBD |
| 1.8 | Site Stairs | TBD | TBD |
| 1.9 | Site Ramps | TBD | TBD |
| 1.10 | Water Service | TBD | TBD |
| 1.11 | Gas Service | TBD | TBD |
| 1.12 | Sanitary Service | TBD | TBD |
| | | | |

Subtotal (Out of 60 pts): 0

2.0 Building Envelope

| 2.1 | Exterior Walls | 3 | 1/3 |
|-----|---------------------|-----|-----|
| 2.2 | Exterior Doors | 2 | 2 |
| 2.3 | Windows | 1/3 | 3 |
| 2.4 | Roofs | 1/3 | 1 |
| 2.5 | Hazmat | TBD | TBD |
| 2.6 | Thermal Performance | 3 | 3 |

Subtotal (Out of 30 pts): 0

3.0 Building Interior

| | 3.1 | Floors | 1/3 | 3 / 4 |
|--|-----|----------|-----|-------|
| | 3.2 | Walls | 3 | 1/3 |
| | 3.3 | Ceilings | 2 | 4 /5 |



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| 3.4 | Doors/ Hardware | 1 | 1 |
|------|---------------------|-----|-----|
| 3.5 | Lavatories | 1/4 | 4 |
| 3.6 | Natural Light | 4 | 5/3 |
| 3.7 | Acoustics | 2 | 2 |
| 3.8 | Millwork/ Cabinets | 1 | 2/1 |
| 3.9 | Gymnasium | 5 | TBD |
| 3.10 | Assembly | N/A | TBD |
| 3.11 | Cafeteria/ Kitchen | 4/3 | TBD |
| 3.12 | Hazmat | TBD | TBD |
| 3.13 | Fire/ Smoke Ratings | 1 | 2/1 |

Subtotal (Out of 65 pts):

4.0 Interior ADA Accessibility

| 4.1 | Lavatory Accessibility | 1 | 2 |
|------|-------------------------|---|-----|
| 4.2 | Childrens Fixtures | 5 | N/A |
| 4.3 | Drinking Fountains | 1 | 1 |
| 4.4 | Doors/ Hardware | 2 | 1 |
| 4.5 | Elevator | 1 | TBD |
| 4.6 | Stairs | 2 | 1 |
| 4.7 | Ramps | 5 | 5 |
| 4.8 | Gymnasium/ Locker Rooms | 5 | 2 |
| 4.9 | Assembly | 5 | TBD |
| 4.10 | Typical Classrooms | 4 | 2 |
| 4.11 | Accessible Exits | 1 | 1 |

Subtotal (Out of 55 pts):

5.0 Building Systems

| 5.1 | Plumbing | 3 | 3 |
|------|--------------------------------|---|---|
| 5.2 | Fire Protection | 3 | 1 |
| 5.3 | Fire Alarm/ Smoke Detection | 5 | 5 |
| 5.4 | Heating - (Building) | 3 | 2 |
| 5.4B | Heating - (Localized) | 3 | 3 |
| 5.5 | Ventilation | 1 | 1 |
| 5.6 | Air Conditioning | 2 | 2 |
| 5.7 | HVAC Controls | 2 | 2 |
| 5.8 | Electrical Service | 3 | 3 |
| 5.9 | Electrical Distribution | 3 | 3 |
| 5.10 | Lighting - Interior | 3 | 3 |
| 5.11 | Lighting- Exterior | 3 | 3 |

0



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| 5.12 Lighting - Emergency | 3 | 3 |
|---------------------------|---|---|
| 5.13 Generator | 3 | 3 |
| Subtotal (Out of 65 pts): | 0 | 0 |

6.0 Technology

| 6.1 | Classroom Technology | 5 | 5 |
|-----|--------------------------|-----|-----|
| 6.2 | Assembly Technology | N/A | TBD |
| 6.3 | Building WiFi | 5 | 5 |
| 6.4 | Intercom/ Public Address | 3 | 3 |
| 6.5 | Clocks/ Bells | 3 | 2 |
| 6.6 | Phones/ Data | 3 | 3 |

Subtotal (Out of 30 pts):

7.0 Building Security

| 7.1 | Secured Entrance Vestibule | 1 | | 1 | |
|-----|-----------------------------|---|--|---|--|
| 7.2 | Secured Building Exits | 1 | | 1 | |
| 7.3 | Operable Windows | 4 | | 4 | |
| 7.4 | Security Cameras - Interior | 5 | | 5 | |
| 7.5 | Security Cameras- Exterior | 5 | | 5 | |

Subtotal (Out of 25 pts):

| Total (Out of 335 pts): | 0 | 0 |
|-------------------------|---|---|
| 10tal (Out 0) 333 pts). | | |

| Ranking System | | | | | |
|----------------|--------------------------------|--|--|--|--|
| Rank | Description | | | | |
| 1 | Urgent Priority (0-1 year) | | | | |
| 2 | High Priority (1-3 years) | | | | |
| 3 | Moderate Priority (3-5 years) | | | | |
| 4 | Moderate Priority (5-10 years) | | | | |
| 5 | Low Priority (10+ years) | | | | |