



Facility Assessment Update of Hambden School – Operations Building

Located at: 13871 Gar Highway, Chardon, Ohio 44024

May 2024



Preface:

ThenDesign Architecture (TDA) conducted a field investigation of conditions at Chardon Local School District's Operations Building (former Hambden Elementary School) in May of 2024. The goal of the assessment was to identify the facility condition and renovation/improvement needs of the building and to understand the immediate, short-term, and long-term needs of the facility. The benchmark standard for the evaluation is based on current codes (including ADA), general conditions, and anticipated life expectancies of building materials, components, and systems. Costs are based on various resources, regional cost data sources, current market conditions, and recent project bid experiences. The structure of the report is outlined in a twenty-three-point checklist which includes:

- A) Heating
- B) Roofing
- C) Ventilation/Air Conditioning
- D) Electrical Systems
- E) Plumbing & Fixtures
- F) Windows
- G) Foundations
- H) Walls & Chimneys
- I) Floors & Roofs
- J) General Finishes
- K) Interior Lighting
- L) Security System
- M) Emergency/Egress Lighting
- N) Fire Alarm System
- O) Handicapped Access
- P) Site Condition
- Q) Sewage System
- R) Water Supply
- S) Exterior Doors
- T) Asbestos
- U) Life Safety Code
- V) Loose Equipment
- W) Technology

Each of the above categories includes a description, recommendation, and cost associated with the identified improvement. Upon subtotal of the cost of work, soft costs including contingencies, A/E Fees, CMR Fees, etc. have been included and tabulated. Additionally, the scope of required work has been broken down in the following manner:

Priority 1 – Needs that should occur as soon as possible – within 1-2 year timeframe

Priority 2 – Items that are approaching the end of useful life – within 3-5 year timeframe

Priority 3 – Replacement of components that are recommended to enhance performance and functionality, but is not necessarily urgent – 6+ year timeframe



General Description:

Chardon School District's Operations Building (former Hamden Elementary School) is a brick school building originally constructed in 1922 (two story), comprised of 9,930 SF, with subsequent additions constructed in 1949 (single story – 8,593 SF), and in 1964 a single-story addition (3,321 SF). All combined, the facility is 21,844 SF.

The school sits on a relatively flat site across from the Hambden Township Park, comprised of 4 parcels with a combined 4.46 acres. The facility is also located next to the Township administration buildings. The site is provided with asphalt parking which is in poor condition. This parking lot is also used for bus driving training. The site features moderate floral, bush, and tree-type landscaping. Nearly all of the playground equipment has been removed since closing down as a school. One piece was observed still present (tire swing) and is mounted to an older metal frame. The site features a large pavilion in fair condition and also features an on-site sewage treatment plant. The plant formally was shared with the Township Facilities next door, but now only served the operations building. Adjacent to the site is the Township Park across the street, and also a graveyard to the south.

The facility was constructed over a hundred years ago in 1922, and age, wear, and tear are evident throughout both the interior and exterior of the building. Original wood flooring is present in the Original 1922 building which is warping, damaged plaster was noted throughout, and peeling paint was observed in the lower levels. The former office is currently occupied by the Director of Operations, and some other district departments occupy various select classrooms. The remaining portions are generally used as storage.

The roof system is a combination of 3 different roof materials/layers. The bottom layer is a built-up roof, with a layer of foam roofing that was installed over top of it at some point in time. The foam roof has been covered by a torch-applied modified bitumen roof, which has also had a silver coating applied on top of that. The district has performed recent roof patching, but no replacement. The roof is reported to have active leaks.

The former school is multi-level and has many ADA barriers throughout. There is no elevator in the building, no ADA-compliant door hardware, and the gymnasium has several steps/risers down from the adjacent connecting corridor. Both the HVAC and electrical systems are outdated and do not meet the Ohio School Facilities Commission's (OSFC) Design Manual requirements. The building's electrical system is single-phase. There is no central air conditioning system and the HVAC system does not provide the Ohio Code requirements for fresh air requirements.

Item A: Heating and Ventilation

Description:

The existing system for the overall facility consists of two 2010 Aldrich steam boilers in fair condition. Unit ventilators are used to provide heat and ventilation with zone controls in many of the classrooms. The equipment in the building does not provide the required outside air delivery to meet the OBC mechanical code. The system temperature controls are pneumatic type thermostats with DDC controls in fair condition. The two-pipe system does not provide a capacity for simultaneous heating and cooling operation which is not compliant with the

OSDM requirements. According to school officials, the site does not contain underground fuel tanks.

Since converting the school to the operations office a few years ago, the district has not updated any of the HVAC equipment other than installing one window air conditioning unit in the special education office. Ceilings fans are present in many of the former classrooms, and they are bent/bowing. Baseboard heaters were observed in the office areas, but the date of installation is unknown.



Thermostat



Unit Ventilator



Boiler



Former Classroom ceiling fan

Recommendations:

Provide a new overall heating, ventilating, and air conditioning system to achieve compliance with OBC and OSDM standards. The heating system has exceeded its expected service life of 35 years. Replace the entire heating system and add air conditioning. The new ducted system will likely require architectural soffits to accommodate the installation of the ductwork.

This work is outlined as Priority 3.

Priority 1 Recommendation:

None at this time.

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

Provide a new OSDM-compliant HVAC system including new ductwork.

Priority 3 Costs:

HVAC System Replacement: 21,844 SF x \$54.42/SF =	\$1,188,750.48
Convert to ducted system: 21,844 SF x \$10.37/SF =	<u>\$226,522.28</u>
Subtotal =	\$1,415,272.76

Total Item A:

\$1,415,272.76

Item B: Roofing

Description:

The entire building has been covered with 3 different roofing systems – all of which are still in place. The only recent improvements have been miscellaneous patching. The district reports there is one active leak currently. District records indicate the bottom layer is a built-up roof that was covered by a foam roof system. The foam has since been covered by a torch-applied modified bitumen roofing system. The most recent application is a silver coating over the modified bitumen. The silver coating has worn away in several areas. The modified bitumen was observed to be severed in some areas near the bottom of the parapet. Most areas of the roof have insufficient slope to drain effectively. The roof is drained with area drains and internal conductors. Stone coping was observed around the perimeter of the original 1922 building roof. Ponding water, soaked insulation, blistering, and a plugged roof drain were observed during the original assessment.

There is no roof hatch to access the roof. An outside ladder must be placed against the outside of the building to gain roof access. During the 2024 assessment validation/update, there was no outside ladder available to gain roof access.

Recommendations:

Remove all roofing installations, and provide new tapered insulation, roofing, and drains. A means of secondary drainage should be provided as well. Provide a roof hatch for safe roof access.

This work is outlined as Priority 1 due to age, condition and to maintain warm, safe, and dry protocols.

Priority 1 Recommendation:

None at this time.

Priority 1 Costs:

Roof replacement (asphalt): 10,628 SF x \$17.10/SF =	\$ 181,738.80
Replace drains & sump: 6 units x \$1,554.78/unit =	\$9,329.68
Overflow: 6 drains x \$3,886.95/drain =	\$23,321.70
Roof insulation (tapered): 10,628 SF x \$6.08/SF =	\$64,618.24
Roof hatch/access ladder: 1 unit x \$4,657.57/unit =	<u>\$4,657.57</u>
Subtotal =	\$ 283,665.99

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

None at this time.

Total Item B: \$283,665.99

Item C: Air Conditioning

Description:

There is no central ducted air conditioning system for this building. Air conditioning through a portable unit is provided in the office only. The general building exhaust systems located in the restrooms and hallways are functional and in satisfactory condition. When the building was still operating as a school there was a separate ventilated exhaust for the kiln.

Recommendations:

Provide for complete replacement of HVAC system. See Item A for recommendations and pricing.

Priority 1 Recommendation:

None at this time.

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

None at this time.

Total Item C:

\$0.00

Item D: Electrical

Description:

The overall electrical system does not meet OSDM requirements in supporting the needs of the school. The electrical system in the overall facility is a 240/120-volt, 1 phase, 600 amp electric service. There was an upgrade in the year 2000 to support the new computers at the school with no increase in the electric service. The existing system is not capable of supporting the new HVAC system. There is no lightning protection.

The overall electrical system does not meet OSDM requirements in supporting the facility as a school and will be inadequate to meet the facility's future needs if converted back into a school.



Electrical subpanel



Main shut off switch



Service is single phase

Recommendations:

The entire electrical system requires replacement to meet OSDM guidelines for overall capacity due to age. Work outlined as a Priority 3 is to be coordinated with associated work outlined in Item A and Item U. Upgrade service to 1200 amp, 208/120, 3 phase 4 wire minimum per OSDM guidelines.

Priority 1 Recommendation:

None at this time.

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

Provide for complete electrical system replacement.

Priority 3 Costs:

Electrical System: 21,844 SF x \$37.26/SF =

\$ 813,907.44

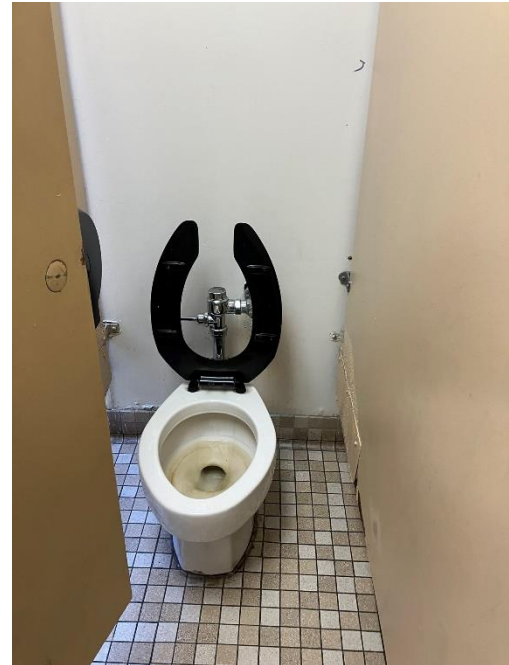
Total Item D:

\$ 813,907.44

Item E: Plumbing & Fixtures

Description:

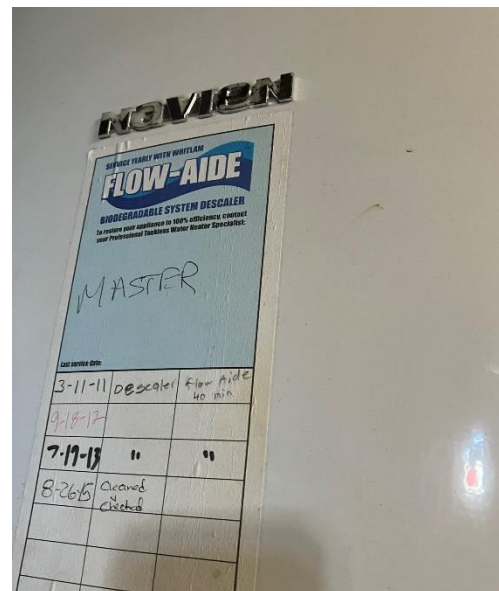
The facility contains one large group restroom for girls, one large group restroom for boys, and 3 restrooms for staff. Additionally, the facility has a former kindergarten restroom in the 1949 addition. The facility contains 11 toilets, 8 sinks, and 4 urinals in various stages of condition. The majority of the water closets are floor-mounted. Most flush valves and faucets are manual. There are 4 drinking fountains in hallways and 2 drinking fountains in the classrooms. There is an eye wash station with a flexible handle for a shower in the mechanical room. As a school, the facility meets the OBC requirements for fixtures and drinking fountains. There are an adequate number of hose bibbs on the perimeter of the building in good condition. The hot water is heated by two Navien instant heat natural gas wall units, that were installed in 2010 and are in good condition. During the original 2016 assessment, the staff indicated the capacity was adequate. There is no grease interceptor for the kitchen in this school, but is not required for its current use (no cooking). The school has its own sewage treatment system on the school grounds. There is a well for water supply with galvanized piping for distribution and is in poor condition.



Typical toilet fixture



Typical sink fixtures



Navien instant heat unit

Recommendations:

Water closets and urinals need to be upgraded to low-flow fixtures to meet OFCC's LEED requirements for water usage. Replace all faucets with sensor and low flow units. Replace the domestic galvanized water piping throughout the building.

Priority 1 Recommendation:

None at this time.

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

Provide for replacement of urinals and toilets to meet low flow requirements for OFCC/LEED. Install sensor, low flow faucets on sinks. Note: ADA fixture counts are provided in Item O. Provide 4 electric water coolers with bottle fillers. Replace sanitary and supply piping due to age and condition.

Priority 3 Costs:

Toilets: 9 units x \$4,923.27/unit =	\$ 44,309.43
Urinals: 3 units x \$ 4,923.27 / unit =	\$ 14,769.81
Electric water coolers: 4 units x \$3,886.95 =	\$ 15,547.80
Sanitary piping: 21,844 SF x \$4.53/SF =	\$ 98,953.32
Domestic supply piping: 21,844 SF x \$4.53/SF =	<u>\$ 98,953.32</u>
Subtotal =	\$ 272,533.68

Total Item E:

\$ 272,533.68

Item F: Windows

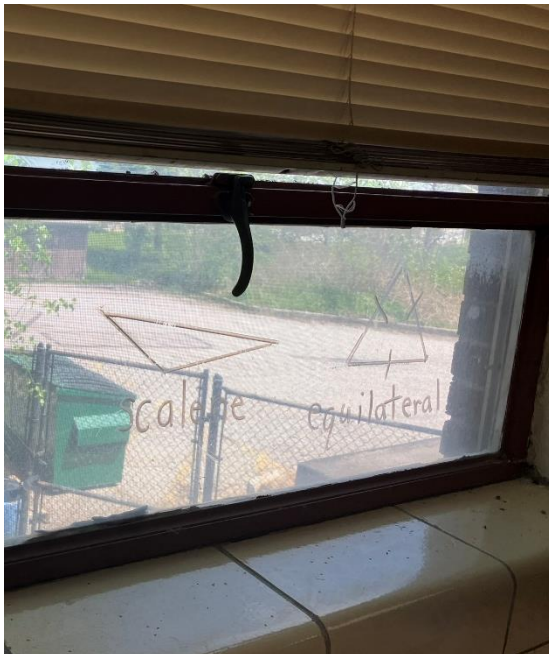
Description:

The overall facility contains a mix of window systems that range in condition and age. Since the original 2016 assessment, there has been no window system replacement implemented. Aluminum frame, double pane windows with operable vents were observed on the west face of the original 1922 building, the east face of the media center, and on the south wall of some of the 1964 classrooms. The remainder of the building has single pane double-hung operable windows. The upper 2/3 of glazing in many of these units has been replaced with opaque panels. In many instances, seals are dried, and the operable vents don't



Single pane window

provide a water-tight closure against the frame. Glass block was observed around the gymnasium. Several repairs to seals and mortar were observed around the glass block. The majority of the windows are in poor condition and are a source of energy loss to the building. The windows are provided with surface-mounted shades and blinds, many of which are in poor or damaged condition. No skylights were observed. There is not a greenhouse associated with this facility.



Operable aluminum frame window



Damaged window blind



Operable aluminum frame window



Glass block windows

Recommendations:

Provide for replacement of all old, single-pane window systems due to age and condition. All work is recommended as a Priority 1 to ensure the building is warm, safe, and dry as a priority.

Priority 1 Recommendation:

Provide for replacement of the remaining old single pane window system.

Priority 1 Costs:

Window replacement: 1,710 SF x \$131.57/SF = \$224,984.70

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

None at this time.

Total Item F: \$224,984.70

Item G: Structure – Foundation

Description:

Visible areas of the foundation in the boiler room reveal the negligible presence of groundwater in the foundation. Some areas of deterioration were visible on the exterior as well as some moisture on the interior of the facility. There are no below grade areas in the 1949 or 1964 addition rendering foundations unable to be visually evaluated. However, many exterior walls display several vertical cracks around the building. Potentially, this is due to previous seismic activity in the area. Professional structural evaluation should be performed to determine further remedial measures.

Recommendations:

Provide below-grade waterproofing of the 1922 foundation. Install a perimeter drain system as well.

Priority 1 Recommendation:

Provide waterproofing and drain tile system to prevent water infiltration into the tunnels.

Priority 1 Costs:

Drain Waterproofing membrane: 1,680 SF x \$12.31/SF = \$20,680.80
Drain tile system: 440 LF x \$23.33/LF = \$10,265.20
Subtotal = \$30,946.00

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

None at this time.

Total Item G:

\$30,946.00

Item H: Structure (Walls & Chimneys)

Description:

The building is framed throughout with load-bearing masonry with a face-brick exterior. Numerous running cracks were observed around the exterior walls. Potentially, these cracks are likely the result of previous seismic activity in the area. Exterior patch repairs were observed in many of these instances. Engineering analysis should be performed on the building to determine further remedial action beyond the scope of this assessment. Only limited control joints were observed. Stone coping around the original building was observed to be covered with roofing applications and missing joint sealant in many instances. Areas of mortar loss were observed at the parapets of the 1922-era building.

Tuckpointing is required on all building portions. Lintels are rusted and delaminating in some locations. Brick and stone sills require repairs and/or tuckpointing at sill joints in various locations.

Brick veneer masonry walls are not to be cavity walls given the construction dates. The exterior masonry needs cleaning and sealing. No significant areas of mold or efflorescence were observed. The exterior accent materials on the façade consist of stone detailing. Installation of the new HVAC systems recommended in Item A will result in the removal of existing unit ventilators, necessitating the exterior masonry infill of associated exterior wall voids.



Rusted delaminating lintel



West facade



Mortar deterioration



Brick façade with minor stone details



Rusting lintels



Interior wall cracks

Interior walls are concrete masonry, glazed block units, brick, and plaster, and range in condition from poor to good condition. Some interior wall cracking was observed and may be related to the 1986 earthquake.

Recommendations:

As a Priority 1, replace stone coping around the 1922 original construction. Provide new aluminum coping in conjunction with roof replacement on the 1949 and 1964 buildings. Provide lintel replacement as needed in conjunction with window replacement.

As a Priority 2, provide cleaning and sealing of all exterior masonry surfaces. Tuckpoint areas of mortar loss in masonry & sills.

As a Priority 3, provide for the installation of control joints to relieve masonry walls of movement forces and infill brick at unit vent openings in coordination with HVAC replacement outlined in Item A.

Priority 1 Recommendation:

Replace stone coping around the original building. Provide new aluminum coping in all other areas in conjunction with roof replacement. Replace delaminated lintels.

Priority 1 Costs:

Stone coping: 250 LF x \$129.57/LF =	\$32,392.50
Aluminum coping: 480 LF x \$48.20/LF =	\$23,136.00
Lintel replacement: 220 LF x \$323.90/SF =	<u>\$71,258.00</u>
Subtotal =	\$ 126,786.50

Priority 2 Recommendation:

Provide masonry and sill tuckpointing, sill replacement as needed, as well as cleaning and sealing of the entire masonry façade.

Priority 2 Costs:

Tuckpointing: 2,500 SF x \$9.72/SF =	\$24,300.00
Masonry cleaning: 13,500 SF x \$1.95/SF =	\$26,325.00
Masonry sealing: 13,500 SF x \$1.30/SF =	\$17,550.00
Tuckpoint sills: Lump Sum =	\$10,000.00
Sill replacement: 30 LF x \$58.31/LF =	<u>\$1,749.30</u>
Subtotal =	\$ 79,924.30

Priority 3 Recommendation:

Provide infill of brick @ unit vent voids when HVAC system is replaced. Install control joints.

Priority 3 Costs:

Control joints: 300 LF x \$77.73/LF =	\$23,319.00
Infill brick @ unit vent voids: 3 units x \$1,500/unit =	<u>\$4,500.00</u>
Subtotal =	\$ 27,819.00

Total Item H:

\$ 234,529.80

Item I: Structure (Floors & Roofs)**Description:**

The upper level of the original building is framed with wood joists and wood deck except the boiler room where structural concrete is in place. The 1949 addition is poured concrete slab on grade and the 1964 addition is framed with poured concrete slab on grade and structural concrete on the upper level. All concrete flooring systems were observed to be in sound condition. The gymnasium is roofed with structural steel beams supporting open web steel joists and metal roof decking.



Gym roof structure

Recommendations:

As a Priority 3, wood joist flooring should be replaced with a new floor framing system.

Priority 1 Recommendation:

None at this time

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

Provide new wood flooring system.

Priority 3 Costs:

Wood flooring system: 4,614 SF x \$58.31/SF =	\$269,042.34
---	--------------

Total Item I:

\$269,042.34

Item J: General Finishes

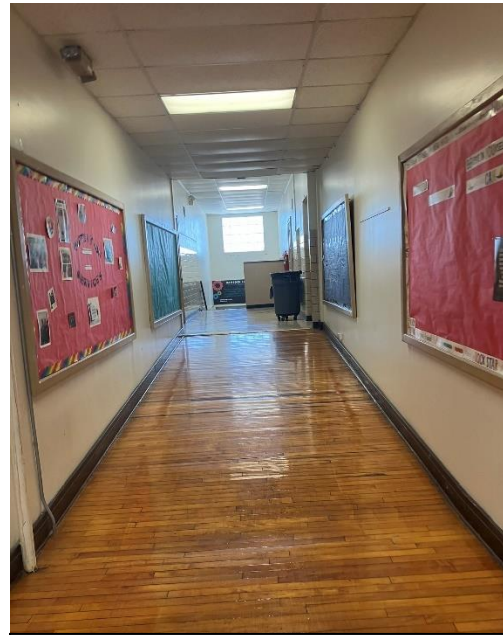
Description:

The school features conventionally partitioned classrooms generally with painted block, glazed block and plaster walls, tongue-in-groove wood and VCT flooring, and generally lay-in acoustic ceiling tiles. The classroom finishes are dated, worn, and damaged in many locations. Some classrooms are provided with wood or laminate-type casework that is worn, damaged, and/or simply dated. Interior doors are a combination of painted wood leafs and metal leafs and are in worn-poor condition. Many doors have single-pane glass panels and louvers. The doors are not equipped with ADA hardware.

The corridor floors are a combination of VCT and quarry tile and they are in worn-poor condition. The corridor walls are both glazed block, plaster, and painted block units in worn condition. Many cracks were observed throughout the masonry. Spalling paint was observed in the lower portions of the building. Ceiling tiles are generally 2 x 4 acoustic ceiling panels in poor condition.

The large group restrooms have a combination of ceramic tile and quarry tile floors, glazed and painted block walls, and 2 x 4 and 2 x 2 lay-in acoustic ceiling tiles in worn condition. Most of the toilet partitions are old metal units, and some were observed in a rusting condition.

The former cafeteria is used for storage now and is equipped with VCT flooring, glazed block and plaster walls, and 2 x 4 lay-in ceilings in worn condition. The adjacent kitchen is abandoned for this use and features the same finishes as the cafeteria. Some kitchen equipment remains and is in worn-out condition.



Corridor finishes

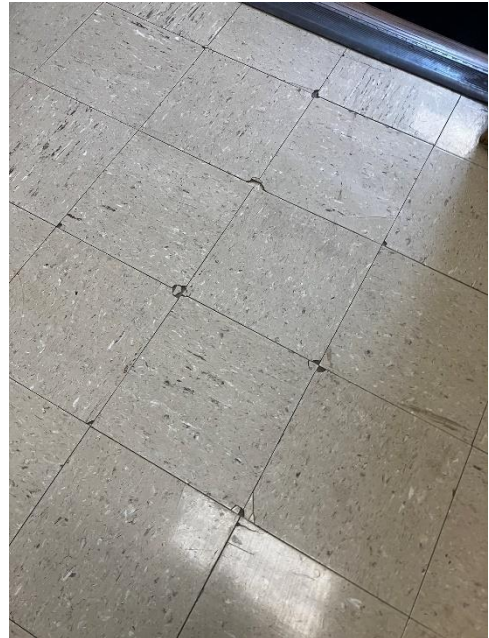


Former classroom finishes

This former school does have a separate gymnasium from the cafeteria. It is, however, several steps down from the other portions of the school. It features old wood flooring, painted block walls, and an exposed steel beam roof structure with a metal deck. Basketball backboards in the gym are original and worn, warranting replacement. The gym floor also requires replacement due to age and condition.

Recommendations:

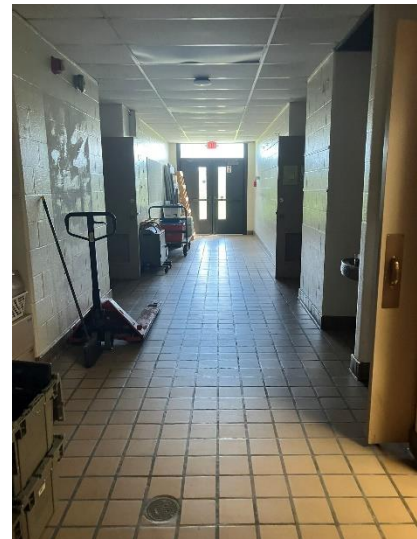
Provide for complete replacement of finishes and casework throughout due to age, condition, lack of compliance with OSDM requirements, and in conjunction with mechanical, electrical, plumbing, and life safety upgrades. Provide new toilet partitions due to age and condition. Should the facility be converted back to a school, warming kitchen equipment replacement will be warranted due to age and condition, as well as gym floor and basketball backboard replacement. New interior door replacement is outlined in Item O. The building is not provided with the wall insulation necessary to meet the LEED requirements by OFCC. Additional wall insulation is required to meet this requirement. Although the outlined work would normally be recommended as a Priority 1 due to its age and poor condition, the work is outlined below as a Priority 3 to coordinate work along with MEP scope outlined throughout this report.



Large group restroom finishes



Corridor finishes



Corridor finishes

Priority 1 Recommendation:

None at this time.

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

Provide complete replacement of finishes and casework, new toilet partitions and accessories, additional wall insulation, gym floor and basketball backboard replacement, plaster refinishing, and replacement of kitchen equipment. See Item O for ADA requirements of ADA toilet partitions and interior door replacement.

Priority 3 Costs:

Complete replacement of finishes & c.w.:	21,844 SF x \$35.95/SF =	\$785,291.80
Toilet partitions:	6 units x \$ 1,606.50/SF =	\$ 9,639.00
Toilet partition accessories:	21,844 SF x \$.26/SF =	\$ 5,679.44
Additional wall insulation:	13,500 SF x \$7.78/SF =	\$105,030.00
Gym floor:	2,232 SF x \$18.21/SF =	\$40,644.72
Basketball Backboards (electric):	4 units x \$8,421.72 =	\$33,686.88
Plaster Refinishing: Lump Sum/allowance:		\$100,000.00
Warming kitchen equipment replacement:	456 SF x \$145.76/SF =	<u>\$66,466.56</u>
Subtotal =		\$ 1,146,438.40

Total Item J:**\$ 1,146,438.40****Item K: Interior Lighting****Description:**

When the facility was assessed in 2016, it contained primarily recessed, fluorescent-type lighting. The lighting in classrooms was T-12 and T-8 fluorescent 2x4 fixtures with electronic ballast. The lighting levels were as follows: classrooms 85 FC, media center 80 FC, cafeteria 65 FC, kitchen 70 FC, gym 40 FC, offices 70 FC, restrooms 50 FC, and corridors at 50 FC. In 2017, the district cut out all of the ballasts and put in LED lamps. The lighting levels are much improved in all of the spaces.

Recommendations:

Although all new LED lighting is provided, complete replacement of lighting system in areas with dropped ceilings will be required due to the installation of mechanical systems and fire suppression systems outlined in Items A & U.



Former Gym finishes



Carpet stain in office area



Peeling paint

Priority 1 Recommendation:

None

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

Replace lighting system in all areas which have lights in the lay in ceilings and are recommended for HVAC system and sprinkler system installation.

Priority 3 Costs:

Interior lighting replacement: 21,844 SF x \$8.42/SF = \$ 183,926.48

Total Item K:

\$183,926.48

Item L: Security System

Description:

Since the 2016 assessment, there have been no upgrades to the security system. The front door cannot be opened from the front office, as the device was removed and taken to the Early Childhood Learning Center when Hambden closed as a school. The security system is a 1992 Fire Burglary system, that includes cameras and motion sensors and is maintained by Vector Security. The system includes cameras located inside and outside of the building. All school district cameras are connected to the high school recording equipment with 2 weeks of storage. When it operated as a school, the doors were locked manually before classes

began. Exterior doors do not have position switches. There is adequate exterior building-mounted security lighting, but parking lot lighting is limited. There is no secure vestibule located at this building.

Recommendations:

Provide a new security system to meet OFCC design manual standards as a Priority 1 which is focused on warm, safe, and dry. Add exterior site lighting. Add a secure vestibule.

Priority 1 Recommendation:

Provide a new security system and exterior lighting to meet OFCC guidelines, including a new secure vestibule.

Priority 1 Costs:

Security system replacement: 21,844 SF x \$3.69/SF =	\$ 80,604.36
Exterior Site Lighting: 21,844 x \$1.30/SF =	\$28,397.20
Secure Vestibule: Lump Sum =	<u>\$250,000.00</u>
Subtotal =	\$ 359,001.56

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

None at this time.

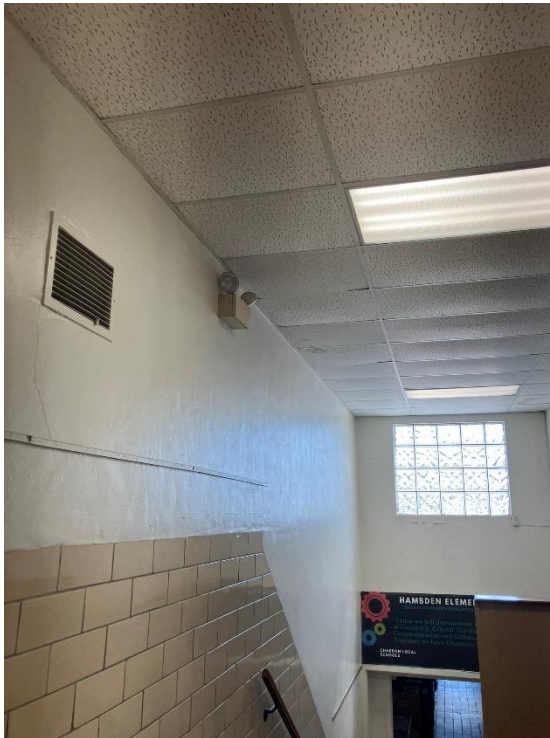
Total Item L:

\$ 359,001.56

Item M: Emergency / Egress Lighting

Description:

The overall facility is equipped with an emergency egress lighting system consisting of compact fluorescent and LED exit signs, and emergency lighting with battery packs. The system is not adequately provided throughout and is not compliant with OSFC design manual guidelines. The only updates to the system since the 2016 assessment were replacing a few batteries and a few exit signs with LED. There is no emergency generator.



Emergency lighting device



Exit sign

Recommendations:

Provide a complete replacement of emergency egress lighting due to lack of compliance with OSDM and due to the installation of systems outlined in this report. A new generator is included as part of Item D.

Priority 1 Recommendation:

None

Priority 2 Recommendation:

Provide a new egress lighting system.

Priority 2 Costs:

Emergency/Egress Lighting: 21,844 SF x \$1.30/SF = \$28,397.20

Priority 3 Recommendation:

None at this time.

Total Item M:

\$28,397.20

Item N: Fire Alarm

Description:

The fire alarm system is a 1992 Silent Night zoned type system and is remotely monitored by Vector Security. There is not an adequate number of horn/strobe units. The existing system does not have enough capacity to add additional horn strobes or duct fire suppression system detectors for the shutdown of air handling equipment to meet NFPA and OFCC standards. It is not likely that the current system would accommodate the addition of an upgraded fire suppression system.



Fire alarm strobe



Fire alarm panel

Recommendations:

Replacement of the system will be required due to lack of compliance with NFPA and OFCC standards and when the work in A and C- upgrading the ventilation and air conditioning is completed.

Priority 1 Recommendation:

None at this time.

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

Provide for replacement of fire alarm system.

Priority 3 Costs:

Fire alarm system replacement: 21,844 SF x \$3.89/SF = \$ 84,973.16

Total Item N:

\$84,973.16

Item O: Handicap Access

Description:

At the site, there is an accessible route provided from the public right-of-way, accessible parking areas, to the main entrance of the school, however, the main entrance itself is 5 risers above the sidewalk thus, is not ADA accessible. Wheelchair access is achieved via a ramp to the first floor at the southwest entrance and the gymnasium. Once in the building, accessibility is challenged by multiple barriers.

The total ADA parking was not able to be identified, as the asphalt is in poor condition and most paint markings are worn off. One spot was noted and identified at the west side parking lot with a sign mounted on the side of the building. There is not an ADA power door assist in the facility.

On the interior of the building, space allowances and reach ranges are not fully compliant. The building is two stories with bilevels which impedes ADA accessibility. There is no elevator provided in the building. Interior doors are generally the original door leaves, are a combination of non-recessed and semi-recessed, and most are not equipped with ADA hardware. Proper ADA toilet partitions and restroom fixtures are not provided.

The drinking fountains are ADA compliant, but do not feature the bottle fillers now required by the OFCC (see Item E for replacement). ADA signage is not provided fully throughout the facility.

Recommendations:

Provide ADA-compliant fixtures in large group restrooms. Provide an elevator in the 2 story portion of the building and lift at gym steps. Provide ADA signage throughout the building, and replace interior doors with new units equipped with ADA hardware. ADA drinking fountains are addressed in Item E. Provide an ADA power door assist.





Bldg. lacks ADA door hardware and signage



ADA electric water cooler

Priority 1 Recommendation:

None at this time.

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

Provide ADA compliant large group restrooms fixtures. Provide a 2-stop elevator for ADA accessibility, lift at gym, interior door replacement, and ADA signage.

Priority 3 Costs:

ADA signage: 21,844 SF x \$0.26/SF =	\$5,679.44
Replace doors: 135 leafs x \$1,684.34/leaf =	\$ 227,385.90
Elevators: (2 stops): 2 stops x \$66,078.15=	\$ 132,156.30
Lift: 2 units x \$19,434.75/unit =	\$38,869.50
ADA Toilets/sinks/urinals: 5 fixtures x \$4,923.47/fixture =	\$ 24,617.35
ADA toilet partitions: 2 units x \$1,750/unit =	\$3,500.00
Power door assist.: 1 unit x \$9,717.38/unit =	<u>\$9,717.38</u>
Subtotal:	\$441,925.87

Total Item O:

\$441,925.87

Item P: Site Condition

Description:

The facility sits on a relatively flat site across from the Hambden Township Park, comprised of 4 parcels with a combined 4.46 acres. The facility is also located next to the Township administration buildings. The site is provided with asphalt parking which is in poor condition. This parking lot is also used for bus driving training. The site features moderate floral, bush and tree-type landscaping.

Parking counts were unable to be determined, as most of the paint striping has worn off. However, given that the facility is now used for a few administrative departments and not a school any longer, it is assumed parking counts are more than sufficient.

The sidewalks are a mix of ages and conditions from fair to poor. Many areas were observed to have large holes, cracking and/or uneven, which could pose tripping hazards. Sidewalks and asphalt drives are placed logically for pedestrian and vehicular circulation patterns.

There is not a dedicated loading/unloading zone at the site. Nearly all playground equipment has been removed, sans one tire swing. Ballfields are also present on the site along with a large pavilion. The site contains an on-site sewer treatment plant which is fenced for security. The remaining site is not fenced. The dumpster was observed being placed on the asphalt, rather than provided with a dedicated concrete pad and protected by an enclosure.

Recommendations:

Provide for replacement of asphalt and sidewalks. Due to the level of deterioration, this work is recommended as a Priority 1. As a Priority 3, construct a dedicated concrete pad and enclosure for the dumpster. If operating as a school, a dedicated bus loop should be provided separately from car drop-off/pick-up zones. Note: OFCC automatically puts in a lump sum for unforeseen circumstances. This allowance remains in this assessment report and is under Priority 3.



Asphalt in very poor condition



Sidewalk in poor condition



Dumpster on asphalt



Sidewalk settling



Pavilion and fields

Priority 1 Recommendations:

Provide for sidewalk and asphalt replacement throughout the site.

Priority 1 Costs:

Sidewalks: 1,020 SF x \$9.72/SF =	\$9,914.40
Asphalt replacement (heavy duty): 2,773 SY x \$36.02/SF =	\$99,883.46
Asphalt replacement (light duty) 1,166 SFx \$33.44/SF =	<u>\$38,991.04</u>
Subtotal =	\$148,788.90

Priority 2 Recommendations:

None at this time.

Priority 3 Recommendations:

Provide dumpster pad and enclosure. OFCC allowances for unforeseen site circumstances.

Priority 3 Costs:

Dumpster pad and enclosure: Lump Sum =	\$10,000.00
Base Sitework allowance: Lump Sum =	\$50,000.00
Additional site work allowance: Lump Sum =	<u>\$32,766.00</u>
Subtotal =	\$92,766.00

Total Item P:

\$241,554.90

Item Q: Sewer System

Description:

An onsite sewage system serves the school. It used to also serve the township building next door but has recently been disconnected from them. The sewage system was upgraded in the 1990s per EPA instructions. No current problems were reported by the district with the sewage on-site system.

Recommendations:

No work is required at this time.

Total Item Q:

\$0.00

Item R: Water Supply

Description:

Currently, a well water system serves the facility's needs. The current system is not adequate to supply pressure to the new sprinkler system proposed in Item U (Life Safety). See Item U for recommendations of scope and costs to serve those needs. The existing water treatment should be replaced.

Recommendations:

Provide a new water treatment system.

Priority 1 Recommendations:

None at this time.

Priority 2 Recommendations:

None at this time.

Priority 3 Recommendations:

Provide a new water treatment system.

Priority 3 Costs:

Water Treatment system: Lump Sum =

\$40,000.00

Total Item R:

\$40,000.00

Item S: Exterior Doors

Description:

The exterior doors throughout the building are a mix of materials, age and condition. They include both hollow metal doors which are generally in dated/poor condition, and some newer FRP doors in poor to good condition. The doors are equipped with panic hardware, but many of the doors feature vision panels that are not double insulated. Some doors were observed in rusting and deteriorating conditions.

Recommendations:

Provide for replacement of all old exterior doors. Due to condition and age, work is recommended as a Priority 2.

Priority 1 Recommendations:

None at this time.

Priority 2 Recommendations:

Replace all dated/aged exterior doors.

Priority 2 Costs:

Exterior Door Replacement: 9 leafs x \$3,239.12/leaf = \$29,152.08

Priority 3 Recommendations:

None at this time.

Total Item S:

\$29,152.08

Item T: Hazardous Materials

Description:

In 2019, the OFCC sent an environmental engineer to confirm the presence of hazardous materials (including asbestos) in the facility. They conducted testing as part of this assessment. They listed pipe insulation, pipe fittings, cement board, fire door, ceiling/wall, window components, resilient flooring, and sink undercoatings as confirmed asbestos-containing materials. Note: Since 2019, the district has replaced all of the fluorescent lighting in the building district-wide, thus the recommendation for incineration of fluorescent lamps is removed from this report.

Recommendations:

Remove asbestos and hazardous material-containing materials as a Priority 3.

Priority 1 Recommendations:

None at this time.

Priority 2 Recommendations:

None at this time.

Priority 3 Recommendations:

Remove hazardous material identified in the Enhanced Environmental Assessment prepared by OFCC in 2019.

Priority 3 Costs:

Est. Cost for Lead Mock-ups: 5,000 units x \$1.30/unit=	\$6,500.00
Special Engineering for LBP Mock-ups: 5,000 units x \$1.30/unit=	\$6,500.00
Pipe insulation Removal: 55 LF x \$32.13/LF =	\$1,767.15
Pipe fitting removal: 40 fittings x \$32.40/fitting =	\$1,296.00
Pipe insulation (hidden behind walls): 498 LF x \$32.13/LF =	\$16,000.74
Cement Board Removal: 576 SF x \$6.48/SF =	\$3,732.48
Fire Door Removal: 3 each x \$129.57/each =	\$388.71
Door and window panel removal: 17 units x \$129.57/unit =	\$2,202.69
Non-ACM Ceiling/Wall Removal (for access): 1,989 SF x \$2.59/SF =	\$5,151.51
Window Component 1: 17 each x \$388.70/each =	\$6,607.90
Window Component 2: 17 each x \$388.70/each =	\$6,607.90
Resilient flooring removal, including mastic: 2,800 SF x \$4.28/SF =	\$11,984.00
Sink undercoating removal: 5 each x \$129.57/each =	\$647.85
Other: XFR Screen for LBP: 3,000 unit x \$1.00/unit =	<u>\$3,000.00</u>
Subtotal =	\$72,386.93

Total Item T:**\$ 72,386.93****Item U: Life Safety****Description:**

The overall facility is not equipped with an automatic fire suppressant system. There is a room or two on the lower level which is equipped with a sprinkler system, as these spaces were used for document storage at a point in time when the school was closed. Exit corridors are situated such that dead-end corridors are not present. The building contains 2 interior stair towers, which contain handrails/guardrails that are not compliant with current code requirements. There is an exterior metal stair located on the west side of the facility, which is rusting, deteriorating, and in poor condition and needs replacement.

The kitchen has one hood protected by an Ansul suppression system, though no cooking occurs at this facility any longer. Fire extinguishers are provided throughout the building, though many are not at ADA-compliant height or provided with through-the-wall cabinets. The facility is not equipped with an emergency generator. The existing well water supply system will need the installation of a dedicated fire water line for the new sprinkler systems. Rooms with a capacity greater than 50 occupants are equipped with adequate egress.

Recommendations:

Provide a complete sprinkler system that includes a new dedicated fire water supply system. Provide new handrails/guardrails as needed. Provide fire extinguisher cabinets throughout the buildings. An emergency generator is provided via complete electrical system replacement in Item D.

Note 1: This work is recommended as a Priority 3 to coordinate the timing of HVAC & electric replacement.



Exterior stair in poor condition



Fire extinguisher mounted too high, obstructed by copier



Handrails not compliant with current code

Priority 1 Recommendations:

None at this time.

Priority 2 Recommendations:

None at this time

Priority 3 Recommendations:

Install new hand/guardrails that meet current code requirements. Provide an automatic fire suppression system throughout the facility and a dedicated water line connection. Provide new fire extinguishers through the wall cabinets at ADA height.

Priority 3 Costs:

Stair Handrails: 7 levels x \$6,478.25/level =	\$45,347.75
Fire extinguisher & cabinets: 8 each x \$757.96/unit =	\$6,063.68
Sprinkler System: 21,844 SF x \$4.86/SF =	\$106,161.84
Exterior Stair Replacement: \$55,065.13/level =	\$55,065.13
Well for fire suppression: 1 unit x \$58,304.25/unit =	\$58,304.25
Well pump: 1 unit x \$25,913.01/unit =	\$25,913.01
Storage Tank: 1 unit x \$64,782.51 =	<u>\$64,782.51</u>
Subtotal =	\$361,638.17

Total Item U:**\$361,638.17****Item V: Loose Furnishings****Description:**

The majority of the former school furnishings have been removed and are no longer present in the building. What is present in terms of school furnishings is stacked up/away and consists of dated pieces. What is currently being utilized is generally composed of office-type furnishings, including desks, tables, and filing cabinets that range in condition and age. Overall, the loose furnishings are recommended for replacement for use as a school or office facility due to their age, condition, and lack of life expectancy and functionality.

Recommendations:

Replace outdated, worn furniture.

Priority 1 Recommendations:

None at this time.

Priority 2 Recommendations:

None at this time.

Priority 3 Recommendations:

Provide for replacement of outdated furnishings.

Priority 3 Costs:

New furniture: 21,844 SF x \$10.71/SF =	\$233,949.24
---	--------------

Total Item V:**\$233,949.24**

Item W: Technology

Description:

The typical classroom is equipped with two data ports in each classroom as well as wireless access through the building. An outdated PA system for communication is present. The classrooms were not provided with phones when operating as a school.

Specialized electrical/sound systems requirements of the gymnasium, student dining, and music spaces are inadequately provided and what is present is outdated. The system is outdated and insufficient for school needs.

Recommendations:

Provide for complete replacement of technology systems to meet Ohio School Design Manual requirements and due to technological advances in 3-5 years.

Priority 1 Recommendations:

None at this time.

Priority 2 Recommendations:

To meet OSDM requirements and to remain current with technological advancements it is recommended that an allowance for updates/replacement of the technology systems is required.

Priority 2 Costs:

Technology replacement: 21,844 sf x \$16.43/sf = \$358,896.92

Priority 3 Recommendations:

None at this time.

Total Item W:

\$ 358,896.92