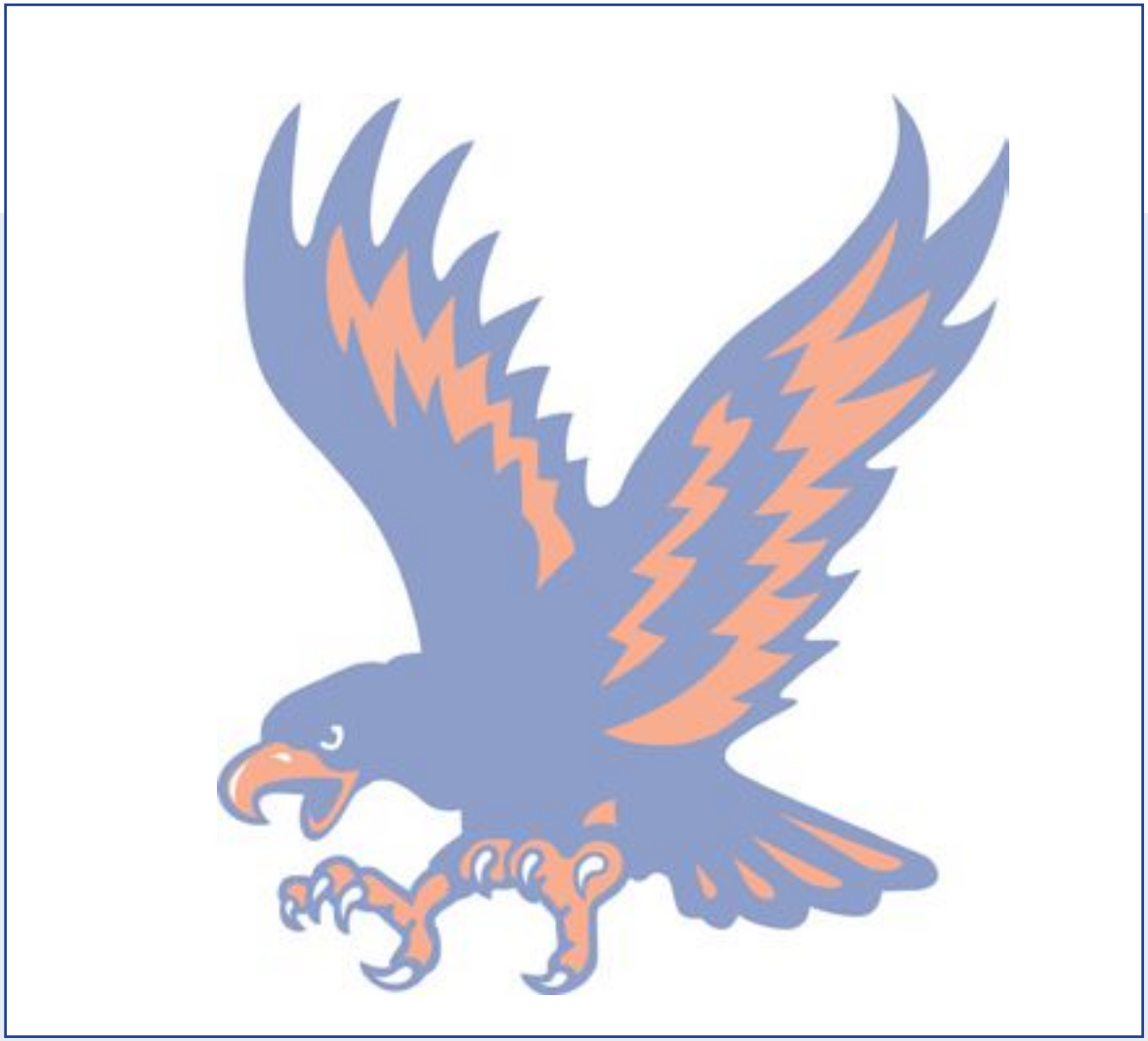
JESUP COMMUNITY SCHOOLS

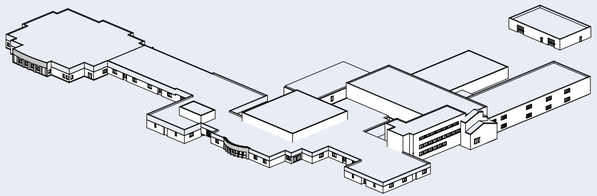


Facility Assessment Report

July 2020

OPN ARCHITECTS

Contents



JESUP COMMUNITY SCHOOLS

ADDRESS
531 Prospect Street
Jesup, IA 50648

SUPERINTENDENT
Nathan Marting

STUDENTS
Pre-K through 12th Grade

Executive Summary

Jesup Community School's previous master plan was completed in 2012. In 2019, district leadership and the school board proactively determined it was time to update the plan to look ahead to the next 10 years.

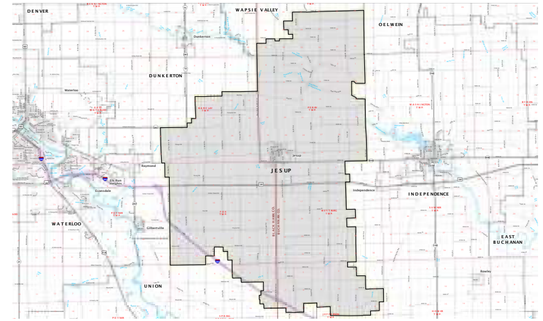
In September 2019, the district hired OPN to conduct an educational facility assessment to help the district identify needs and prioritize funding. This report was created to outline the condition of the Jesup Community Schools' academic and athletic facilities. The purpose of this report is to assist the School Board and District Administration in making informed financial and building upgrade decisions regarding the future use of district facilities.

Over the course of several months, the project team worked closely with district leadership and a Facilities Advisory Committee to develop this document. This highly collaborative process engaged users to gather information about how the current facilities are or are not working for learning and teaching in the 21st century.

The assessment focuses on identifying the deficiencies based on currently adopted codes and other maintenance or risk conditions that exist on the property. This report does address general accessibility issues noted at the facilities, but an in-depth analysis was not made to determine full compliance with the Americans with Disabilities Act.

Visual inspections and observations were noted and have been documented in this report. Specific items reviewed include building envelope (excluding the roof), assessment of interior spaces for circulation, egress, code compliance, accessibility, and finish materials that could impact use or safety.

The mission of championing each and every student through opportunity and compassion begins with the infrastructure and facilities of the District supporting education and instruction triumphantly. This assessment provides the foundation for the design of spaces that are inspirational, collaborative, flexible, and adaptable for today's and future generations of Jesup's students.



DISTRICT MAP

CAMPUS AERIAL

Process

Process

Kickoff

Establish assessment objectives

Establish Facilities Advisory Committee

Research

Review existing Drawings

Building tours

Analysis

Existing conditions

Existing space utilization

Code compliance

Building technologies

Energy performance

Feedback

Facility Advisory Committee meetings

Staff & student listening sessions

Document

Assemble findings

Associate cost estimates

Prioritize projects

Deliver final assessment

Research

OPN Architects began the information gathering and evaluation by reviewing the provided existing architectural drawings sets for Jesup Community Schools. Using these drawings, OPN created a 3D Building Information Model with an associated database for Jesup Elementary, Middle, and High School.

Analysis

The team then conducted several field verification visits for the facilities logging additional observations into the database in real-time using laptops. Further, each room and building was documented using photography and laser measuring devices to compare to the existing drawings for accuracy.

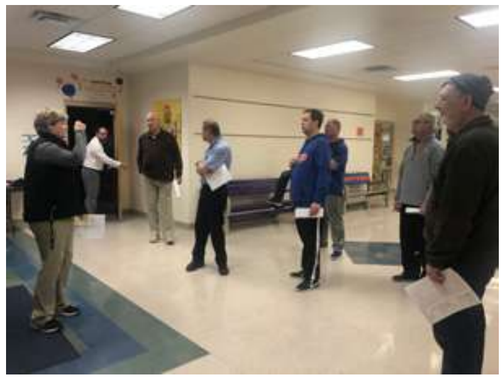
Simultaneously, MODUS Engineering also assessed each building's mechanical, electrical, technology, and fire protection systems through visual inspection and photo documentation, and Fehr Graham assessed exterior site improvements on the campus through visual inspection.

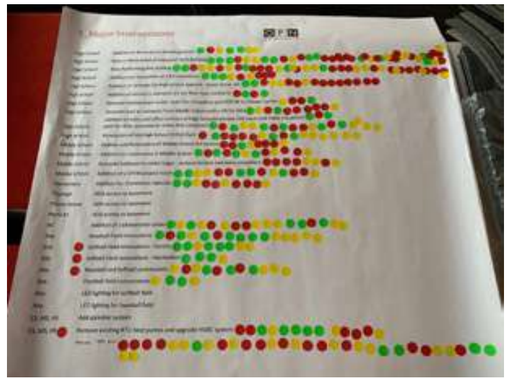
Feedback

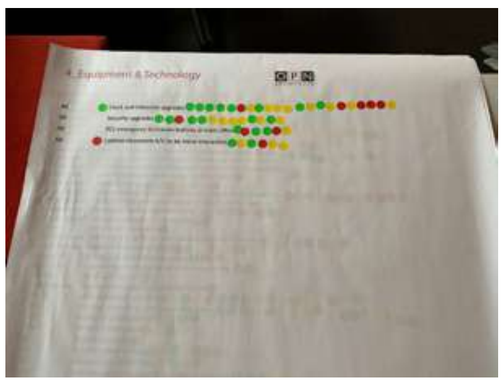
Concurrent with the facility analysis, the design team conducted listening sessions with Jesup staff and students and the community to gain a broader understanding of the district's needs and generate a preliminary set of priorities.

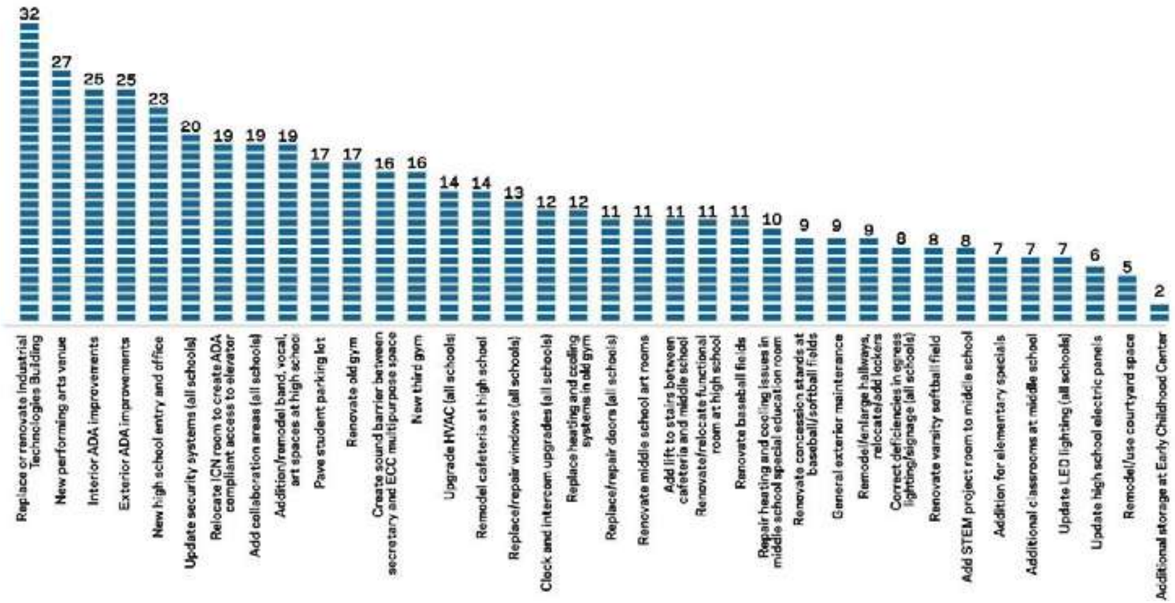
This qualitative feedback was presented to the Facilities Advisory Committee along with the results of the physical assessments. Based on feedback from the Facilities Advisory Committee, needs were divided into four categories: Major Interventions, Minor Interventions, General Maintenance, and Equipment & Technology. Following building tours led by faculty, the committee members were asked to place dots (see page 10) next to the items they felt most in need.

Using data from facility assessments and following the building tours, the design team further refined the priorities list. The facilities committee was then asked to select their individual top 15 needs. The results of this on-line survey (see page 11) and subsequent conversation revealed the projects to which the design team would focus on assigning costs.






4. Equipment & Technology


32
Replace or renovate Industrial Technologies Building
27
New performing arts venue
25
Interior ADA improvements
25
Exterior ADA improvements
23
New high school entry and office
20
Update security systems (all schools)
19
Relocate ICN room to create ADA compliant access to elevator
19
Add collaboration areas (all schools)
19
Addition/remodel band, vocal, art spaces at high schoo
17
Pave student parking lot
17
Renovate old gym
16
Create sound barrier between secretary and ECC multipurpose space
16
New third gym
14
Upgrade HVAC (all schools)
14
Remodel cafeteria at high school
13
Replace/repair windows (all schools)
12
Clock and intercom upgrades (all schools)
12
Replace heating and cooling systems in old gym
11
Replace/repair doors (all schools)
11
Renovate middle school art rooms
11
Add lift to stairs between cafeteria and middle school
11
Renovate/relocate functional room at high school
11
Renovate baseball fields
10
Repair heating and cooling issues in middle school special education room
9
Renovate concession stands at baseball/softball fields
9
General exterior maintenance
9
Remodel/enlarge hallways, relocate/add lockers
8
Correct deficiencies in egress lighting/seignage (all schools)
8
Renovate varsity softball field
8
Add STEM project room to middle school
7
Addition for elementary specials
7
Additional classrooms at middle school
7
Update LED lighting (all schools)
6
Update high school electric panels
5
Remodel/use courtyard space
2
Additional storage at Early Childhood Center

Facility Assessment

Facility Assessment

As part of the facilities assessment process, the design team of OPN Architects, Modus Engineering, and Fehr Graham visited Jesup Community Schools buildings multiple times over the course of a few months. Initial visits included guided building tours with administration leaders and facilities staff. Existing building drawings were analyzed and digitized for the District and for design team use in the construction of 3D building information management (BIM) models.

Also during these visits, by logging observations into digital models in real time, the design team was able to make a full assessment of the interior as well as the exterior of the primary district facilities. The team identified deficiencies in floors, ceilings, doors, windows, casework, display surfaces, and overall paint quality. Also documented were issues related to Americans with Disabilities Act (ADA) compliance. Further field observations were included review of building systems, plumbing fixtures, and visible equipment.

KEY ISSUES

Overall, the facilities have good bones. The exterior is constructed of durable brick and robust finishes. The building layout is indicative of a facility that has grown over time, with a sprawling footprint and areas that have been adapted as needed.

The oldest sections of the school are nearing 100 years old. The majority of the building was constructed in the mid 20th century with several smaller additions completed in the early 2000s. Many areas are well maintained, however there are areas and building systems that have long outlived their useful lifespan and are in need of modernization.

Some of the biggest issues of note are the lack of cohesive finishes throughout the building, resulting in a disjointed appearance moving between various areas of the building. Door hardware and stairs throughout the building are not ADA compliant. The industrial technology and agriculture building is one of the spaces in the poorest condition.

The following items were noted as part of the assessment findings presented to the school board at the January 2020 meeting:

- **Finishes:** A wide spectrum of finishes were noted. Cohesive finishes would help to tie the building together. Some floors appear to be asbestos tile. Ceiling panels and lighting are not cohesive in some areas.
- **Doors:** In older areas of the building many doors do not meet ADA requirements for lever access. Door panels throughout the building are not consistent and some are in very poor condition.
- **Exterior:** Overall the exterior appears to be in good shape. Some areas of tuck-pointing / brick repair are noted. Windows appear to be in adequate to good condition. Any upgrades on older windows would help energy, heating, and cooling needs, especially those in the High School.
- **Restrooms:** Code and ADA issues related to clearances, door hardware, toilet partitions, and spacing of restroom fixtures were noted. Finish and equipment upgrades in these spaces is needed. Lighting repair or replacement is also suggested for these areas.
- **Circulation:** ADA paths to the Cafeteria and levels in the High School are convoluted and longer than direct paths to and from spaces. Suggested review of circulation be taken into consideration for improved access and flow.

Facility Assessment — Interior

As part of the detailed site visits conducted by OPN Architects and Modus Engineering, the design team was able to review much of the interior spaces and quality of finishes. The following heat maps indicates a ranking of deficiencies in doors, floors, casework and wall finishes.

Each component listed above was rated from 1 (very poor) to 5 (excellent). Ratings below a 3 were identified as in need of repair and/or replacement. These results are represented in a variety of formats including graphs, floor plans, and numerical representations.

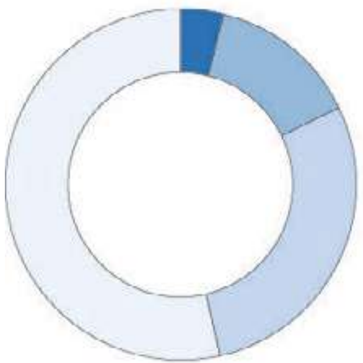
Areas darker in color reveal areas within the building that may require the most urgent attention. Not surprisingly, the areas typically in excellent condition are zones of the building that are newer in age or were recently renovated in the early 21st Century. Finishes are not standard through the building, and could perhaps be made more cohesive to better create a sense of consistency and quality. Doors/door hardware and some restrooms throughout the facility do not meet ADA requirements and may need to be addressed as a priority item for the maintenance of the building.

The diagrams below show the general state of casework, doors, ceilings, walls, flooring, and windows:

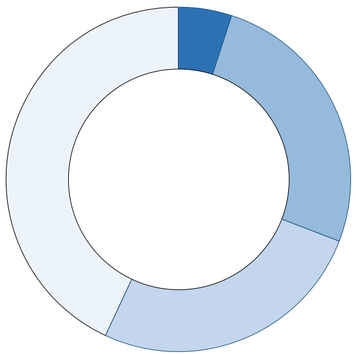
RANKING SCALE & COLOR CODE KEY

- 1 - VERY POOR
- 2 - POOR
- 3 - FAIR
- 4 - ABOVE AVERAGE
- 5 - EXCELLENT

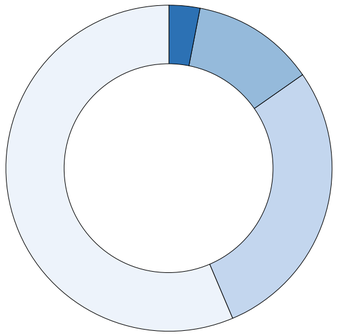
CASEWORK



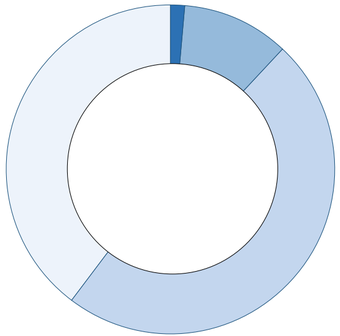
DOORS



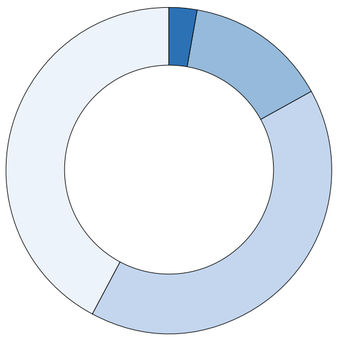
CEILING



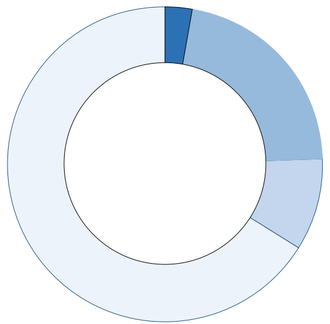
WALLS



FLOORING

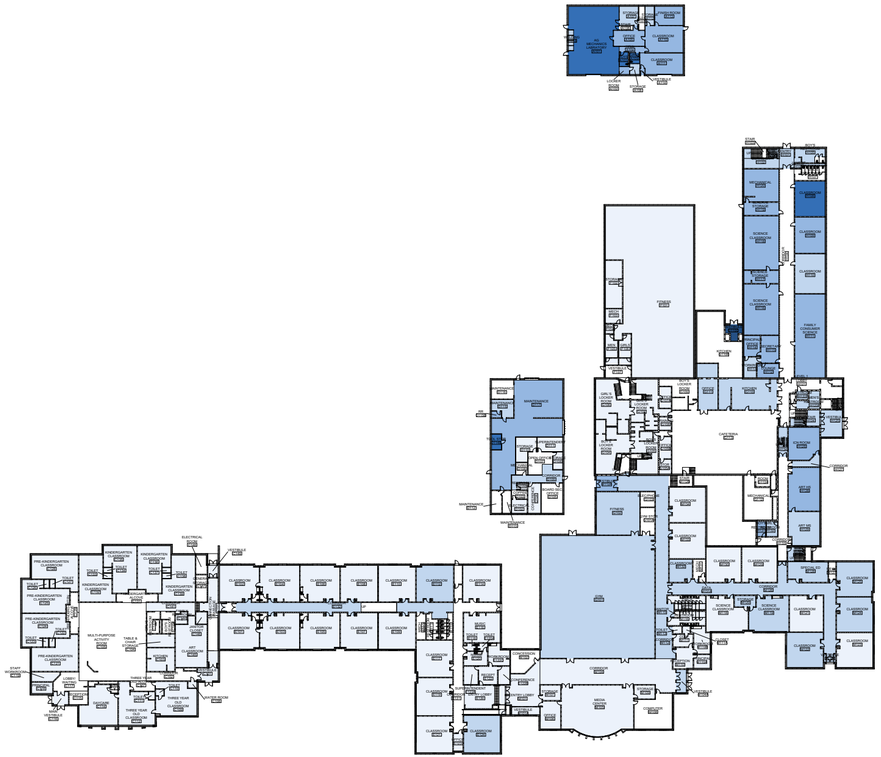


WINDOWS



LEVEL 1 - CASEWORK

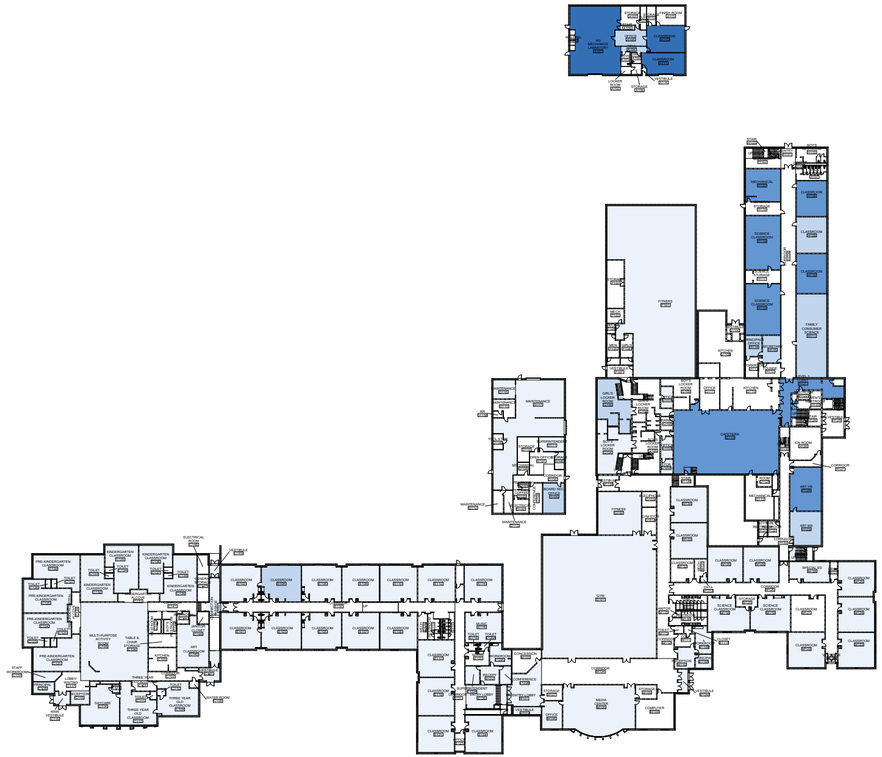
LEVEL 1 - CEILING



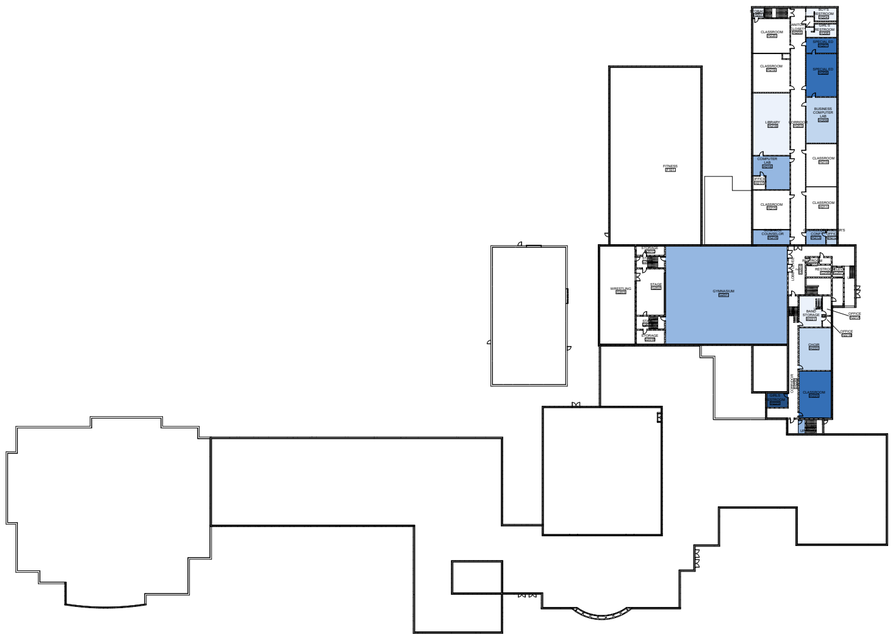
LEVEL 1 - DOORS

LEVEL 1 - FLOORING

LEVEL 1 - WALLS

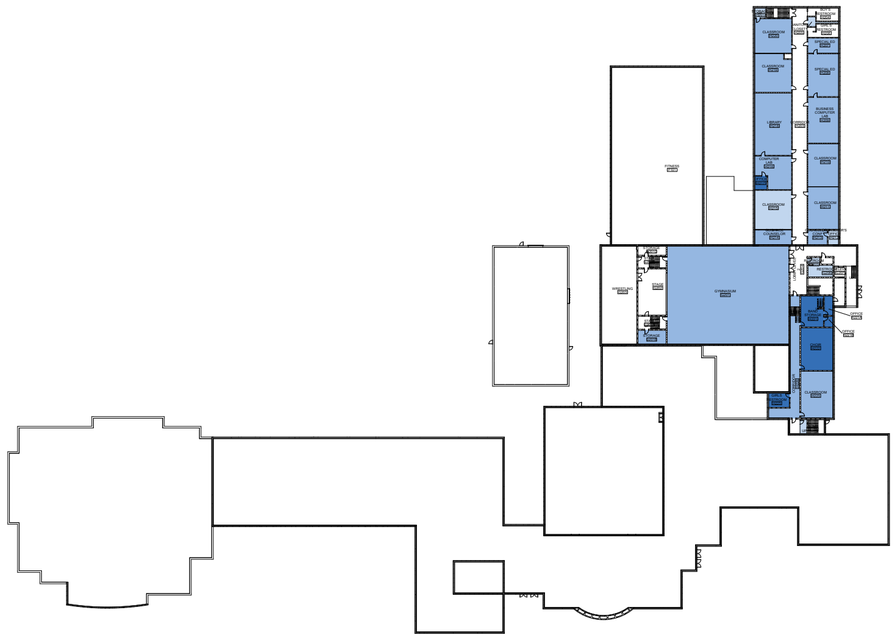


LEVEL 1 - WINDOWS

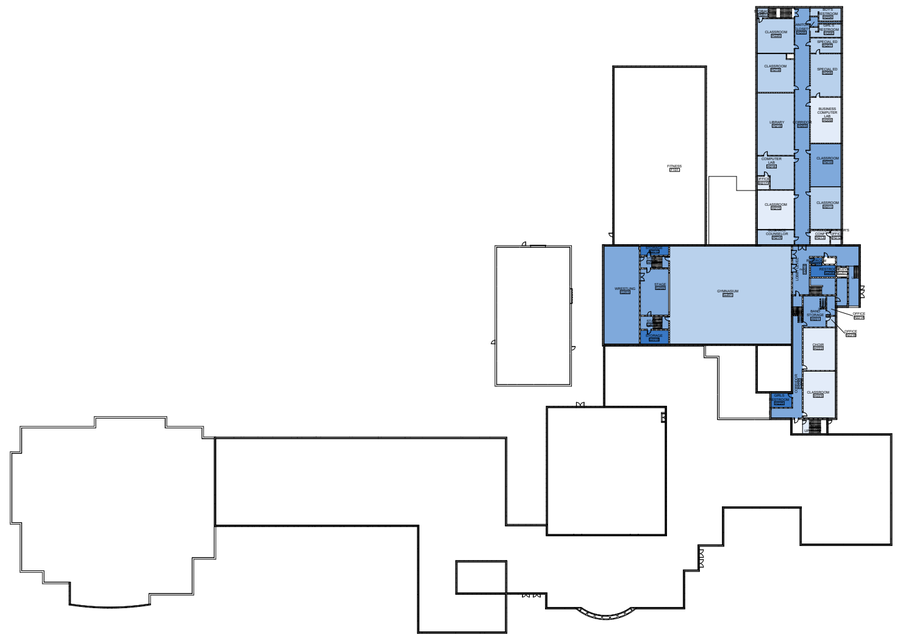


LEVEL 2 - CASEWORK

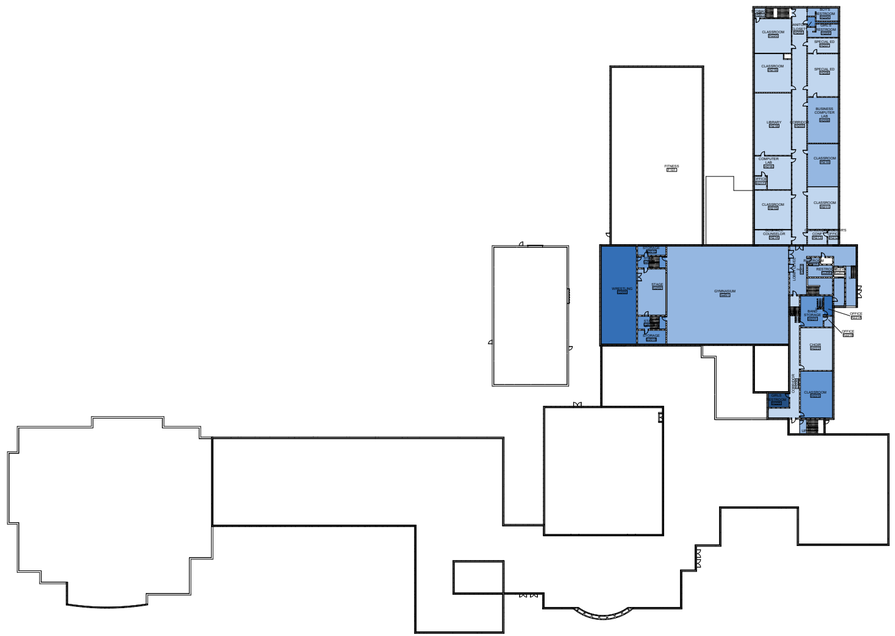
LEVEL 2 - CEILING



LEVEL 2 - DOORS

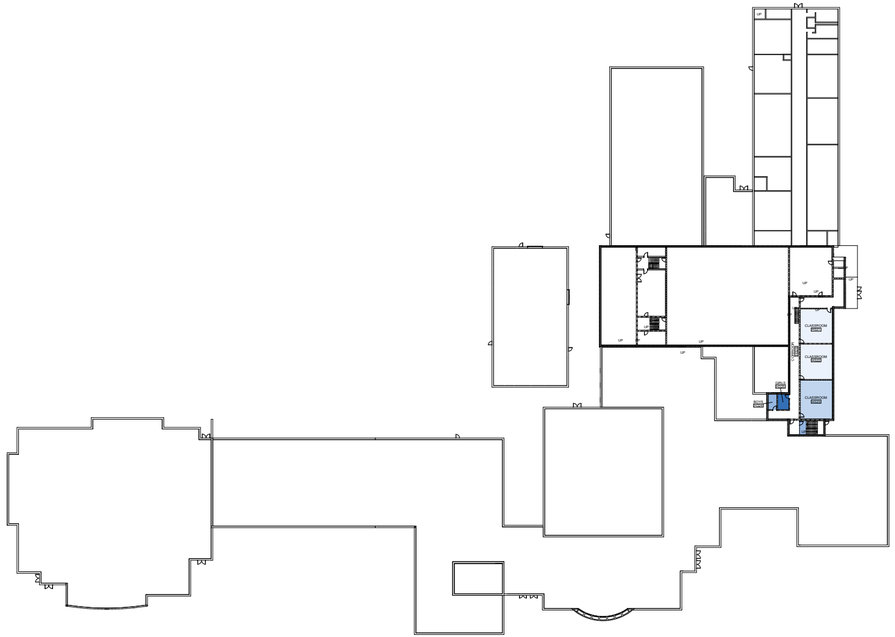


LEVEL 2 - FLOORING

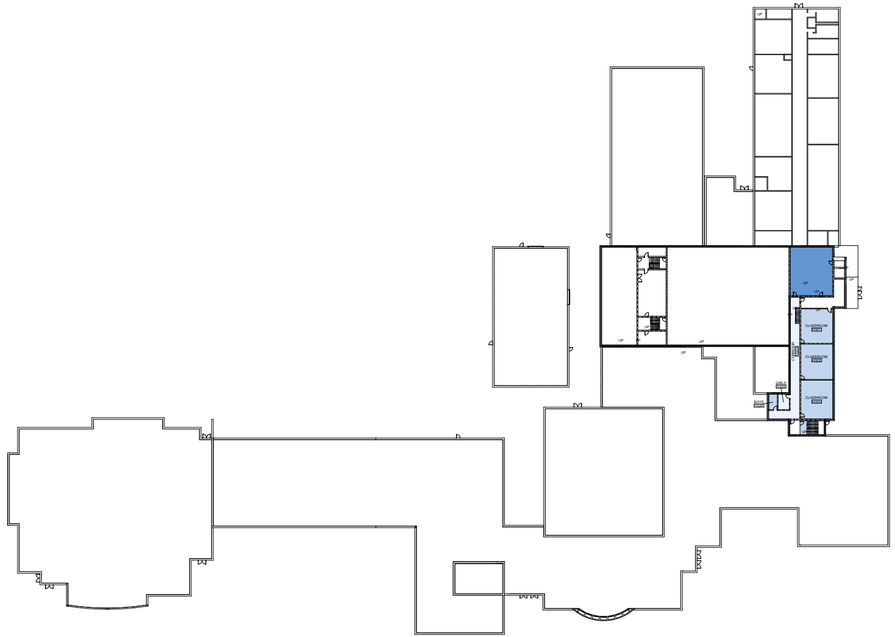


LEVEL 2 - WALLS

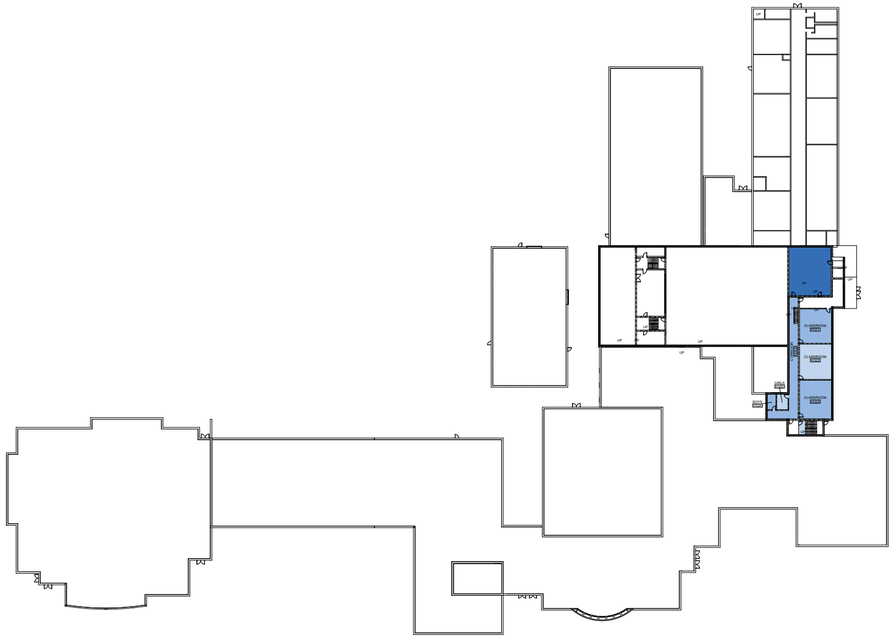
LEVEL 2 - WINDOWS



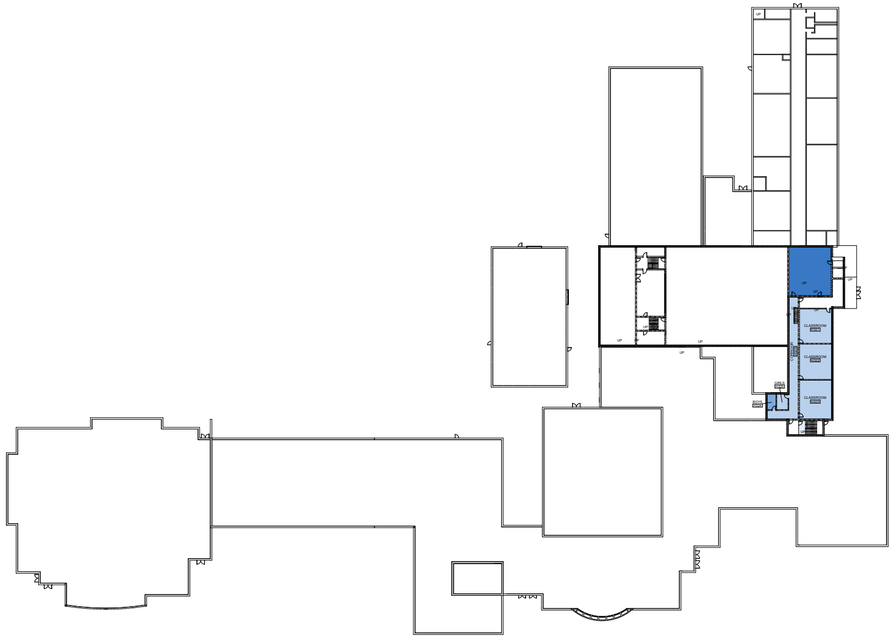
LEVEL 3 - CASEWORK



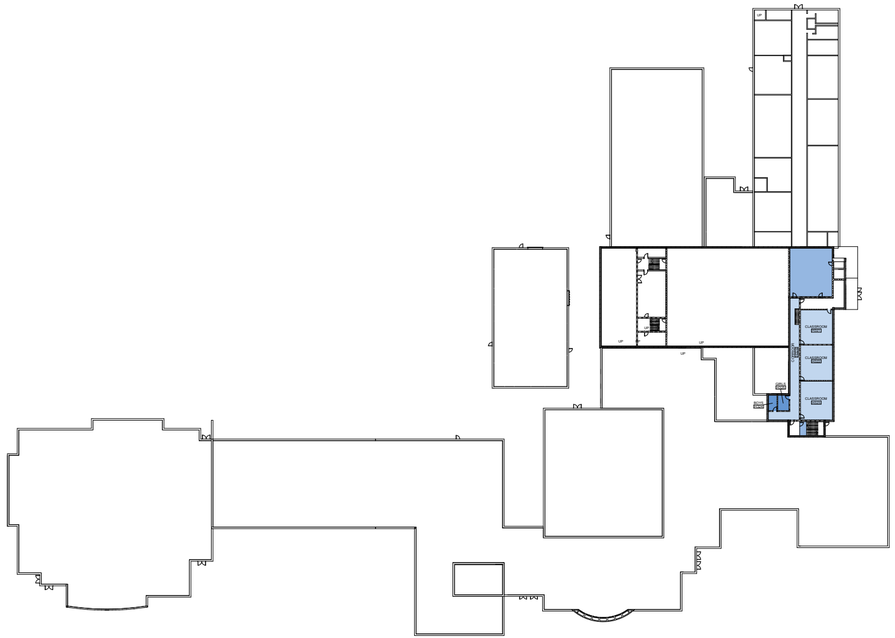
LEVEL 3 - CEILING



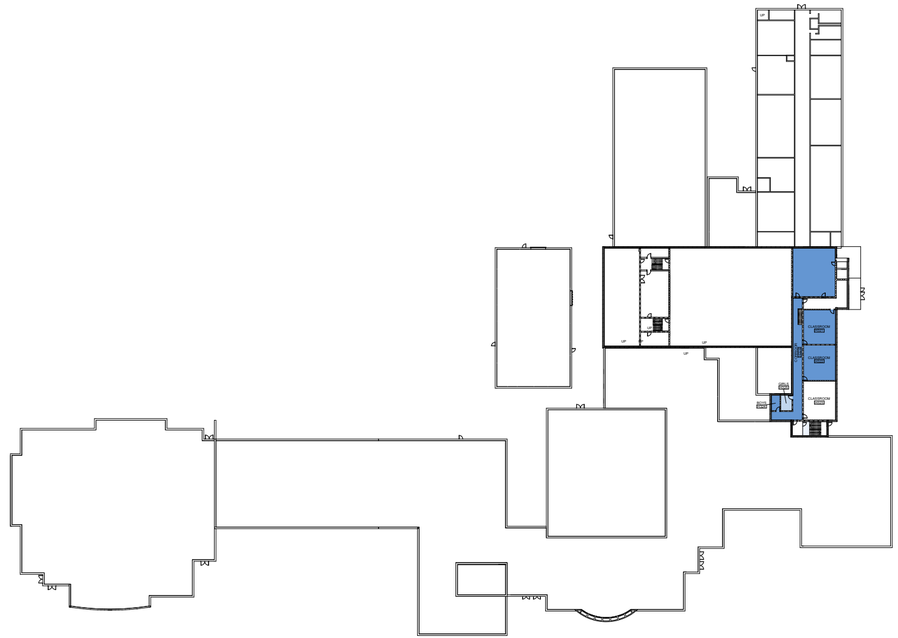
LEVEL 3 - DOORS



LEVEL 3 - FLOORS



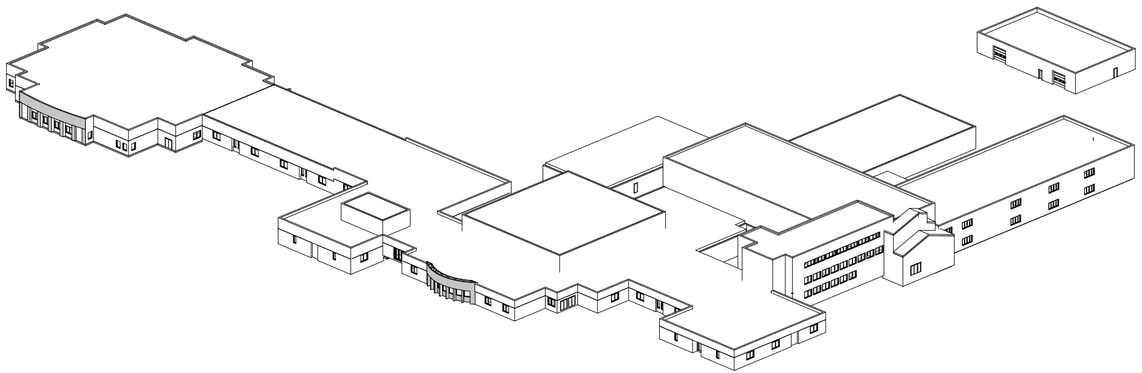
LEVEL 3 - WALLS



LEVEL 3 - WINDOWS

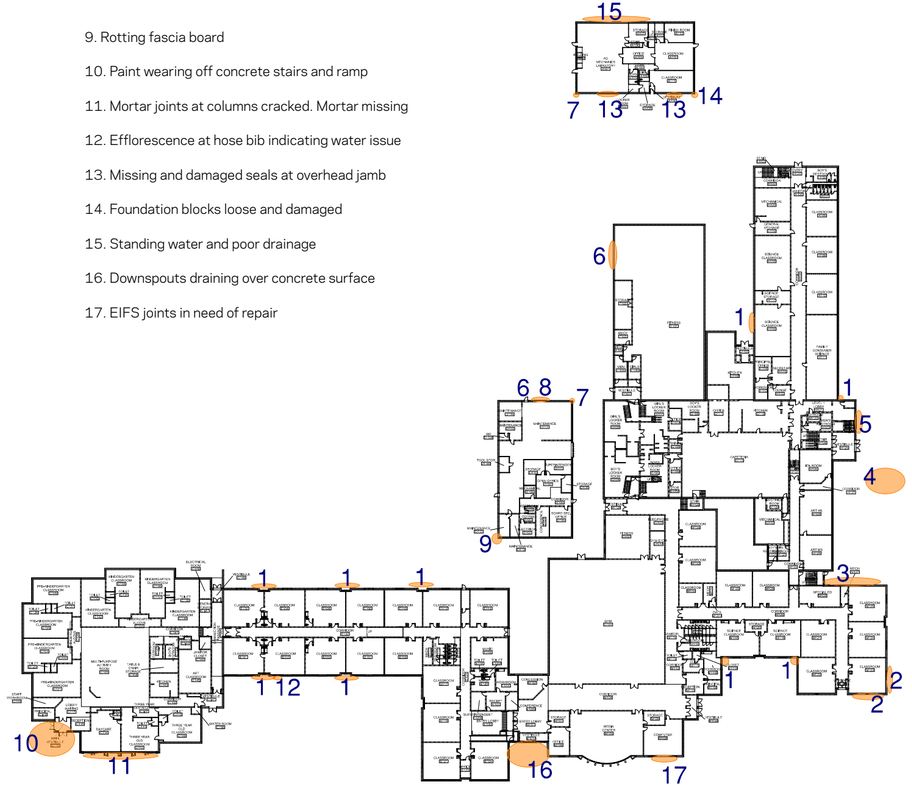
Facility Assessment — Exterior

Overall, the exterior of the building is in good shape and will continue to serve the district well into the third decade of the 21st Century, provided the building is well maintained , deficient areas rehabilitated, and updated as required.



KEY ISSUES

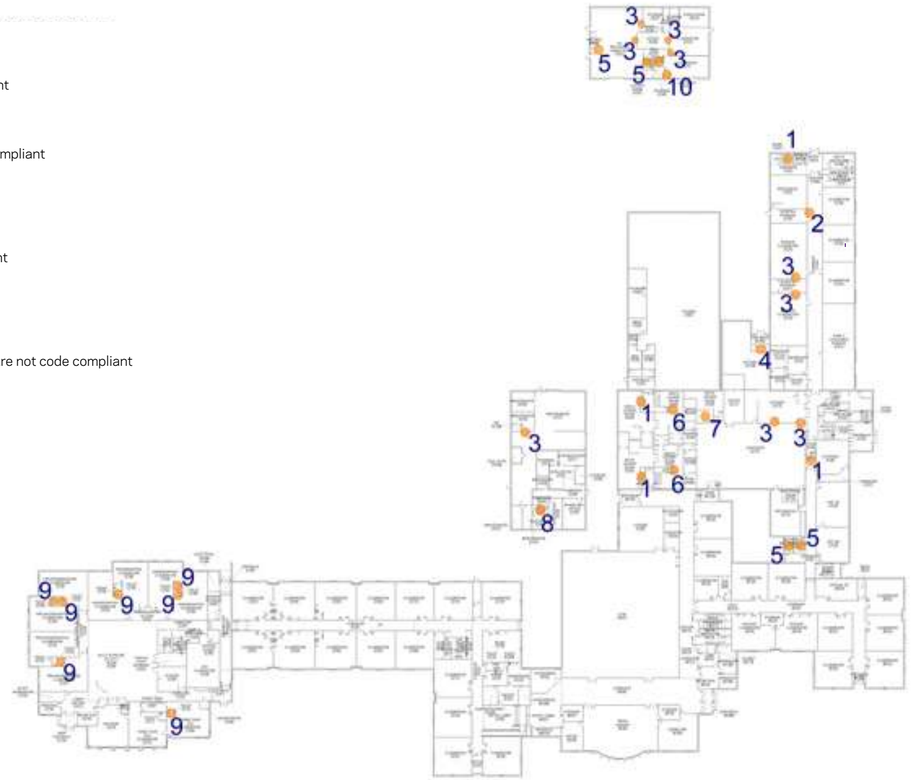
1. Water damage on brick and mortar
2. Grade above exterior flashing
3. Drainage issues along wall
4. Ramp not ADA compliant
5. Metal panels in poor condition
6. Damaged overhead door
7. Brick and joints cracked at corner
8. Damaged lintel
9. Rotting fascia board
10. Paint wearing off concrete stairs and ramp
11. Mortar joints at columns cracked. Mortar missing
12. Efflorescence at hose bib indicating water issue
13. Missing and damaged seals at overhead jamb
14. Foundation blocks loose and damaged
15. Standing water and poor drainage
16. Downspouts draining over concrete surface
17. EIFS joints in need of repair



Facility Assessment — ADA & Code

KEY ISSUES

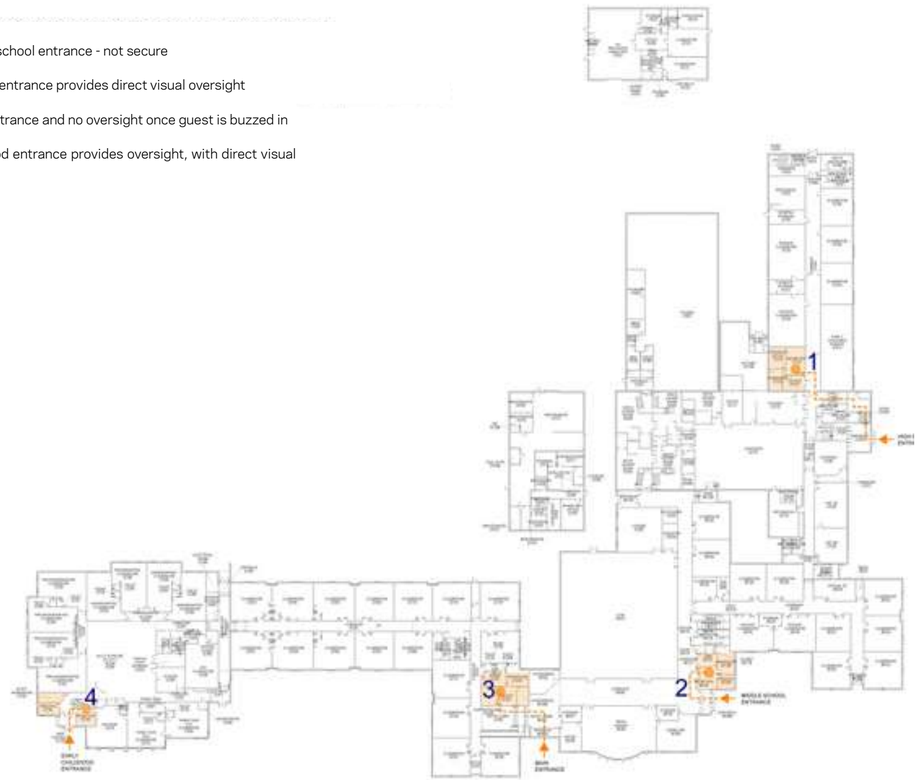
1. Handrails not ADA compliant
2. FEC mounting height not code compliant
3. Door hardware not ADA compliant
4. Unsteady handrail, handrail not ADA compliant
5. Fixtures not ADA compliant
6. No stair handrail, not code compliant
7. Locker room showers not ADA compliant
8. Counter/sink not accessible
9. No grab bars
10. Entry into classroom and door hardware not code compliant
11. Door opening not code compliant



Facility Assessment — Entry Security

KEY ISSUES

1. Staff has no direct oversight over high school entrance - not secure
2. Staff offices adjacent to middle school entrance provides direct visual oversight
3. Staff has no direct oversight at main entrance and no oversight once guest is buzzed in
4. Staff offices adjacent to early childhood entrance provides oversight, with direct visual connection through vestibule window

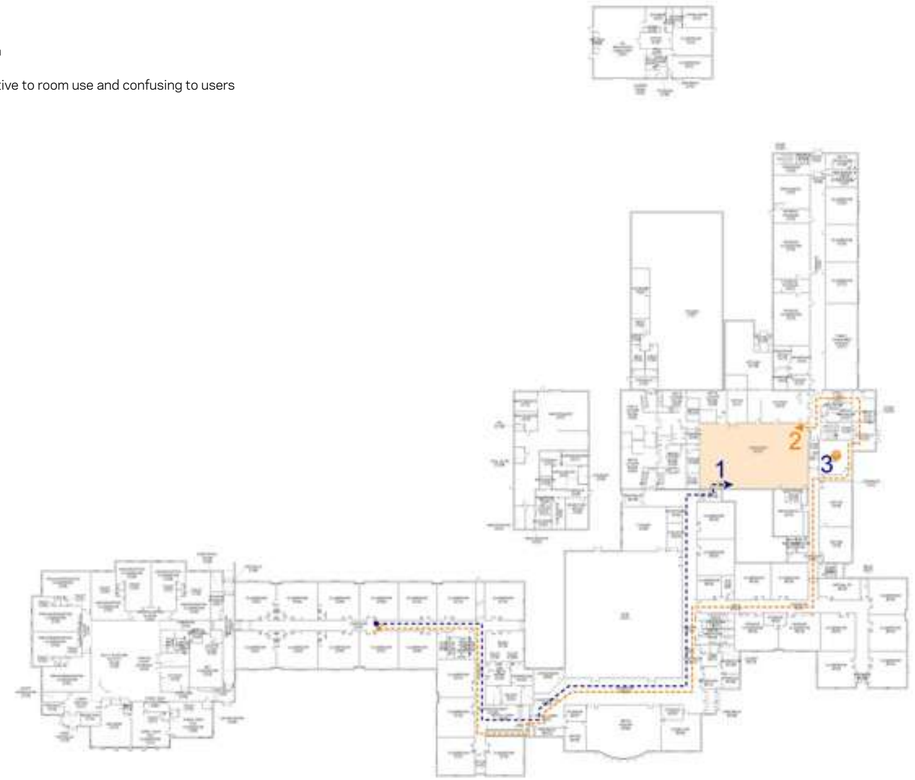


Facility Assessment — Accessibility

TRAVEL PATH TO CAFETERIA

1. Accessible circulation path to cafeteria

2. Circulation through ICN room is disruptive to room use and confusing to users



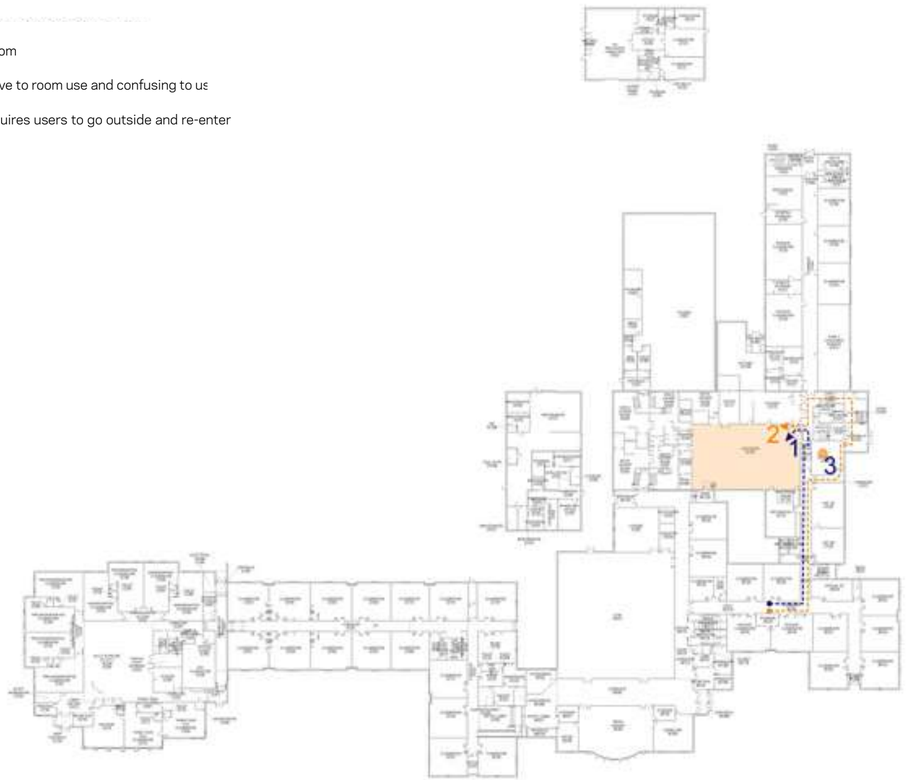
Facility Assessment — Accessibility

TRAVEL PATH TO FITNESS ROOM

1. Accessible circulation path to fitness room

2. Circulation through ICN room is disruptive to room use and confusing to us

3. The accessible path to fitness room requires users to go outside and re-enter from main fitness vestibule



Facility Assessment — Site

The site is located at 531 Prospect Street on the northwest side of Jesup, Iowa. The site is a single campus serving grades preschool through 12th grade, including all athletic fields, covering nearly 48 acres. Primary vehicular paths and staff and guest parking areas are concrete surfaced, with student and additional overflow parking surfaced with rock. The open areas are turf grass and well maintained. The west end of the property is row cropped, occupying approximately 300 feet parallel to 1st Street and serves as a storm water detention facility. A berm was constructed along 1st Street in 2014 to prevent overtopping 1st Street and slow runoff onto the golf course approximately a quarter mile west.

The buildings are primarily faced with brick to be low maintenance. The school is interconnected except for the administration/maintenance building, agriculture and industrial technology education (Ag ed) building, a small green house and the bus maintenance shed (bus barn). The bus barn is a steel-sided building with access from North Street. There are numerous structures to support the athletic fields, as well.

There is a small parcel along North Street that is owned by the City of Jesup. A municipal elevated water storage tank resides on the parcel, as well as outdoor tennis and basketball courts. The courts encroach onto school property. The courts are considered a shared improvement, though the existence of a formal agreement for responsibility is in question.

Existing Facilities and Findings

The campus was reviewed with facilities maintenance staff and the athletic director. The exteriors of the buildings were visually inspected from ground level for indications of structural issues, water infiltration or drainage issues, and accessibility. Pavement was reviewed based on its use, either vehicular or pedestrian access. Athletic facilities were considered from both maintenance and performance perspectives. The overall site drainage patterns were reviewed, and problem areas noted.

The exteriors of the buildings are generally in good to excellent condition. Only some minor items were noted, and none of them are high priority or needing immediate attention. The items noted are as follows:

- Staining along some of the downspouts, especially in interior corners (presumably from splashing or leaky fittings in the downspouts)
- Brick on Ag ed building is cracked near north end (no expansion joint)
- Heated stairs at early development entrance do not heat to outside edges of treads and create ice dams

The campus is served by municipal water and sanitary sewer. No issues were observed or reported. Natural gas and electric service is provided by MidAmerican and no concerns were observed or reported. Storm water runoff drains to the municipal storm sewer system or to open channels and off-site.

The drainage immediately around the school buildings is generally sufficient. There were several minor issues identified as follows:

- Tile from sump pit near the northeast corner freezes in winter and requires a heat tape to be run in cold weather
- Erosion/scouring along stairs at east main entrance
- Erosion/scouring from roof drains in landscaping in southeast interior corner
- Downspout near Activities entrance discharges onto sidewalk (ice problem in cold weather)
- Low point in curb at north entrance does not drain (ice problem in cold weather)
- Back-fall toward west side of Ag ed building, causing infiltration during heavy rains

The drainage on and around the athletic fields has several more significant issues. The terrain generally slopes from east to west, so a significant amount of runoff from the buildings and parking drains toward the athletic fields. It appears that some problem areas have been addressed reactively. Specific locations that have issues are:

- Right field of the baseball field (from football field and track runoff)
- Along centerfield and left field fence of baseball field
- Between baseball field and NW recreational softball field
- Between varsity softball field and NW recreational softball field
- Multiple broken tile in practice football field
- Wet spot in south end zone on east side of football field

There is a total of 208 paved and striped parking stalls, including eight designated as reserved for handicapped. This satisfies the recommended minimum number of accessible spaces of seven as based on the Iowa Statewide Urban Design and Specifications Design Manual Section 8C-1, Table 8C-1.02. Six of the eight stalls are van accessible. There are an additional 196 stalls in designated parking lots and 14 to 20 around the greenhouse and Ag ed building available on rock surfaced areas. There are no accessible parking stalls in the rock surfaced areas, thus handicap parking is deficient by at least five stalls. Handicap accessible access from the parking to the buildings and facilities is discussed later.

The parking demand is projected to be 350 to 370 in the next five to ten years. The 410 to 416 parking stalls (not including handicap stalls) available satisfies this demand. However, the student parking is desirable on the north side of the campus. With student drivers generating most of the demand, the parking on the north side of the school is deficient by 50 to 70 stalls.

Pavement on the campus appeared to generally be in fair to excellent condition except for the driveway entrance from 6th Street on the north side of the school to the parking lot east of the track. That concrete was observed to have many random cracks and faulting, most likely due to poor sub-grade and inadequate sub-grade drainage. All the pedestrian paths around the school and football field are paved but most are not compliant with the Americans with Disabilities Act (ADA) and current design standards, guidelines and requirements. The baseball and softball fields have gaps in the paved pedestrian paths, thus are not ADA compliant. The drop-off location at the main entrance on 6th Street has handicap stalls marked but there is not an accessible route from that area.

The athletic facilities vary in condition. The football field and track were rehabilitated in 2013, which included drainage and surfacing improvements. These are still in good condition with a few exceptions, namely the wet spot noted above and a gap between the asphalt track and concrete path on the east side of the track. Items noted as deficient are a lack of permanent bleachers on the visitor's side and lack of handicap accessible bleachers on the home side.

The baseball and softball fields were constructed over 30 years ago with no major rehabilitation projects. There is a concession stand and restroom facility shared by the baseball and softball fields. All the fields have bleachers. There is some overhead netting installed to protect spectators from foul balls. The baseball and varsity softball fields are irrigated, but the systems do not operate reliably and require a significant amount of maintenance. The fields appear to be tiled to help with drainage but no records to confirm the size, spacing or arrangement were available. The fences around the varsity fields are leaning in some places and there are gaps between the bottom of the fence and ground in several locations. The backstop on the baseball field is shorter than the desired height. The lime on the infields does not drain well. There is an undesirable slope in the right field corner of the baseball field. Storm water drainage between and onto the fields is a major issue. It was noted by staff that there is a significant amount of time and resources spent to maintain the fields due to the multitude of ongoing issues. Based on the age of the fields, the lighting is at or past its expected useful life. The quality and intensity of the light is likely substandard as the bulbs' output decreases over time. Replacing the lighting systems with light-emitting diode (LED) lighting will improve the illumination quality and intensity. LED lights also provide a more consistent and energy-efficient light, improving the player and fan experience while reducing energy consumption.

Bleacher seating was noted at all the athletic fields. The home side of the football field is not accessible, and the visitors' side does not have permanent or compliant bleachers. The softball fields have bleachers but not with fall protection. The softball and baseball bleachers have some overhead netting to provide protection from foul balls from other fields, but the netting does not provide protection for all bleachers. There have been minor injuries to spectators reported from foul balls.

The athletic field concession stands are functional but showing age. The current structures are requiring more and more maintenance. The layouts for functionality and efficiencies could be improved. Major renovations are needed on the baseball and softball fields which provides an opportune time to address deficiencies and improve the operation and function of the concession stands at all the athletic facilities.

Proposed Improvements/Recommendations

With a growing number of students and visitors with limited mobility, ADA-compliant accessibility improvements are a high priority. Most of the sidewalks constructed since 2010 appear to comply, but most of the older pedestrian routes do not. Even the newer paths are not completely accessible. There is not designated handicap parking near the football field and track. The baseball and softball fields do not have a fully accessible route. It is recommended that all pedestrian routes to/from the paved parking lots, along the school building, to/from the Ag ed building, and all athletic fields be improved. This work will primarily consist of pavement removal and replacement, minor grading, and possibly some drainage improvements to eliminate ice problems during cold weather. It will also address the deficiency of handicap parking stalls, adding a minimum of five stalls. It is suggested to add at least three near the baseball and softball fields entrance and two at the football field/track entrance north of the school and east of the track.

The available parking theoretically satisfies the demand, but it was noted that student parking

available on the north side of the school is likely deficient. Unfortunately, there is no available space for additional parking on the north side of the school without displacing the shot put and discus track event fields. The recommendation is to maintain the existing parking available. Limited convenient parking will encourage carpooling and bus use or alternative transportation such as biking or walking.

The disturbance of the sidewalks creates an opportunity to repair the erosion and scouring. The concentrated flows causing the erosion may be rerouted or utilize resilient landscaping to armor the locations. This can include landscaping rock and cobble and deep-rooted plantings that will both beautify and protect the areas.

The back-fall along the west side of the Ag ed building should be resolved as soon as possible to prevent water infiltration and, subsequently, damage to the structure or growth of mildew/mold inside the building and walls. The earth along this side may be regraded to provide positive drainage at least ten feet from the building. It appears that the site can be graded to surface drain to the north around an addition to the Ag ed building.

The exteriors of the buildings are generally in good condition. The staining near the downspouts appears to be cosmetic only. This maybe left as-is or power washed. Any cleaning solutions used should be tested in an inconspicuous location prior to use to ensure they do not discolor the façade. It is likely that the staining may not be fully removed or may return.

The cracking of the brick mortar joint on the Ag ed building should be repaired to prevent water infiltration. The cause of the cracking is likely due to a lack of expansion joint near the corner. It is recommended that an experienced masonry expert be consulted for the proper solution.

The broken pavement along the north side of the school and south of the Ag ed building likely is not a major concern except for the ponding at the north entrance. Without amending the soils and addressing the subsurface drainage, it is likely that similar pavement cracking would develop in the new pavement. Instead of or in addition to the sub-grade improvements, new pavement could be reinforced so that any random cracking will not separate or fault, thus maintaining a smoother ride and better surface drainage. It is likely most economical to include the pavement with other concrete work in that vicinity, such as a sidewalk or pedestrian path project to improve ADA compliance.

The parking for the baseball and softball fields is surfaced with crushed stone and thus is not considered handicap accessible. At a minimum, accessible parking should be provided close to the entrance to the baseball/softball fields with hard surfaced stalls and pedestrian path. The ideal solution is to provide a paved parking lot with defined parking stalls to maximize access and available parking.

The wet areas in the south end zone of the football field and across the practice football fields are likely damaged tile. The cause is difficult to determine without excavating the problem location and inspecting the type of failure. The solution is likely removing the damaged section and replacing it.

The gap between the track and the sidewalk pavement on the east side appears to be freeze/thaw deterioration of the asphalt edge. It is recommended to have an asphalt contractor route and clean the area and fill with a hot-applied tar sealant. The tar sealant will prevent water from standing in the gap and thus preventing further damage. The color of the tar will blend well with the black track surface.

The condition of the baseball field and severity of the drainage issues warrant an overhaul of the playing surface, subsurface drainage system, and fencing. It is highly recommended to address the drainage issues in the outfield at the same time. Because there is limited elevation difference from outside the right field fence to the left field corner, a traditional storm sewer system to capture runoff from the football field will be very challenging and likely inefficient. The recommendation is to grade a swale, or shallow channel, at least 10 to 20 feet outside the fence to capture runoff from routine rain events before the runoff impacts the baseball field. The swale would flow northerly and westerly parallel to the fence and outlet to the channel north of the north softball field. If grade allows, a tile may be installed in or along the swale to promote a dry, stable flow line in order to facilitate regular mowing.

The varsity softball field is also in need of an overhaul to improve drainage and the playing surface. Improvements recommended include new tile system, better infield surface to promote drainage, and replace the irrigation system.

The recreational softball fields also suffer from drainage and playing surface problems. These fields are not expected to play to the same level as the varsity field but are utilized at a competitive level. At a minimum, the subsurface drainage and infield surfacing should be addressed.

The common areas between the softball and baseball fields does not provide ADA accessibility and suffers from drainage problems, both lack of drainage and erosion or scouring from concentrated flows. Installing pavement, including a series of ramps and stairs for access to the concession stand and restrooms, will promote better drainage and prevent the erosion in the pedestrian areas. This may eliminate or reduce the need for storm sewer inlets and piping, thus the concentrated flows that cause erosion and scouring.

Bleacher seating improvements may be a lower priority, but still worth considering for accessibility and safety reasons. There appears to be room on the north end of the home side football bleachers to install a ramp to provide ADA access. There will need to be some modifications to allow for wheelchair accommodations. The visitors' side would benefit from bleachers with fall protection due to the height of the bleachers present. It is likely most cost effective to purchase new bleachers with such protection rather than retrofit. The bleachers would also be dedicated to the visitors' side and prevent damage from moving them for other events. The softball bleachers should have fall protection installed.

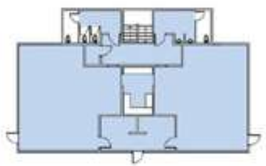
The baseball and softball concession stand is showing age and wear. The concession area is not highly efficient, and the restrooms are outdated. It is possible that the existing building be remodeled, but it may be as cost-effective to demolish the structure and construct a new one to meet current standards. That would allow for additional restroom stalls, true ADA compliance and confidence that the concession area meets all applicable codes and standards for food safety. The storage areas could be expanded and security enhanced. It would also be an opportunity to make Jesup athletics a premiere facility to host tournaments and post-season games.

Many of the recommended improvements will require significant capital expenditures. Budgetary cost information for the recommendations is included in Appendix A. Some projects may be phased or staged to fit available funding.

Facility Assessment — Rural Schools: Triumph

The Triumph Elementary site is located at 1348 145th Street near Fairbank in Buchanan County, Iowa. The site is a 0.88-acre parcel serving an Amish community. The building is served with a crushed stone surfaced driveway and small parking lot. The parcel is fenced around the perimeter with chain link fencing. There is a metal slide, jungle gym, swing set and merry go round. There is backstop for baseball, basketball hoop and volleyball area. There is also a small plastic play set and a sandbox.

The school has poured concrete foundation, composite siding and a steel roof. The building appears to be in good condition. The main entrance has a concrete patio and flush entry for accessibility. There is a liquid propane tank for the furnace and evidence of a septic system. There is a small horse barn available for students' horses. The barn has steel siding, with one section having a steel roof and the other part having asphalt shingles.



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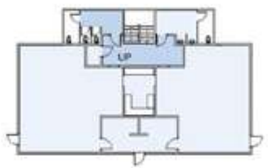

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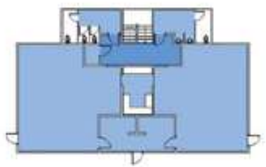

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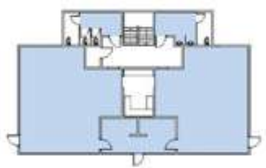

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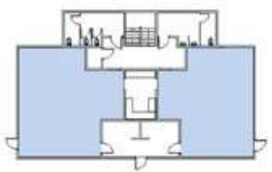

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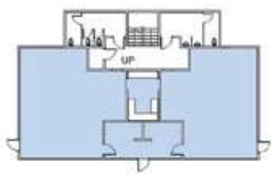


CASEWORK

Existing Facilities and Findings

The site was reviewed for potential problems or items of concern. The exteriors of the buildings were visually inspected from ground level for indications of structural issues, water infiltration or drainage issues, and accessibility. Pavement and other surfacing was reviewed based on its use, either vehicular or pedestrian access. The overall site drainage patterns were reviewed, and problem areas noted.

The exterior of the school building is generally in good to excellent condition. The siding has some minor chipping or breaks along the bottom edge, but this does not appear to be of significant concern at this time.

The drainage around the school building should be improved on the north and west sides as the ground immediately adjacent to the building has back-fall. The concrete areas drain well and are in good condition.

The asphalt shingled roof of the horse barn is in poor condition, with significant wear to the entire roof.

The fence around the perimeter is in good condition and appears to provide sufficient security.

There are no signed or striped parking due to the rock surfacing. Because there is no pavement, there is inherently no accessible parking. The main entrance appears to otherwise be ADA compliant. Other exits have stoops but are not handicap accessible. There is one egress window for the basement in the northeast corner. It has a permanent ladder bolted to the foundation. The size of the window was not checked for proper egress standards.

The playground equipment is out of date and lacks modern safety features. There is no fall protection or safety surfacing present. There are no competition-level athletic facilities on the site.

Proposed Improvements/Recommendations

Because this is an Amish school, the normal parking standards to not apply. There is sufficient space for the students' horse drawn buggies. The staff operating motorized vehicles also have adequate space. However, there is a lack of handicap accessible parking. At least one van-accessible space should be paved near an accessible entrance.

The playground does not meet current safety regulations and the equipment should be replaced. Until it is replaced, fall protection and/or safety surfacing should be installed under the slide, swing set and jungle gym. The volleyball area is missing a post on the west end. A new post is recommended to be installed and net provided. Consideration may be given to installing permanent bases for the ball field.

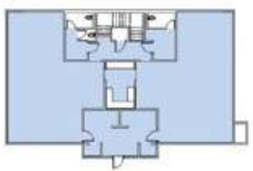
The low areas adjacent to the foundation should be regraded for proper drainage.

The asphalt shingles on the horse barn should be replaced as soon as practical.

Facility Assessment — Rural Schools: Prairie Grove

The Prairie Grove Elementary site is located at 1501 150th Street outside of Hazelton in Buchanan County, Iowa. The site is a 0.63-acre parcel serving an Amish community. The building is served with a crushed stone surfaced driveway and small parking lot. The parcel is fenced around the perimeter with chain link fencing. There is swing set, backstop for baseball, basketball hoop and volleyball net.

The school has poured concrete foundation, composite siding and a steel roof. The building appears to be in good condition. The main entrance has a concrete patio and flush entry for accessibility. There is a liquid propane tank for the furnace and evidence of a septic system.



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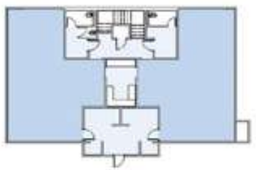

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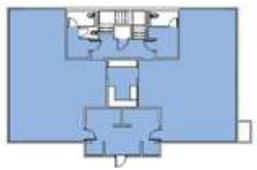
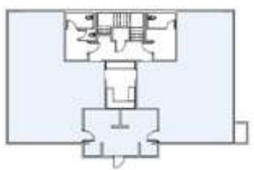


WALLS



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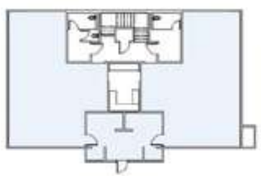

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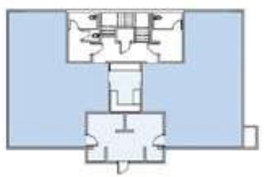


CASEWORK

Existing Facilities and Findings

The site was reviewed for potential problems or items of concern. The exteriors of the buildings were visually inspected from ground level for indications of structural issues, water infiltration or drainage issues, and accessibility. Pavement and other surfacing was reviewed based on its use, either vehicular or pedestrian access. The overall site drainage patterns were reviewed, and problem areas noted.

The exterior of the building is generally in good to excellent condition. The siding has some minor chipping or breaks along the bottom edge but this does not appear to be of significant concern at this time.

The drainage around the school building appears sufficient. The concrete areas drain well and are in good condition. The only area noted was at the downspout on the northeast corner of the school. The splash pad is in a slight depression and does not appear to fully drain.

The fence around the perimeter is in good condition and appears to provide sufficient security.

There are no signed or striped parking due to the rock surfacing. Because there is no pavement, there is inherently no accessible parking. The main entrance appears to otherwise be ADA compliant. Other exits have stoops but are not handicap accessible. There is one egress window for the basement in the northeast corner. It has a permanent ladder bolted to the foundation. The size of the window was not checked for proper egress standards.

The playground equipment is minimal and appears to be in fair condition. There is no fall protection or safety surfacing present. There are no competition-level athletic facilities on the site.

Proposed Improvements/Recommendations

Because this is an Amish school, the normal parking standards to not apply. There is sufficient space for the students' horse drawn buggies. The staff operating motorized vehicles also have adequate space. However, there is a lack of handicap accessible parking. At least one van-accessible space should be paved near an accessible entrance.

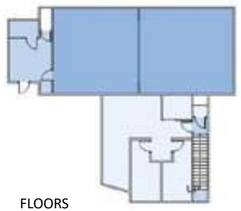
There is minimal playground equipment available. Consideration may be given for additional, age-appropriate items. The playground does not meet current safety regulations and fall protection and/or safety surfacing should be installed under the swing set. Consideration may be given to installing permanent bases for the ball field.

The low spot at the northeast downspout should be regraded for proper drainage.

Facility Assessment — Rural Schools: Perry #1

The site is located at 1726 Fairbank Amish Boulevard north of Independence in Buchanan County, Iowa. The site is a 0.66-acre parcel serving an Amish community. The building is served with a crushed stone surfaced driveway and small parking lot. The parcel is fenced around the perimeter with wood posts and welded wire panels. There is some playground equipment available, including a metal slide, jungle gym, merry-go-round and swing set. There is also a backstop for baseball and a volleyball net. A small barn is available for horses.

The school has vinyl siding and a steel roof. The building appears to consist of an original building with a concrete block foundation and an addition to the southeast. The addition appears more modern and has a concrete ramp and stairs to provide access. There is a liquid propane tank for the furnace and evidence of a septic system.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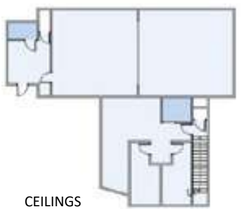
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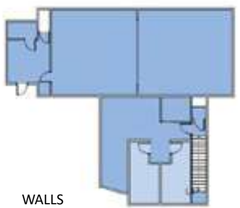
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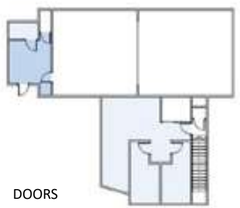
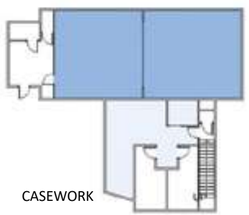

DOORS


WINDOWS


CASEWORK

Existing Facilities and Findings

The exteriors of the buildings were visually inspected from ground level for indications of structural issues, water infiltration or drainage issues, and accessibility. Pavement and other surfacing was reviewed based on its use, either vehicular or pedestrian access. The overall site drainage patterns were reviewed, and problem areas noted.

The exterior of the building is generally in fair condition. The vinyl siding shows some wear with minor damage on the north side.

The drainage around the school building is questionable as the ground immediately against the foundation appears to have back-fall. This may not be a noticeable issue since the roof has gutters with downspouts that are tiled away.

The fence around the perimeter appears to provide sufficient security. However, the majority of the fence on the northeast side is leaning. Another small section is leaning on the southwest side. The backstop in the east corner is severely leaning.

There are no signed or striped parking due to the rock surfacing. Because there is no pavement, there is inherently no accessible parking. There is a ramp to access the school. The ramp and stairs have railings. There is a precast set of stairs at the west door to the original building that is cracked and the reinforcement is showing at the bottom.

The playground equipment is out of date and lacks modern safety features. There is no fall protection or safety surfacing present. There are no competition-level athletic facilities on the site.

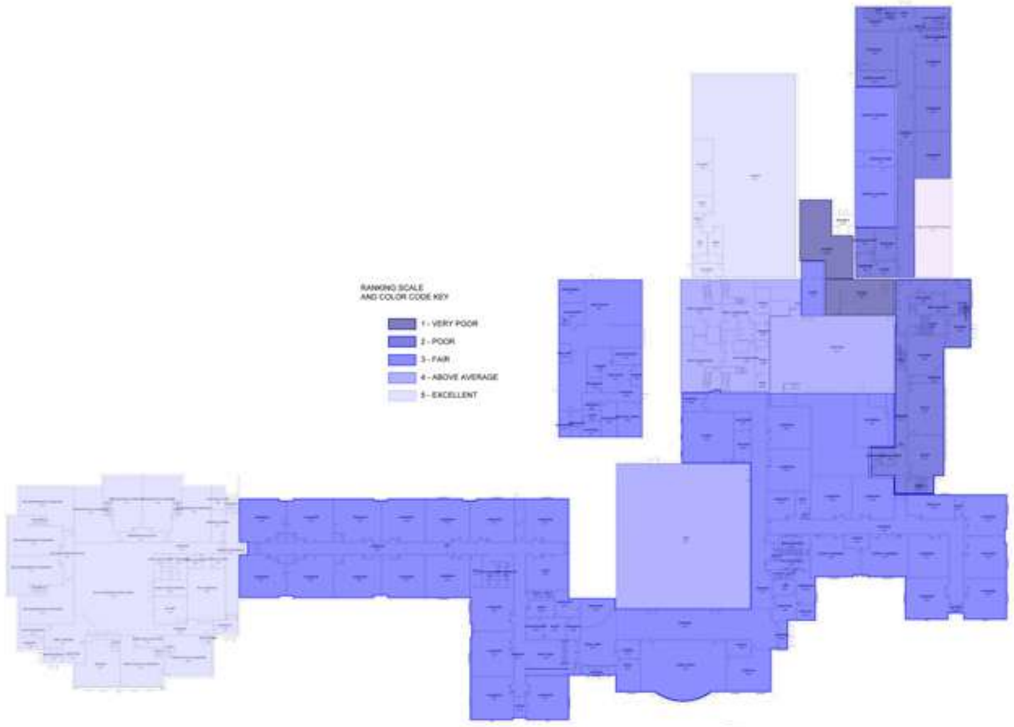
Proposed Improvements/Recommendations

The damaged siding should be repaired to prevent water infiltration and damage to the building. It may also improve thermal efficiency by reducing airflow in the walls, especially with predominant winds from the northwest. The grading adjacent to the structures should also be improved to promote positive drainage.

Because this is an Amish school, the normal parking standards to not apply. There is sufficient space for the students' horse drawn buggies. The staff operating motorized vehicles also have sufficient space. However, there is a lack of handicap accessible parking. At least one van-accessible space should be paved near the accessible entrance.

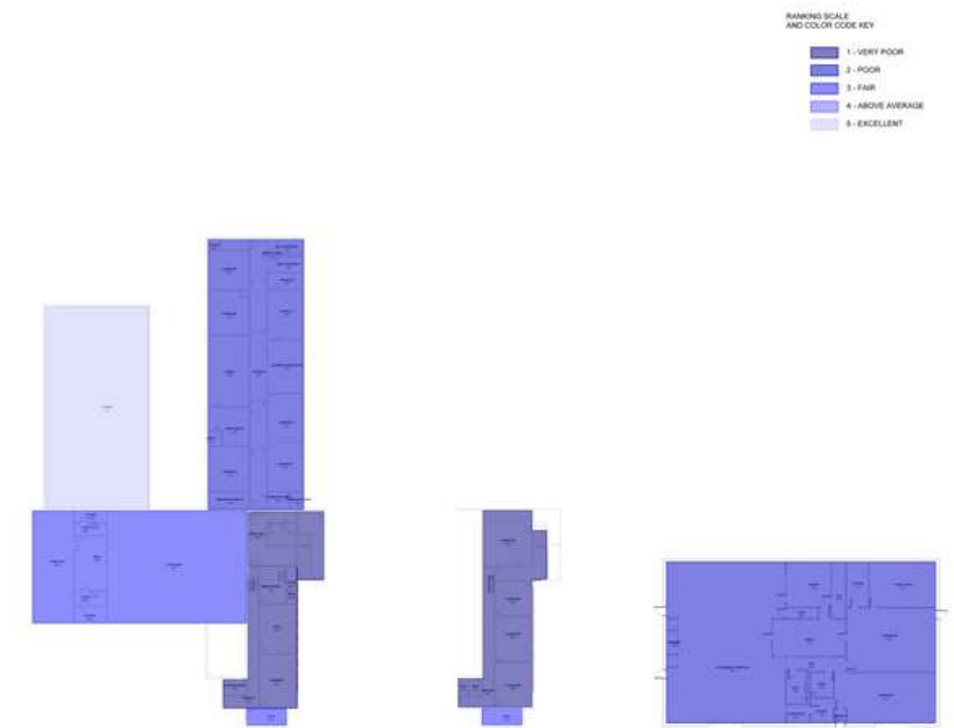
The playground does not meet current safety regulations and the equipment should be replaced. Until it is replaced, fall protection and/or safety surfacing should be installed under the slide, swing set and jungle gym. The volleyball net is supported by movable posts cast in concrete in rubber tires. The posts were also anchored with rope to the fence on one end and a picnic table on the other. Permanent posts capable of supporting the net are recommended to eliminate the ropes to the fence and table that present hazards. The backstop should be repaired. Consideration may be given to installing permanent bases for the ball field.

Facility Assessment — Mechanical Systems



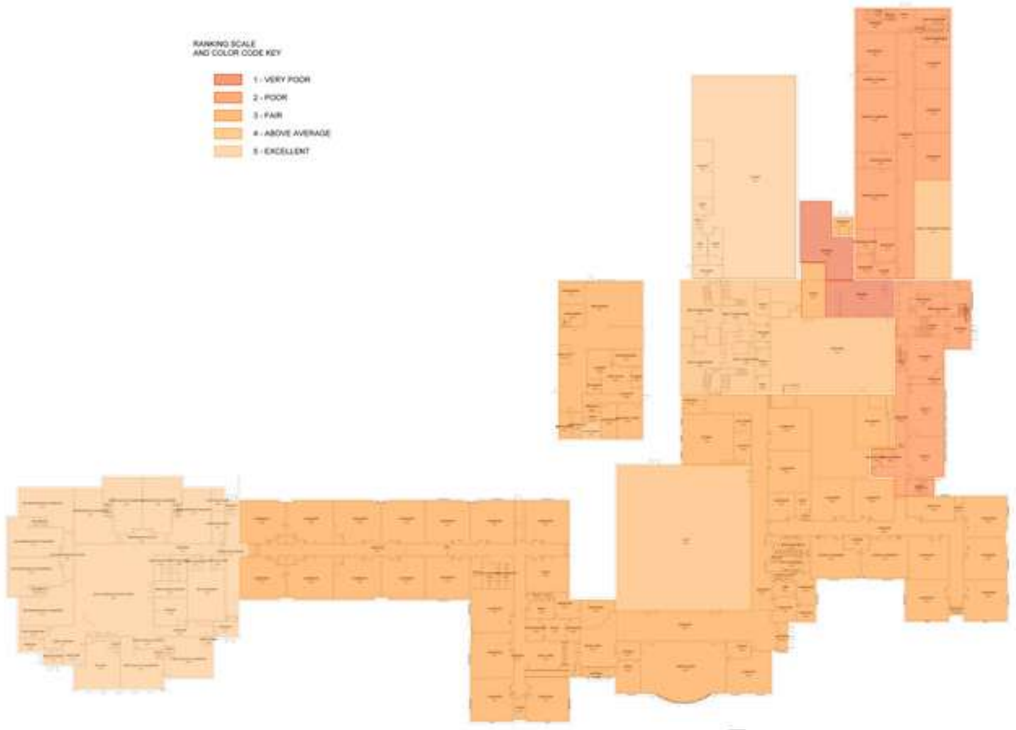
LEVEL 1

Facility Assessment — Mechanical Systems



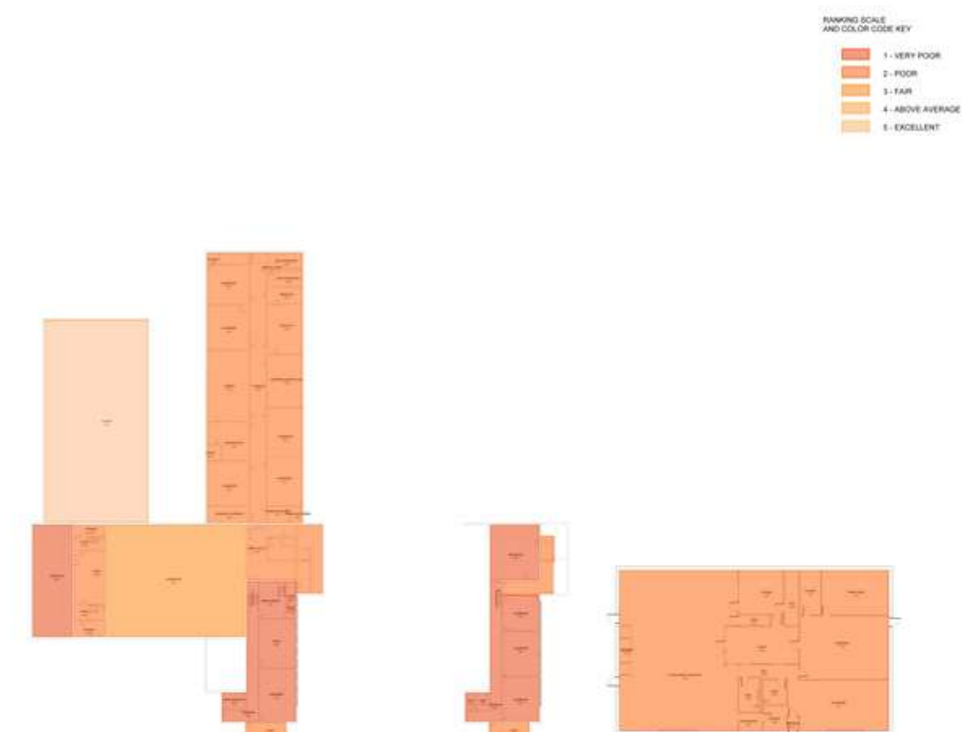
LEVEL 2

Facility Assessment — Electrical Systems



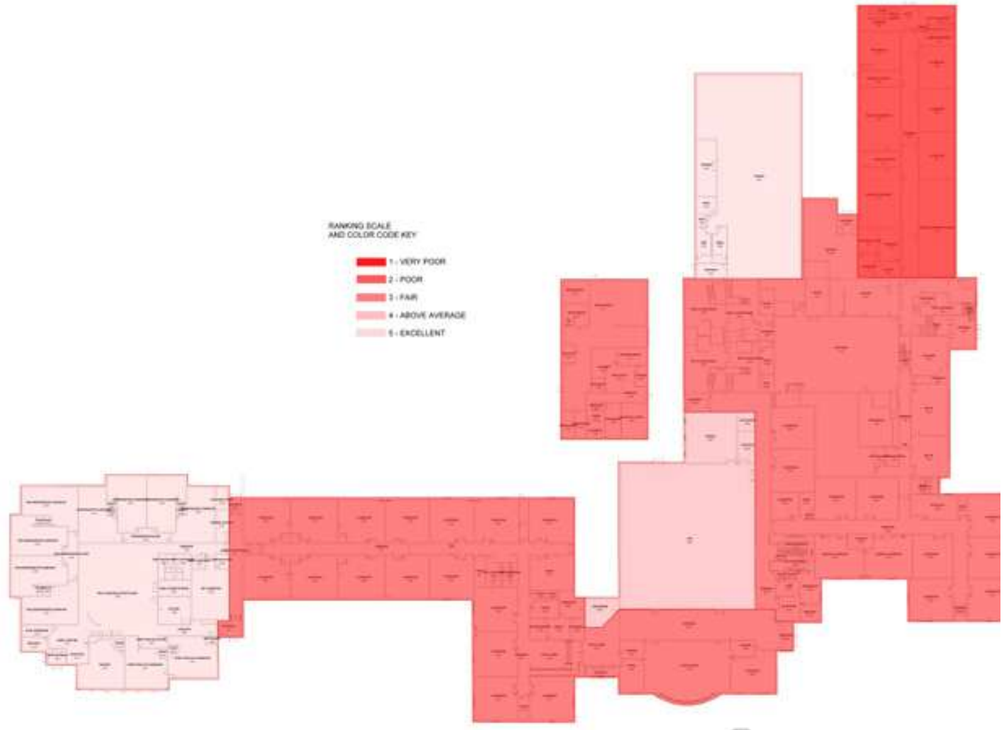
LEVEL 1

Facility Assessment — Electrical Systems



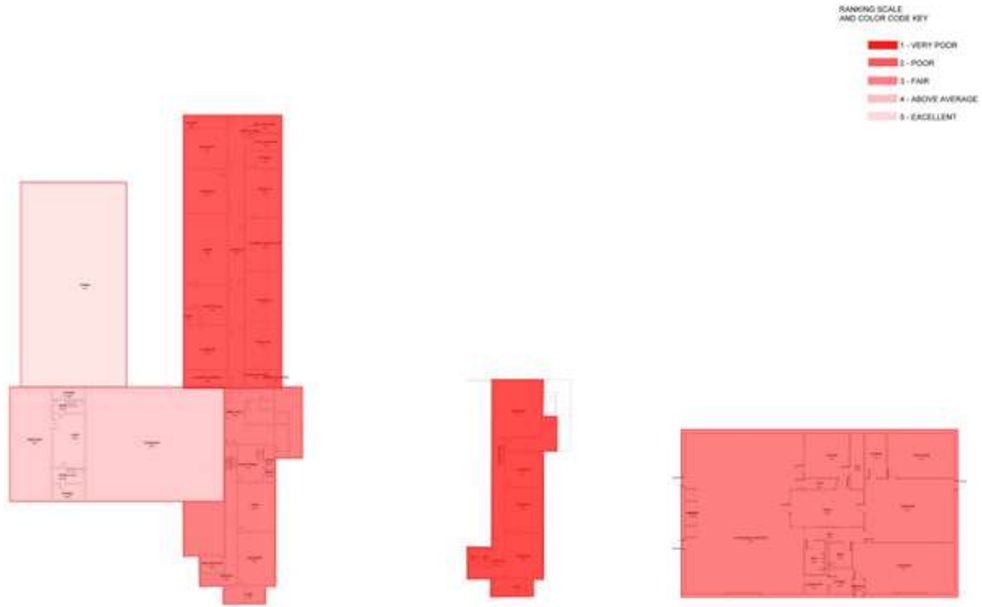
LEVEL 2

Facility Assessment — Technology Systems



LEVEL 1

Facility Assessment — Technology Systems



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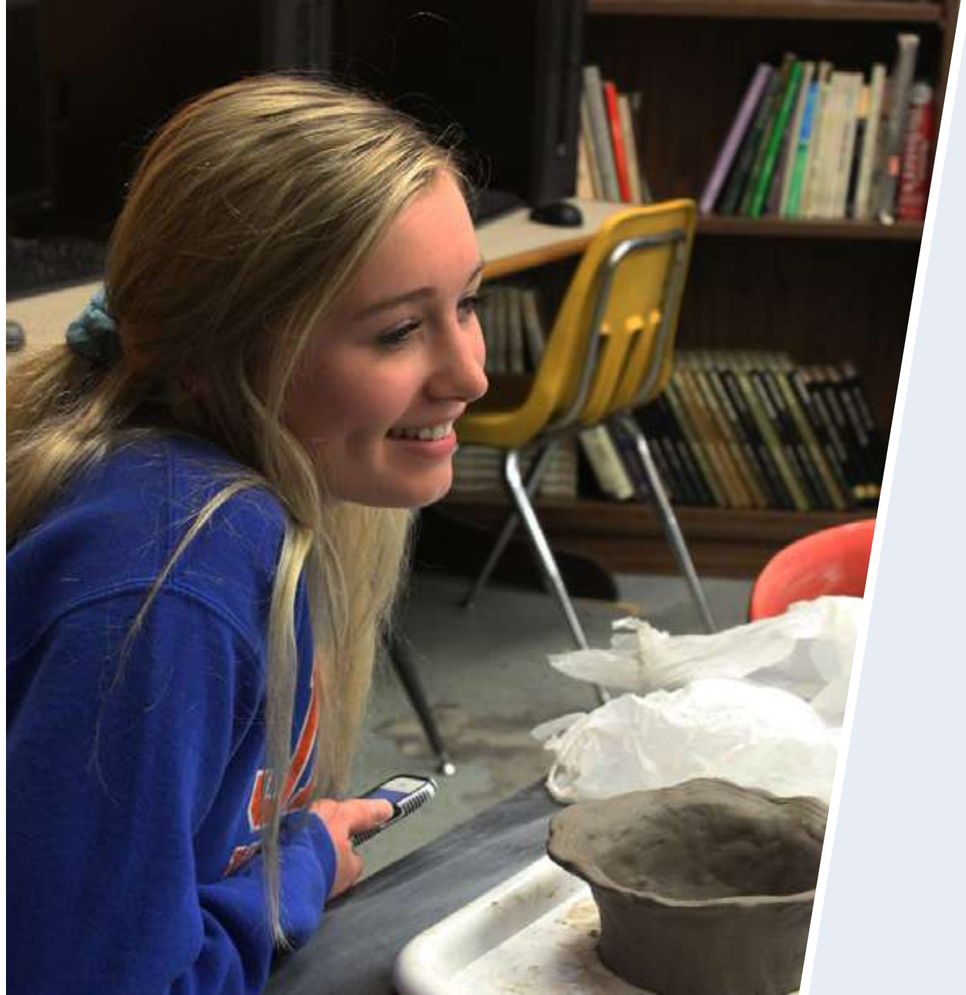
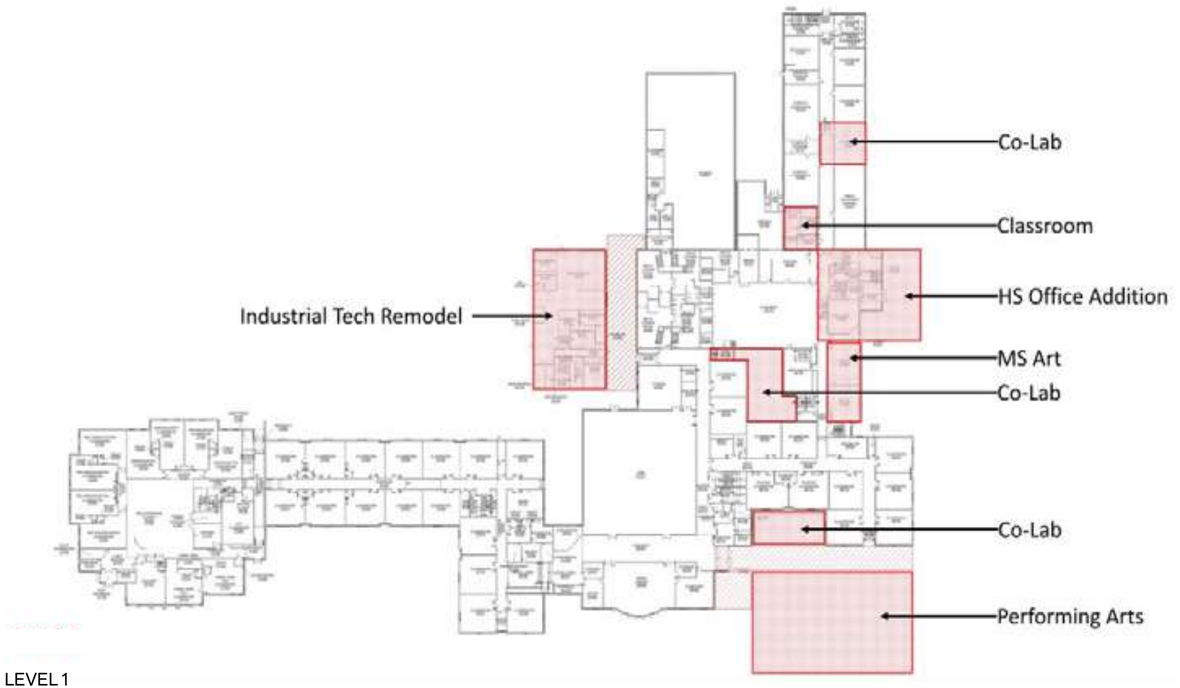


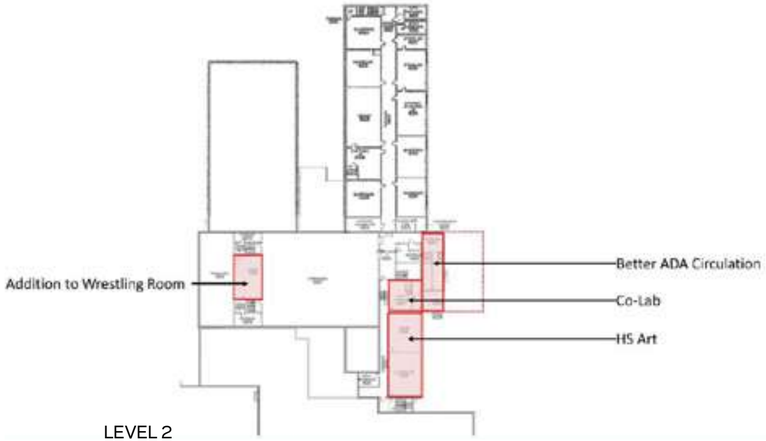
Concepts & Cost Analysis

Future Project Concepts

The priority projects were assessed on the overall campus. The following plan diagrams indicate potential locations for additions and remodels on the campus. These are intended to be placeholders and not representatives of the actual design. Further exploration and programming will need to be done for finalizing program of each space and needs.



LEVEL 1



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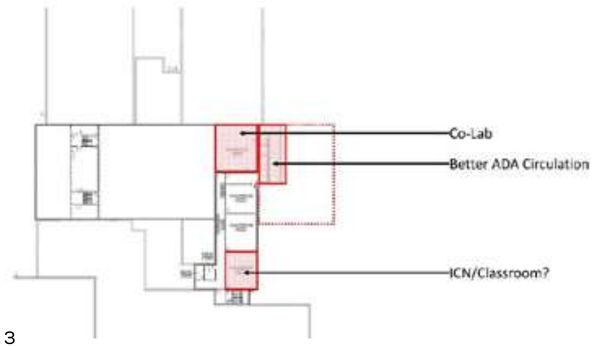

LEVEL 3

Future Project Cost Analysis

The priority projects were grouped into 5 different categories: Site Improvements, Code, Renovation, New Construction, and Mechanical/Electrical/Plumbing/Technology. Each project identified in the Building Planning Diagrams was assigned a cost and grouped into a phased master plan. The Steering Committee met to agree upon the masterplan and funding sources for the projects.

Description	Quantity	Unit	Area	Unit Cost	Total	Phase 1 2020-2022	Phase 2 2022-2023	Phase 3 2025-2026
Site Improvements								
Student Parking -6" PCC	1	LS	1	$275,000.00	$275,000.00		$275,000.00	$0.00
Baseball Field Renovation	1	LS	1	$750,000.00	$750,000.00		$750,000.00	$0.00
Softball Field (Varsity) Renovation	1	LS	1	$550,000.00	$550,000.00		$550,000.00	$0.00
Softball Field (Recreation) Renovation	1	LS	1	$350,000.00	$350,000.00		$350,000.00	$0.00
Baseball/Softball Drainage	1	LS	1	$200,000.00	$200,000.00	$200,000.00		
Bleachers at all Athletic Fields	1	LS	1	$80,000.00	$80,000.00	$80,000.00		
Overhead netting at Baseball and Softball fields	1	LS	1	$60,000.00	$60,000.00	$60,000.00		
Baseball/Softball Concessions	1	LS	1	$350,000.00	$350,000.00		$350,000.00	$0.00
LED Lighting at Softball Field	1	LS	1	$220,000.00	$220,000.00		$220,000.00	$0.00
LED Lighting at Baseball Field	1	LS	1	$175,000.00	$175,000.00		$175,000.00	$0.00
				SUBTOTAL	**$3,010,000.00**	**$340,000.00**	**$2,670,000.00**	**$0.00**
Code								
Security -Doors with Lockdown Capability @ vestibules	12	Doors	1	$5,500.00	$66,000.00		$66,000.00	$0.00
ADA Code Compliance - Interior	1	LS	1	$50,000.00	$50,000.00	$50,000.00		
ADA Code Compliance - Exterior	1	LS	1	$150,000.00	$150,000.00	$150,000.00		
Security -Cameras	10	Cameras	1	$2,000.00	$20,000.00		$20,000.00	$0.00
				SUBTOTAL	**$286,000.00**	**$200,000.00**	**$86,000.00**	**$0.00**
Renovation								
HS Office conversion to Functional Classroom	1	SF	1042	$45.00	$46,890.00		$46,890.00	$0.00
Classroom conversion to Collaboration Rooms	1	SF	793	$40.00	$31,720.00		$31,720.00	$0.00
Art Room Remodel - High School	1	SF	1907	$50.00	$95,350.00		$95,350.00	$0.00
Art Room Remodel - Middle School	1	SF	1734	$50.00	$86,700.00		$86,700.00	$0.00
ECC Sound Barrier Wall	1	SF	250	$40.00	$10,000.00	$10,000.00		
Cafeteria Remodel	1	SF	4792	$30.00	$143,760.00			$143,760.00
Gym Stage Renovation - Weight Room	1	SF	865	$100.00	$86,500.00		$86,500.00	$0.00
Gym Renovation - Bleachers	1	SF	500	$130.00	$65,000.00		$65,000.00	$0.00
Gym Renovation - Flooring	1	SF	7941	$15.00	$119,115.00		$119,115.00	$0.00
Window Replacement - Campus Wide	1	SF	2041	$81.00	$165,321.00		$165,321.00	$0.00
Door Replacement/Repair - Campus Wide	15	EA	1	$1,800.00	$27,000.00		$27,000.00	$0.00
General Exterior Maintenance	1	LS	1	$150,000.00	$150,000.00		$150,000.00	$0.00
				SUBTOTAL	**$1,027,356.00**	**$10,000.00**	**$873,596.00**	**$143,760.00**

New Construction								
Ag / CTE Remodel	1	SF	7193	$200.00	$1,438,600.00			
Ag / CTE Addition	1	SF	2000	$250.00	$500,000.00			
Ag / CTE Addition @ Corridor	1	SF	3282	$200.00	$656,400.00			
					$2,595,000.00		$2,595,000.00	
Demo Maintenance Building	1	SF	5960	$15.00	$89,400.00			
New Mantenance Building	1	SF	5960	$150.00	$894,000.00			
					$983,400.00		$983,400.00	
High School Lobby / Office Addition - Level 1	1	SF	2500	$275.00	$687,500.00		$687,500.00	
High School Lobby / Office Remodel - Level 1	1	SF	3725	$350.00	$1,303,750.00		$1,303,750.00	
High School Lobby / Office Remodel - Level 2	1	SF	3271	$350.00	$1,144,850.00			$1,144,850.00
High School Lobby / Office Remodel - Level 3	1	SF	2338	$250.00	$584,500.00			$584,500.00
					$3,720,600.00			
Collaboration Areas Additions @ Exterior Courtyard	1	SF	2093	$275.00	**$575,575.00**			$575,575.00
Collaboration Areas Additions @ Middle School south infill (STEM)	1	SF	1932	$275.00	**$531,300.00**			$531,300.00
Performing Arts Addition	1	SF	9500	$425.00	$4,037,500.00			
Band/Vocal Addition	1	SF	4500	$275.00	$1,237,500.00			
					$5,275,000.00		$5,275,000.00	
3rd Gym - New Construction	1	SF	14000	$250.00	**$3,500,000.00**			$3,500,000.00
				SUBTOTAL	**$17,180,875.00**	**$0.00**	**$10,844,650.00**	**$6,336,225.00**
M/E/P + Tech Items								
HVAC Upgrades - Entire Campus ROI Scenarios - Direct Replace	1	System	1	$900,000.00		$900,000.00		
HVAC Upgrades - Entire Campus ROI Scenarios - Mid Level	1	System	1	$3,200,000.00				
HVAC Upgrades - Entire Campus ROI Scenarios - High Level (Geothern	1	System	1	$4,800,000.00	$4,800,000.00			$4,800,000.00
Clock updgrades (All Schools)	107	System	1	$234.00	$25,038.00		$25,038.00	
Paging updgrades (All Schools)	178,210	SF	1	$0.85	$151,478.50		$151,478.50	
Correct deficiencies in egress lighting/signage (All Schools)	1	System	1	$10,000.00	$10,000.00		$10,000.00	
Fire Alarm System (NEW add to the list)	178,210	SF	1	$3.50	$623,735.00		$623,735.00	
				SUBTOTAL	**$5,610,251.50**	**$900,000.00**	**$810,251.50**	**$4,800,000.00**
				TOTAL	**$27,114,483**	**$1,450,000**	**$15,284,498**	**$11,279,985**

Appendix

High School Wing

FIGURE 01

FIGURE 02

FIGURE 03

FIGURE 01 - Wood stalls in original bathroom of high school too short and missing doors

FIGURE 02 - Wall mount sinks showing wear at overflow drain

FIGURE 03 -Glazed block at high school restroom cracking at joints

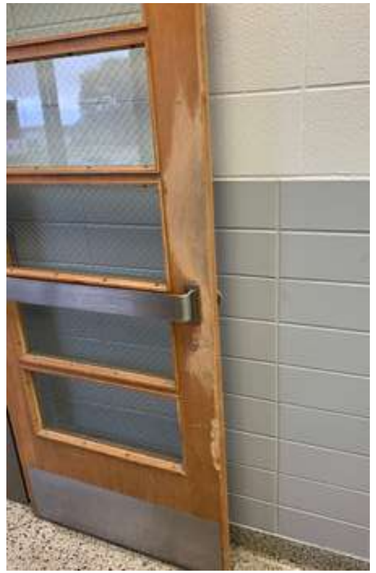

FIGURE 04

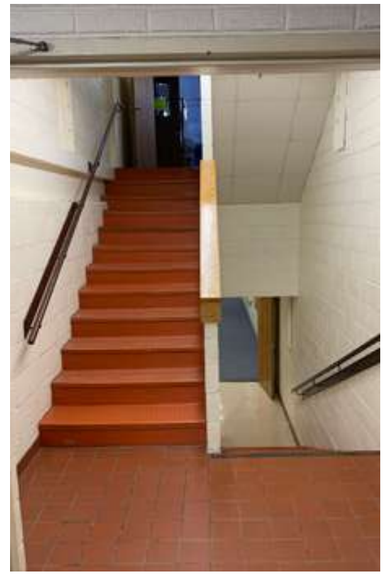

FIGURE 05

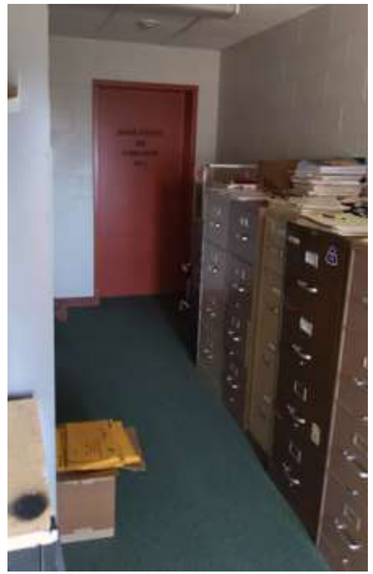

FIGURE 06

FIGURE 04 - High School wood doors at staircase showing wear

FIGURE 05 - Multiple changes in levels in high school

FIGURE 06 - Elevator connecting multiple levels - not all doorways to elevator are accessible. Storage blocking accessible route

Elementary School Wing

FIGURE 07

FIGURE 08

FIGURE 09

FIGURE 10

FIGURE 11

FIGURE 12

FIGURE 13

FIGURE 07 - Storage cabinet delaminating

FIGURE 08 - Wrestling room mats peeling at wall

FIGURE 09 - Drinking fountain projecting into corridor walkway. Fire extinguishing does not meet clear space requirements for accessibility.

FIGURE 10 - Worn counter top at Elementary School

FIGURE 11 - Delaminating counter top

FIGURE 12 - Non-accessible restroom in Ag building

FIGURE 13 - Non-accessible entrance to classroom

Elementary School Wing

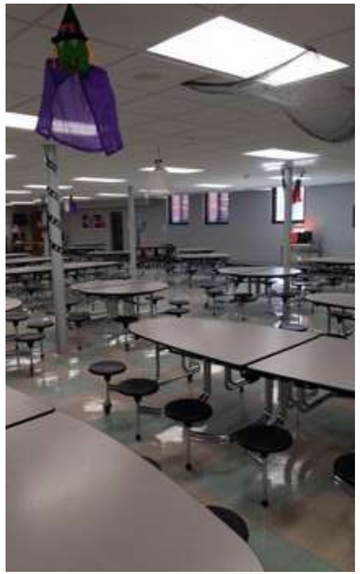

FIGURE 14

FIGURE 15

FIGURE 16

FIGURE 14 - Cafeteria in High School Building

FIGURE 15 - Kitchen in High School Building

FIGURE 16 - Library in High School Building

FIGURE 18

FIGURE 19

FIGURE 20

FIGURE 18 - Library in High School Building

FIGURE 19 - Renovated locker room at High School Building

FIGURE 20 - Classroom at Elementary School

Middle/High School Wing

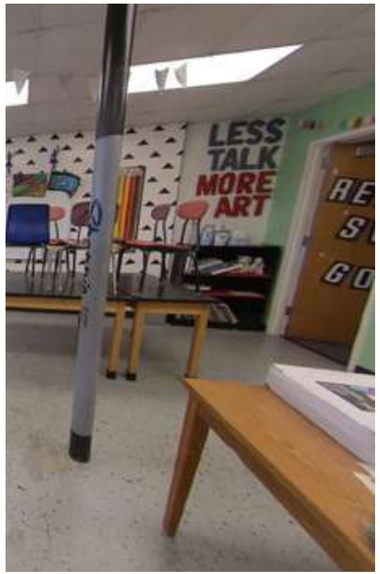

FIGURE 28

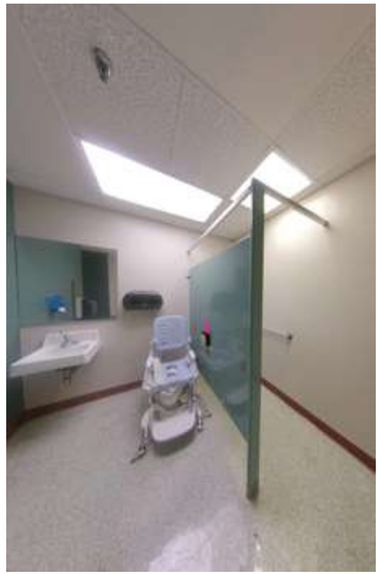

FIGURE 29

FIGURE 30

FIGURE 28 - Art room floor coating wearing through

FIGURE 29 - Non ADA compliant restroom

FIGURE 30 - View from stage into old gym - platform on gym wall appears unsafe

FIGURE 31

FIGURE 32

FIGURE 33

FIGURE 34

FIGURE 31 - In floor outlet creates trip hazard

FIGURE 32 - Fire extinguisher not in accessible reach range

FIGURE 33 - Non-accessible route from locker room to gym

FIGURE 34 - Exposed metal structure at classroom - possibly uninsulated and may need fireproofing/sprinklered

Middle/High School Wing

FIGURE 35

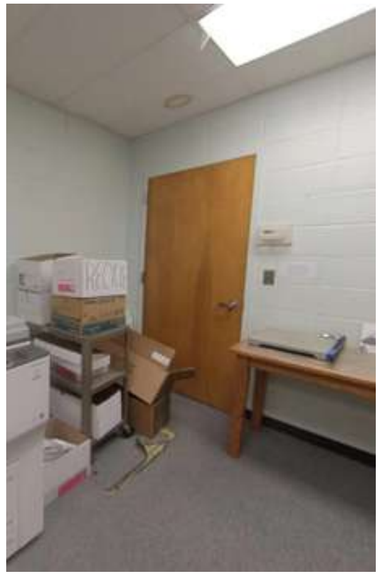

FIGURE 36

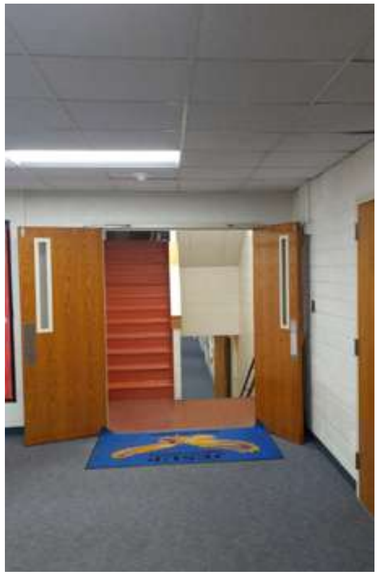

FIGURE 37

FIGURE 35 - Existing Band room

FIGURE 36 - Ripped carpet in the workroom and lack of storage

FIGURE 37 - Stairwell linking buildings - low ceiling height and lack of accessibility

75

FIGURE 38

FIGURE 39

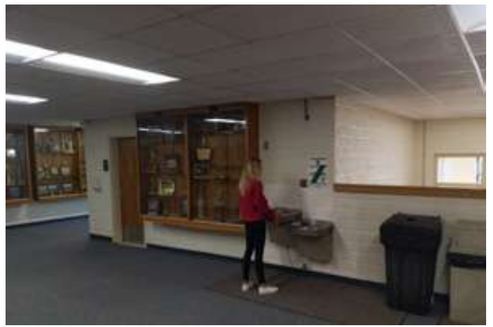

FIGURE 40

FIGURE 41

FIGURE 38 - Computer room in high school

FIGURE 39 - Home Economics

FIGURE 40 - Main lobby at High School Entrance (accessible through elevator)

FIGURE 14 - Existing fitness center not accessible through school

High School Wing

FIGURE 49

FIGURE 50

FIGURE 51

FIGURE 49 - Disconnected downspout

FIGURE 50 - Drainage issues - washout along foundation

FIGURE 51 - Drainage issues - washout underneath concrete sidewalk

FIGURE 53

FIGURE 54

FIGURE 55

FIGURE 52 - High School ramp may not be ADA compliant

FIGURE 53 - Brick at base damaged and plastered over

FIGURE 54 - Water damage at mechanical unit louver and piping

FIGURE 55 - Overspill at downspouts - moss and mortar damage

MS/ES/EC School Wing

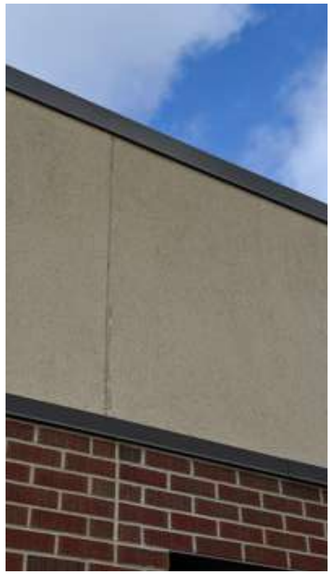

FIGURE 56

FIGURE 57

FIGURE 58

FIGURE 56 - EIFS at MS/ES joints cracking

FIGURE 57 - Disconnected downspout at middle school. Several locations where grade/rock are above flashing

FIGURE 58 - Joint between windows deteriorating - replace with flexible joint

FIGURE59

FIGURE 60

FIGURE 61

FIGURE 62

FIGURE 59- Trim and seal around overhead door damaged at Ag building

FIGURE 60 - Standing water at Ag building

FIGURE 61 - Brick deteriorating at Ag building bas

FIGURE 55 - Damaged overhead door at Admin building.

ELEMENTARY AND PRE-K

FIRE PROTECTION

1. The latest addition of the Elementary school has a full sprinkler system with its own water service. The elementary school that was last renovated in 2003 currently has no fire protection system installed. The existing water service is not adequate to support the installation of a sprinkler system. The water system added to the addition may be adequately sized to add additional fire sprinkler capacity.

PLUMBING

1. The existing 2" water service supplies domestic water to the original parts of the elementary school and is equipped with a water meter and back flow preventor.
2. Existing plumbing fixtures, piping, and insulation all appear to be installed around 2003 and later and are in good condition and no actions should be taken if no known issues exist.
3. One electric water heater provides domestic hot water to the eastern half of the elementary. The water heater is in good condition and no actions should be taken if no known issues exist. A recirculation system is installed and appears to be in working condition.
4. One gas water heater provides domestic hot water to the new addition of the elementary/pre-K. The water heater is in good condition and no actions should be taken if no known issues exist. A recirculation system is installed an appears to be in working condition.
5. Pre-k and Kindergarten area domestic water is on a water softener which appears to be in good condition and no action should be taken if no known issues exist.
6. Existing roof drainage system is by external downspouts. Pre-K and Kindergarten area roof drainage system is by internal downspouts. Systems appear to be in good condition and no actions should be taken if no known issues exist.

MECHANICAL/HVAC

1. Kindergarten and Pre-K area is heated and cooled by a modern variable air volume air handling unit system. Heating portion is done by two boilers located in mechanical mezzanine with two primary pumps.
2. Original elementary portion of the building is heated and cooled by rooftop units. Multiple rooms appeared to have issues with noise and show signs of occupant discomfort. Commercial air-to-air heat pumps have a median life expectancy of 15 years and these units were installed roughly 15 years ago and are therefore nearing the end of their expected life. Rooftop units serve multiple classrooms with a single thermostat zone which is not typical for a school due to varying occupant comfort perception.
3. A two-zone snow melt system serves the entrance ramp and entrance stairs/landing to the main vestibule. This system appears to be in good condition and no further action should be taken if no known issues exist.

ELECTRICAL

1. The kindergarten and Pre-K area are served from distribution panelboards installed in the 2016 project. These distribution panelboards are fed from the main electrical service in the administration office. These distribution panelboards have adequate space and capacity for the future.
2. The elementary wing is served by branch panelboards installed in the 2003 project. These panelboards are fed from the main electrical service in the administration office. They all appear to be in good, working condition.
3. Some teachers are using power strips due to a few or inadequately placed receptacles in the classrooms.

LIGHTING

1. The lighting in the kindergarten and Pre-k is LED.
2. The lighting in the elementary is T8 fluorescent.
3. Lighting controls in the kindergarten and Pre-k are a combination of occupancy sensors and manual switching. There is some concern with the coverage of the occupancy sensors.

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4. Emergency lighting in both the elementary and Pre-k consists of fixtures with integral batteries.
5. Lighting controls in the elementary are manual on/off with standard toggle switches.
6. The emergency and egress lighting in the Kindergarten and Pre-k for both interior and exterior appears to meet current codes.
7. In the elementary, the emergency lighting is inadequately spaced in the corridors. The lighting levels in the corridors are likely below the code minimum.

COMMUNICATIONS

1. Telecommunications and infrastructure is in very good to excellent condition. There is CAT6 in many of the areas. Networked closets are tied together with fiber. Remote buildings are connected to the main building and on the network with fiber. There are a few wings and portions of the school that still have CAT5E premise wiring but at the time of assessment the facilities IT department was actively working on finalizing the infrastructure overhaul.
2. Technology within the classrooms is fair condition but is not consistent from classroom to classroom. Older projectors are utilized fed from teachers' workstations. Technology is minimal compared as compared to other schools. The cabling is pieced together and in several rooms, exposed and not installed to code as they are not supported or in conduit. Most of it is VGA quality display which is no longer utilized/specified. Modern classrooms are technology heavy spaces, with listening enhancement, teacher amplification, interactive screens, and capable of multiple technology collaboration through high definition quality audio and video.
3. Clocks – scheduling – class release. There appears to be no centralized clock system keeping the same time for the entire facility. Having the ability to keep common time and have a scheduler that communicates with several systems across the platform would improve functionality and flexibility across the district.

SECURITY

1. The fire alarm system throughout the entire facility will be required to be brought up to current codes with any substantial addition or renovation project. Current code for education occupancies is a voice evacuation type system. Traditional horn strobes are presently installed and coverage spacing is maxed out. Detection is required in large venue assembly occupancy spaces, as well as corridors and gathering spaces as well as spaces that are open or exposed to said areas within education occupancy spaces. For the most part detection coverage is fair. This includes the Pre-K area built in 2016. Choir and Band rooms do not currently have smoke detection coverage. The 3rd floor corridors are covered with notification but not the classrooms.
2. Camera coverage is fair. The facility has an expandable ExacqVision NVR with a mixture of IP and analog cameras. IP cameras give the best picture and coverage today. Facility camera coverage needs are usually based on need or perception. Coverage is dependent on what you are trying to monitor and/or prevent. The coverage is lacking compared to a full coverage assessment or what we would see in a new school but may fit the needs of the district at this time. Full coverage on the interior and exterior ensures safety of students, faculty and property.
3. Access control coverage is fair. The building has an expandable Continental access control system serviced by Hawkeye Alarm. For the most part the building is secure. The facility has controlled access with intercom and door release, the rest of the doors without system-controlled entry appear to be locked during the day by lock and key and not on the "scheduled" or access control system. There is no secured vestibule or lock down (active shooter/unwanted visitor) prevention. The office space is remote from the main entrance and there is no visitor check-in monitoring. There doesn't appear to be any mass notification system that can tie to this procedure as well.
4. There appears to be no burglar alarm system. This may not be a need or requirement but they are common in similar facilities.

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MIDDLE SCHOOL

FIRE PROTECTION

1. Middle/high school currently has no fire protection system installed. The existing water service is not adequate to support the installation of a sprinkler system. The sprinkler system installed in the pre-k and kindergarten area may be adequately sized to be extended to the middle school portion. Recommend providing fully sprinkled fire protection system of middle school portion of building.

PLUMBING

1. The middle school is served by a 2-1/2" water main with a backflow preventer. This is based on design documentation and couldn't be verified at the time of the survey.
2. Plumbing fixtures, pipes, and insulation appear to have been replaced in the 2003 project and appear to be in good condition.
3. A single electric water heater provides hot water to this section of the building. Water heater appears to be in good shape but is nearing the end of it's expected useful life. Anticipate replacement of tank in the near future.
4. Recirculation piping does not appear adequate to recirculate hot water close enough to boy's lavatories, recommend extending recirculation piping to connect to hot water line closer to final fixtures.
5. Existing roof drainage system is by external downspouts. See architect recommendations for any recommended action on external downspouts.

MECHANICAL/HVAC

1. The Middle school portion of the building is heated and cooled by multiple small rooftop units. Multiple rooms appeared to have issues with noise and show signs of occupant discomfort. Commercial air-to-air heat pumps have a median life expectancy of 15 years and these units were installed roughly 15 years ago and are therefore nearing the end of their expected life. Rooftop units serve multiple classrooms with a single thermostat zone which is not typical for a school due to varying occupant comfort perception.
4. Bathrooms have roof-mounted exhaust fans.

ELECTRICAL

1. The middle school wing is served by branch panelboards installed in the 2003 project. These panelboards are fed from the main electrical service in the administration office. They all appear to be in good, working condition.
2. There are multiple rooms where cords are plugged into receptacles and go above the ceiling. This violates the National Electrical Code.
3. Some teachers are using power strips due to a few or inadequately placed receptacles in the classrooms.

LIGHTING

1. Light fixtures in the middle school are a combination of T8 fluorescent.
2. Lighting controls in the middle school are manual on/off with standard toggle switches.
3. Emergency lighting consists of fixtures with integral batteries.
4. In the middle school, the emergency lighting is inadequately spaced in the corridors. The lighting levels in the corridors are likely below the code minimum.

COMMUNICATIONS

1. Previously described under the elementary and pre-k areas.

SECURITY

1. Previously described under the elementary and pre-k areas.

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HIGH SCHOOL

FIRE PROTECTION

1. The high school portion of the building has no sprinkler system and existing water service does not appear to be adequately sized to connect sprinkler system to. Water service also does not have a backflow preventer device.

PLUMBING

1. Water heater on first floor appears to be relatively new and in good condition with recirculation pump. This system appears to be in good condition.
2. Plumbing fixtures, pipes, and insulation appear to be aged but in good condition. Many lavatories appear to have had replaced faucets of inconsistent types. Further investigation would be required to examine the condition of the domestic water, drain, waste, and vent piping in older parts to determine if replacement is necessary.
6. Public lavatories do not appear to have code required thermostatic mixing valves for scald protection.
7. A recirculation system for the domestic how water system is not shown in the design documents and wasn't observed during survey.
8. Existing roof drainage system is by external downspouts. See architect recommendations for any recommended action on external downspouts.

MECHANICAL/HVAC

1. Three natural gas boilers of different sizes and hot water storage tank provide heating water throughout the northern portion of the high-school. Units were instaledl around 2004 and appear to be in good condition. Units appear to have venting issues. Recommend revising venting layout entirely at time of replacement. Life expectancy of boilers is 20-25 years.
2. Classroom unit ventilators were installed in 2009 and have DX cooling and hot-water heating. Units provide air to ducted diffusers in classroom and appear to be in good condition.
3. Pumps are configured in a one pump per system configuration. Pumps appear to be in in poor condition. Recommend replacing pumps with a combined system pumping system with redundant pumping. Additional investigation is required to determine exact pumping configuration.
4. High school unit ventilators and fan coils units are controlled by a DDC control system.
5. Offices have perimeter hydronic heating systems and mini-split cooling units. Systems appear to be in working condition but are aged and likely are nearing their end of life. Ventilation is not up to current code requirements as none was observed in the office spaces.

ELECTRICAL

1. The high school portion of the building is served from a General Electric 120/208 Volt, 3 phase, 4 wire, 1200 Amp distribution board, which is fed from the main electrical service in the administration office. This distribution board has a few extra breaker spaces, but due to its age it is recommended to replace this with a new distribution board if a major remodel or addition is done to the high school due to the age of the equipment.
2. Most of the branch panelboards in the high school are original to the building and do not have extra breaker space for future projects. With an exception to the two panelboards added for the HVAC remodel in 2009, the panelboards are original to the construction of the building. Due to their age it is recommended to replace them if a project were to occur in the area which they serve.
3. Some branch panels do not have nameplates or updated schedules, which makes maintenance difficult.
4. There are too few and inadequately spaced receptacles in the high school classrooms. Multiple rooms used power strips or surface mounted raceway to extend power where receptacles would typically be located.
5. The family and consumer science room was remodeled in 2016 and is in good condition.
6. The classrooms, choir & band room, South of the gymnasium on the 2nd and 3rd floor of the high school have low voltage cabling routed exposed and underneath the joists. This is likely due to limited above ceiling space.

LIGHTING

1. Interior lighting in the high school is mostly recessed troffers with T8 fluorescent lamping.

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2. Lighting controls are manual on/off with standard toggle switches.
3. There are no exterior pole lighting fixtures in the north gravel parking lot, which creates a security and safety issue for people who park in this lot.
4. Emergency lighting consists of fixtures with integral batteries.
5. There is no exterior emergency lighting. A remodel or addition to this building would require adding exterior battery packs at paths of egress.
6. Emergency lighting is inadequately spaced in the corridor. The lighting levels in the corridors are likely below the code minimum. This is typical for all three floors.

COMMUNICATIONS

1. Previously described under the elementary and pre-k areas.

SECURITY

1. Previously described under the elementary and pre-k areas.

COMMON SPACES

Common spaces include Fitness room, Cafeteria, Wrestling room, Gymnasiums, Locker rooms, and media center.

FIRE PROTECTION

1. No existing fire protection system exists, and existing water service sizes are not adequate. Recommend installing new water service or services sized to permit installation of fire protection system.

PLUMBING

1. Kitchen domestic water service may require additional survey work. Existing water heating, hot water recirculation, and water softening system should be further evaluated but appeared to be in fair to poor condition.
2. Plumbing fixtures appear to have been replaced in 2016 renovation project and are in good condition. Piping and insulation to units revised in project are in good condition.
3. Kitchen currently uses internal grease traps that appear to be in poor condition. Recommend installing underground grease interceptor outside and bringing new grease sanitary sewer line into kitchen.
4. Some kitchen equipment does not appear to be installed correctly. A floor sink is installed on top of the floor, discharge lines are plumbed below the lip of floor sinks and therefor have no air-gap.
5. An existing gas shut-off line was not verified on the cook line.
6. Locker plumbing fixtures were replaced in 2016 renovation project.

MECHANICAL/HVAC

1. Kitchen is served by a roof-mounted make-up-air unit installed in 2013.
2. Kitchen exhaust hood does not extend beyond the edge of cooking equipment per current kitchen exhaust design standards.
3. Cafeteria is served by a roof-mounted make-up-air unit installed in 2013.
4. Competition gym, adjacent fitness room, Media Center, and Computer Room served by air-source heat pump roof top units installed in 2003 project. Expected life of an air-source heat pump is 15 years so these units are nearing the end of their useful life.
5. Practice Gym and stage is heated by two heating only air handlers in mechanical rooms adjacent to stage.
6. Wrestling room is only provided with heating only system.
7. Locker rooms heated with Unit Heaters. Wall exhaust fans provide exhaust for rooms.
8. Recommend integrating all units into a central building automation system to assist with maintenance and troubleshooting.

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ELECTRICAL

1. The main electrical service, which serves the entire school, is located in the administration office building. The main distribution panel MDP1 is a Square D 277/480 Volt, 3 phase, 4 wire, 2000 Amp distribution board with a 65,000A AIC rating and is fed from a 1000 KVA utility transformer located just outside of the electrical room.
2. MDP1 has adequate amperage capacity for future renovations and remodels, but there is concern for adding high ampacity rated breaker for a future distribution panelboard (if required). There is plenty of breaker space available for low ampacity rated breakers.
3. The administration offices remodeled in 2005 appeared to have adequate receptacle layout and there were no visible concerns at the time of the walkthrough.
4. The kitchen in the school has multiple code violations for a school kitchen. The electrical panelboards do not have the required code clearances for maintenance. There is no emergency gas and electric shutoff for the kitchen equipment underneath the hoods.
5. The electrical panelboards in the kitchen are old and have very limited breaker space. A remodel to the kitchen would likely require them to be replaced.
6. The cafeteria was updated in 2016 with new electrical equipment in the mechanical room to the south. The equipment is in good condition.
7. In the girl's and boy's locker rooms there are multiple electrical boxes, faceplates, and devices that have started rusting.

LIGHTING

1. Lighting in the administration office is a combination of surface mount and recessed fluorescent fixtures with T8 lamping.
2. The lighting in the wresting room and gymnasium is metal halide and has a long startup time before the fixtures are fully illuminated and the technology is currently being phased out of production.
3. Lighting controls are manual on/manual off via standard toggle switches.
4. Emergency lighting consists of fixtures with integral batteries.
5. There is no exterior emergency lighting. A remodel or addition to this building would require adding exterior battery packs at paths of egress.
6. Lighting in the cafeteria was upgraded in the 2016 project and is LED and is in good condition.

COMMUNICATIONS

1. Previously described under the elementary and pre-k areas.

SECURITY

1. Previously described under the elementary and pre-k areas.

INDUSTRIAL TECH BUILDING

FIRE PROTECTION

1. No sprinkler system currently installed.

PLUMBING

1. There is a water heater mounted to the wall serving a sink in the shop area.

MECHANICAL/HVAC

1. Shop areas heated with electric heaters that appear to be original to the building.
2. Classroom areas heated and cooled with furnaces that appear to be original to the building.
3. Saw dust collection system appears to be in poor condition.
4. Welding hood does not reflect current standards for welding exhaust systems.

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ELECTRICAL

1. The industrial tech building is served from a separate service than the rest of the school. The utility transformer is located just north of the building.
2. The electrical equipment is original to the building's construction in 1979 and due to age or current condition, it is recommended to replace this equipment when a remodel occurs in the building, or there are problems that occur with the equipment.
3. There are no shunt trip breakers installed in the electrical equipment or emergency shutoff buttons to equipment. In a teaching classroom of this nature it is recommended that these be installed for safety.

LIGHTING

1. Lighting in the industrial tech building is suspended and wall mount linear fluorescent fixtures with T8 lamping.
2. Lighting controls are manual on/manual off via standard toggle switches.
3. Emergency lighting consists of fixtures with integral batteries.

TRIUMPH RURAL SCHOOL

FIRE PROTECTION

1. No sprinkler system. Water main not capable of supporting fire suppression system.

PLUMBING

1. The school is served by a 2" water main. Water main has a 2" backflow preventer. Water main is leaking and should be fixed. Water main pipe is not properly supported.
2. Plumbing fixtures, pipes, and insulation appear to be original to the building and appear to be in good condition. If no known issues exist no action is recommended other than potential further investigation.
3. A single propane water heater provides hot water to the building. Water heater appears to be in good shape. No soft water is provided to water heater, water hardness is unknown so condition of water heater heating element is unknown. Further investigation is recommended. No expansion tank was noticed during the survey.
4. No hot water recirculation. Recommend installing hot water recirculation when water heater is replaced.
5. Existing roof drainage system is by external downspouts. See architect recommendations for any recommended action on external downspouts.
6. Sanitary system utilized a duplex sewage ejector located in basement and external septic tank. System appears to be in good condition.
7. Footing tile drainage is served by a duplex sump pump system in the basement with controller and alarm. System appears to be in good condition.
8. Lavatories should be provided with thermostatic mixing valves. Water heater temperature setpoint is unknown but public lavatories require thermostatic mixing valves for scaled protection.

MECHANICAL/HVAC

1. HVAC system is served by two ducted propane furnaces without air conditioning located in the basement. Furnace appears to be original to the building and appears to be in good condition. If no known issues exist no action is recommended other than potential further investigation.
2. Ventilation could not be verified if adequate, but it appears there may be a louver for fresh air intake. Recommend measuring CO2 levels during class to determine if additional ventilation should be provided.
3. No exhaust air found in janitor's closet. Recommend installing exhaust fan to serve janitor's closet.
4. Electric radiant heaters installed for supplemental heat in restrooms and entry. Unsure if this was part of the design intent or installed later to mitigate heating issues.

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5. Sump pump basins are not provided with radon mitigation fans, recommend verifying if radon is present in building.

ELECTRICAL

1. The main electric service to the school is a Square D 120/240 Volt, 1 phase, 3 wire, 200 Amp panelboard. The panelboard is in very good condition. There is limited breaker space available and if a remodel or addition were to occur, an additional panelboard would need to be installed.
2. A receptacle located on the exterior of the building does not have a weatherproof cover and violates the NEC.

LIGHTING

1. Lighting in the school is mostly T8 fluorescent fixtures with metal halogen exterior wall packs. Exterior fluorescent can light fixtures in the canopy could potentially fail in colder weather and should be replaced. The metal halogen fixtures should be replaced once there are performance issues.
2. Lighting controls are manual on/manual off via standard toggle switches.
3. Emergency lighting consists of fixtures with integral batteries.
4. There is no emergency lighting in the entry. A battery pack fixture should be installed to comply with code.
5. There is no exterior emergency lighting. Fixtures should be installed at each exit to comply with code.
6. There is not adequate emergency lighting coverage on the stairwell.

PRAIRIE GROVE RURAL SCHOOL

FIRE PROTECTION

1. No sprinkler system. Water main not capable of supporting fire suppression system.

PLUMBING

1. The school is served by a 2" water main. Water main has a 2" backflow preventer.
2. Plumbing fixtures, pipes, and insulation appear to be original to the building and appear to be in good condition. If no known issues exist no action is recommended other than potential further investigation.
3. A single propane, tankless water heater provides hot water to the building. Water heater appears to be in good shape. No soft water is provided to water heater, water hardness is unknown so condition of water heater heating element is unknown. Further investigation is recommended. No expansion tank was noticed during the survey.
4. No hot water recirculation. Recommend installing hot water recirculation when water heater is replaced.
5. Existing roof drainage system is by external downspouts. See architect recommendations for any recommended action on external downspouts.
6. Sanitary system utilized a duplex sewage ejector located in basement and external septic tank. System appears to be in good condition.
7. Footing tile drainage is served by two duplex sump pump system in the basement with controller and alarm. System appears to be in good condition.
8. Lavatories should be provided with thermostatic mixing valves. Water heater temperature setpoint is 120°F but public lavatories require thermostatic mixing valves for scald protection/

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MECHANICAL/HVAC

1. HVAC system is served by two ducted propane furnaces without air conditioning located in the basement. Furnace appears to be original to the building and appears to be in good condition. If no known issues exist no action is recommended other than potential further investigation.
2. Ventilation could not be verified if adequate, but it appears there may be a louver for fresh air intake. Recommend measuring CO2 levels during class to determine if additional ventilation should be provided.
3. Electric radiant heaters installed for supplemental heat in restrooms and entry. Unsure if this was part of the design intent or installed later to mitigate heating issues.
4. Sump pump basins are not provided with radon mitigation fans, recommend verifying if radon is present in building.

ELECTRICAL

1. The main electric service to the school is a Square D 120/240 Volt, 1 phase, 3 wire, 200 Amp panelboard. The panelboard is in very good condition. It has a surge protective device which helps protect the building electrical system. There is limited breaker space available and if a remodel or addition were to occur, an additional panelboard would need to be installed.

LIGHTING

1. Lighting in the school is T8 fluorescent fixtures for both exterior and interior. Exterior fluorescent fixtures should be replaced due to the potential to fail in colder weather.
2. Lighting controls are manual on/manual off via standard toggle switches with occupancy sensors in some spaces.
3. Emergency lighting consists of fixtures with integral batteries.
4. There is not adequate emergency lighting coverage on the stairwell.
5. There is no emergency lighting in the entry. A battery pack fixture should be installed to comply with code.

PERRY #1 RURAL SCHOOL

FIRE PROTECTION

1. No sprinkler system. Water main not capable of supporting fire suppression system.

PLUMBING

1. The school is served by a 1" water main. Water main has no backflow preventer but a single ball valve.
2. Plumbing fixtures, pipes, and insulation appear to be original to the building addition and appear to be in good condition. If no known issues exist no action is recommended other than potential further investigation.
3. A single propane water heater provides hot water to the building. Water heater appears to be in good shape. No soft water is provided to water heater, water hardness is unknown so condition of water heater heating element is unknown.
4. No hot water recirculation. Recommend installing hot water recirculation when water heater is replaced.
5. Existing roof drainage system is by external downspouts. See architect recommendations for any recommended action on external downspouts.
6. Sanitary system drains to exterior septic tank. Building owner mentioned issues with drainage but believe issue was addressed but could not confirm is problem was eliminated. Recommend further investigation into sanitary drainage system to verify if problem has been corrected.
7. Footing tile drainage is served by simplex sump pump system in the basement. System appears to be in good condition.
8. Lavatories should be provided with thermostatic mixing valves. Water heater temperature setpoint is unknown but public lavatories require thermostatic mixing valves for scald protection.

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MECHANICAL/HVAC

1. HVAC system is served by two ducted propane furnaces without air conditioning located in the basement and furnace room. Basement furnace appears to be original to the building addition and appears to be in good condition. If no known issues exist no action is recommended other than potential further investigation. Upstairs furnace is reaching the end of its expected useful life and should be replaced soon.
2. Ventilation could not be verified if adequate, but it appears there may be a louver for fresh air intake. Recommend measuring CO2 levels during class to determine if additional ventilation should be provided.
3. Sump pump basin is provided with radon mitigation fan.

ELECTRICAL

1. The main electric service to the school is a Westinghouse load center. The panelboard is original to the building and has no space available. It currently uses tandem breakers which violates the NEC. This load center would be required to be replaced during any addition or remodel. There is no main circuit breaker in the panelboard, which requires the owner to go to the electric pole to shutoff power at the main disconnect switch. This does not violate the NEC, but it is inconvenient.

LIGHTING

1. Lighting in the school is T8 fluorescent fixtures for both exterior and interior. Exterior fluorescent fixtures should be replaced due to the potential to fail in colder weather.
2. Lighting controls are manual on/manual off via standard toggle switches with occupancy sensors in the addition to the school.
3. Emergency lighting consists of fixtures with integral batteries.
4. There is no exterior emergency lighting on the original building.
5. There is not adequate emergency lighting coverage on the stairwell.

CURRENT ENERGY PERFORMANCE

1. Based on the previous two years of utility bills and an estimated square footage of 192,619 the entire facility has an energy usage intensity (EUI) of 75. This value is well above that of more recently updated schools and there is a fair amount of potential to increase energy efficiency throughout.

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MIDDLE SCHOOL

FIRE PROTECTION

1. Middle/high school currently has no fire protection system installed. The existing water service is not adequate to support the installation of a sprinkler system. The sprinkler system installed in the pre-k and kindergarten area may be adequately sized to be extended to the middle school portion. Recommend providing fully sprinkled fire protection system of middle school portion of building.

PLUMBING

1. The middle school is served by a 2-1/2" water main with a backflow preventer. This is based on design documentation and couldn't be verified at the time of the survey.
2. Plumbing fixtures, pipes, and insulation appear to have been replaced in the 2003 project and appear to be in good condition.
3. A single electric water heater provides hot water to this section of the building. Water heater appears to be in good shape but is nearing the end of it's expected useful life. Anticipate replacement of tank in the near future.
4. Recirculation piping does not appear adequate to recirculate hot water close enough to boy's lavatories, recommend extending recirculation piping to connect to hot water line closer to final fixtures.
5. Existing roof drainage system is by external downspouts. See architect recommendations for any recommended action on external downspouts.

MECHANICAL/HVAC

1. The Middle school portion of the building is heated and cooled by multiple small rooftop units. Multiple rooms appeared to have issues with noise and show signs of occupant discomfort. Commercial air-to-air heat pumps have a median life expectancy of 15 years and these units were installed roughly 15 years ago and are therefore nearing the end of their expected life. Rooftop units serve multiple classrooms with a single thermostat zone which is not typical for a school due to varying occupant comfort perception.
4. Bathrooms have roof-mounted exhaust fans.

ELECTRICAL

1. The middle school wing is served by branch panelboards installed in the 2003 project. These panelboards are fed from the main electrical service in the administration office. They all appear to be in good, working condition.
2. There are multiple rooms where cords are plugged into receptacles and go above the ceiling. This violates the National Electrical Code.
3. Some teachers are using power strips due to a few or inadequately placed receptacles in the classrooms.

LIGHTING

1. Light fixtures in the middle school are a combination of T8 fluorescent.
2. Lighting controls in the middle school are manual on/off with standard toggle switches.
3. Emergency lighting consists of fixtures with integral batteries.
4. In the middle school, the emergency lighting is inadequately spaced in the corridors. The lighting levels in the corridors are likely below the code minimum.

COMMUNICATIONS

1. Previously described under the elementary and pre-k areas.

SECURITY

1. Previously described under the elementary and pre-k areas.

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