

## EXECUTIVE SUMMARY

The Facilities Assessment (FA) is a critical first step in the master planning process and provides an independent, objective analysis of the present conditions and capabilities of the district's buildings and grounds. The FA will inform the School District of Menomonee Falls (SDMF) and community about the current state of facilities and sites and how well they support the District's educational goals and initiatives. This assessment serves as a foundational resource document to support immediate facilities planning as well as a strategic, long-term Master Plan.

The information presented in the FA was obtained through on-site reviews of all facilities and sites, consultation with mechanical, electrical and plumbing engineers, and interviews with building administrators, teachers and maintenance staff. In addition, the FA provides analysis of the Americans with Disabilities Act (ADA) accessibility and general building code compliance.

The Executive Summary to the Facilities Assessment provides an overview of significant findings and provides general recommendations for facilities and sites. For a comprehensive analysis, with detailed observation and supporting data, please refer to the complete Facilities Assessment in the subsequent sections of the report.

### SCHOOL DISTRICT OF MENOMONEE FALLS

The School District of Menomonee Falls is located in the Village of Menomonee Falls in Waukesha County on 216 acres of land. The District serves approximately 4200 students, grades 4K-12, in six school buildings. The average age of District buildings is 53.5 years old:

- Benjamin Franklin Elementary - 1963
- Riverside Elementary – 1959 (Community Center – 1996)
- Shady Lane Elementary -1960
- Valley View Elementary -1966
- Thomas Jefferson -1961, currently not used for students
- Hiawatha -1957, currently not used for students
- North Middle -1949
- Menomonee Falls High School - 1969

A preliminary definition and overview of the **Site and Building Capacity** data, **Educational Adequacy Analysis** and **Building Systems Assessment** report for each of the District's facilities is provided below:

## SITE AND BUILDING CAPACITY DATA

Site capacity is important when looking at the size of the total land and how that allows or limits the amount of improvements or amenities that can be offered to a specific student population. Recommended site capacity is calculated by combining a minimum amount of acres per use (e.g. elementary, middle, high), plus an additional acre for each 100 students. The resulting data for each building can then be used as an indicator to how the schools and their sites compare with national recommendations.

The School District of Menomonee Falls owns 217 acres of land; approximately 109 acres include educational buildings and 108 acres are without buildings or without educational buildings. The land owned by the district is generally usable, buildable acreage. Terrains are either flat or flat with moderate slopes. The sloped sites do not create challenges, with the exception of the North Middle School site, whose topography and size limitations affect the efficiencies of parking and entry. Based on current student enrollment of approximately 4200 it is recommend that SDMF own/occupy approximately 149 acres of buildable land, as recommended by the Council of Educational Facility Planners International (CEFPI). Based on this analysis, the District owns adequate acres of buildable land to serve student and community needs; however the individual sites may be smaller than what is preferably recommended. Particularly, major deficiencies in size were identified at the Shady Lane and North Middle School sites.

In a similar way, analyzing building capacity helps to quantify adequacies, inadequacies and inequities at the various schools relative to current practice and future trends. The space analysis evaluates building capacity in three ways:

1. **Functional Design Capacity\*** based on the maximum number of students recommended per educational (classroom/teaching) space.
2. Capacity based on the existing school's **gross square footage\*** and the square foot per student based on best practices.
3. Capacity Based on the School District of Menomonee Falls' **Board of Education Recommendation.**

\*Capacity is calculated based on nationally recognized educational planning standards and recommendations.

Over the past decade recommended space provided per student has increased as teaching methodologies have evolved and student learning occurs in multiple ways and environments. Contributing factors include:

- Increased space needs to support personalized learning, flexible collaboration in classrooms and common areas and evolving teaching methodology.
- Increased and/or repurposed space to accommodate technology, equipment and furniture to support infrastructure and educational needs.
- Increased space needs to support children with special needs
- Increased space needs to support specialists/interventionists; speech, occupational and physical therapy services and Title I programs.
- Increased space needs to support student, staff and community needs.

The evaluation of the District's capacity based on **Functional Design Capacity** indicate several buildings are nearing or over capacity; including Ben Franklin Elementary, Riverside Elementary and Shady Lane Elementary. Valley View Elementary is at **Functional Design Capacity**; North Middle School and Menomonee Falls High School are below the recommended capacity standards.

The evaluation of SDMF's capacity based on total building area -**Gross Square Footage** indicate Ben Franklin Elementary, Shady Lane Elementary, North Middle School and Menomonee Falls High School are all within recommended capacity standards. Valley View Elementary is at capacity and Riverside Elementary is over the capacity for total building square footage.

The Middle School and High School were also studied for individual **Room Utilization**. Room Utilization assesses the daily use of educational space based on the total *potential* divided by the hours or class periods occupying the space for the intended educational purpose. A middle school or high school are considered to be "highly utilized" if the average use of education spaces approach 80%.

Overall Room Utilization for core academic subjects (English, Math, SS, Science) at the Middle and High School is 75%. The overall average for the Middle and High School is reduced because of low utilization of classrooms serving exploratory programs, such as music, art, Technical Education and Family and Consumer Education. Room Utilization percentages for the Middle and High School calculated with both core and non-core classes is noted below:

- Middle School utilization average: 68.4%
- High School utilization average: 67.2%

## EDUCATIONAL ADEQUACY ASSESSMENT

The **Educational Adequacy Assessment** (EAA) is a comprehensive review of spaces that support the overall school site to include; entrances and security; lobbies, corridors, and common spaces; office and staff resource; classrooms and special education space; Library Media Center, gymnasium, cafeteria, and kitchen spaces. The EAA reviews the program activities, use of the building, and physical space required for each activity and provides analysis of how effectively the spaces support student learning and program delivery.

## BUILDING SYSTEMS ASSESSMENT

The **Building Systems Assessment** considers comprehensive review of all exterior and interior systems and components, to include:

- Building's exterior shell components\*
- Mechanical, electrical, and plumbing systems (MEP)
- Building and site compliance with the Americans with Disabilities Act (ADA)
  - Building and site ADA compliance is based on the review of accessible routes to and through the building and site, as well as accessible features and accommodations inside the building, as defined by ADA design guidelines and the International Building Code (IBC)
- Interior finishes and materials

\*The School District of Menomonee Falls consulted with Industrial Roofing Services, Inc. to assess site asphalt, concrete, roofing, windows and exterior walls. Reports are located in the appendices of the Facilities Assessment report.

## SCHOOL DISTRICT OF MENOMONEE FALLS | SCHOOL OVERVIEW

The following section reviews the Educational Adequacy Assessment, Building Systems Assessment, and ADA code compliance for each of SDMF's schools. A deeper analysis is provided within the complete Facilities Assessment report. The analysis includes relevant information to assess building and site conditions, strengths, weaknesses and opportunity to provide optimal learning environments to support student achievement.

## **BENJAMIN FRANKLIN ELEMENTARY SCHOOL**

- **Year Built:** 1963 (Additions/renovations in 1966, 1975, and 2010)
- **Site Size:** 14 acres
- **Building Size:** 140,264 sq. ft.
- **Current Enrollment:** 716 students

### **Education Adequacy Assessment | BENJAMIN FRANKLIN ELEMENTARY SCHOOL**

#### Positives:

- The building has a secured main entrance.
- There are 4K classrooms in the building.
- Classroom sizes are adequate.
- The building design allows for natural light being available for many of the classroom and other learning spaces.
- Combined with the High School, Ben Franklin is located on one of the larger district sites, which provides some flexibility for shared green space, athletic facilities, site circulation and shared parking.

#### Negatives:

- The building does not offer flexibility for active learning in the classrooms and collaboration/breakout spaces off of the corridors/outside classrooms.
- Existing classroom furniture does not allow for flexible learning environments. Lack of flexible furniture in the cafeteria limits its use a multi-purpose academic or extra-curricular space, which could create an active learning environment.
- The special education spaces are isolated on the south side of the building.
- Visitor traffic not restricted from the bus drop-off area.
- Limited student display areas.

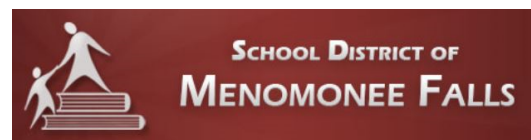
### **Building Systems Assessment | BENJAMIN FRANKLIN ELEMENTARY SCHOOL**

#### Positives:

- The boiler plant was replaced in 2008 with an approximate life span of an additional 15 years.
- The fire alarm system complies with current code.
- A closed-circuit television (CCTV) camera system was installed in 2013.
- Toilet rooms on the first and second floor were remodeled in 2010 and meet ADA guidelines. The classroom sinks throughout the building also meet ADA guidelines.
- A portion of the first floor was heavily remodeled in 2010 and a majority of finishes are in good condition.

#### Negatives:

- The 1963 air handling equipment serving the gym and library is well beyond its expected service life of 25-30 years.
- Portions of the fin pipe radiation system serving the main office are over 50 years old and lacking temperature control.
- The constant volume rooftop system currently serving the south special education area does not provide individual room temperature control.
- The electrical unit sub-stations are approximately 50 years old and at the end of their useful service life.
- The electrical branch panels are over 30 years old and beyond their useful service life.
- The building does not have an emergency generator.
- A surge suppression system for the main electrical service gear does not exist.
- The hallways and second floor classrooms have T12 lighting.



- T12 lamps and magnetic ballasts are considered outdated compared to the far more energy efficient T8 and T5 fluorescent technologies now available. T12 lamps are no longer manufactured.
- The building has two sealed combustion water heaters which are significantly over-sized for the actual building demand, reducing energy efficiency.
- The water supply piping for the building is a mix of copper and galvanized.
  - Galvanized piping lasts approximately 35 years under typical conditions before areas of pipe start to erode or fail. Replacement of galvanized pipe at its expected service life will prevent catastrophic failures of these systems.
- The sanitary waste piping and storm sewer piping has some original cast iron pipes.
  - Cast iron piping lasts approximately 50 years under typical conditions before areas of pipe start to erode or fail. Conditions such as grease or high temperature water may decrease the life of cast iron by half that. Replacement of cast iron at its expected service life will prevent catastrophic failures of these systems.
- The lower level toilet rooms do not meet ADA guidelines.
- Exterior steel doors and frames are rusting. Weather stripping at exterior doors is deteriorated and failing.
- The adhered acoustical ceiling tiles in the second floor classrooms, gymnasium, and cafeteria are failing. Damaged and stained acoustical lay-in ceiling tiles exist throughout the school.
  - Staining could indicate leaking roofs or water pipes.
- The majority of vinyl composition tile (VCT) on the second floor is original to the building, and is damaged/failing.
- Site drainage is poor, resulting in ponding at south parking lot and drive lane.

#### RIVERSIDE ELEMENTARY SCHOOL

- **Year built:** 1959 (Additions/renovations: 1962)
- **Site Size:** 9 acres
- **Building Size:** 46,383 sq ft
- **Current Enrollment:** 374 students

#### Education Adequacy Assessment | RIVERSIDE ELEMENTARY SCHOOL

##### Positives:

- The classrooms all receive an adequate amount of natural daylight.

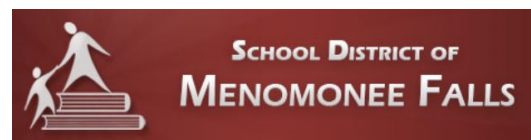
##### Negatives:

- Lack of 4K classrooms in building.
- The building does not offer flexibility for active learning in the classrooms and collaboration/breakout spaces off of the corridors/outside classrooms.
- Existing classroom furniture does not allow for flexible learning environments. Lack of flexible furniture in the cafeteria limits its use as multi-purpose academic or extra-curricular space, which could create an active learning environment. Lack of flexible furniture in the Library limits active learning, group collaboration and flexibility.
- Student/Parent drop-off is not restricted from the bus drop-off area and students are required to walk in the parking lot at the end of the day for bus pick-up.

#### Building Systems Assessment | RIVERSIDE ELEMENTARY SCHOOL

##### Positives:

- The boiler plant was replaced in 2009 and in good condition.
- All of the electrical branch panels have been upgraded to GE A-Series type.
- The exterior doors and frames are aluminum and in good condition.



Negatives:

- Rooftop units that were replaced in 1995 are now 18 years old and are close to reaching their 20 year useful life expectancy.
- The lower level heating and cooling is handled by a single zone air handling equipment which is original to the building and is well beyond its useful service life.
- The data closets do not have proper ventilation.
- The building does not have an emergency generator.
- A majority of classrooms have T12 lighting.
- The fire alarm does not meet current building code; it was recently upgraded however horn strobe devices were not installed in the classrooms.
- The restrooms have original fixtures, worn finishes and do not meet ADA guidelines.
- The water supply piping for the building is a mix of copper and galvanized.
- The classroom plumbing fixtures do not meet ADA requirements.
- The school's 100 gallon gravity-vented gas fired water heater is inefficient per today's standard.
- Many of the louvers below the classroom windows are damaged, dented and rusting.
- The recessed walk-off mats are damaged and becoming potential trip hazards.
- The classrooms have adhered ceiling tiles which are falling. The hallways have acoustical lay-in ceiling tiles, which are sagging or damaged.
- A majority of door handles do not meet ADA requirements.
- The stair handrails do not meet ADA requirements.
- There is a drainage issue at the west end of the asphalt playground.
- The fence along the property line has become overgrown with vegetation and rusted.

**SHADY LANE ELEMENTARY SCHOOL**

- **Year built:** 1960 (Additions/renovations: 1962, 1995)
- **Site Size:** 7.6 acres
- **Building Size:** 67,000 sq ft
- **Current Enrollment:** 408 students

**Education Adequacy Assessment | SHADY LANE ELEMENTARY SCHOOL**

Positives:

- The building design allows for an adequate amount of natural daylight in classrooms.

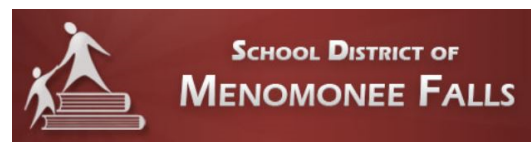
Negatives:

- The site has issues relative to the location of the building entrance and Administration at the south east corner of the site, limiting traffic flow, pedestrian and vehicular safety and building access control.
- Lack of 4K classrooms in building.
- The building does not offer flexibility for active learning in the classrooms and collaboration/breakout spaces off of the corridors/outside classrooms.
- Existing classroom furniture does not allow for flexible learning environments. Lack of flexible furniture in the cafeteria limits its use as multi-purpose academic or extra-curricular space, which could create an active learning environment. Lack of flexible furniture in the Library limits active learning, group collaboration and flexibility.

**Building Systems Assessment | SHADY LANE ELEMENTARY SCHOOL**

Positives:

- The Boiler plant was replaced in 2009.



- The 1995 and 2009 air handling units have been well maintained.
- Most of the electrical branch panels were upgraded to Square D NQ.
- A closed-circuit television (CCTV) camera system was installed in 2013.
- The lower level library, art and music rooms have been renovated and are in good condition.

Negatives:

- The northwest stairwell has signs of water infiltration causing rust damage to the stair stringer and deterioration of the grout. Investigation into the cause of this problem needs to be undertaken.
- The 1960 air handlers are well beyond their useful service life.
- A surge suppression system for the main electrical service gear does not exist.
- Five of the Square D fused electrical panels are over 30 years old.
- Classrooms lack sufficient electrical receptacles for 21<sup>st</sup> Century learning environments.
- The building does not have an emergency generator.
- A majority of classrooms have T12 lighting.
- Fire alarm system does not meet current building codes.
- The restrooms have original fixtures, worn finishes and do not meet ADA guidelines.
- The grease interceptor has gone beyond its useful life span.
- Galvanized pipes exist in the building.
- The classroom plumbing fixtures do not meet ADA requirements.
- Exterior steel doors and frames have rust.
- Areas of the original 1960 and 1962 still have the original VAT (vinyl asbestos tile) which has gone beyond the useful service life.
- Areas of the original 1960 and 1962 still have the original glued on acoustical ceiling tiles, which have begun to fall.
- A majority of door handles do not meet ADA requirements.
- The playground does not have an accessible route to the equipment.

## VALLEY VIEW ELEMENTARY SCHOOL

- **Year built:** 1966 (Additions/renovations: 1997)
- **Site Size:** 11.6 acres
- **Building Size:** 49,800 sq ft
- **Current Enrollment:** 364 students

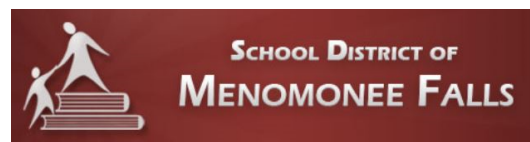
## Education Adequacy Assessment | VALLEY VIEW ELEMENTARY SCHOOL

Positives:

- Building is within the recommended calculated capacity for its student population.
- Entrance is relatively secure; although visitors do not walk directly into the office, they make visual/verbal contact with a secretary before being buzzed into the building during the day.

Negatives:

- Lack of 4K classrooms in building.
- Exterior doors are not monitored.
- The building does not offer flexibility for active learning in the classrooms and collaboration/breakout spaces off of the corridors/outside classrooms.
  - Collaboration/break-out spaces in hallways and stairwells are well-utilized but should be relocated to avoid impeding exit widths.





- Existing classroom furniture does not allow for flexible learning environments. Lack of flexible furniture in the cafeteria limits its use as multi-purpose academic or extra-curricular space, which could create an active learning environment. Lack of flexible furniture in the Library limits active learning, group collaboration and flexibility.
- Bus and vehicular traffic is not separated and parking is co-mingled with entry/egress traffic lanes.
- An outside storage shed is needed for phy ed and maintenance items.

## Building Systems Assessment | VALLEY VIEW ELEMENTARY SCHOOL

### Positives:

- Boiler plant and portions of the ventilation system were replaced in 2007.
- Constructed in 1966, this building has only had one addition in 1997.
- Interior finishes are generally in good condition.

### Negatives:

- The second floor constant volume booster coil distribution system does not provide adequate temperature control.
- Electrical switchboard is at the end of its useful service life.
- A surge suppression system for the main electrical switch gear does not exist.
- Three Square D fused electrical panels have not been upgraded.
- Areas of the building have T12 lighting.
- Fire alarm devices do not meet current building codes.
- Public address system/intercom does not work in all building locations.
- The building does not have an emergency generator.
- The current hot water system is inefficient compared to today's standards.
- Galvanized pipes exist in the building.
- The restrooms have original fixtures, worn finishes and do not meet ADA guidelines.
- Some exterior hollow metal doors are rusted at their base.
- A majority of door handles do not meet ADA requirements.
- Areas still have the original adhered ceiling tiles, which have begun to fall. There are areas of water-damaged tiles.
- Classroom cabinetry and associated plumbing fixtures are worn and aging.
- Area under gym floor sounds hollow. Investigation is needed.
- There are drainage issues on the playground, which results in large muddy ponds at the east end of the playground.
- Property fencing is damaged.

## THOMAS JEFFERSON SCHOOL

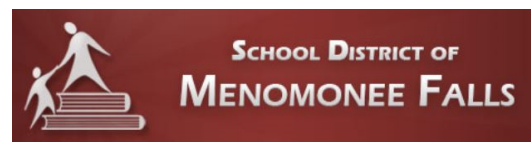
- **Year built:** 1961 (Additions/renovations: none)
- **Site Size:** 14.5 acres
- **Building Size:** 119,784 sq ft
- **Current Enrollment:** - students

Thomas Jefferson School was not reviewed for **Educational Adequacy**.

## Building Systems Assessment | THOMAS JEFFERSON SCHOOL

### Positives:

- Constructed in 1961, there have been no additions to this building.



- Site is well maintained.
- Classrooms and auxiliary spaces such as gym, music and art are well-sized to accommodate primary and intermediate learners.

Negatives:

- Building was taken “off-line” a few years ago and has not received the same MEP system upgrades that the other school buildings have.
  - The boiler plant is original to the building.
  - Unit ventilators, air handling units and the central chilled water system have all exceeded their useful service life.
  - Building controls are pneumatic.
  - There is no wireless access in the building.
  - The unit sub-stations are 50 years and nearing the end of their useful life.
  - A surge suppression system for the main electrical service gear does not exist.
  - A majority of the electrical branch panels are original.
  - T12 lighting fixtures exist in the corridors and second floor classrooms.
  - Exit lights do not have battery back-up.
  - The building does not have an emergency generator.
  - Fire alarm devices do not meet current building codes.
  - The current hot water system is inefficient compared to today’s standards.
  - The grease interceptors are in poor condition.
  - Galvanized piping is original to the building.
  - The restrooms have original fixtures, worn finishes and do not meet ADA guidelines.
- Exterior steel doors and frames have rust.
- Areas of the original VAT (vinyl asbestos tile), carpeting and VCT (vinyl composition tile) are damaged.
- Areas of the original adhered ceiling tiles have begun to fall.
- A majority of door handles do not meet ADA requirements. Glass is missing from some of the doors.
- All building cabinetry (and any associated plumbing fixtures) is worn and aging.
- An accessible route is not provided to the playground equipment and athletic fields.
- Trash closure is damaged and non-functioning.
- Exterior handrails and guardrails do not meet ADA guidelines.

**HIAWATHA**

- **Year built:** 1957 (Additions/renovations: 1961)
- **Site Size:** 3.2 acres
- **Building Size:** 33,180 sq ft
- **Current Enrollment:** - students

Hiawatha was not reviewed for **Educational Adequacy**.

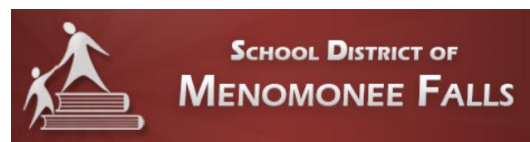
**Building Systems Assessment | HIAWATHA**

Positives:

- The building is in very good structural condition with no sign of being built on unsuitable soils.

Negatives:

- Steel exterior doors and frames have significant rust.
- Older aluminum doors have broken glass and have been boarded up.



- The floor and ceilings throughout the building are worn and damaged.
- Water damage at the southeast stair has begun to cause rusting of the stair stringer. The cause should be investigated.
- A majority of door handles do not meet ADA requirements.
- Many classrooms have had their cabinets removed; what is remaining is in poor condition.
- The building does not have a gymnasium.
- An ADA route is not provided to the lower level.
- The boilers are operational but have exceeded their expected service life.
- The unit ventilators and air handling units have been well maintained but have exceeded their expected service life.
- The pneumatic control system is original to the building.
- The main distribution panels have no further capacity and are original to the building.
- All of the electrical branch panels are original to the building and have exceeded their expected service life.
- All rooms have T12 lighting.
- The building does not have a security or camera system, fire alarm system or public address system.
- The building does not have an emergency generator.
- The restrooms have original fixtures, worn finishes and do not meet ADA guidelines.
- The classroom plumbing fixtures do not meet ADA requirements.
- The water softener for the boiler is in poor condition.
- The building has 2 water heaters, one of which may not be operational.
- The water supply piping for the building is a mix of copper and galvanized.
- The piping material for storm system is cast iron and nearing the end of its life expectancy.
- Water stained ceiling tile throughout building indicate water leakage.

#### NORTH MIDDLE SCHOOL

- **Year built:** 1949 (Additions/renovations: 1950, 1959, 1962, 1965, 2000)
- **Site Size:** 12.8 acres
- **Building Size:** 258,000 sq ft
- **Current Enrollment:** 882 students

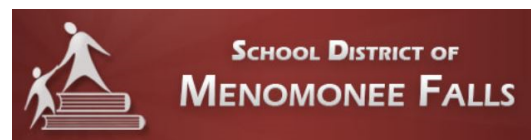
#### Education Adequacy Assessment | NORTH MIDDLE SCHOOL

##### Positives:

- Building is within the recommended calculated capacity for its current student population.
- The building design allows for an adequate amount of natural daylight in classrooms.
- Building has a secure main entry.
- There is the ability to lock down parts of the building for nighttime activities.
- The North Middle School pool is a great asset to the district and the community.
- The auditorium is a great asset to the district and the community.

##### Negatives:

- The site is less than half of the recommended 28 acres for a building of North Middle School's student population.
- The main entrance on Garfield Street is treated as the back of building because parking and the secure entry is off of Main Street.
- Tech Ed spaces are out-of-date and should be upgraded to Project Lead the Way (PLTW) classrooms.
- Seventh and eighth grade science rooms are outdated, inflexible, and require upgrades.
- Band and orchestra rooms are not located near the Auditorium, where they typically perform.



- The building does not offer flexibility for active learning in the classrooms and collaboration/breakout spaces off of the corridors/outside classrooms.
- Existing classroom furniture does not allow for flexible learning environments. Lack of flexible furniture in the cafeteria limits its use as multi-purpose academic or extra-curricular space, which could create an active learning environment. Lack of flexible furniture in the Library limits technology-focused active learning, group collaboration and flexibility.
- Classrooms are generally small in size.
- Cafeteria is undersized for number of students being served. A larger cafeteria would allow for the flexibility of reduced lunch periods. Currently there are five.
- The pool bleachers are not accessible.

## Building Systems Assessment | NORTH MIDDLE SCHOOL

### Positives:

- The North Middle School pool is a great asset to the district and the community.
- The boiler plant and air handling units were replaced in 2000 and have several years of useful life left.
- Mechanical controls have been upgraded to direct digital controls.
- The fire alarm system complies with current code.
- The building has an emergency generator.

### Negatives:

- Air handling units and unit ventilators not replaced in 2000 are nearing the end of their useful life.
- Electrical distribution equipment (switch boards and some of the electrical branch panels) are beyond their useful service life.
- Many plumbing fixtures are beyond their useful service life.
- The domestic water heating system is old and inefficient. It is over-sized for the building.
- The water supply piping for the building is a mix of copper and galvanized.
- The sanitary waste piping and storm system has some original cast iron pipes.
- Some of the art sinks do not contain plaster traps.
- The concrete storm sewer does not comply with current codes.
- North Middle School is the oldest district building built in 1949, with several additions. This has resulted in multiple levels throughout.
- Metal exterior door, frames and hardware are rusted and damaged.
- Precast concrete elements at the pool canopy are deteriorated and crumbling.
- Miscellaneous exterior metals, such as mechanical louvers and railings need repainting.
- Site fencing is damaged and falling down in locations.
- Interior walls are generally in good condition but signs of water infiltration exist in multiple locations.
- Ceramic tile wall base is damaged or missing in locations.
- Areas of the original VAT (vinyl asbestos tile) and carpeting are damaged.
- Areas of acoustical lay-in ceiling tile are damaged or water-stained.
- Corridor locker paint is dated and worn.
- Gym bleachers and gym divider wall are nearing the end of their useful service life.
- Some restrooms have original fixtures, worn finishes and do not meet ADA guidelines.
- The pool deck and pool filtering equipment are aging.
- The auditorium requires general lighting, sound system, seating, and finish upgrades.

## HIGH SCHOOL

- **Year built:** 1969 (Additions/renovations: 1985, 2007)
- **Site Size:** 39.6 acres
- **Building Size:** 335,000 sq ft
- **Current Enrollment:** 1457 students

## Education Adequacy Assessment | MENOMONEE FALLS HIGH SCHOOL

### Positives:

- The school has a secure main entrance.
- The pool, gymnasium and auditorium are all community assets.
- The newly built science classrooms are an asset to the district.
- The high school serves as the district's flagship building and has had recent aesthetic improvements.
- Building is within the calculated capacity.
- Building is well maintained.
- There are opportunities for display of student work in most public spaces.

### Negatives:

- The school is lacking PLTW (Project Lead the WAY) spaces to support a 21<sup>st</sup> Century curriculum.
- The building does not offer flexibility for active learning in the classrooms and collaboration/breakout spaces off of the corridors/outside classrooms.
- Existing classroom furniture does not allow for flexible learning environments.
- The library could be restructured to a more technologically focused delivery system.
- The computer labs are not an efficient use of space, given the mobile technology that is available to students.
- Athletic fields require improvements including: a fence for soccer fields, restrooms and team room at football/track complex, additional bleacher capacity and a scoreboard replacement at Trenary Field.

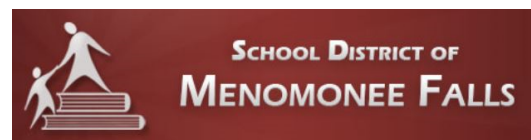
## Building Systems Assessment | MENOMONEE FALLS HIGH SCHOOL

### Positives:

- A majority of the mechanical equipment was replaced in 2007.
- Most of the electrical branch panels in the facility are newer square D NQ type.
- A closed-circuit television (CCTV) camera system was installed in 2013.
- The fire alarm system complies with current code.
- The building has two emergency generators.
- Many of the toilet rooms were renovated in 2007.
- Interior finishes are generally in good condition.

### Negatives:

- The 1969 boiler plant and water-cooled chiller are well beyond their useful service life.
- There are approximately 8 branch electrical panels that are well beyond their useful service life.
- The low voltage lighting control system for corridors and common areas is difficult to control.
- The restrooms at the pool lobby are single-use and cannot accommodate the crowds during swim meets. They were not upgraded in 2007 like many of the building's restrooms were.
- Only the 2007 addition received an automatic sprinkler system.
- The grease interceptor does not accommodate the dishwasher, which is currently required by code.
- The exterior steel doors, frames, and coiling doors have significant rusting.
- Soffits at the original 1969 portion of the building have water damage and rusting.



- Many of the metal site components, ie. site fences and practice field goal posts, have rusting.
- Grading around the building should be evaluated to ensure water drainage is directed away from the building.
- Some acoustical ceilings in this building are stained and/or damaged.
- The main gymnasium has VCT flooring around the competition court that is damaged.
- The auditorium requires general lighting, sound system, seating, and finish upgrades.

## COMMUNITY CENTER

The Community Center was not reviewed for *Educational Adequacy*. See Riverside for additional building information.

### Building Systems Assessment | COMMUNITY CENTER

#### Positives:

- The building was an addition added onto Riverside elementary in 1996, and is the district's newest building.
- In general all of the floor and ceiling finishes are in good condition.
- All of the doors are in good condition and meet ADA requirements.
- Toilet room's finishes are in good condition and meets ADA requirements.

#### Negatives:

- The main entrance canopy structure has rusting at the base of the steel columns. Rusting was also present at the base of the exterior benches and bike racks.

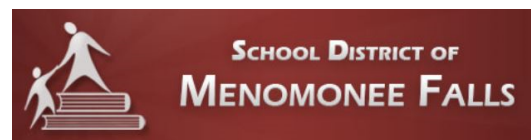
## RECOMMENDATIONS

With the exception of North Middle School, the district's buildings were all built right around 1960. The buildings' systems and finishes are aging at the same rate and are now requiring typical upgrades that are consistent with buildings that are fifty to sixty years old. Some of the district-wide capital renewal recommendations include:

- Replacing exterior steel doors and frames with FRP doors in aluminum frames.
- Painting of exterior building soffits.
- Remove/replace original adhered ceiling tiles with lay-in acoustical ceiling systems.
- Replace any water-damaged or stained ceiling tiles.
- Replace any failing VAT, carpeting, VCT or other flooring materials.
- Paint interior wall surfaces, including corridor lockers.
- Upgrade all door hardware to meet current ADA guidelines.
- Paint interior door frames and consider refinishing or replacing wood doors.
- Replacement of aged restroom fixtures and finishes.
- Provide surge suppression for main electrical service gear.
- Replace any galvanized piping in the building with copper piping.
- Replace exterior building lighting and site lighting with LED type light fixtures.
- Replace any T12 lighting.

In addition to typical district-wide recommendations, each *Building Inspection Report* contains unique recommendations for the individual buildings and sites.

As of July, 2002 the building code in the State of Wisconsin changed to the International Building Code (IBC). One major difference between the prior code and the current IBC that impacts school projects is the requirement for schools to be



protected by a fire sprinkler system if the fire areas within the facility are over 12,000 square feet. Although this requirement does not affect existing facilities that do not receive upgrades, significant remodeling or additions to an existing structure may trigger this requirement.

## CONCLUSION

As stated, the Executive Summary highlights specific sections of the complete Facilities Assessment. Although several of the buildings are within the calculated capacity, there are minor to significant deficiencies found in the schools and on the sites. There are several options that could be explored through a Master Planning process that range from mechanical, electrical, and plumbing updates all the way to building consolidation and closure. This assessment is not intended to provide those solutions but rather to allow the District to understand the existing conditions of their buildings and sites. The educational market is entering an era of increased consumer choice, increasing competition between public, private and charter schools options. This ultimately impacts enrollment and the associated operational funding.

## RECOMMENDED NEXT STEPS

At the conclusion of a Facilities Assessment, many schools ask how to proceed. It is our recommendation that the Administration and Board of Education review the document for content and understand the recommendations. The next step should be prioritizing the items identified in this report into two different categories; items that can be budgeted for with yearly maintenance funds and those items which would require significant capital expenditure.

This facilities assessment report could be considered a work in progress and a system should be put in place to track items that get updated through a Capital Improvement Plan. This assessment should serve as a reference to the District and its constituents in making informed decisions for effective planning into the future.

Thank you for the opportunity to participate in this endeavor. If you have any questions or concerns regarding this summary, please feel free to contact the EUA team.

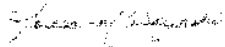
Sincerely,



John Miceli  
Vice President



Abie Khatchadourian  
Educational Planner/Senior Project Manager



Teresa Wadzinski  
Architect



Sean Clendenning  
Project Specialist

