



Facilities Study - Summary of Findings

August 21, 2019



Eau Claire, WI | www.sdsarch.com

Scope of Facilities Study Services - Schedule

Data Collection and Documentation | May - August 2019

- Evaluation of existing facility by Architects & Engineers
- Review existing building documentation
- Identify and document building and site deficiencies
- Develop preliminary cost summary based on findings

Present Summary of Findings | August 2019

- Present Facilities Study Document and process
- Review highlights and associated cost estimates

Concept Development | TBD

- Develop conceptual options based on final findings and feedback from the Board and Administration
- Refine preferred conceptual options
- Develop estimated cost projections for conceptual options

Final Presentation | TBD

- Present conceptual options and costs

Agenda

- Facilities Study Document
- Summary of Findings
- Estimated Cost Projections
- Next Steps

Perspective

- Buildings have been well-maintained
- Findings serve as foundational resource for possible maintenance or construction projects
- This is the first phase of a series of actions necessary to achieve goals
- Facilities Study Document is a guide for making decisions and the feasibility of these decisions



Facilities Study Document - Overview

Facilities Study Document

- Visual document
- Reference manual for district sites
- Tool for documenting changes
- Valuable resource for facility management



Project Team



Facilities Study Document - Malone Elementary

2 CHAPTER
MALONE ELEMENTARY SCHOOL

General Overview

Principal:	Sara Dusek
2018-2019 Enrollment	Students
4K:	76 Total / 12 on-site*
Kindergarten:	79
1st Grade:	87
2nd Grade:	89
Total:	267
Approx. Building Areas	
First Floor:	56,630 GSF
Total:	56,630 GSF**
GSF/Student:	212
Assignable square footage:	36,820 ASF***
Efficiency (ASF/GSF):	65%
Parking Stalls	
P1:	16
P2:	60
Total:	76
Property Area	Acres
Parcel 1:	7.40
Parcel 2:	0.88
Total:	8.28

*4K has three off-site facilities and the classroom utilized at Malone Elementary (Classroom 151) is only occupied in the afternoon, with 12 students.

**Gross square footage (GSF) = the sum of all areas on all floors of a building included within the outside faces of the exterior walls

***Assignable square footage (ASF) = The sum of all areas on all floors of a building which are occupied or used to accomplish the institution's mission (classrooms, offices, gym, library, computer labs, etc.); does not include circulation, toilet rooms, mechanical/support areas, wall/structure space, etc.



Property information from Pierce County, Wisconsin Land Records Web Portal.



Facilities Study Document - Malone Elementary

Site Analysis

- ① Damage/worn stoop
- ② Bus drop off is not ideal for supervision or building access
- ③ Concentrated area of damage/worn paving

Paved Area P.1
Description: Faculty Parking
Type: Asphalt
Area: Approx. 27,100 SF
Rating: 6

Paved Area P.2
Description: Visitor Parking
Type: Asphalt
Area: Approx. 12,600 SF
Rating: 5-6

Paved Area P.3
Description: Playground
Type: Asphalt
Area: Approx. 11,750 SF
Rating: 3-4

Paved Area P.4
Description: Playground
Type: Asphalt
Area: Approx. 10,620 SF
Rating: 8-9

See the final page of Chapter 1 for rating system of paved surfaces.

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue



Facilities Study Document - Malone Elementary

2 CHAPTER MALONE ELEMENTARY SCHOOL

Roof Analysis

Roof Types

- BUR (Built Up Roof System)
- TPO (Thermoplastic Polyolefin Single Ply Roof System)

Roof Areas

Roof Area R.1

- Roof Type: BUR
- Area: 7,790 SF
- Year Installed: 2001
- Condition: Fair
- Current Age: 18 years

Roof Area R.2

- Roof Type: TPO
- Area: 22,170 SF
- Year Installed: 2009
- Condition: Good
- Current Age: 10 years

Roof Area R.3

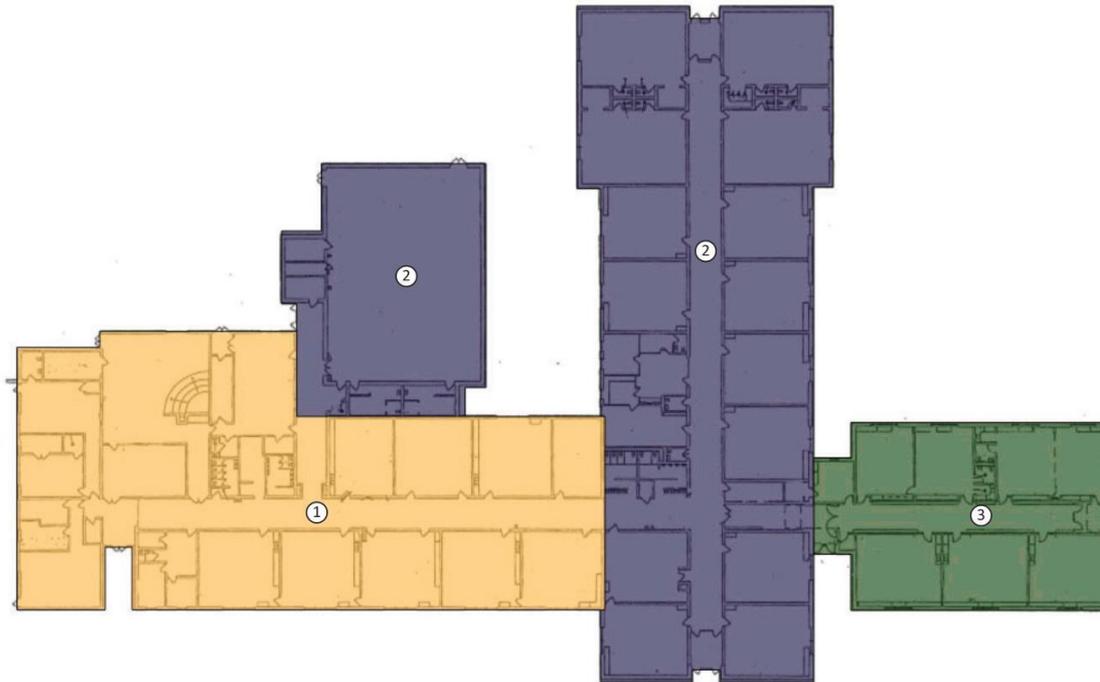
- Roof Type: TPO
- Area: 5,420 SF
- Year Installed: 2009
- Condition: Good
- Current Age: 10 years

Roof Area R.4

- Roof Type: BUR
- Area: 21,260 SF
- Year Installed: 2001
- Condition: Fair
- Current Age: 18 years



Facilities Study Document - Malone Elementary



Building Construction Ages

Year	Project Scope	Area
1963	Original Construction	19,815 SF
1988	Addition	29,030 SF
2001	Addition	7,785 SF

Legend

- ① Foundation: Concrete slab-on-grade; cast-in-place foundation walls and footings
Exterior Shell: Brick over CMU
Interior: CMU walls
- ② Foundation: Concrete slab-on-grade; cast-in-place foundation walls (with perimeter insulation) and footings
Exterior Shell: Brick cavity wall; CMU backup
Interior: CMU walls
- ③ Foundation: Concrete slab-on-grade; CMU foundation walls (with perimeter insulation); cast-in-place footings
Exterior Shell: Brick cavity wall; CMU backup
Interior: CMU walls



Facilities Study Document - Malone Elementary



CHAPTER MALONE ELEMENTARY SCHOOL

Room Assignments and Building Use

Legend

- Classroom/Instruction
- Administration/Conference
- Elective/Fine Arts
- General/Support
- Food Service
- Athletics
- Circulation
- Core

101 Storage	122 Girls	146 Storage
102 LD	123 Classroom	147 Office
102A Psych	124 Boys	148 Classroom
102B Speech	125 Janitor	149 Classroom
103 ??	126 Classroom	150 Classroom
103A ED	127 Classroom	151 Classroom
103B Storage	128 Classroom	151A Toilet
103C ??	129 Classroom	151B Storage
103D Storage	130 AV Equipment	152 Classroom
103E Toilet	131 Recess Storage	153 Classroom
104 Computer Lab	132 Classroom	153A Toilet
105 Media Center	133 Toilet	153B Storage
105A Work	134 Classroom	154 Classroom
106 Kitchen	135 Faculty	
106A Toilet	136 Toilet	
106B Food Storage	137 Office	
106C Toilet	137A Work	
106D Receiving	137B Principal	
107 Girls	137C Nurse	
108 Janitor	137D Toilet	
109 Boys	138 Classroom	
110 Storage	139 Classroom	
111 OT / PT	140 Classroom	
112 Gym	141 Classroom	
112A Locker Room	142 Classroom	
112B Locker Room	142A Work	
112C Gym Storage	142B Toilet	
113 ??	142C Toilet	
113A Storage	143 Classroom	
113B Speech	143A Work	
113C ??	143B Toilet	
113D Toilet	143C Toilet	
114 Music	144 Classroom	
115 Classroom	144A Work	
116A Art	144B Toilet	
117 Classroom	144C Toilet	
118 Classroom	145 Classroom	
119 Classroom	145A Work	
120 Classroom	145B Toilet	
121 Classroom	145C Toilet	

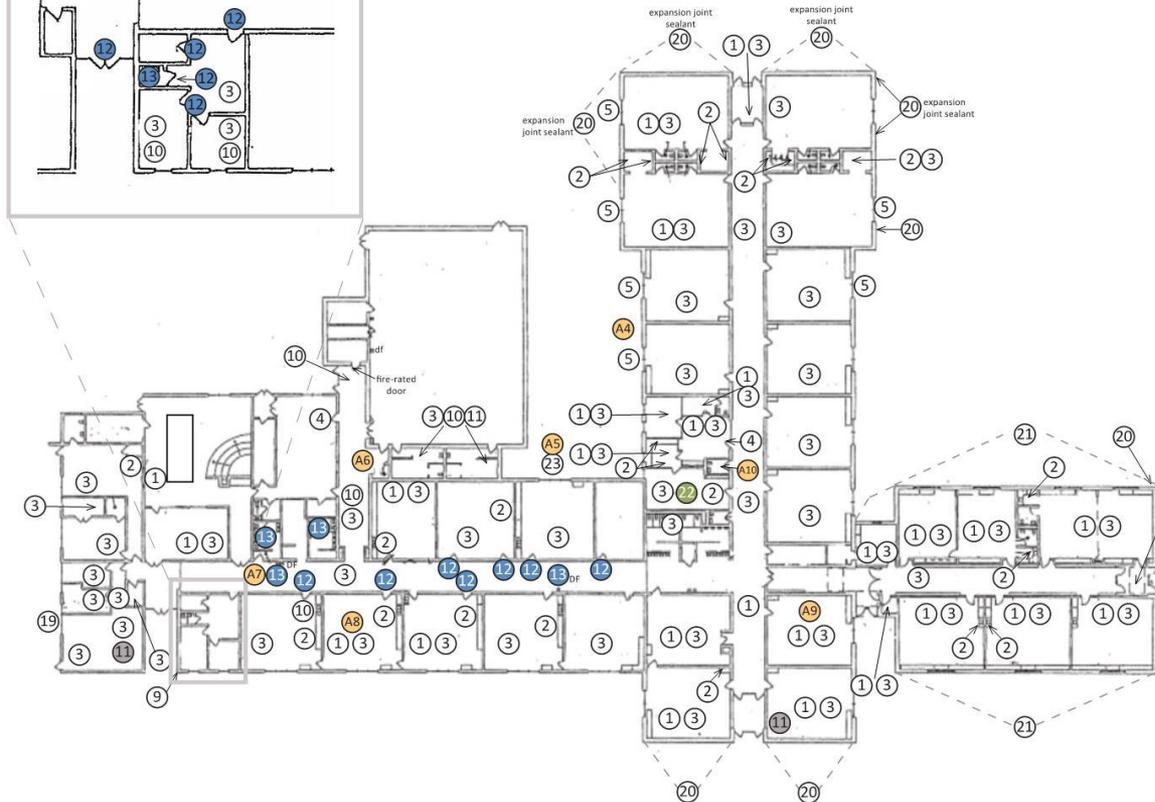
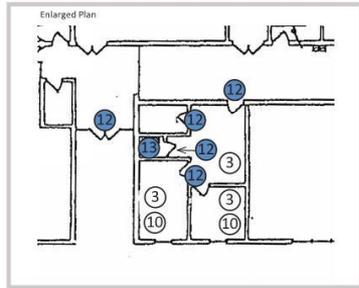


Average Classroom Size
 1962 Classrooms: 850 SF
 1988 Classrooms: 875 SF
 2001 Classrooms: 600 / 900 SF

Recommended Classroom Size
 Kindergarten Classrooms: 1100 SF
 1-5 Classrooms: 900 SF



Facilities Study Document - Malone Elementary



Floor Plan Analysis (not all notes will be used)

- ① Damaged/worn flooring
 - ② Damaged/worn casework
 - ③ Damaged/worn ceiling
 - ④ Damaged/worn door and/or door hardware
 - ⑤ Damaged/worn window
 - ⑥ Damaged/worn wall
 - ⑦ Damaged/worn plumbing fixtures
 - ⑧ Cracks along foundation wall
 - ⑨ Water related wall damage
 - ⑩ Water related ceiling damage
 - ⑪ Inefficient or improper use of space
 - ⑫ ADA non-compliant accessible route/entry/reach
 - ⑬ ADA non-compliant toilet room/drinking fountain
 - ⑭ ADA non-compliant locker room/shower
 - ⑮ Code - Construction
 - ⑯ Code - Exiting/Travel Distance
 - ⑰ Code - Stair/Ramp
 - ⑱ Possible Asbestos tile flooring
 - ⑲ Damaged/worn gutter
 - ⑳ Tuckpointing or expansion joint sealant in need of repair
 - ㉑ Wall weeps and/or flashing needs repair
 - ㉒ No visual connection from Office to main entrance
 - ㉓ Damaged roof drain outlet and splash block
-
- Ⓜ Photos
 - Ⓝ Code Issue
 - Ⓢ Safety/Health Issue
 - Ⓜ ADA/Accessibility Issue



Facilities Study Document - Malone Elementary

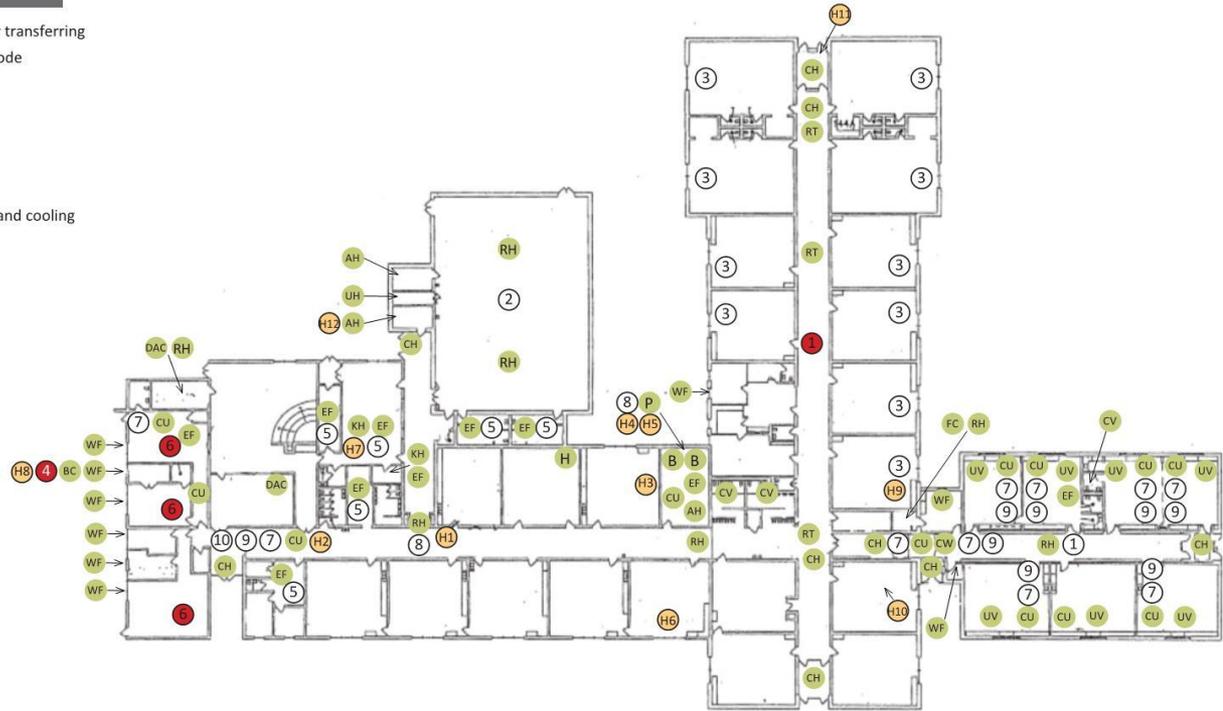
2 CHAPTER MALONE ELEMENTARY SCHOOL

Mechanical Analysis

- 1 Corridor is being used as a relief air plenum with air transferring from rooms, code compliant at time of work. Not code compliant under current code
- 2 No air conditioning in gym
- 3 Unit ventilator abandoned in place
- 4 Provide ducted outside air to unit
- 5 Units approaching end of useful life
- 6 Upgrade controls to prevent simultaneous heating and cooling
- 7 R-22 refrigerant
- 8 Rust
- 9 Missing or damaged DX pipe insulation
- 10 Seal wall opening at DX pipe

- AH Air Handling Unit
- B Boiler
- BC Blower Coil
- CU Condensing Unit
- CH Cabinet Unit Heater
- CV Convector
- DAC Ductless Air Conditioner
- EF Exhaust Fan
- FC Fan Coil
- H Hood
- HC Hot Water Coil
- KH Kitchen Hood
- P Pump
- RH Roof Hood
- RTU Rooftop Unit
- UH Unit Heater
- UV Unit Ventilator
- VV VAV Unit
- WF Wall Fin

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue



Facilities Study Document - Malone Elementary

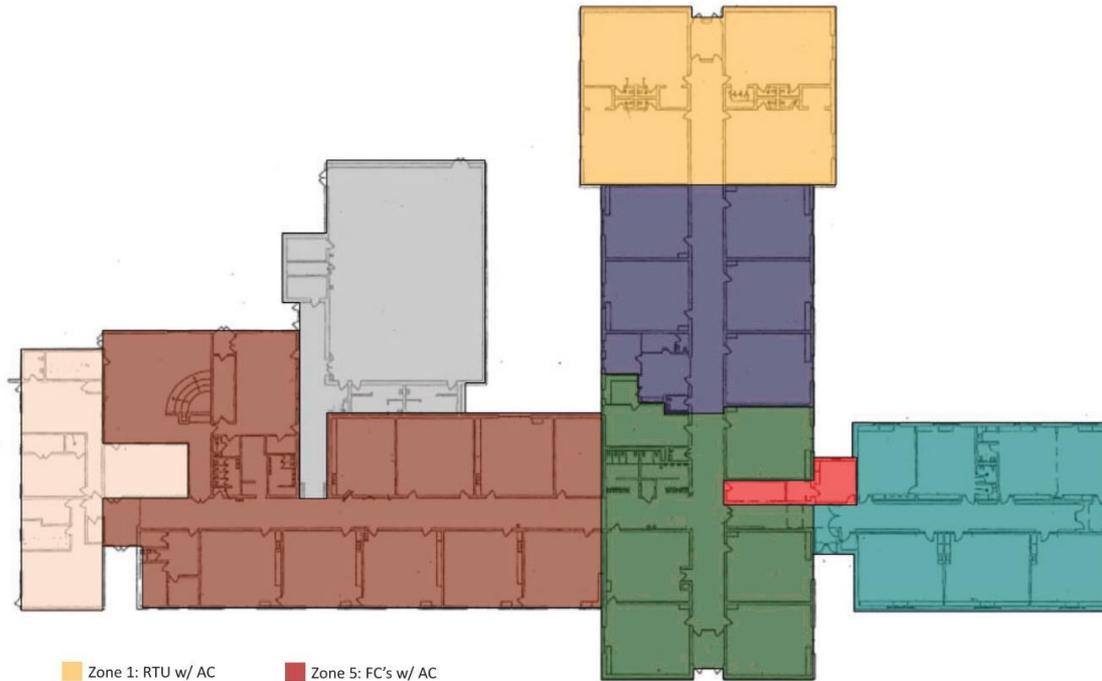
Mechanical Analysis - HVAC Zones

MECHANICAL NARRATIVE:

BOILER SYSTEM: The facility is served by two gas-fired Hydrotherm KN16 high-efficiency cast iron condensing boilers located in the central boiler/mechanical room. The boilers are newer and appear to be in good working order. Combustion air is ducted with PVC pipe to each boiler from a sidewall intake louver. Boiler venting is combined to one double-wall vent through the roof. Eight B&G inline circulating pumps, with variable frequency drives (VFD) are located in this room which distribute the heating water throughout the building.

HVAC SYSTEM: The building is conditioned by various HVAC systems/equipment ranging from central air handling units, packaged roof top air handling units, variable air volume boxes (VAV) with reheat coils, blower coil units, fan coils units, ductless mini-split units, unit ventilators, cabinet unit heaters, convectors, and wall fin. The air handling unit serving the west classroom wing is located in the boiler room and contains a hot water heating coil and a DX cooling coil. The condensing unit serving the cooling coil is located on the roof. This area has abandoned below grade ductwork. The two air handling units serving the Gym are located in a mezzanine next to the Gym and each contains a hot water heating coil, but no air conditioning. The far west end of the building is heated by perimeter hot water wall fin and cooled by vertical cooling only blower coil units. The center classrooms are served by three packaged rooftop units that have gas heating and DX cooling. These rooftop units utilize VAV/reheat boxes to control individual space conditioning. The wall unit ventilators in this area were abandoned in place and are no longer operational. The east classrooms have exterior wall mounted unit ventilators that contain hot water heating and DX cooling coils. The condensing units serving the cooling coils for each unit ventilator are located on the roof. The building ceiling space is used as a return air plenum. Air is relieved from the classrooms through either door grilles or overhead ducted transfer grilles to the corridor. Air is then relieved from the building through gravity relief roof hoods. The kitchen contains a center island hood over the cooling equipment and a dishwasher hood. The art room contains a ducted hood over the kiln. Ductless mini-split cooling units serve the computer lab and the server room. The electrical room is served by a horizontal hot water fan coil unit. Vestibules are heated by hot water cabinet unit heaters. Convectors are used for heating in some toilet rooms and other small areas. Wall fin is also used in some smaller areas for heating.

CONTROLS: The building utilizes DDC controls.



- Zone 1: RTU w/ AC
- Zone 2: RTU w/ AC
- Zone 3: RTU w/ AC
- Zone 4: AHU/VAV w/ AC
- Zone 5: FC's w/ AC
- Zone 6 - UV's w/ AC
- Zone 7 - AHU's w/ No AC
- Zone 8 - AHU w/ separate units added for AC



Facilities Study Document - Malone Elementary

2 CHAPTER MALONE ELEMENTARY SCHOOL

Electrical Analysis

- 1 Electrical service panel has missing blank covers exposing live parts
- 2 Panelboard does not have required working clearances.

- EM Electric Meter
- FA Fire Alarm Control Panel
- ITR IT Racks
- MC Master Clock System
- MS Main Service
- P Panels
- PA Public Address System
- SS Security System
- UT Utility Transformer

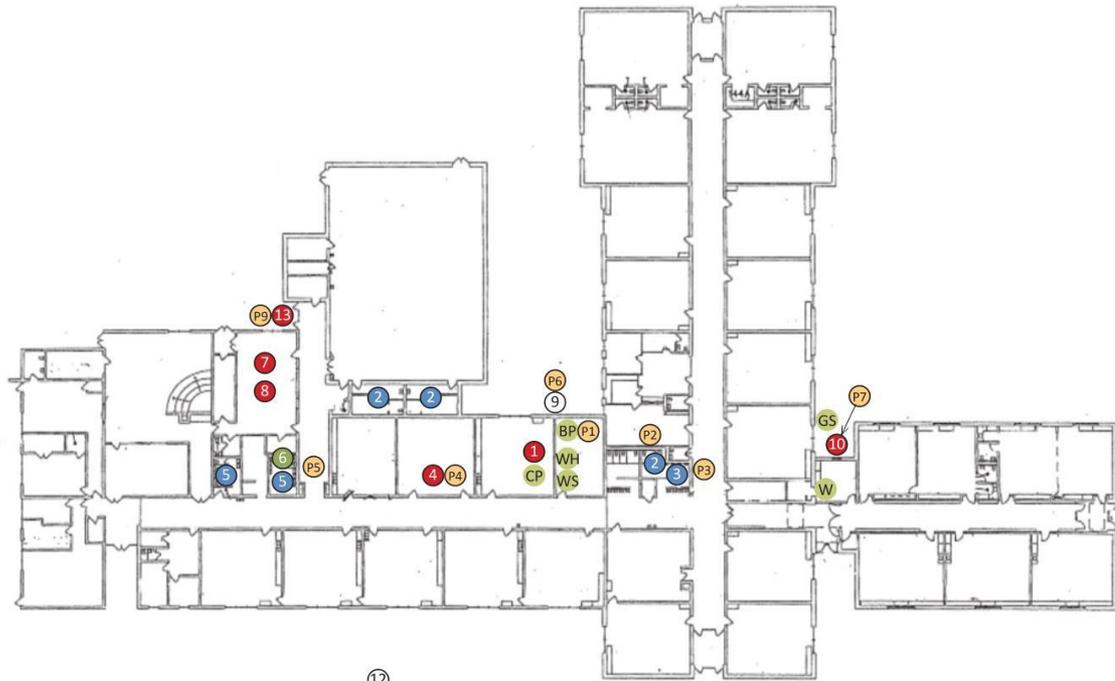


- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue



Facilities Study Document - Malone Elementary

Plumbing Analysis



- 1 Hot water piping at new (2016) water heater is not insulated per code
- 2 Plumbing fixtures are not compliant with ADA Standards for Accessible Design
- 3 Reach distance at urinals for handle operation are not ADA compliant
- 4 Art room sink does not have solids/clay interceptor
- 5 Sinks do not have waste, trap, or supplies insulated per ADA standards
- 6 Urinals only flush all together by a gravity tank installed above; not able to flush individually; this is a sanitary and water consumption issue
- 7 Dishwasher and wash sinks should be discharging through a grease interceptor
- 8 Prep sink waste is not connected to the sanitary by way of air gap connection
- 9 Rain leader discharges to grade (no freeze protection)
- 10 No cover at sanitary clean out
- 11 Guard at drinking fountain has broken off
- 12 Several exterior hose bibs are no longer functioning, unable to obtain parts for repair
- 13 Exterior hose bib is in an undesirable location; potential trip hazard when in use and hose lays in front of doors

- # Photos
- # Code Issue
- # Safety/Health Issue
- # ADA/Accessibility Issue

- BP Back Flow Preventer, Boiler Makeup
- CP Domestic Water Circulation Pump
- GS Gas Service
- WH Water Heater
- W Water Service
- WS Water Softener



Facilities Study Document - Malone Elementary



CHAPTER MALONE ELEMENTARY SCHOOL

Electrical & Plumbing Narratives

ELECTRICAL NARRATIVE:

UTILITIES: The building is served by a 1200 120/208 Volt 3-phase service. The utility company transformer is pole mounted in the courtyard. The electrical meter is adjacent to the service. The service is of newer vintage. Power Distribution: Panelboards are located throughout the building and serve various loads. The majority are original to the building and past their life expectancy. Adequate power is provided to the classrooms and supporting spaces.

LIGHTING AND LIGHTING CONTROLS: Lighting is original fluorescent troffers with T-8 lamps throughout. Exit signs are a combination of original and newer LED, although the batteries in these are most likely past their life expectancy. Emergency egress lighting fixtures are of a newer vintage, but again the integral batteries are most likely past their life expectancy. Exterior lighting is on the process of being upgraded to LED. Lighting control comprises of simple light switches throughout. Automatic controls are not provided in the interior of the building. Exterior lighting is controlled through a timeclock.

SPECIAL SYSTEMS: The fire alarm system is difficult to determine. It is a combination of new and old equipment. The type of system is obsolete and does not comply with current Code. Coverage of annunciating and initiating devices does not meet current Code.

The clock system is dated and only semi-functional. Problems with synchronization are present in the system.

The security system is relatively new and is currently serving the building adequately.

The public address system is comprised of traditional speakers and call buttons in classrooms. More user-friendly updated technology exists for public address systems.

Two IT racks serve the building. One is located in Storage room 105A and one is located in Storage 130. The system is currently serving the building adequately, however further discussions with IT personnel is required to determine additional capacity if it is needed.

PLUMBING NARRATIVE:

UTILITIES: The facility is served by city-supplied 2 1/2" potable water service with water pressure of 70 Psig static, 950 gallons per minute flow at 65 psig residual pressure. The water meter is 2" in size with a 2" bypass piping and a 2" pressure reducing valve. The water service enters the building in room 147 of the 2001 addition. The building is served by 6" sanitary service. From the 1962 construction and a 4" sanitary from the 2001 addition.

Per discussion with maintenance staff, this facility has issues with debris in school water lines after city performs water main flushing in the area of the school. This causes aerators and flush valves to clog and they need to go thru all the fixtures to clean the aerators and flush valve diaphragms.

GAS SYSTEM: The building is served with one natural gas utility service provided by St.Croix Gas. The service is located on the North side of the 1988 building. The gas utility is provided firm gas. The gas distribution in the building is black iron piping.

STORM SEWER: The majority of all roof water is collected via roof drains and connected via underground storm piping running below the school. The storm water then exits the facility to the south and east, and is piped to the municipal storm water system, with the original building discharging on grade to the East.

SANITARY: All building sanitary is gravity drained with no lift stations or grinder pumps. Piping consist of Cast Iron and galvanized materials with PVC for areas that have been remodel or repaired. The Cast Iron and galvanized piping that is visible appears to be in fair condition.

POTABLE WATER DISTRIBUTION: Potable water is distributed throughout the building via a copper and galvanized distribution on piping located above grade. Piping condition on appears to be in fair condition. Asbestos insulation is likely in the older section of the building and in concealed locations that were not accessed during any remodel or repaired areas.

POTABLE WATER HEATING: The building is served by one natural gas fired tank type water heaters with gravity vent exhaust, producing 120-degree hot water throughout the building. A hot water recirculation line/pump is present and operating. The water heater was installed in 2016 in good condition. A booster heater to serve the kitchen dishwasher. Water softener unit conditions the hard water for the hot water system.

FIRE PROTECTION SYSTEM: This building does not have any fire protection in the building.

PLUMBING FIXTURES: Plumbing fixtures located in the facility are original to the building and its addition, or the time of the areas were last remodeled. Majority of the fixtures are in good condition. The toilet facilities consist of floor mounted tank type water closets with 3 gallon per flush older models and 1.6 gallons per flush for the newer models. 1998 and 2001 additions the water closets are wall hung with handle flush valves. Floor mounted urinals with handle flush valves in the 1988 addition, and gravity flush tank in the 1962 construction. Lavatory sinks are wall mounted with handle faucets, or semi-circle wash fountain. The Locker Room showers, surface mount hot and cold shower valves with fixed shower heads. Water coolers are wall hung units; newer models have water bottle fillers. Sinks located in classrooms are based on the classroom needs, the standard classroom sinks are a mix of hot and cold or just cold water faucets, and some have a bubbler.



Facilities Study Document - Malone Elementary

2 CHAPTER
MALONE ELEMENTARY SCHOOL
Photographs
Unless noted otherwise, all photos were taken on May 21, 2019



A1



A2



A3



A4



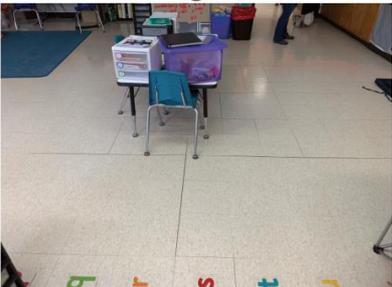
A5



A6



A7



A8



A9



A10



H1



Summary of Findings - Student Enrollment & SF/Student

- **Assignable Square Footage (ASF)** - the sum of all areas on all floors of a building which are occupied or used to accomplish the institution’s mission (classrooms, offices, gym, library, computer labs, etc.); does not include corridors, toilet rooms, mechanical/support areas, wall/structure space, etc.
- **Gross Square Footage (GSF)** - the sum of all areas on all floors of a building included within the outside faces of the exterior walls

Malone Elementary

2018-2019 Enrollment	Students
4K:	76 Total / 12 on-site*
Kindergarten:	79
1st Grade:	87
2nd Grade:	89
Total:	267
Approx. Building Areas	
First Floor:	56,630 GSF
Total:	56,630 GSF**
GSF/Student:	212
Assignable square footage:	36,820 ASF***

Malone Intermediate

2018-2019 Enrollment	Students
3rd Grade:	76
4th Grade:	91
5th Grade:	88
Total:	255
Approx. Building Area	
Lower Level:	22,960 GSF
First Floor:	71,140 GSF
Total:	94,100 GSF*
GSF/Student:	369
Assignable square footage:	53,510 ASF**

Middle School

2018-2019 Enrollment	Students
6th Grade:	117
7th Grade:	111
8th Grade:	103
Total:	331
Approx. Building Area	
Lower Level:	22,450 GSF
First Floor:	33,790 GSF
Second Floor:	10,970 GSF
Total:	67,210 GSF*
GSF/Student:	203
Assignable square footage:	34,930 ASF**

Summary of Findings - Malone Elementary

- 1963 Original Construction, 1988 Addition, 2001 Addition
- Identified issues to note:
 - Bus drop off is not ideal for supervision or building access
 - Limited off-street parking
 - **No visual connection from Office to front entrance (Security)**
 - Finish and cosmetic updates
 - Roofing replacement
 - HVAC items are minor; no A/C in Gym/Cafeteria; upgrade recommended in south rooms
 - Electrical systems are reaching end of their useful life, some significant costs to replace; lighting and control upgrades
 - Plumbing items are minor, ADA non-compliant fixtures; majority of piping is original



Average Classroom Size
1962 Classrooms: 850 SF
1988 Classrooms: 875 SF
2001 Classrooms: 600 / 900 SF

Recommended Classroom Size
Kindergarten Classrooms: 1100 SF
1-5 Classrooms: 900 SF

Summary of Findings - Malone Elementary



Summary of Findings - Malone Intermediate

- 1968 Original Construction
- Most underutilized building; highest GSF/student
- Identified issues to note:
 - Parent drop not ideal
 - **No visual connection from Office to front entrance (Security)**
 - Finish and cosmetic updates
 - **Asbestos flooring in many areas**
 - ADA non-compliant door hardware in many areas
 - **No natural light in over half of the occupied areas**
 - Possible structural issues at several locations, further investigation needed
 - Acoustic transfer issues on lower level
 - **Roofing replacement: 24 years old and in fair/poor condition**
 - HVAC equipment on roof is original; some code issues in boiler room
 - Electrical systems are reaching end of their useful life; equipment room clearance issues; lighting controls upgrade; replace generator
 - Plumbing items are minor, ADA non-compliant fixtures; majority of piping is original



Average Classroom Size
1968 Classrooms: 700-800 SF

(Recommended Classroom Size: 900 SF)

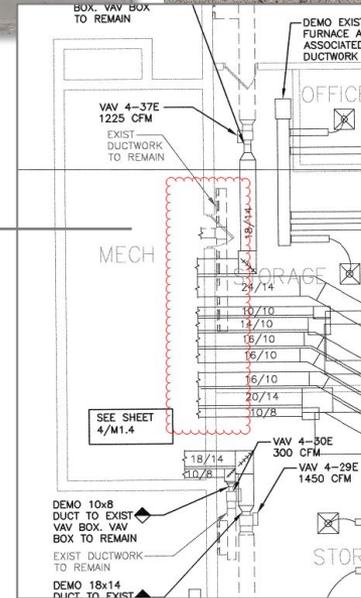
Summary of Findings - Malone Intermediate



Summary of Findings - Malone Intermediate



Summary of Findings - Malone Intermediate



Summary of Findings - Middle School

- 1924 Original Construction, 1955 Addition, 1963 Addition, 2004 Addition
- Most inefficient building
- Identified issues to note:
 - Congested parent drop
 - Bus drop on street
 - Limited off-street parking
 - **No visual connection from Office to front entrance (Security)**
 - Some finish and cosmetic updates
 - **Classroom sizes**
 - Many repairs needed to building exterior
 - Majority of areas do not have A/C; three-story building contains aging equipment; did not receive ACT 32 upgrades
 - Some electrical systems are reaching end of their useful life, not as significant as other buildings; lighting upgrades
 - Plumbing items are minor, ADA non-compliant fixtures; majority of piping may be original



Average Classroom Size
Classroom size varies from 600-1000 SF

(Recommended Classroom Size: 900 SF)

Summary of Findings - Middle School



Summary of Findings - Middle School



Estimated Cost Projections - Process & Considerations

SCHOOL DISTRICT OF PRESCOTT - Middle School										
Ref.	Issue	Recommended Solution	Priority and Cost				Comments			
			1-3 Years	4-6 Years	7-10 Years	10+ Years				
Site Related										
MS-S1	Damaged sidewalk; needs handrail; drainage issue caused by sidewalk sloping towards building	Replace and/or repair sidewalk and handrail		\$1,092						
MS-S2	Parent drop becomes very congested during drop-off and pick-up	Varies						Cost varies greatly depending on solution; feasible to solve with future building project		
SCHOOL DISTRICT OF PRESCOTT - Intermediate School										
Ref.	Issue	Recommended Solution	Priority and Cost				Comments			
			1-3 Years	4-6 Years	7-10 Years	10+ Years				
Building										
MS-A1	Damage IS-S1	Roof overflow scupper located directly above electrical equipment	Relocate overflow scupper		\$3,000					
MS-A2	Damage IS-S2	Concentrated area of damage/worn paving	Repair/replace paving and regrade		\$21,000					
MS-A3	Damage IS-S3	Curb area is damaged/worn	Repair/replace paving		\$6,000					
MS-A6	Damage IS-S4	Stoop at entrance is damaged/worn	Repair/replace stoop	\$4,000						
MS-A9	Water r	Paving work identified on Site Analysis	Sealcoat or replace paving	\$33,045	\$141,904	\$52,000			4.5 years cost includes replacement of P.3	
MS-A10	Water r									
SCHOOL DISTRICT OF PRESCOTT - Elementary School										
Ref.	Issue	Recommended Solution	Priority and Cost				Comments			
			1-3 Years	4-6 Years	7-10 Years	Feasible with future building project				
Site Related										
MS-A11	Inefficient									
MS-A12	ADA non	Building								
MS-A13	ADA non	IS-A1	Damaged/worn							
MS-A14	ADA non	IS-A2	Damaged/worn							
MS-A19	Stoop h	IS-A3	Damaged/worn							
MS-A20	Damage	IS-A4	Damaged/worn	ES-S1	Damage/worn stoop	Replace stoop		\$2,500		
MS-A20	Damage	IS-A9	Water related	ES-S2	Bus drop off is not ideal for supervision or building access	Varies			Cost varies greatly depending on solution; feasible to solve with future building project	
MS-A20	Damage	IS-A10	Water related							
MS-A21	Damage	IS-A11	Inefficient or	ES-S3	Concentrated area of damage/worn paving	Repair		\$7,500		
MS-A22	Damage	IS-A11	Inefficient or		Paving work identified on Site Analysis	Sealcoat or replace paving	\$18,870	\$18,870	\$132,090	
MS-A23	Damage	IS-A12	ADA non-comp							
MS-A24	Exposed	IS-A12	ADA non-comp							
MS-A25	Exterior	IS-A12	ADA non-comp							
MS-A26	Structur	IS-A13	ADA non-comp							
MS-A27	Door ho	IS-A13	ADA non-comp							
MS-A28	Door op	IS-A14	ADA non-comp	ES-A1	Damaged/worn flooring	Replace flooring		\$119,280		
MS-A29	Standin	IS-A14	ADA non-comp	ES-A2	Damaged/worn casework	Replace casework		\$243,000		
MS-A30	No visua	IS-A17	Code - stair/ra	ES-A3	Damaged/worn ceiling	Replace ceiling		\$187,025		
MS-A30	No visua	IS-A17	Code - stair/ra							
MS-A31	Rusted/	IS-A18	Possible asbe	ES-A4	Damaged/worn door and/or door hardware					
MS-A31	Rusted/	IS-A19	Sealant is dan	ES-A5	Damaged/worn window					
MS-A31	Rusted/	IS-A20	HVAC grate da	ES-A9	Water related wall damage					
Subtotal for Site										
							\$18,870	\$28,870	\$132,090	\$0
Building										
MS-A11	Inefficient									
MS-A12	ADA non	Building								
MS-A13	ADA non	IS-A1	Damaged/worn							
MS-A14	ADA non	IS-A2	Damaged/worn							
MS-A19	Stoop h	IS-A3	Damaged/worn							
MS-A20	Damage	IS-A4	Damaged/worn							
MS-A20	Damage	IS-A9	Water related							
MS-A20	Damage	IS-A10	Water related							
MS-A21	Damage	IS-A11	Inefficient or							
MS-A22	Damage	IS-A11	Inefficient or							
MS-A23	Damage	IS-A12	ADA non-comp							
MS-A24	Exposed	IS-A12	ADA non-comp							
MS-A25	Exterior	IS-A12	ADA non-comp							
MS-A26	Structur	IS-A13	ADA non-comp							
MS-A27	Door ho	IS-A13	ADA non-comp							
MS-A28	Door op	IS-A14	ADA non-comp	ES-A1	Damaged/worn flooring	Replace flooring		\$119,280		
MS-A29	Standin	IS-A14	ADA non-comp	ES-A2	Damaged/worn casework	Replace casework		\$243,000		
MS-A30	No visua	IS-A17	Code - stair/ra	ES-A3	Damaged/worn ceiling	Replace ceiling		\$187,025		
MS-A30	No visua	IS-A17	Code - stair/ra							
MS-A31	Rusted/	IS-A18	Possible asbe	ES-A4	Damaged/worn door and/or door hardware					
MS-A31	Rusted/	IS-A19	Sealant is dan	ES-A5	Damaged/worn window					
MS-A31	Rusted/	IS-A20	HVAC grate da	ES-A9	Water related wall damage					
Subtotal for Building										
HVAC										
MS-H1	Corridor	IS-A21	Window seal	ES-A11	Inefficient or improper use of space					
MS-H1	Corridor	IS-A22	Vestibule can							
MS-H1	Corridor	IS-A23	Railings are n	ES-A12	ADA non-compliant door hardware					
MS-H1	Corridor	IS-A24	Structural lint	ES-A13	ADA non-compliant toilet room					
MS-H2	Area's d	IS-A25	Structural issu	ES-A13	ADA non-compliant drinking fountain					
MS-H2	Area's d	IS-A25	Structural issu	ES-A19	Damaged/worn gutter					
MS-H2	Area's d	IS-A26	Vent/louver in	ES-A20	Tuck-pointing or expansion joint sealant in need of repair					
MS-H2	Area's d	IS-A27	Sealer/topcoa	ES-A21	Wall weeps and/or flashing needs repair					
MS-H2	Area's d	IS-A28	Infill area doe	ES-A22	Light missing in canopy					
MS-H2	Area's d	IS-A29	Concrete spall	ES-A23	Damaged roof drain outlet and splash block					
MS-H2	Area's d	IS-A30	No natural lig		Roof work identified on Roof Analysis					
MS-H2	Area's d	IS-A31	Acoustical sep							
Subtotal for Building										
HVAC										
ES-H1	Corridor used as relief air plenum									
ES-H2	No AC in gym									
ES-H3	Abandoned unit ventilators taking up space									
ES-H4	Blower coil at west end does not contain code required									

Considerations:

- Preliminary cost **ESTIMATES**
- 2020 construction costs, not total project costs
- Escalation not included in individual line items, 3% per year
- Roofing/paving assumptions
- PME equipment life expectancies
- Includes some optional items
- Prioritization can be adjusted
- Costs are replacement-in-kind, not comprehensive
- Purpose is to define for relative comparison to other concepts

Estimated Cost Projections - Summary by Building

Chapter	Site Name	1-3 Years	4-6 Years	7-10 Years
2	ELEMENTARY SCHOOL	\$90,218	\$1,616,623	\$743,965
	Site Related	\$15,518	\$25,518	\$68,393
	Building	\$4,100	\$569,605	\$500,572
	HVAC	\$16,200	\$26,500	\$68,000
	Electrical	\$5,300	\$990,000	\$100,000
	Plumbing	\$49,100	\$5,000	\$7,000

\$2.5 Million

3	INTERMEDIATE SCHOOL	\$1,962,435	\$1,921,055	\$241,090
	Site Related	\$37,045	\$181,280	\$66,090
	Building	\$1,629,940	\$366,775	\$0
	HVAC	\$58,800	\$87,000	\$0
	Electrical	\$150,050	\$1,270,000	\$175,000
	Plumbing	\$86,600	\$16,000	\$0

\$4.2 Million

4	MIDDLE SCHOOL	\$263,550	\$1,565,452	\$400,400
	Site Related	\$2,920	\$4,012	\$2,920
	Building	\$69,730	\$482,440	\$322,480
	HVAC	\$95,000	\$432,000	\$75,000
	Electrical	\$26,100	\$641,000	\$0
	Plumbing	\$69,800	\$6,000	\$0

\$2.3 Million

	Subtotal Construction Costs	\$2,204,055	\$4,158,732	\$1,126,672
	Contractor's GR, OH, and Profit - 15%	\$330,608	\$623,810	\$169,001
	Escalation	\$198,365	\$748,572	\$304,201
	Estimated Total Construction Costs	\$2,733,028	\$5,531,114	\$1,599,874
	A/E Fees, Contingency, Other Project Costs - 25%	\$683,257	\$1,382,778	\$399,969
	Estimated Total Project Cost	\$3,416,285	\$6,913,892	\$1,999,843

\$8.9 Million

\$11.7 Million

\$14.6 Million

Overall Considerations

- Safe & Secure Entrances
- Classroom Sizes
- GSF/Student
- General ADA/Code Issues
- Vehicle Circulation and Parking at Each Facility
- Structural Issues
- PME Life Expectancies



Next Steps

- Feedback and direction from District



Questions?

