

GAINES ELEMENTARY



300 Lansing Street, Gaines, Michigan

GAINES ELEMENTARY SCHOOL

300 Lansing Street, Gaines

General Information:

- Instructional, Kindergarten through Grade 5th
 - o (1) Kindergarten classroom 31 students
 - o (1) 1st Grade classroom 25 students
 - o (1) 2nd Grade classroom 22 students
 - o (1) 3rd Grade classroom 20 students
 - o (1) 4th Grade classroom 25 students
 - o (1) 5th Grade classroom 38 students
 - o Library
 - o Art Room
 - o Music Room
 - o Computer Lab
- Student Population: 161 (190 sq feet per student) Maximum Student Population: 200
- Staff: 20
- Year Built: 1953 / 1962
- Building Size: 30,626 square feet (includes classroom each side of upper stage)
- Site Size: 7 acres
- Utilities:
 - o Natural Gas: Consumers Energy
 - o Electricity: Consumers Energy
 - o Water: On-site well
 - o Sanitary: Unknown

Site Information / Condition: See site map included.

- Site Entrance: Enter from West Lansing Street and exit onto Elms Street.
- Staff Parking: 22 spaces on north side of building.
- Visitor Parking: 20 spaces on west side of building.
- Bus Drop Off Area: Yes, separate from visitor parking/parent drop off along Elms Street.
- Playgrounds:
 - o Newer play equipment surrounded with wood fiber mulch and cushioned mats under exit points of equipment. Overall in good condition, however additional wood fiber mulch is required. Basketball hoops need to be replaced.
 - o Asphalt paved basketball court area. Overall in good condition.
 - o (1) ballfield with fenced backstop. Overall in good condition could be raised to improve drainage.

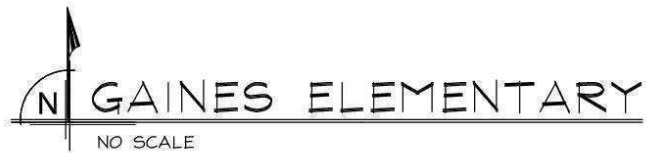
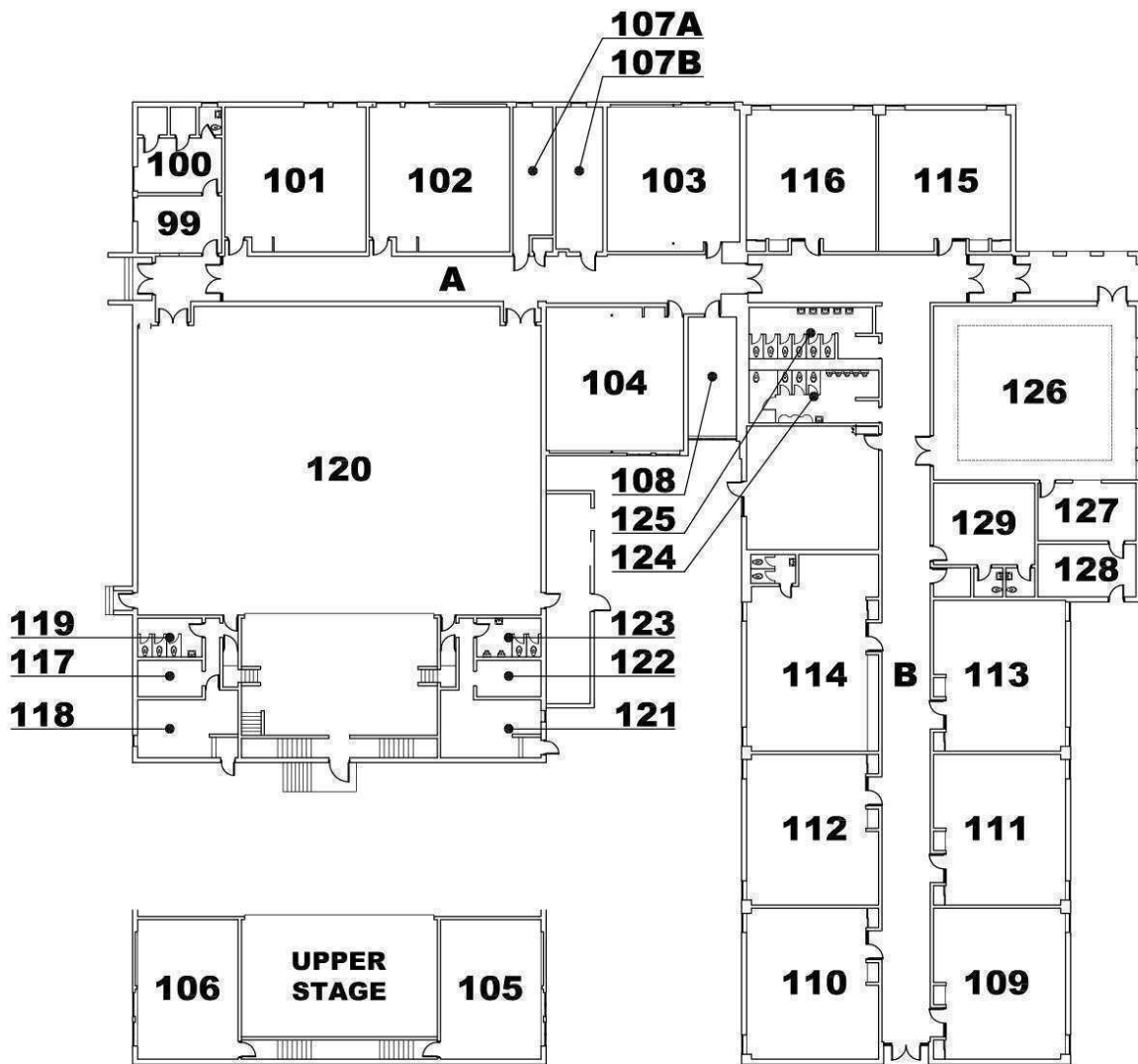
- Site fencing is in good condition, however fencing along West Lansing Street has frost heaved in some locations and is rusting. Heaved sections should be reset and entire fence painted or replaced.
- Asphalt Pavement: Overall in very good condition. All parking lots and drives should be seal coated and re-striped.
- Concrete Sidewalks: Overall in good condition with some areas showing some surface spalding. Areas that are broken and uneven need to be replaced.
- Site Lighting: Wall mounted light fixtures.
- Landscaping: Generally consists of lawn area with some major trees. Most of the foundation plantings (shrubbery at entry doors) is overgrown and should be removed.

General Building/Site Information:

- Number of Stories: One with two classrooms located on second level of upper stage.
- Construction Type:
 - Masonry bearing wall.
 - Steel bar joist roof structure with EPDM roofing membrane
 - Concrete slab on grade
 - Windows: Aluminum casement windows with insulating glazing.
- Fire Suppression: None.
- Exterior Walls: Are in good condition with some brick tuckpointing required.
- Window Sash: Windows are in good operating condition, no broken seals were observed on the glass units. Some insect screens need replacing. Windows are of the following types:
 - 1953 Section: Most of the original sashes have been removed and the openings infilled with insulated stud framing and aluminum casement windows glazed with insulating glazing.
 - 1962 Section: Aluminum awning windows glazed with insulating glazing.
- Entry Doors: All remaining wood and hollow metal doors in hollow metal frames should be replaced.
 - 1953 Section: Most entry doors are the original hollow metal doors and frames and are in poor to bad condition. Some original wood doors in hollow metal frames remain in the gymnasium. Main entry doors have been replaced with FRP doors in aluminum frame.
 - 1962 Section: All entry doors are the original hollow metal doors and frames and are in fair to bad condition.
- Roof Membrane: Adhered single ply EPDM (rubber) membrane approximately 10 years old.

- 1953 Section: EPDM membrane over 2" to 2 ½" rigid insulation over gravel built-up roof membrane on wood deck.
- 1962 Section: EPDM membrane over 2 ½" rigid insulation on metal deck.
- Existing R-Value of Roof Insulation – R12.5 Required R-Value – R20
- Interior Walls:
 - 1953 Section: Masonry construction (CMU - slag aggregate type) and gypsum board infill. Although structural sound the walls appear old and dated.
 - 1962 Section: Masonry construction (brick, painted cmu or glazed structural tile) and have been well maintained.
- Interior Doors:
 - 1953 Section: Majority of assemblies are the original wood doors (hollow and solid core) in wood frames, with some hollow metal door and frame assemblies. All doors should be replaced in this section of the building.
 - 1962 Section: Assemblies are solid core wood doors in hollow metal frames and are in good condition.
 - Door Lites and Sidelites: Are glazed with wire or non-wire glass. These should be re-glazed with fire-rated glazing to comply with current building codes.
 - Hardware: All knob handles should be replaced with lever handles and keyed alike throughout the building. Classroom doors must have closer installed.
- Ceramic Tile Floors: Are overall in good condition, but show some staining and minor chipping.
- Carpet Flooring: Condition varies with the age of the carpet. Generally the life expectancy is 10 to 12 years for a classroom. Carpet appears to have been laid over the original 9x9 asbestos tile flooring to encapsulate it.
- Vinyl Tile Flooring: Some rooms still have the original 9x9 asbestos tile flooring exposed. Should consider flooring over to encapsulate it.
- Acoustical Ceilings: Majority of ceilings throughout the building are 2x4 suspended acoustical tile. The grid appears to be original and is rusting and has discolored over time. Condition of tiles varies, but replacing the ceiling system throughout the building would greatly improve the buildings overall appearance.
- Plaster Ceilings: Overall are in good condition with only minor areas needing some patch work and painting.
- Lighting: The majority of the building lighting consists of 2x4 lay-in fluorescent fixtures that have been re-lamped with T8 bulbs. All major rooms have occupancy sensors to control lighting.
- Emergency Lighting: Emergency lighting should be installed throughout the building to comply with current codes.
- Fire Alarm System: New audio / visual system throughout.

- Mechanical: Existing HVAC system for this building consists of a central hot water heating system served by two newer mid-efficiency natural gas boilers. The boiler's supply perimeter hot water fin tube radiation for all classrooms, with hot water cabinet heaters and convectors serving the entry vestibules and corridors. A hot water vertical ventilator and radiation serves the Cafeteria room 126. Four (4) small hot water unit ventilators supply the gymnasium. Ventilation for the school is via operable windows with no mechanical means of supplying ventilation air to the building. The only air conditions spaces in the building are the Office area and Computer Lab 104.
- Electrical: Majority of the lighting fixtures were installed during the original construction and have been converted from T12 fluorescent lamps to T8 fluorescent lamps. Lighting controls in the form of occupancy sensors have been added in storage rooms, etc., but were not seen in the corridors or classrooms. Some exit lights have been replaced and added over the years, but provide poor coverage for marking path of egress.



Inventory of Existing Building Finishes / Conditions:

Condition of finishes is subjective and based on the following criteria:

Good: The finish material appears similar to its original condition and with continued maintenance should last its intended life expectancy. Example: Carpeting rated Good – Surface shows little wear and has an expected remaining life of 8 to 10 years of a 10 to 12 year life.

Fair: The finish material shows some wear or condition issues that need maintenance. Example: Carpeting rated Fair – Surface shows wear and/or staining, seams may be showing, and has an expected remaining life of 3 to 4 years.

Bad: The finish material is at the end of its life expectancy and needs to be replaced.

99 Main Office	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Vinyl covered gypsum board infill	X		
Floor	Carpet	X		
Base	4" Coved Vinyl	X		
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	(4) 2x4 Lay-in / (2) T8 lamps	X		
	Lever door handle			

100 Principal	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Vinyl covered gypsum board infill	X		
Floor	Carpet		X	
Base	4" Coved Vinyl	X		
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	(4) 2x4 Lay-in Parabolic / (3) T8 lamps	X		
	Lever door handle			
Adjoining Restroom				
Walls	Painted CMU	X		
Floor	12x12 Vinyl Tile			X
Base	4" Coved Vinyl		X	
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	1x4 Recessed / (2) T8 Lamps		X	
Water Closet	Floor Mounted Tank	X		
Lavatory	Wall Mounted with blade handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

101 Classroom Music	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Vinyl covered gypsum board infill	X		
Floor	Carpet Tile		X	
Base	6" Coved Vinyl, sections missing and mis-matched		X	
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	(12) 2x4 Lay-in / (2) T8 lamps			X
	Knob door handle / hollow core wood door			

102 Classroom Early Childhood	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Vinyl covered gypsum board infill	X		
Floor	12x12 Vinyl Tile		X	
Base	6" Coved Vinyl	X		
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	(12) 2x4 Lay-in / (2) T8 lamps		X	
	Knob door handle / hollow core wood door			

103 Classroom RTI/Multi-Use	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Vinyl covered gypsum board infill		X	
Floor	Carpet Tile		X	
Base	6" Coved Vinyl		X	
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	(12) 2x4 Lay-in / (2) T8 lamps		X	
	Lever door handle			

104 Computer Lab	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Vinyl covered gypsum board infill	X		
Floor	Carpet		X	
Base	6" Coved Vinyl	X		
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	(12) 2x4 Lay-in / (2) T8 lamps	X		
	Lever door handle			

105 Art Classroom	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Vinyl covered gypsum board infill		X	
Floor	9x9 Vinyl Tile			X
Base	6" Coved Vinyl		X	
Ceiling	2x4 Suspended Acoustical Tile			X

Lighting	(10) 2x4 Lay-in / (2) T8 lamps		X	
Casework	Wood / Plastic Laminate		X	
	Knob door handle			

106 Library	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Vinyl covered gypsum board infill		X	
Floor	Carpet		X	
Base	4" Coved Vinyl		X	
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	(10) 2x4 Lay-in / (2) T8 lamps		X	
	Knob door handle			

107A Speech and Language	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Painted gypsum board	X		
Floor	Carpet		X	
Base	6" Coved Vinyl		X	
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(5) 2x4 Lay-in / (2) T8 lamps	X		
	Knob door handle			

107B Special Education	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Painted gypsum board	X		
Floor	Carpet		X	
Base	4" Coved Vinyl		X	
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(6) 1x4 Surface Mounted / (2) T8 lamps		X	
	Lever door handle			

108 Social Worker	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	6" Coved Vinyl	X		
Ceiling	12x12 Acoustical Tile		X	
Lighting	(6) 1x4 Surface Mounted / (2) T8 lamps			X
	Knob door handle			

109 Classroom 2 nd Grade	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	6" Coved Vinyl	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(12) 2x4 Lay-in / (2) T8 Lamps		X	
Casework	Wood / Plastic Laminate		X	
	Knob door handle			

110 Stem	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	6" Coved Vinyl	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(12) 2x4 Lay-in / (2) T8 Lamps		X	
Casework	Wood / Plastic Laminate		X	
	Knob door handle			

111 Classroom 3 rd and 4 th Grade	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(12) 2x4 Lay-in / (2) T8 Lamps		X	
Casework	Wood / Plastic Laminate		X	
	Knob door handle			

112 Classroom 1st Grade	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(12) 2x4 Lay-in / (2) T8 Lamps		X	
Casework	Wood / Plastic Laminate		X	
	Knob door handle			

113 Classroom RTI	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(12) 2x4 Lay-in / (2) T8 Lamps		X	
Casework	Wood / Plastic Laminate		X	
	Knob door handle			

114 Classroom Kindergarten	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet Tile	X		
Base	6" Coved Vinyl	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(14) 2x4 Lay-in / (2) T8 lamps		X	
Casework	Wood / Plastic Laminate		X	
	Knob door handles			
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	1x4 Surface Mounted / (2) T8 Lamps, very dim		X	
Stall Partitions	Metal, Floor Mounted		X	
Water Closets	Floor Mounted Flush Valve with sensors	X		
Lavatory	Wall Mounted with push handles, no pipe wrap	X		
Comments:				
1. Restroom is not ADA Compliant				

115 Classroom 5th Grade	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Painted gypsum board, needs patching		X	
Floor	Carpet Tile, patched with different carpet tiles			X
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(9) 2x4 Lay-in / (2) T8 Lamps		X	
Casework	Wood / Plastic Laminate		X	
	Knob door handle			

116 Classroom 4 th and 5 th Grade	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Painted gypsum board, needs patching		X	
Floor	Carpet Tile, patched with different carpet tiles		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(9) 2x4 Lay-in / (2) T8 Lamps	X		
Casework	Wood / Plastic Laminate		X	
	Knob door handle			

117 Child Care	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	6" Coved Vinyl	X		
Ceiling	2x4 Acoustical Tile, glued to concrete structure		X	
Lighting	(2) 1x4 Surface Mounted / (2) T8 Lamps		X	
	Knob door handles / 4 panel wood door			

118 Child Care	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	6" Coved Vinyl	X		
Ceiling	Painted Concrete Structure	X		
Lighting	(4) 1x4 Surface Mounted / (2) T8 Lamps		X	
Exterior Door	Hollow Metal with Knob handles		X	
	Knob door handle / 4 panel wood door			

119 Girls Restroom Off Gymnasium	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	12x12 Vinyl Tile		X	
Base	6" Coved Vinyl, some missing		X	
Ceiling	Plaster		X	
Lighting	(2) 1x4 Surface Mounted / (2) T8 lamps	X		
Stall Partitions	Metal, Floor Mounted, new	X		
Water Closets	Floor Mounted Tank, center WC does not flush		X	
Lavatories	Wall Mounted with no hands operation, no pipe wrap	X		
	Knob door handles			
Comments:				
1. Restroom is not ADA Compliant				

120 Gymnasium	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Strip Wood	X		
Base	Wood	X		
Ceiling	Painted Steel Joist and Metal Deck, needs cleaning	X		
Lighting	(12) 2x4 Chain Hung / (6) T5 lamps	X		
Adjoining Stage				
Walls	Painted CMU	X		
Floor	Strip Wood	X		
Base	Wood	X		
Ceiling	Painted Steel Joist and Metal Deck, needs cleaning	X		
Lighting	(9) 1x4 Chain Hung / (2) T8 Lamps		X	
Stage Curtain	Valor, needs cleaning		X	

121 Copy Room	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	6" Coved Vinyl	X		
Ceiling	Painted Concrete Structure		X	
Lighting	(2) 1x4 Surface Mounted / (2) T8 Lamps (1) 1x8 Surface Mounted / (4) 48" T8 Lamps		X	
Casework	Wood / Plastic Laminate		X	
Exterior Door	Hollow Metal with Knob handles		X	

122 Storage	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Painted Concrete		X	
Base	Painted CMU	X		
Ceiling	Painted Concrete Structure		X	
Lighting	1x4 Surface Mounted / (2) T8 lamps	X		

123 Boys Restroom Off Gymnasium	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	12x12 Vinyl Tile		X	
Base	6" Coved Vinyl, some missing sections		X	
Ceiling	Plaster	X		

Lighting	(2) 1x4 Surface Mounted / (2) T8 Lamps	X		
Stall Partitions	Metal, Floor Mounted, new	X		
Water Closets	Floor Mounted Tank	X		
Lavatories	Wall Mounted with no hands operation, no pipe wrap	X		
Urinals	Wall Hung, no sensors, (1) PH mounting height	X		
	Push / Pull door handles			
Comments:				
1. Restroom is not ADA Compliant				

124 Boys Restroom	Material	Condition		
		Good	Fair	Bad
Walls	Glazed Masonry Tile, some patching		X	
Floor	1x1 Ceramic Tile		X	
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster, needs patching and painting		X	
Lighting	(2) 2x4 and (1) 1x4 Recessed / (2) T8 lamps		X	
Stall Partitions	Metal, Floor Mounted			X
Water Closets	Floor Mounted Flush Valve with sensors	X		
Lavatories	Wall Mounted with push handle or hands free operation	X		
Urinals	Floor Mounted with sensors	X		
Comments:				
1. Restroom is ADA Compliant				

125 Girls Restroom	Material	Condition		
		Good	Fair	Bad
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	(3) 2x4 and (1) 1x4 Recessed / (2) T8 lamps	X		
Stall Partitions	Metal, Floor Mounted		X	
Water Closets	Floor Mounted Flush Valve with sensors	X		
Lavatories	Wall Mounted with blade handle or hands free operation	X		
Comments:				
1. Restroom is not ADA Compliant				

126 Cafeteria	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	12x12 Vinyl Tile	X		
Base	6" Coved Vinyl	X		
Ceiling	2x2 and 2x4 Suspended Acoustical Tile / Plaster bulkheads		X	

Lighting	(16) 2x4 Lay-in / (2) T8 lamps / (14) CFL Downlights	X		
Exterior Door	Hollow Metal, exit only		X	

127 Kitchen	Material	Condition		
		Good	Fair	Bad
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile, patched		X	
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	(8) 1x4 Surface Mounted / (2) T8 Lamps		X	
Kitchen Equipment	Original, Metal and Stainless Steel Knob door handles		X	

128 Kitchen Storage	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	12x12 Vinyl Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	Plaster		X	
Lighting	(4) 1x4 Surface Mounted / (2) T8 Lamps Knob door handles		X	

129 Staff Lounge	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	12x12 Vinyl Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	(6) 2x4 Lay-in / (2) T8 lamps		X	
Casework	Wood / Plastic Laminate Push / Pull door handles		X	
Adjoining Restrooms				
Walls	Glazed Masonry Tile, needs tuckpointing work		X	
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	1x4 Surface Mounted, (2) T8 Lamps	X		
Water Closets	Floor Mounted Flush Valve (1) with sensor, (1) without	X		
Lavatory	Wall Mounted with handles, no pipe wrap (1) Knob door handle, (1) Lever door handle	X		

Comments:

1. Restroom is not ADA Compliant

Corridor A	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Painted gypsum board	X		
Floor	12x12 Vinyl Tile		X	
Base	6" Coved Vinyl	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	2x4 Lay-in / (2) T8 lamps		X	

Corridor B	Material	Condition		
		Good	Fair	Bad
Walls	Brick	X		
Floor	12x12 Vinyl Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	2x4 Lay-in / (2) T8 lamps		X	

Swartz Creek Gaines Elementary School

1969 Original Construction

30,626 sf

Mechanical Systems

Existing heating ventilation and air conditioning (HVAC) system description:

The existing HVAC system for this building consists of a central hot water heating system served by two newer mid-efficiency 84-85% natural gas Raypak boilers Model H9-1262, each rated at 1,262,000 btuh, for a total heating capacity of 2,524,000 btuh.

The boiler's supply perimeter hot water fin tube radiation for all the classrooms and hot water cabinet heaters and convectors serve the entry vestibules and the corridors. A hot water vertical unit ventilator and radiation serves the cafeteria Room 126. Four (4) small hot water unit ventilators supply the gymnasium.

Ventilation for the school is via operable windows and there is no mechanical means of supplying ventilation air to the building. The only air conditioning for this school is in the Office area and Computer Lab Room 116. Ductless split air conditioning systems serve those rooms.

In general this school has no air conditioning and no mechanical means of provided outside air ventilation.

Electrical Systems

Electrical Service/Power Distribution

The main distribution is from original construction and consists of a 800 Amp 120/240 square D Safeflex QMB fusible distribution. An "X" panel is feed ahead of the main disconnect which feeds exit lighting. Branch circuit panel boards, wiring, and general purpose receptacles are from original construction. Classrooms have some surface raceway and computer rooms have power poles to feed the dense receptacle loads.

Recommendation:

1. *Add new emergency power via:*
 - a. *Individual battery units within the fixtures*

Lighting

Interior:

A majority of the lighting fixtures are from original construction and consist of 2x4 prismatic lensed fixtures with T8 lamps. The corridors are in worse shape than the classrooms.

Some exit lights have been replaced and added over the years but provide poor coverage for marking the path of egress. They are typically equipped with two emergency lighting heads which appear to be the only emergency egress lighting source.

Lighting controls in the form of occupancy sensors have been added in storage rooms etc but were not seen in the corridors or classrooms.

Exterior:

Exterior lighting is very limited with one light pole with four flood fixtures. There are also building mounted lights that are aged. Some but not all exit doors are equipped with light fixtures. In General the exterior lighting is inadequate and is past its useful life.

Recommendation:

- 1. Lighting upgrades should be considered to be replaced with new high efficient LED lighting with added controls to meet current Michigan energy code requirements.*
- 2. Emergency egress lighting is deficient and needs to be added throughout the building's interior and exit discharge areas.*
- 3. Exterior lighting including building mounted and parking lot lighting should be replaced and added.*
- 5. Replace exit and emergency lighting with new and associated wiring to meet current Life Safety and building codes.*

Fire Alarm

The fire alarm system is a new Simplex system installed in 2017.

Systems

Public Address system is aged. It appears to be functional but based on its age is most likely limited in its maintainability and expansion options. Speakers are located in the walls of the classrooms and in the ceiling of the corridors. There are push buttons for communications typically adjacent to a phone for communication.

There are stand alone battery powered clocks.

Data systems appear to be up to date with data outlets at the teachers desk in each classrooms and Cisco wireless access points (wi fi) throughout the corridors and common spaces surface mounted in the lay in ceilings

Recommendation:

1. *Replace PA system*
2. *Replace master clock system*

Code Deficiencies:

- Insufficient mulch cushioning on playground.
- Main entry is not ADA compliant.
- Classroom corridor doors lack closers.
- Some classroom corridor doors have knob handles in lieu of levers.
- Toilet rooms are not ADA compliant.
- Emergency lighting insufficient throughout building.

Suggested Facility Upgrades:

- Provided additional site lighting.
- Increase building security at main entrance.
- Provide new classroom furniture throughout.
- Replace classroom cabinets / countertop with new increasing storage cabinets.
- Replace ceilings and lighting.
- Air condition building.

GAINES ELEMENTARY SCHOOL

Proposed Site Work:	Quantity of Work:	Estimate of Cost:
Concrete Walk Replacement	55 sq feet	\$ 825.00
Raise and re-grade infill of ball field	9500 sq feet	\$ 13,800.00
Install Site Lighting	4 poles / 14 building	\$ 30,000.00
Straighten / Repair Chainlink Fence	250 linear feet	\$ 3,750.00
Replace Older Play Structures	Lump Sum	\$ 60,000.00
Add Mulch to Playground	370 cubic yards	\$ 16,650.00
Construct Ramp at Main Entry Doors for ADA Compliance	30 linear feet	\$ 24,000.00
Total Opinion of Probable Cost of Site Work:		\$ 149,025.00

Proposed Code Upgrades:	Quantity of Work:	Estimate of Cost:
Install Closers on Classroom Doors	28 units	\$ 13,000.00
Install Lever Handles on Doors	25 units	\$ 12,500.00
Install Fire-rated Glazing in Classroom Doors	8 units (32 sq feet each plus 100 sq feet)	\$ 24,920.00
Replace Hollowcore Doors with Solid Core in Hollow Metal Frames	6 units	\$ 12,000.00
Enlarge Classroom Entry Door Openings for ADA Compliance	5 rooms	\$ 20,000.00
Renovate Student Gang Toilet Rooms	580 sq feet	\$ 58,000.00
Renovate Staff Gang Toilet Rooms	250 sq feet	\$ 25,000.00
Upgrade Emergency Lighting	Lump Sum	\$ 15,000.00
Total Opinion of Probable Cost of Code Deficiencies:		\$ 183,420.00

Proposed Building Renovation Work:	Quantity of Work:	Estimate of Cost:
Replace Main Entry Doors	2 double leaf	\$ 9,000.00
Replace Exit Doors	6 single leaf	\$ 18,000.00
Refurbish Interior Doors	15 leaves	\$ 5,000.00
Replace / Install Carpet Flooring	370 yards	\$ 11,200.00
Replace Corridor Ceilings	3550 sq feet	\$ 21,300.00
Replace Corridor Lighting Fixtures		\$ 21,300.00
Replace Classroom Ceilings	13,300 sq feet	\$ 79,800.00
Replace Classroom Lighting Fixtures		\$ 97,800.00
Replace or Add Classroom Cabinetry	11 rooms	\$ 77,000.00
Replace Chalkboards with Whiteboards	6 rooms (24 ft length)	\$ 14,400.00
New Classroom Furniture	All classrooms	\$ 112,000.00
Replace Master Clock System	Lump Sum	\$ 18,000.00
Air Condition Building	Lump Sum	\$ 600,000.00
Reroof Building	30,700 sq feet	\$ 184,200.00
Technology Upgrades		
Replace Public Address System	Lump Sum	\$ 45,000.00
Electronic Door Access System	18 doors	\$ 30,200.00
Security Camera System	10 cameras	\$ 20,000.00
Chrome Books and Carts	100 units / 3 carts	\$ 28,980.00
Smart Boards	5 units	\$ 37,500.00
Total Opinion of Probable Cost of Building Renovation Work:		\$1,430,180.00



Gaines Elementary
School

Elm St

W Lansing St

W Lansing St

AREA OF CONCRETE
WALK REPLACEMENT

Clinton St

Elm St

RAISE INFILL

STRAIGHTEN AREAS
OF FENCE HEAVED BY
FROST AND PAINT

ADD WOOD FIBER
MULCH TO PLAY
AREA

REPLACE
BASKETBALL
HOOPS

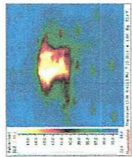
PROPOSED SITE PLAN
GAINES ELEMENTARY
NO SCALE

GAINES ELEMENTARY
ROOF CONDITION REPORT

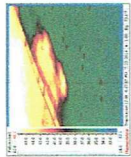
Gaines Elementary

The low slope roof areas A, B, C, D, E, F, G & H are covered with single ply EPDM (rubber) membranes. Areas A & B are EPDM membranes over insulation, over gravel built-up roof membrane over a wood deck (retrofit). Areas C & F are EPDM membranes over insulation over metal deck. Four (4) wet insulation areas were identified totaling 96 square feet. Most areas are estimated to be 10+ years old and have no reported active leaks. We made several leak repairs late spring 2014. We recommend housekeeping, maintenance and repairs on all areas. It appears roof D may require removal and replacement due to existing detail and drainage conditions. All other areas appear to be viable candidates for long term repair and restoration procedures.

All roof areas should be placed under a yearly inspection, preventive maintenance and reporting process to extend roof life cycles, minimize disruptions/risks, and lower facility costs. Regular inspections, preventive maintenance, repair/restoration procedures can double the life cycles of well designed and installed roof systems at 1/2 to 1/3 the cost of removal and replacement.



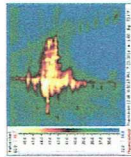
Thermogram T-01



Thermogram T-02



Thermogram T-03



Thermogram T-04

ROOF AREA	SIZE (S.F.)	WET (S.F.)	% WET
A	3,960	30	0.76%
B	3,367	0	0.00%
C	13,239	12	0.09%
D	1,326	0	0.00%
E	55	0	0.00%
F	8,160	54	0.66%
G	600	0	0.00%
H	30	0	0.00%
TOTALS	30,737	96	0.31%

ROOF CORE CUT		MOISTURE READING		CONSTRUCTION DATA	
AREA NUMBER	A1	30	0%	CONSTRUCTION	ROOF
MOISTURE READING	0%	0%	0%	SINGLE PLY RUBBER ROOF SYSTEM	CONSTRUCTION
CONSTRUCTION	1" POLYISOCYANURATE INSULATION	1" POLYISOCYANURATE INSULATION	1" POLYISOCYANURATE INSULATION	BUILT-UP ROOF WITH GRAVEL	ROOF
ROOF CORE CUT	B1	25	0%	CONSTRUCTION	ROOF
MOISTURE READING	0%	0%	0%	SINGLE PLY RUBBER ROOF SYSTEM	CONSTRUCTION
CONSTRUCTION	1" POLYISOCYANURATE INSULATION	1" POLYISOCYANURATE INSULATION	1" POLYISOCYANURATE INSULATION	BUILT-UP ROOF WITH GRAVEL	ROOF
ROOF CORE CUT	C1	21	80%	CONSTRUCTION	ROOF
MOISTURE READING	80%	80%	80%	SINGLE PLY RUBBER ROOF SYSTEM	CONSTRUCTION
CONSTRUCTION	1" POLYISOCYANURATE INSULATION	1" POLYISOCYANURATE INSULATION	1" POLYISOCYANURATE INSULATION	BUILT-UP ROOF WITH GRAVEL	ROOF
ROOF CORE CUT	F1	12	70%	CONSTRUCTION	ROOF
MOISTURE READING	70%	70%	70%	SINGLE PLY RUBBER ROOF SYSTEM	CONSTRUCTION
CONSTRUCTION	1" POLYISOCYANURATE INSULATION	1" POLYISOCYANURATE INSULATION	1" POLYISOCYANURATE INSULATION	BUILT-UP ROOF WITH GRAVEL	ROOF



PROPERTY: #150008
 ADDRESS: L.A.A.
 DATE: 8/21/2004

SWARTZ CREEK COMMUNITY SCHOOLS
 GAINES ELEMENTARY
 SWARTZ CREEK, MT. 48473



TREMCO
 ROOFING & BUILDING MAINTENANCE

STANDARD SET OF SYMBOLS
 THERMOGRAM (T-01) → THERMOGRAM
 WET INSULATION (W) → WET INSULATION
 TRACE CORE (C) → TRACE CORE
 INTERMITTENT MOISTURE (M) → INTERMITTENT MOISTURE
 PHOTOGRAPH (P) → PHOTOGRAPH
 MOISTURE DENSITY READING (M) → MOISTURE DENSITY READING
 MOTISTURE DENSITY GRID (M) → MOTISTURE DENSITY GRID

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