

DIECK ELEMENTARY



2239 Van Vleet Road, Swartz Creek, Michigan

DIECK ROAD ELEMENTARY SCHOOL

2239 Van Vleet Road, Swartz Creek

General Information:

- Instructional, Kindergarten through Grade 5th
 - o (1) Kindergarten classroom 28 students
 - o (1) Early Childhood classroom 14 students
 - o (1) Head Start classroom 11 students
 - o (2) 1st Grade classrooms 49 students
 - o (1) 2nd Grade classroom 27 students
 - o (2) 3rd Grade classrooms 59 students
 - o (2) 4th Grade classrooms 41 students
 - o (2) 5th Grade classrooms 58 students
 - o (2) Stem classrooms
 - o (2) Special Education classrooms 24 students
 - o Library
 - o Art Room
 - o Music Room
- Student Population: 311 (121 sq feet per student) Maximum Student Population: 475
- Staff: 35
- Year Built: 1969
- Building Size: 37,564 square feet (excludes tunnel)
- Site Size: 10 acres
- Utilities:
 - o Natural Gas: Consumers Energy
 - o Electricity: Consumers Energy
 - o Water: On –site Well
 - o Sanitary: Municipal system

Site Information / Condition: See site map included.

- Site Entrance: Two entry points from Van Vleet Road.
- Staff Parking: 32 spaces on northwest side of building.
- Visitor Parking: 30 spaces on southwest side of building.
- Bus Drop Off Area: Yes, integral with visitor parking/parent drop off.
- 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.

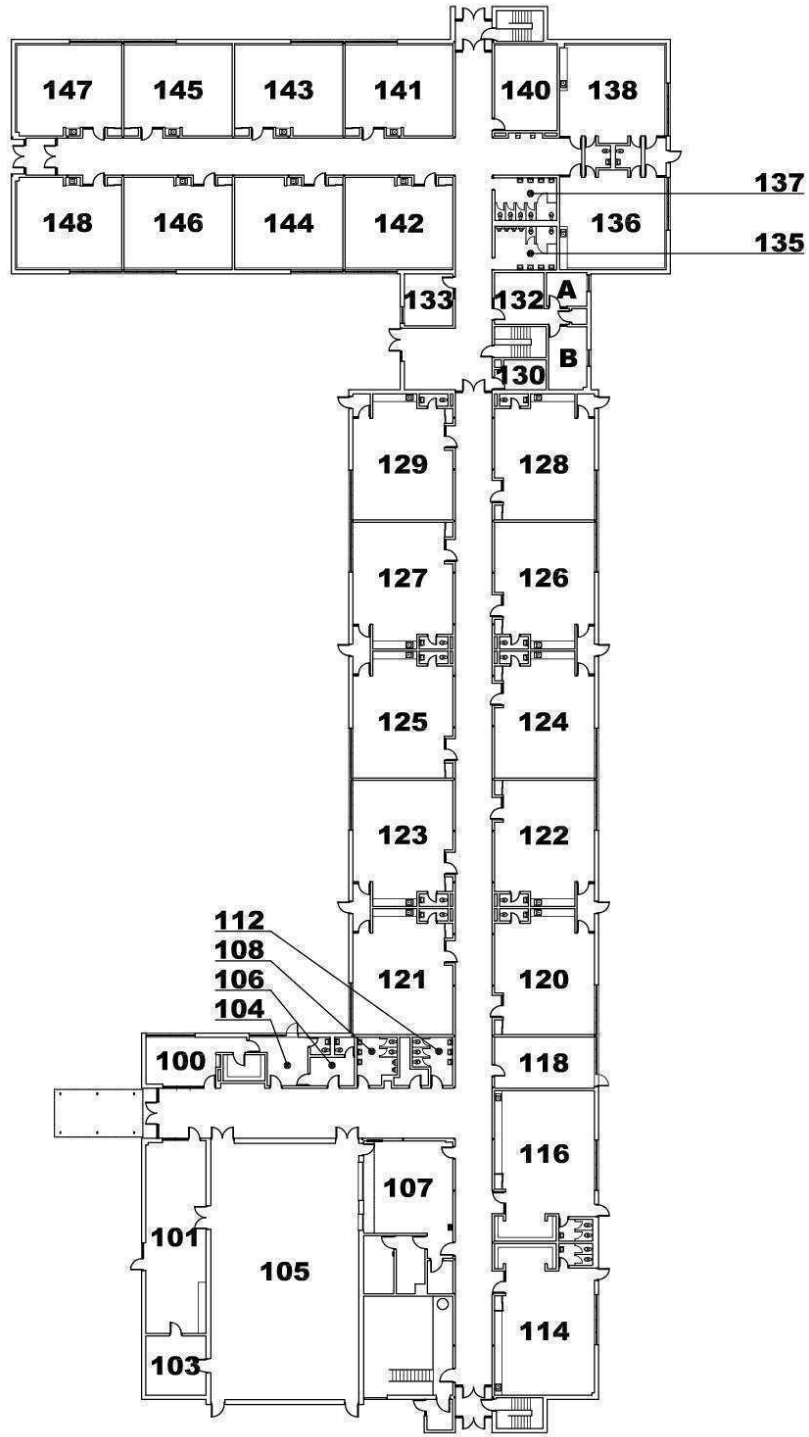
- Asphalt paved basketball court area. In very bad condition. It should be pulverized, re-graded and re-paved.
- (1) ballfield with fenced backstop. Overall in fair condition.
- Asphalt Pavement: Overall in poor condition. All parking lots and drives should be pulverized and re-paved with additional drainage catch basins added.
- Concrete Sidewalks: Overall in fairly good condition with most areas showing some surface spalding. Areas that are broken and uneven need to be replaced. The district may consider reducing the number of walks, especially walks from classroom doors.
- Site Lighting: Two (2) headed poles located on the north edge of southwest parking lot.
- 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.


Building Information / Condition:

- Number of Stories: One with walk able service tunnel.
- Construction Type:
 - Steel frame with masonry (brick and cmu) infill
 - Steel bar joist roof structure with coal tar built-up roofing membrane and a small area of fully adhered EPDM roofing membrane.
 - Concrete slab on grade
 - Windows: Aluminum storefront with single pane glazing, some areas covered with an exterior insulated finish system.
- Fire Suppression: None.
- Exterior Walls: Are in good condition with only some minor brick tuckpointing required. Walls exhibit water staining from overflow from the roofs in many locations. This is consistent with the roofing inspection report that indicated areas of heavy water ponding on the roofs.
- Window Sash: Is original and consists of non-thermally broken aluminum framing with single glass glazing. Some areas of the sash have been covered over with EIFS (exterior insulation finish system). The sash are drafty and allow a great deal of heat gain from the sun. All sash should be replaced with new windows and wall infill.
- Entry Doors: Most entry doors are the original hollow metal door and frames and are in poor to bad condition. Two pair of main entry doors and several single exit doors have been replaced with aluminum door and frames. All remaining hollow metal doors and frames should be replaced.
- Roof Membrane: The majority of the roofs are coal tar built-up membranes with aggregate surfacing over ¾" perlite insulation and 1" rigid insulation on metal deck. Roof membrane is approximately 15 to 20 years old. One small roof area has been roofed over with a fully adhered single ply EPDM membrane.

- Existing R-Value of Roof Insulation – R7.5 Required R-Value - R20
- Interior Walls: Are of masonry construction (brick, painted cmu or glazed structural tile) and have been well maintained. Corridor walls contain a 20” high glass borrowlite between the corridor and classrooms. All borrowlites should be removed and infilled with 1 hour rated stud construction to comply with current building codes.
- Interior Doors: Majority of assemblies are the original solid core wood doors in hollow metal frames.
 - Doors: Condition is fair, with most having some veneer missing and worn finish from years of use. Doors could be re-surfaced with plastic laminate or painted for a fresh appearance.
 - Door and Sidelites: Are glazed with wire and 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 need to have closers installed.
- Terrazzo Floors: Are in very good condition given the age of the floors.
- Ceramic Tile Floors: Are overall in good condition, but show some staining.
- Carpet Flooring: Condition varies with the age of the carpet. Generally the life expectance 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-lamed 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: Is original and is grandfathered for continued use, however it does not comply with current codes and should be replaced with an audible / visual system.
- Plumbing Fixture Count: Based on gang style toilet rooms and current student population. Note: Individual classroom toilet rooms are not included in the following.
 - Staff Toilets:
 - Women – 1 water closet required, 3 currently

- Men – 1 water closet required, 4 currently
- Student Toilets:
 - Girls – 4 water closets required, 7 currently
 - Boys – 4 water closets required, 8 currently
- 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, stairways and corridors. A small hot water air handling unit supplies the cafeteria/gymnasium. Ventilation for the school is via operable windows with no mechanical means of supplying ventilation air to the building. The only air conditioned spaces in the building are the Office area and Computer Lab 120.
- Electrical: Majority of the lighting fixtures were installed during the original construction and have been converted from T12 fluorescent lamps to T8 fluorescent lamps. The lens of the fixtures are showing their age and many are damaged, yellowed or sagging down out of the fixture frames. Lighting controls in the form of occupancy sensors have been added in classrooms and storage rooms, but not in the corridors. Emergency exit lighting is minimal and provides poor coverage for marking the path of egress.




N DIECK ELEMENTARY
 NO SCALE

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.

100 Main Office	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Field Stone	X		
Floor	Carpet		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(4) 2x4 Lay-in / (2) T8 lamps		X	
	Lever door handle			

Vault	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	12x12 Vinyl Tile	X		
Base	Glazed Masonry Tile	X		
Ceiling	Plaster	X		
Lighting	1x4 Surface Mounted / (2) T8 lamps		X	
	Knob door handle			

101 Facility	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	9x9 Vinyl 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	
Exterior Door	Hollow Metal Door and Frame			X
	Knob door handles			

103 PE Office / Gym Storage	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	9x9 Vinyl Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	Plaster	X		
Lighting	(2) 2x4 Recessed / (2) T8 lamps		X	
	Knob door handles			

104 Principal	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(2) 2x4 Lay-in / (2) T8 lamps		X	
	Knob door handles			
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster, requires patching and painting		X	
Lighting	Wall Sconce over Mirror		X	
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

105 Multi-Purpose	Material	Condition		
		Good	Fair	Bad
Walls	Glazed CMU / Painted CMU	X		
Floor	9x9 Vinyl Tile		X	
Base	Glazed CMU	X		
Ceiling	Painted Concrete Structure	X		
Lighting	(16) 2x4 Chain Hung / (4) T5 lamps	X		
Exterior Doors	FRP Doors in Aluminum Frames	X		
	Space is very noisy			

106 Clinic	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	9x9 Vinyl Tile	X		
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(2) 2x4 Lay-in / (2) T8 lamps		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 Wall Mounted over Mirror, (2) T8 Lamps	X		
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with blade handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

107 Kitchen	Material	Condition		
		Good	Fair	Bad
Walls	Glazed CMU	X		
Floor	Terrazzo	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster, requires patching and painting		X	
Lighting	(19) 1x4 Surface Mounted / (2) T8 lamps, one lens missing	X		
Kitchen Equipment	Original Stainless Steel	X		
	Knob door handles			
Adjoining Storage				
Walls	Painted CMU	X		
Floors	9x9 Vinyl Tile	X		
Base	Coved Vinyl			
Ceiling	Plaster	X		

108 Men's Staff Restroom	Material	Condition		
		Good	Fair	Bad
Walls	Glazed CMU	X		
Floor	Terrazzo	X		
Base	Glazed Masonry Tile, Coved – stained		X	
Ceiling	Plaster with skylight, requires new access panel	X		
Lighting	1x4 Surface Mounted / (2) T8 lamps		X	
Stall Partitions	Metal, Floor Mounted		X	

Water Closets	Floor Mounted Flush Valve with sensors		X	
Lavatories	Wall Mounted with handles, no pipe wrap		X	
Urinals	Wall Mounted with sensors	X		
Comments:				
1. Restroom is not ADA Compliant				

112 Women's Staff Restroom	Material	Condition		
		Good	Fair	Bad
Walls	Glazed CMU	X		
Floor	Terrazzo	X		
Base	Glazed Masonry Tile, Coved – stained	X		
Ceiling	Plaster with skylight, requires new access panel		X	
Lighting	1x4 Recessed / (2) T8 lamps		X	
Stall Partitions	Metal, Floor Mounted		X	
Water Closets	Floor Mounted Flush Valve with and without sensors		X	
Lavatories	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

114 Classroom Empty - Not Used	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet	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	
Exterior Door	Hollow Metal Door and Frame Knob door handles			X
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile, patched		X	
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	1x4 Surface Mounted, (2) T8 Lamps		X	
Stall Partitions	Metal, Floor Mounted			X
Water Closets	Floor Mounted Flush Valve, no sensors	X		
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

116 Classroom Kindergarten	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet	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	
Exterior Door	Hollow Metal Door and Frame Knob door handles			X
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile – floor heaved and cracked at drain			X
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster, requires painting		X	
Lighting	1x4 Surface Mounted, (2) T8 Lamps		X	
Stall Partitions	Metal, Floor Mounted			X
Water Closets	Floor Mounted Flush Valve, no sensors	X		
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

118 Facility Lounge	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(3) 2x4 Lay-in / (2) T8 lamps		X	
Casework	Wood / Plastic Laminate		X	
Exterior Door	Aluminum glazed with solid panel		X	

120 Computer Lab	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 Knob door handle		X	
Adjoining Vestibule	With Classroom 122			

Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	Plaster	X		
Lighting	1x4 Surface Mounted / (2) T8 Lamps	X		
Exterior Door	Hollow Metal Door and Frame			X
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	Wall Mounted Sconce, Incandescent			X
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

121 Classroom Early Childhood	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet	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 handles			
Adjoining Vestibule				
Walls	Painted CMU	X		
Floor	Carpet		X	
Base	Glazed Masonry Tile	X		
Ceiling	Plaster	X		
Lighting	1x4 Surface Mounted / (2) T2 Lamps	X		
Exterior Door	Hollow Metal Door and Frame			X
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	Wall Mounted Sconce, Incandescent		X	
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	

Comments:

1. Restroom is not ADA Compliant

122 Classroom 1 st 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 handles			
Adjoining Vestibule	See Classroom 120			
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	Wall Mounted Sconce, Incandescent		X	
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

123 Classroom Special Education	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 handles			
Adjoining Vestibule	See Classroom 121			
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	Wall Mounted Sconce, Incandescent		X	
Water Closet	Floor Mounted Flush Valve, no sensor, needs new handle		X	

Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments: 1. Restroom is not ADA Compliant				

124 Literacy Lab All Grades	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 handles			
Adjoining Vestibule	With Classroom 126			
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	Plaster		X	
Lighting	1x4 Surface Mounted / (2) T8 Lamps	X		
Exterior Door	Hollow Metal Door and Frame			X
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	Wall Mounted Sconce, Incandescent		X	
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments: 1. Restroom is not ADA Compliant				

125 Classroom 5 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 handles			
Adjoining Vestibule	With Classroom 127			

Walls	Painted CMU	X		
Floor	9x9 Vinyl Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	Plaster	X		
Lighting	1x4 Surface Mounted / (2) T8 Lamps	X		
Exterior Door	Hollow Metal Door and Frame			X
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	Wall Mounted Sconce, Incandescent		X	
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

126 Library	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 handles			
Adjoining Vestibule	See Classroom 124			
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile, water closet leaked at one time		X	
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	Wall Mounted Sconce, Incandescent		X	
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

127 Classroom 2 nd 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 handles			
Adjoining Vestibule	See Classroom 125			
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved - stained		X	
Ceiling	Plaster	X		
Lighting	Wall Mounted Sconce, Incandescent			X
Water Closet	Floor Mounted Flush Valve, no sensor, handle broken		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

128 Classroom 5 th Grade	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet	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 handles			
Adjoining Vestibule				
Walls	Painted CMU	X		
Floor	Carpet			X
Base	Glazed Masonry Tile	X		
Ceiling	Plaster	X		
Lighting	1x4 Surface Mounted / (2) T8 Lamps	X		
Exterior Door	Hollow Metal Door and Frame		X	
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		

Lighting	Wall Mounted Sconce, Incandescent			X
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

129 Classroom 1 st 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 handles			
Adjoining Vestibule				
Walls	Painted CMU	X		
Floor	Carpet Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	Plaster	X		
Lighting	1x4 Surface Mounted / (2) T8 Lamps	X		
Exterior Door	Hollow Metal Door and Frame			X
Adjoining Restroom				
Walls	Glazed Masonry Tile	X		
Floor	1x1 Ceramic Tile	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	Wall Mounted Sconce, Incandescent			X
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restroom is not ADA Compliant				

130 Copy Room	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	9x9 Vinyl Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	Plaster, requires patching and paint		X	
Lighting	(2) 2x4 Recessed / (2) T8 lamps		X	
	Knob door handle			

132 Speech	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Brick	X		
Floor	Carpet Tile		X	
Base	Glazed Masonry Tile / Brick	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	(4) 2x4 Lay-in / (2) T8 Lamps		X	
	Knob door handles			
Adjoining Office A				
Walls	Painted CMU	X		
Floors	Carpet		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	(2) 2x4 Lay-in / (2) T8 Lamps		X	
Adjoining Office B				
Walls	Painted CMU / Brick	X		
Floors	Carpet		X	
Base	Glazed Masonry Tile / Brick	X		
Ceiling	(4) 2x4 Suspended Acoustical Tile			X
Lighting	2x4 Lay-in / (2) T8 Lamps		X	

133 Guidance	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU / Brick	X		
Floor	Carpet	X		
Base	Glazed Masonry Tile / Brick	X		
Ceiling	2x4 Suspended Acoustical Tile	X		
Lighting	(4) 2x4 Lay-in / (2) T8 Lamps		X	
	Knob door handle			

135 Boys Restroom	Material	Condition		
		Good	Fair	Bad
Walls	Glazed Masonry Tile - patched		X	
Floor	1x1, 1x2 and 2x2 Ceramic Tile		X	
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster with skylight, requires patching and painting		X	
Lighting	(2) 1x4 Surface Mounted / (2) T8 lamps		X	
Stall Partitions	Plastic Laminate, Floor Mounted	X		
Water Closets	Floor Mounted Flush Valve with sensors		X	
Lavatories	Wall Mounted with push handles, no pipe wrap		X	

Urinals	Floor Mounted with sensors	X		
Comments:				
1. Restroom is partially ADA Compliant				

136 Stem Lab	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet	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 handles			
Adjoining Vestibule				
Walls	Painted CMU	X		
Floor	Terrazzo	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	Plaster	X		
Lighting	1x4 Surface Mounted / (2) T8 Lamps		X	
Exterior Door	FRP Door in Aluminum Frame	X		
Adjoining Restrooms				
	This room is used as a Storage Room			
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	X		
Stall Partitions	Removed			
Water Closet	Floor Mounted Flush Valve, no sensor		X	
Lavatory	Wall Mounted with handles, no pipe wrap		X	
Comments:				
1. Restrooms are not ADA Compliant				

137 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 with skylight, requires patching and painting			X
Lighting	(2) 1x4 Surface Mounted / (2) T8 lamps	X		
Stall Partitions	Plastic Laminate, Floor Mounted	X		
Water Closets	Floor Mounted Flush Valve with and without sensors		X	

Lavatories	Wall Mounted with blade or push handles and pipe wrap		X	
Comments:				
1. Restroom is partially ADA Compliant				

138 Stem Lab	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet	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 handles			
Adjoining Vestibule	See Classroom 137			
Adjoining Restroom	See Classroom 138			

140 Maker Space	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	9x9 Vinyl Tile		X	
Base	Glazed Masonry Tile	X		
Ceiling	2x4 Suspended Acoustical Tile			X
Lighting	(8) 2x4 Lay-in / (2) T-8 Lamps			X
	Knob door handle			

141 Classroom Special Education	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 handles			

142 Music / Special Education	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			

143 Classroom 3 rd 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			

144 Art Room	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			

145 Classroom 4 th Grade	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet	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			

146 Classroom 3 rd 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			

147 Classroom Head Start	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	12x12 Vinyl Tile	X		
Base	Glazed Masonry Tile / 4" Coved Vinyl 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			

148 Classroom 4 th Grade	Material	Condition		
		Good	Fair	Bad
Walls	Painted CMU	X		
Floor	Carpet	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			

Corridors	Material	Condition		
		Good	Fair	Bad
Walls	Brick	X		
Floor	Terrazzo	X		
Base	Glazed Masonry Tile, Coved	X		
Ceiling	2x4 Suspended Acoustical Tile		X	
Lighting	2x4 Lay-in / (2) T8 lamps		X	
Borrowlites	Non-rated glazing			

Swartz Creek Dieck Elementary School

1969 Original Construction

37,564 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, stairways and the corridors. A small hot water air handling unit supplies 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 120. 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 1200 Amp 120/240 volt FPE bolted pressure switch main disconnect and circuit breaker distribution located in the boiler room. 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. *Replace the obsolete electrical distribution.*
2. *Add new emergency power via:*
 - a. *Individual battery units within the fixtures*
3. *Replace branch circuit breaker panel boards with new.*

Lighting

Interior:

A majority of the lighting fixtures are from original construction which have been converted from T12 fluorescent lamps to T8 fluorescent lamps. The Lenses of the fixtures are showing their age and many are damaged, yellowed or sagging down out of the fixture frames. The corridors are in worse shape than the classrooms.

Some exit lights have been replace 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 classrooms and storage rooms etc. but were not seen in the corridors.

Note: Classrooms are equipped with exterior doors which do not have exit signs. An exit sign is required to meet current code.

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 an original National Time and Signal system. The fire alarm system is deficient in most areas and does not meet current Life Safety and building codes. A new fire alarm control panel was installed in 2017 which only supports the renovated kitchen.

Recommendation:

1. *Replace the fire alarm system with new.*

Systems

Public Address system is aged but functional. 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 was a Simplex brand **Master Clock system** and most locations still have functional central system 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.
- Classroom exit doors not ADA compliant. Have 4" to 6" step at sill.
- All main entrances are not ADA compliant.
- Classroom corridor doors lack closers.
- Some classroom corridor doors have knob handles in lieu of levers.
- Corridor borrowlites not glazed with fire rated glazing.
- Corridor walls do not extended to underside of roof deck.
- Classrooms 141 through 148 do not have emergency egress windows.
- Toilet rooms are not ADA compliant.
- Emergency lighting insufficient throughout building.
- Fire alarm is not an audio/visual system.

Suggested Facility Upgrades:

- Physically divide parent student drop-off area from bus drop-off area.
- Provide additional parking – 10 to 15 spaces.
- Provided additional site lighting.
- Repave hard surface playground area.
- Eliminate sidewalks from classroom exits. Appear to be used as drives, not sidewalks.
- Increase building security at main entrance.
- Replace storefront/window units with new windows and wall infill.
- Provide storage space for cafeteria tables.
- Provide new classroom furniture throughout.
- Replace classroom cabinets / countertop with new increasing storage cabinets.
- Provide space for individual student teaching / support. Currently done in corridors.
Possible Media Center / Maker Space / Multi-Use area.
- Add student lockers within main corridors.
- Replace ceilings and lighting.
- Air condition building.
- If needed, replace existing corridor roll down security grilles with cross corridor doors linked to fire alarm system.
- Replace public address system.
- Replace master clock system.
- Upgrade technology.
- Upgrade electrical distribution system.

DIECK ELEMENTARY SCHOOL

Proposed Site Work:	Quantity of Work:	Estimate of Cost:
Concrete Walk Replacement	4000 sq feet	\$ 40,000.00
Reconstruct Classroom Exit Door Stoops for ADA Compliance	10 Exits (650 sq feet)	\$ 40,000.00
Asphalt Pavement Replacement (Between walks and building)	3000 sq feet	\$ 3,000.00
Reconstruct and Expand Parking Lot with new Bus and Parent Drop-off	45,000 sq feet	\$ 328,675.00
New Concrete Walk at New Parent Drop-off	1,600 sq feet	\$ 13,600.00
Install Site Lighting	8 poles / 20 building	\$ 55,000.00
Reconstruct Paved Play Area	19,200 sq feet	\$ 59,000.00
Replace Older Play Structures	Lump Sum	\$ 75,000.00
Add Mulch to Playground	200 cubic yards	\$ 9,000.00
Total Opinion of Probable Cost of Site Work:		\$ 623,275.00

Proposed Code Upgrades:	Quantity of Work:	Estimate of Cost:
Install Closers on Classroom Doors	43 units	\$ 20,000.00
Install Lever Handles on Doors	49 units	\$ 24,500.00
Replace Borrowlites with Rated Wall	575 linear feet	\$ 74,750.00
Install Fire-rated Glazing in Classroom Doors	24 units (32 sq feet each plus 200 sq feet)	\$ 67,760.00
Renovate Student Gang Toilet Rooms	520 sq feet	\$ 52,000.00
Renovate Staff Gang Toilet Rooms	250 sq feet	\$ 25,000.00
Upgrade Emergency/Exit Lighting	Lump Sum	\$ 30,000.00
Replace Fire Alarm System	Lump Sum	\$ 110,000.00
Total Opinion of Probable Cost of Code Deficiencies:		\$ 404,010.00

Proposed Building Renovation Work:	Quantity of Work:	Estimate of Cost:
Replace Storefront Assemblies with Windows and Infill Wall	380 linear feet	\$ 32,300.00
Replace Main Entry Doors	4 double leaf	\$ 18,000.00
Replace Exit Doors	10 single leaf	\$ 30,000.00
Refurbish Interior Doors	40 leaves	\$ 12,000.00
Replace / Install Carpet Flooring	475 yards	\$ 14,250.00
Replace Corridor Ceilings	6900 sq feet	\$ 41,400.00
Replace Corridor Lighting Fixtures		\$ 41,400.00
Replace Classroom Ceilings	19,750 sq feet	\$ 118,500.00
Replace Classroom Lighting Fixtures		\$ 136,500.00
Replace or Add Classroom Cabinetry	22 rooms	\$ 154,000.00
Replace Chalkboards with Whiteboards	11 rooms (24 ft length)	\$ 26,400.00
New Classroom Furniture	All classrooms	\$ 197,000.00
Replace Master Clock System	Lump Sum	\$ 20,000.00
Replace Electrical Distribution System	Lump Sum	\$ 25,000.00
Air Condition Building	Lump Sum	\$ 650,000.00
Reroof Building	37,564 sq feet	\$ 225,400.00
Technology Upgrades		
Replace Public Address System	Lump Sum	\$ 55,000.00
Electronic Door Access System	26 doors	\$ 40,000.00
Security Camera System	15 cameras	\$ 30,000.00
Chrome Books and Carts	196 units / 6 carts	\$ 55,900.00
Smart Boards	8 units	\$ 60,000.00
Total Opinion of Probable Cost of Building Renovation Work:		\$1,983,050.00

Proposed Building Additions:	Quantity of Work:	Estimate of Cost:
Construct New Office	670 sq feet	\$ 147,400.00
Renovate Existing Office Area	300 sq feet	\$ 30,000.00
Construct Gym Storage	300 sq feet	\$ 30,000.00

Construct Media/Maker Center	4200 sq feet	\$ 924,000.00
Renovate Existing Teachers Lounge for Media/Maker Connection	380 sq feet	\$ 38,000.00
Total Opinion of Probable Cost of Building Additions:		\$1,169,400.00



79 PARKING SPACES

S. VAN VLEET RD

PARENT DROP-OFF

BUS DROP-OFF AREA

MULTI-MEDIA CENTER ADDITION

OFFICE ADDITION

ADD MULCH TO PLAY AREAS - TYPICAL

DESIGNATES AREA OF CONCRETE REPLACEMENT

REPLACE ASPHALT PLAY AREA

ADD MATERIAL AND REGRADE INFILL OF BALLFIELD

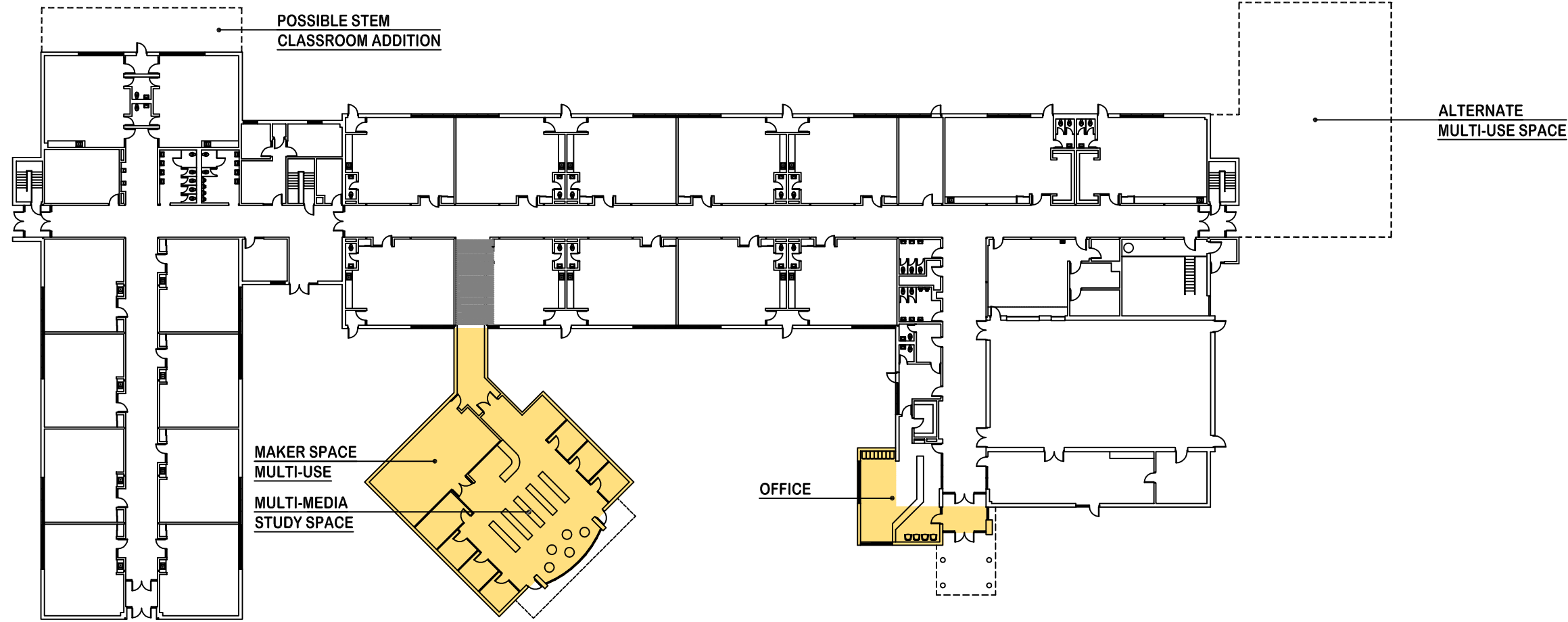
04-22-100-005

PROPOSED SITE PLAN
DIECK ELEMENTARY

NO SCALE

FetchGIS

20m

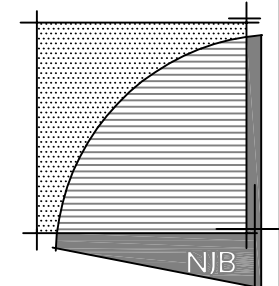


DIECK ELEMENTARY
NO SCALE

ADDITION - 4770 sq feet
 REMODELED - 380 sq feet

REVIEWED BY	LRD	SCALE	DATE
DRAWN BY	TLG	PROJECT NO.	CAD FILE
		170125	x01
			12/14/2017

SWARTZ CREEK COMMUNITY SCHOOLS
FACILITY STUDY
 2239 VAN VLEET ROAD, SWARTZ CREEK
 DIECK ROAD ELEMENTARY

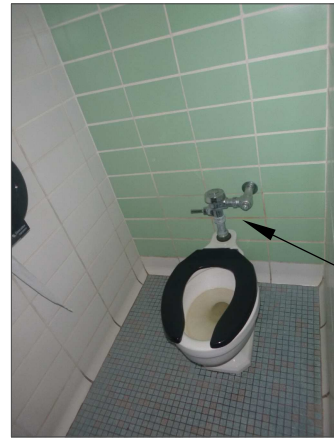


NJB ARCHITECTS INC.

105 + Main Street
 Flushing, Michigan 48433
 810-659-7118 voice
 810-659-7224 fax

www.njb-architects.com

A1



INSTALL AUTOMATIC FLUSH VALVE ON WC

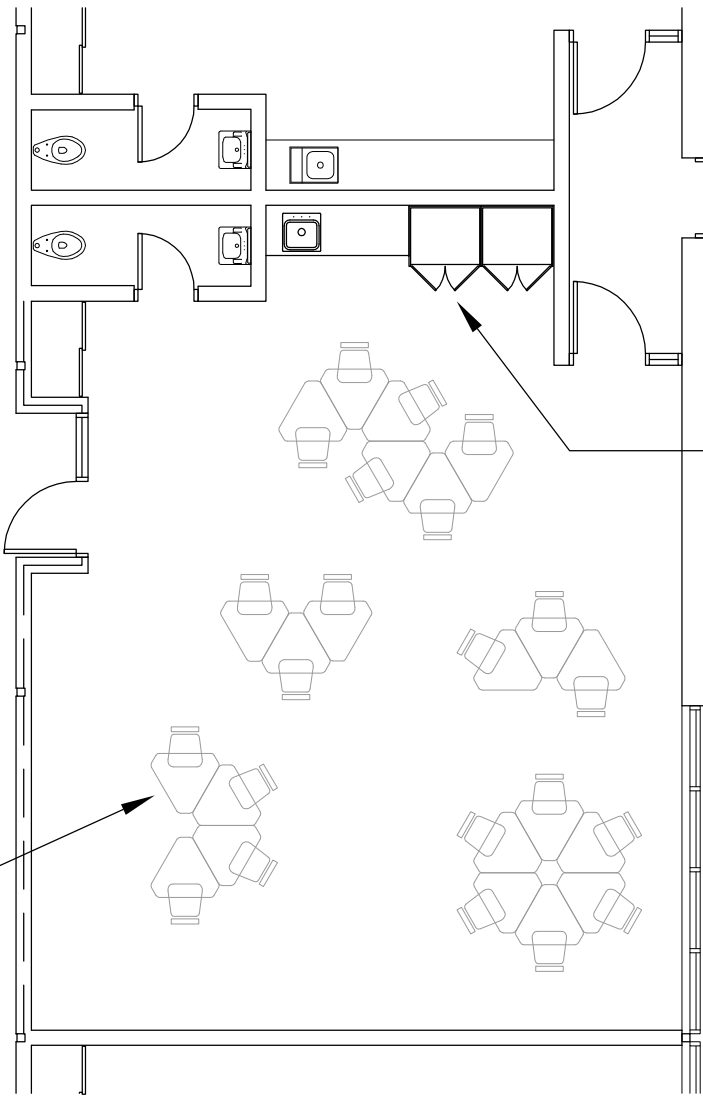


REPLACE BORROWLITE WITH FIRE-RATED STUD ASSEMBLY

REPLACE WIRE GLASS WITH FIRE-RATED GLAZING IN DOORS AND SIDELITES

REPLACE KNOB WITH LEVER HANDLE ON DOOR - ADD CLOSER

NEW CLASSROOM FURNITURE



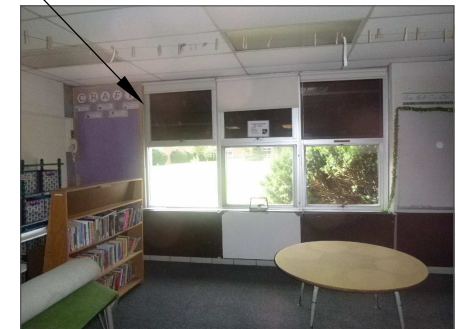
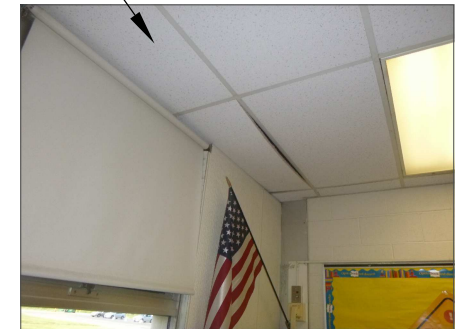
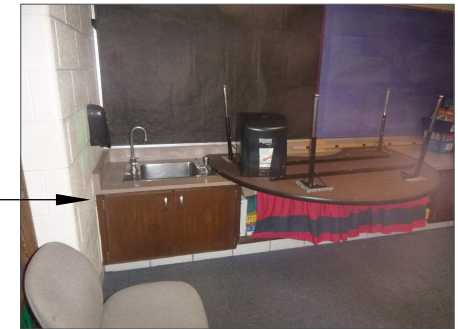
REPLACE EXTERIOR DOOR ASSEMBLY

REPLACE KNOB WITH LEVER HANDLE ON DOORS - TYPICAL

REPLACE CABINETS AND COUNTERTOP WITH NEW STORAGE CABINETS

REPLACE SUSPENDED CEILING SYSTEM

INFILL AND REPLACE WINDOW ASSEMBLIES



PROPOSED WORK TYPICAL
CLASSROOM
1/8" = 1'-0"

Typical window conditions:

Existing



Proposed



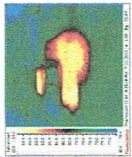
DIECK ELEMENTARY
ROOF CONDITION REPORT

Dieck Elementary

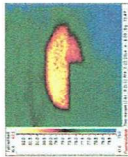
The low slope roofs A, C, D, E & F are all coal tar pitch built-up (multi-ply) roofs with aggregate surfacing over two layers of insulation on a metal deck. They are estimated to be 15 to 20 years old with no active leaks reported. The roof areas are in fair condition and require housekeeping, maintenance and repairs especially at perimeter edges. Two (2) small wet insulation areas totaling 69 square feet (< 1% of the roof area) were identified. Roof C has some heavy ponding in various areas. It may be worth evaluating adding drain(s) to this area to minimize ponding conditions. These roof areas appear to be good candidates for long term repair/restoration procedures based on the diagnostic testing and visual inspection. We recommend tensile strength tests be taken on these areas prior to restoration procedures to ensure membrane strength/condition and to comply with warranty requirements.

The low slope roof area B is covered with a fully adhered single ply EPDM (rubber) membrane. It is estimated to be less than 10 years old and had no reported active leaks. It is in fair condition.

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

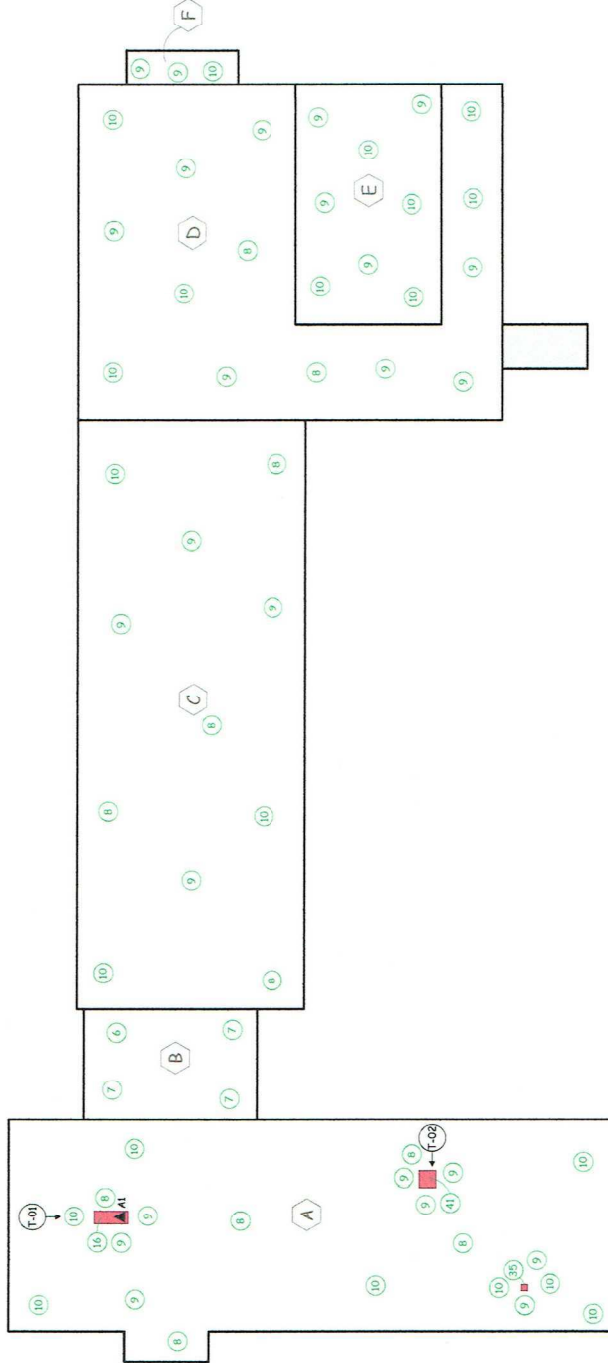


Thermogram T-02



CONSTRUCTION DATA	
ROOF CORE CUT	MOISTURE
AREA NUMBER	READING
A	A1
CONSTRUCTION	
100%	ASPH/FLT SHINGLE
100%	1/2" POLYSTYRENE INSULATION
30%	1" POLYISOCYANURATE INSULATION
NA	METAL DECK

ROOF AREA DATA			
ROOF AREA	SIZE (S.F.)	WET (S.F.)	% WET
A	11,502	69	0.60%
B	1,683	0	0.00%
C	11,792	0	0.00%
D	9,322	0	0.00%
E	3,053	0	0.00%
F	330	0	0.00%
TOTALS	37,682	69	0.18%



ROOF PLAN
SCALE: AS SHOWN

AREA DESIGNATION (A) THERMOGRAM (T-01) TRACE CORE (C-01) PHOTOGRAPH (P-01) WET CUT (W-01) WET INSULATION (W-I) R.I.M. (RANDOM INTERMITTENT MOISTURE) (R-I-M) MOISTURE DENSITY READING (M-D-R) N.I.C. (NON-INTRUSIVE CONCRETE) (N-I-C) MOISTURE DENSITY READING (M-D-R) MOISTURE DENSITY GRID (M-D-G) INTERMITTENT MOISTURE (I-M) MOISTURE DENSITY GRID (M-D-G)

TREMCO
ROOFING & BUILDING MAINTENANCE

wu
A Division of **FDI** Building Solutions

SWARTZ CREEK COMMUNITY SCHOOLS
DIECK ELEMENTARY
SWARTZ CREEK, MI 48473

PROJECT NO. 21-00000
ISSUE NO. 4.0 A.A.
DATE 8/20/2014
SHEET NO. H

© 2014 BY TREMCO INCORPORATED. ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC, MECHANICAL, PHOTOCOPIING, RECORDING OR OTHERWISE WITHOUT THE EXPRESS PRIOR WRITTEN CONSENT OF TREMCO INCORPORATED.