Mills Elementary School Site Summary

Address	6201 Davis Lane Austin, TX 78749
Number of Permanent Campus Facilities	1
Original Year of Construction	1998
Total Campus Building Area (combined)	81,368 SF

Introduction

The Mills Elementary School campus is located at 6201 Davis Lane in Austin, Texas. Mills Elementary School was established in 1998, and consists of the Main School Building (BLDG-181A), which has administrative offices, classrooms, library, cafeteria, and gymnasium.

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
7/18/16	Interview	00	8/26/16	Draft Issue
7/18/16	Assessment	01	1/26/17	Added comments from Architect Julie Vetter as indicated on email dated 10/31/16. See page 12.
9/15/16	Cluster Meeting (Not Attended)			
11/2/16	Follow-Up			

Main School Building – BLDG-181A

Building Purpose	Administrative, Cafeteria, Library, Gymnasium, Classrooms
Building Area	81,368 SF
Inspection Date	July 18, 2016
Inspection Conditions	95°F - Sunny
Facility Condition Index	

System Deficiency Overview

The following table provides a summary of the systems and their respective conditions found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior of the building consists primarily of a concrete masonry unit (CMU) façade with areas of gunite present. The CMU walls had areas with minor water staining caused by leaking gutters and ponding water due to poor site drainage. It was reported that rooms 104 and 106 have had water intrusion through the base of the wall during heavy rain events, likely caused by poor site drainage. A significant amount of vertical and step cracks were observed in the CMU around the exterior of the building. Dents and holes caused by thrown rocks and balls were also observed in the areas of gunite façade. It was reported that the gunite façade acts "sponge like" during rain events and tends to absorb water. Despite having multiple minor wall deficiencies, the overall condition of the exterior walls was average.	Average
	Exterior Windows	The exterior windows consist of single-pane units with metal frames. All of the windows were in average condition, with no reported or visual deficiencies.	Average
	Exterior Doors	The primary doors around the exterior of the facility are storefronts with a metal frame. Other solid metal doors with metal frames were also observed around the facility. It was reported that water leaks through the bottom of	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		the doors on the south end of the C6 corridor and floods the corridor during heavy rain events. This is caused by poor site drainage outside of the doors. The exterior doors were in average condition with typical wear and tear.	
Roofing	The roof material covering the building is asphalt shingle roll roofing. There are covered walkways near the building entryways with metal roofing. The asphalt roof surfaces had cracks and bubbling and appeared aged. It was reported that minor water penetration occurs on the roof, which has required the replacement of ceiling tiles. The asphalt roofing is nearing the end of its service life and was in poor condition.		Poor
Interior Construction	Interior Walls	The interior partitions original to the building are predominantly painted gypsum board construction with painted CMU. The interior partitions appeared to be in good condition as no instances of significant cracking or chipping were observed on any of the wall surfaces.	Good
	Interior Doors	The interior doors are primarily solid core wood in metal frames. Metal doors in metal frames were also observed in areas of the building, including the kitchen. Severe corrosion was observed on the bottom of some of the metal door frames in the kitchen area. Apart from the corrosion visible in the kitchen area, the interior doors and frames were in average condition given the age of the system and typical signs of wear and use.	Average
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	The interior stairs for access to the second floor of the building are constructed of concrete with steel railings. The stairs were in good condition with no visual deficiencies.	Good
Interior Finishes	Interior Wall Finishes	The interior walls are painted gypsum board. It was reported that water staining occurs on the walls in the gymnasium and cafeteria due to the exterior gunite walls soaking up water during rain events but this was not observed during the survey. All of the interior wall finishes appeared in average condition with typical wear and tear.	Average
	Interior Floor Finishes	Vinyl floor tile is found in most areas throughout the building and is original to the facility. Ceramic tile floor is present in the restrooms and the kitchen. The administrative offices and library as well as some	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		classrooms are finished with carpet. It was reported that the carpet in the admin offices and 100-wing classrooms was replaced this past year. Visual observation of these classrooms confirmed that the carpet was in excellent condition. Minor cracking was observed in some of the vinyl floor tiles in the corridors. Apart from this deficiency, interior floors appeared to be in good condition.	
	Interior Ceiling Finishes	The ceilings in the building are predominantly finished with 2x2 and 2x4 suspended lay-in acoustic tiles. It was reported that stained ceiling tiles are visible on occasion because of reported water intrusion from the degraded roof. Stains in the ceiling tiles were located at various locations throughout the school. The ceiling tiles were in average condition, apart from the stained ceiling tiles.	Average
Conveying	The elevator in the facility was reported as having no known deficiencies and was last inspected in October 2015. The elevator was in good condition.		Good
Plumbing	Plumbing Fixtures	The building has public restrooms for men, women, and students, and separate staff restrooms located throughout the facility. These restrooms generally have wall-mounted vitreous china hand sinks with manual faucets, along with vitreous china, floor-mount toilets with manual flushing mechanisms, and vitreous china, wall-hung urinals in the male restrooms with manual flushing mechanisms. There are service sinks found in the janitorial closets, and water coolers located throughout the facility, typically near the public restrooms. Restroom plumbing fixtures were in average condition as the fixtures were typically aged but still operational. The kitchen for the school cafeteria contained multi-basin stainless steel sinks for dishwashing and food preparation. Apart from typical wear and tear, none of these fixtures had any observed deficiencies and were in average condition.	Average
	Domestic Water Distribution	The only plumbing fixtures that are serviced with hot water from gas and electric water heaters are located in the kitchen and in the janitorial closets. The tankless water heater located in the KITMECH room was reported as having a circulating pump that was not operating properly. The multi-basin stainless steel sink in the KITDWRM does not receive adequate	Poor

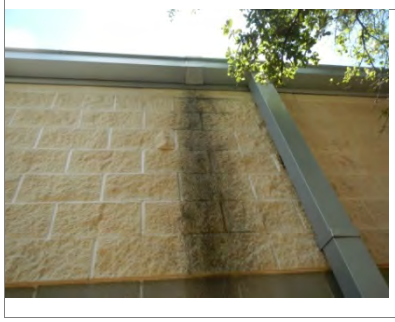
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		hot water pressure to the right-hand fixture of the sink. The plumbing distribution equipment appeared to be in average condition, but with the reported deficiencies the domestic water distribution system, is rated as poor.	
	Other Plumbing	Roof drains are not present at the facility apart from one drain for HVAC (heating, ventilating, and air conditioning) condensation. Gutters and downspouts are present at the facility to drain water from the roof. The condensate roof drain appeared unclogged and in average condition despite the amount of water pooled around the drain caused by improper plumbing of the condensate line. The floor drains in KITDWRM for draining the dishwashing sinks were reported as being undersized. It was reported that it takes nearly 40 minutes for staff to completely drain the sinks, and water will typically pool on the floor around the drain. It was also reported that the floor drain in front of the ovens potentially has a severe clog or blockage that causes poor and slow drainage. The drains throughout the facility were observed to be in average condition, but with the reported issues, the system rating of other plumbing is in poor condition.	Poor
Mechanical/ HVAC	The HVAC system for the building is composed primarily of package rooftop units (RTUs) ranging in size from 10- to 15-TON and split system individual heat pump consoles located in classrooms. It was reported that the console units function properly for their age but are almost at the end of their service life. It was reported that some of the console units in classrooms have had excessive condensation on high humidity days, and the drip pans will overflow and leak onto the classroom floor. It was also reported that the condensate lines drain to the exterior of the classrooms, and the exterior drainage for units located primarily in the 100-wing will clog up. It was reported that variable air volume (VAV) units have tripped in the past during storms, but none of the faculty was certain if the problem had been addressed. The HVAC system for the building was observed as being in average condition with the only major deficiencies being the age of the units and the excessive condensation on some units. These units are all reaching the end of their recommended service life and will need replacement in the next few years.		Average
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as strobes, horn/strobe combination devices, pull stations, and detectors. The fire alarm system was observed and reported to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Fire Protection/ Suppression	The building does not have a fire sprinkler system. The building consists of portable fire extinguishers that are located throughout the building. These extinguishers had up-to-date inspection tags and were observed in good condition. The kitchen vent hoods had a fire suppression system that was reported to be in good working condition.	Good
Electrical	Electrical Distribution	All of the distribution equipment was reported as being adequately sized with no deficiencies. Some of the ground fault circuit interrupter (GFCI) receptacles on the exterior of the building had missing or broken covers. The electrical distribution equipment was reported to be in good working order.	Good
	Lighting	Interior lighting consisted primarily of 2x4, two-lamp fluorescent troffer-type fixtures. It was reported that all of the interior fixtures are in average operating condition for their age with no known issues. It was reported that the exterior lighting is inadequate, and there is a need for additional lighting to be installed. Some of the exterior light fixtures were damaged. These fixtures were reported as being aged and out of date and were recommended to be replaced with new light emitting diode (LED) fixtures. The lighting system is rated in average condition with minor deficiencies because of the aged fixtures.	Average
	Communications & Security	It was reported that the building has surveillance camera system on the interior and exterior that functions but has poor resolution and needs to be upgraded. There is a public address system in the building, reported to be in good condition with no deficiencies. The card readers for the facility were reported as being in average working condition apart from the card reader outside of the 200-wing that was reported as not working. It was reported that the facility has fences, but vandals are still able to access the campus grounds outside of school hours. It was reported that Wi-Fi connection issues occur near the library. The communications and security system is rated in average condition with only minor issues observed and reported.	Average

Exterior System Deficiency Examples

Exterior Walls



Roofing Deficiency Examples


Interior Construction Deficiency Examples

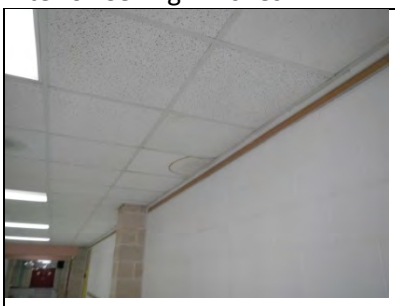
Interior Doors

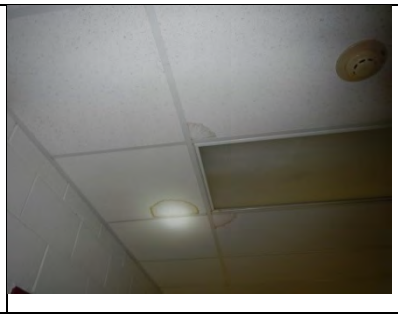
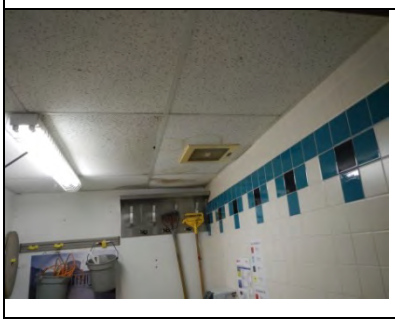

Interior Finish Deficiency Examples

Interior Floor Finishes



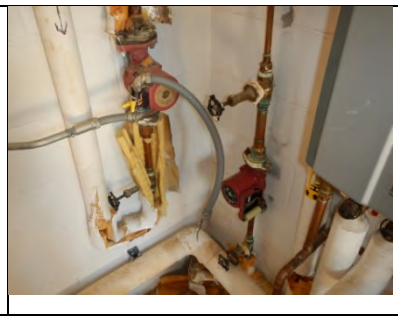
Interior Ceiling Finishes



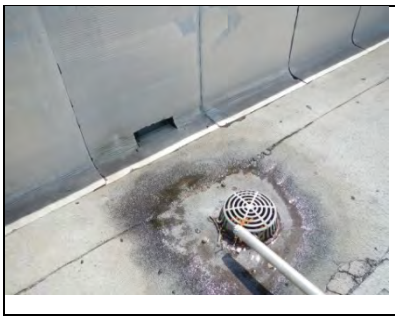



Plumbing System Deficiency Examples

Domestic Water Distribution

Other Plumbing



Mechanical/HVAC System Deficiency Examples



Electrical System Deficiency Examples

Lighting


Mills Elementary School Campus Summary of Recommendations

This document is based on conditions observed during fieldwork and provides recommendations for corrective actions by each discipline. The following recommendations provide a summary of the findings.

Campus Recommendations

Exterior Walls

1. Investigate site drainage issues that are causing leakage through exterior walls and doors and take corrective action
2. Investigate a solution to control all of the cracking in CMU walls and take corrective action.

Roofing

1. Consider repairing or replacing the existing roof as it was in poor condition and is near the end of its service life.
2. Investigate the roof for leaks that are causing staining on the interior ceiling tiles and take corrective action.

Interior Doors

1. Repair damaged metal door frames in kitchen area.

Interior Ceiling Finishes

1. Replace water-stained acoustical ceiling tiles (ACT) and investigate the cause of staining.

Domestic Water Distribution

1. Repair the non-operational water heater circulating pump.
2. Investigate repair options for the inadequate water pressure in the dishwashing sink.

Plumbing

1. Continue preventive maintenance on aged plumbing fixtures and plan for replacement in the future as fixtures continue to age at all associated campus facilities
2. Consider upsizing existing floor sink drains in the dishwashing room to better handle the amount of water drainage flowing into it.
3. Repair or unclog the floor drain located in front of the oven that has slow drainage.

Mechanical/HVAC

1. Consider replacement of all HVAC units that are original to the facility as they are nearing the end of their recommended service life.
2. Improve the exterior drainage for classroom heat pump console condensate lines to prevent water leakage onto classroom floors.
3. Repair the condensate drain lines for the RTUs to reduce the amount of ponding water on the roof.

Fire Protection

1. Continue annual inspections of the portable fire extinguishers.

Electrical

1. Provide covers for all exposed exterior GFCI outlets.
2. Replace all outdated luminaires with LED luminaires and consider the installation of additional exterior lighting.
3. Replace outdated security systems and add more cameras where required for all buildings, particularly at all building entry access points.

Security

1. Repair the damaged card reader outside of the 200-wing.
2. Investigate the issues with Wi-Fi connection around the library and consider installing signal boosters or upsizing.

Mills Elementary School Planned Future Improvements

The following are any known planned and funded improvements scheduled to take place at this campus in the future. Their scope and schedule are subject to change.

Planned Improvements from Architect Julie Vetter on 10/31/16.

- 170009 - Summer 2018.
  - Replace HVAC (work room)
  - Install louvers (hail guards) to RTUs.
  - Provide ADA restrooms in portable.
  - Add two multipurpose classrooms.