Widen Elementary School Site Summary

Address	5605 Nuckols Crossing Austin, TX 78744
Number of Permanent Campus Facilities	2
Original Year of Construction	1986
Total Campus Building Area (combined)	74,523 SF

Introduction

The Widen Elementary School campus is located at 5605 Nuckols Crossing in Austin, Texas. Widen Elementary School was established in 1986, and consists of two main buildings. The permanent campus buildings are the Main School Building (BLDG-175A), which includes the administration offices, classrooms, library, cafeteria, and gymnasium, and the Stand-Alone Classroom Building (BLDG-175B). The two buildings are connected by an exterior covered walkway.

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
7/19/16	Interview	00	8/26/16	Draft Issue
7/12/16 - 7/13/16	Assessment	01	1/24/17	Added comments from Architect Julie Vetter as indicated on email dated 10/31/16. See pages 2 and 28.
9/19/16	Cluster Meeting (Attended)			
10/20/16	Follow-Up			

Main School Building – BLDG-175A

Building Purpose	Administration, Classrooms, Gymnasium, Cafeteria, and Library
Building Area	63,666 SF
Inspection Date	July 12-13, 2016
Inspection Conditions	July 12 - 99°F and sunny July 13 - 100°F and 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 walls are brick facade on CMU (concrete masonry unit) backing. There is pre-finished metal panel above eight feet to cover the attic space up to the sloped roofline. The building's brick and metal panels appeared to be in good condition. There was an area near the loading dock where the foundation was cracking. The sidewalks on the east and southeast end of the building have shifted and cracked due to soil erosion and settlement. There were multiple trip hazards. Pest control at windows and eaves was an issue in all areas around the school. Facility staff reported pests outside and inside the building.	Good
	Exterior Windows	The exterior windows are anodized aluminum frames with single-pane glazing in the classrooms. The exterior windows that occur in corridors are painted metal frames with single pane glazing. The exterior windows appeared to be in good condition.	Good
	Exterior Doors	The exterior doors are painted metal with painted metal frames. The doors have half glass lites and panic bar hardware. There are vestibule doors at the main two front entry doors. There is a call box and card reader on the west front entry doors. The exterior doors appeared to be in average condition, as there were no weather seals present. Light from outside and unconditioned air could be felt at the frame.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		Facility staff reported the doors were not hung correctly and did not have bottom sweeps.	
Roofing	The roofing material is modified bitumen over the administration area that holds three large HVAC (heating, ventilating, and air conditioning) units. It is also modified bitumen over a portion of the kitchen where numerous EFs (exhaust fans) are located. There is a roof hatch accessed internally from the book room and the cafeteria. The majority of the roof is sloped pre-finished standing seam metal. There are flat portions of metal standing seam roofing on the covered walkways. The roof appeared to be in good condition with a few areas on the flat roof with minor issues. There was evidence of previous standing water on the northwest corner of the flat roof over the admin area, and the seams have been patched west of the mechanical units and on the east portion of the modified bituminous roof covering. The southwest corner of the flat roof over the kitchen also appeared to have had standing water previously. Facility staff reported possible roof leaks occurring in the kitchen, and in and around the library. The covered walkways appeared to have had standing water at one time as well. Facility staff reported leaks on both the front and west walkway covers. The roof downspouts and underground storm sewer drains on the east side of the school appeared to be contributing to the soil erosion and settlement issues at the sidewalks. There were additional downspouts that were not draining to the storm drain system properly.		Good
Interior Construction	Interior Walls	The majority of the interior walls are gypsum board on studs. The cafeteria and gymnasium are CMU with a manual movable partition separating the two spaces. The interior walls appeared to be in good condition. Facility staff reported the movable partition between the café and gymnasium is not functional.	Good
	Interior Doors	The interior doors are wood veneer with wire glass vision lites and painted metal frames. The interior doors appeared to be in good condition with issues on the frames and hardware. The painted doors and frames in the A-wing rooms have peeling paint. The doors stops and hold-open hardware at the bottom of the doors appeared to be in poor condition throughout the school. They function appropriately, but were loosely attached to the doors.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	There are exterior stairs for access to the loading dock at the kitchen. There is a painted metal railing. The exterior concrete stairs appeared to be in average condition. There are cracks and wear due to high use, but they were still fully functional.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Stairs	Stairs to the stage are fully carpeted on the cafeteria side. The stairs on either side from the back of the stage are wood. There are painted metal railings. The stairs appeared to be in good condition. The metal railings had peeling paint.	Good
Interior Finishes	Interior Wall Finishes	The interior wall finishes are paint throughout the classrooms with areas of acoustic panels attached to the walls. The corridors have wood veneer paneling up to seven feet and paint above. The walls in the A-wing classrooms had peeling paint and cracked gypsum board, specifically at the outside corners inside the classrooms. Clear plastic corner guards were installed, but the walls need repair. There were areas of peeling paint on the outside walls. The rubber cove base was missing in some of the A-wing classrooms.	Average
	Interior Floor Finishes	The interior floor finishes include VCT (vinyl composition tile) in the classrooms, corridors, cafeteria, and gymnasium. The restrooms and kitchen have ceramic tile. A portion of the freezer tile was being replaced during the assessment. The stage has hardwood and carpeting on the steps into the cafeteria. The gymnasium has a vinyl sheet flooring with a wood appearance and solid color at the perimeter. The library has carpet throughout with VCT at the main entrance and the library workroom. The VCT has been well maintained with various areas that have been replaced with mismatched tiles. The carpeting in the library was worn and damaged.	Average
	Interior Ceiling Finishes	The majority of the ceiling finish is ACT (acoustic ceiling tile) and grid. The restrooms have painted gypsum board. The gymnasium has a high ACT and grid system. The interior ceiling finishes appeared to be in good condition. The tile was discolored around the air supply vents in the gymnasium.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building contains predominantly single-use restrooms throughout the facility, with multi-use restrooms found outside of the gymnasium. Typical restrooms have floor-mounted vitreous china water closets with manual flush valves. Additionally, wall-hung vitreous china urinals with manual flush valves are	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		located in the dedicated male restrooms. Typical classrooms contain a single-basin stainless steel sink with a drinking fountain attached. Stainless steel drinking fountains and a water bottle fill-up station can be found in the corridors of the building. A commercial kitchen is located in the school's cafeteria. The kitchen contains stainless steel kitchen equipment, including a single-basin prep sink and a three-basin prep sink. It also has various wall-mounted vitreous china sinks for personal use. A triple-faucet stainless steel handwashing sink is located outside the cafeteria. The building also has service sinks located in various janitorial closets. Room D5 is an art room that contains one vitreous wash sink and three stainless steel basin sinks, one as a drinking fountain combo. The majority of the plumbing fixtures appeared to be in average working condition, but are aged and show minor signs of deterioration. The restrooms in the corridor between the A- and B-wings (MFHRR and WFHRR) and the lounge restroom (LOUWFRR) had cracked sinks. The cafeteria hand-washing sink had no hot water to the hot water knob. All three faucets to the hand-washing sinks leaked. It was reported in the facility interview that the water temperature in the hand-washing sink is too hot. One of the personal sinks in the kitchen was leaking from the faucet. The female restroom in the lounge had no hot water to the hot water knob. Room D5 had no hot water to the vitreous china sink. The hot water knob on the sink in room D4 was difficult to turn. The sink in room D2 had a note underneath it to clean out behind the wall; the visual assessment did not show any deficiencies. The shower in the gymnasium office had no hot water. The drinking fountains in rooms A4 and B8 would stick in the on position. The water closet in room A5 had a musty smell and evidence of a leak. The water closet in room B6 did not fully flush. The janitorial mops' sinks were in average to poor condition, some showing signs of leaks and corrosion around the base.	
	Domestic Water Distribution	Domestic hot water to the kitchen is provided by a 99-gallon, 0.399 MBH GWH (gas water heater) stored in the mechanical room (MAINMECH) located off the kitchen and cafeteria. Various smaller electric hot water heaters are located throughout the building to provide heated domestic water to specific locations in the school	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		(i.e., nurse's office and administration area). Domestic hot water is not supplied to the classroom plumbing fixtures. The GWH feeding the cafeteria was aged and out of date. It also had corrosion and rust and was in poor condition. The smaller units installed for specific hot water use were in good to average condition. Some were showing signs of age deterioration and rust. The plumbing distribution equipment was in average condition with damaged insulation and corrosion and rust piping throughout the building. Several sinks had corrosion and rust in the piping connecting to the sink.	
	Other Plumbing	Associated other plumbing was in average condition. The kitchen drain pipes had corrosion and rust. A floor drain in the kitchen was emitting a rotten smell. Leakage was seen in the MAINMECH room; floor drains had corrosion and rust on them. There was a pipe in the kitchen that was leaking. The restrooms in rooms A4, K2, and K4 were emitting a foul odor. It was reported by a maintenance worker that the building is known to have plumbing issues underneath the floor.	Average
Mechanical/ HVAC	The building's HVAC system is primarily composed of roof top AHUs (air handling units), heat pump systems, package units, and a cooling tower and boiler system. The MAINMECH room stored the boilers, chilled water pumps, and hot water pump. The heat pump systems are primarily stored inside of the ceiling and were not able to be assessed. Additionally there were mechanical closets that housed heat pump systems for the cafeteria and gymnasium. A single packaged AC condenser unit was found outside in the courtyard by room C8. Various sized exhaust fans fed the building. Roof top AHUs were in average condition, showing signs of corrosion and rust. AHU MUA-2 was making an excessively noisy whirring sound. This sound could be heard inside the classrooms below it. The cooling tower had no visible nameplate, but appeared to be aged. The unit has signs of corrosion and rust and evidence of leaks. One of the two boilers (B-2) was aged and had the back vent cover removed. The floor surrounding this unit had water puddled on it, indicating possible leakage from the unit. The other boiler (B-1) was newer and in good condition. Of the two chilled water pumps, CWP-1 was newer and in good condition, CWP-2 was aged and had signs of corrosion or rust. Additionally, there was evidence of leakage underneath the pump. The hot water pump (HWP-1) was aged and showed signs of corrosion and rust. The heat pump outside the cafeteria and gymnasium area, HP-46 was making a grinding and bubbling noise when operating. One of the in-ceiling heat pump systems was visible in room A8. The ceiling tiles were removed, and a piece of the connecting duct was on the ground inside the classroom. The heat pump in room		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	D5 did not appear to be working properly. The thermostat was set to 74°F but read 84°F. It was very warm. A similar observation was made for the gymnasium office. The thermostat read 78°F but was set at 60°F. The associated units were in the ceiling and not visible. The condenser AC unit outside of room C8 is newer, but a condensation drip was observed off the back. The item is not documented on the floorplan. Multiple HVAC units were using R-22 refrigerant, which is an outdated refrigerant that is being phased out of use.		
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns/ annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is controlled by the Silent Knight control panel. The fire alarm system was in average condition due to the fire alarm end devices being aged or worn from outdoor exposure. Some end devices have been replaced, but the majority of the devices appeared to be near their end of life.	Average
	Fire Protection/ Suppression	A fire suppression system is present for the range hood in the kitchen with a tank mounted to the wall at the ceiling. The remaining fire suppression method consists of fire extinguishers throughout the building. Visual inspection showed these appeared to be in average condition. The majority of the extinguishers were up-to-date with their inspections. The extinguisher in the A-wing atrium was out of date with its inspection.	Average
Electrical	Electrical Distribution	The electrical service enters the building at the 277/480-volt 1600-amp main switchboard located in the main electrical room on the west side of the building near the kitchen area. The service feeds transformers and high-voltage panelboards, which are located in various electrical rooms throughout the building. There are ten distribution transformers rated at 480-volt primary that step-down to 120/208-volt secondary, which feeds power to 120/208-volt panelboards. The building does not have a lightning protection system. The electrical distribution equipment was in average condition. The majority of the assets are original to the building construction. One panel had screws missing from the housing enclosure that should be replaced. Three panelboards were missing breaker covers, and the bussing was exposed behind the breaker board. This condition could be considered a life safety hazard, and breaker covers should be installed immediately.	Average

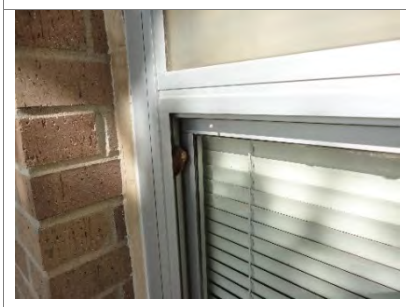
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		One roof top panel was found to have a damaged seal, which could allow for water infiltration. There are several storage rooms where items are blocking proper access to the panels and should be moved due to safety concerns. There are also several storage rooms where items are being stored on top of transformers, which could create a fire. Items should never be stored on top of or against any transformers. There are several safety switches for HVAC equipment on the roof that are heavily corroded or have holes that will allow for water infiltration into electrical conduit. The facility staff reported that there are not enough circuits throughout the cafeteria and kitchen area. Faculty has also reported that several facility circuits trip due to corroded conduit within the foundation.	
	Lighting	The building's exterior lighting consists of metal-halide and LED (light-emitting diode) luminaires that are located near parking lots, playground, covered/non-covered walkways, and building egresses. The interior lighting primarily consists of T8 fluorescent luminaires. The lighting for the building was in average condition. Many interior and exterior luminaires appeared to be aged past their design life. Observed deficiencies included broken lenses, inconsistent color temperatures, and non-functional fixtures. There are exit signs and emergency lighting present in the building that appeared to be in good working order. There are two original emergency lighting luminaires that are original to the building in the cafeteria and the gymnasium. There were several issues in the branch wiring, including damaged or loose conduit and missing junction box covers. Several exterior receptacles were found with broken covers. Some classroom light switches were beginning to arc. Faculty has requested additional lighting at building exits and around the exterior, along with additional emergency lighting luminaires for the corridors. Faculty also reported that water infiltrates the kitchen lights during rain.	Average
	Communications & Security	The building is equipped with telecommunications/cable systems, with the main backbone equipment located in MDF-A and IDF-B. Networking Wi-Fi access points are installed throughout the building. VOIP (voice over internet protocol) telephones are used for voice	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		communications. Remnants of 1980s Token Ring LAN networking are still present in some of the classrooms. The building security is made up of surveillance cameras, motion detectors, and a proximity card access system. According to facility staff, the security system needs frequent maintenance. During the assessment, the system displayed several zone faults for the building. Faculty staff have also requested security system improvements, such as a forced-entry alarm code, new alarm codes, and the old alarm codes removed. Faculty report that the timekeeping and intercom systems work well.	

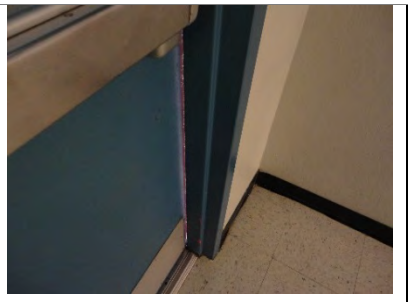
Exterior System Deficiency Examples

Exterior Walls




Exterior Doors

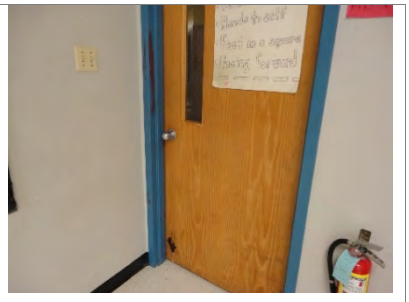
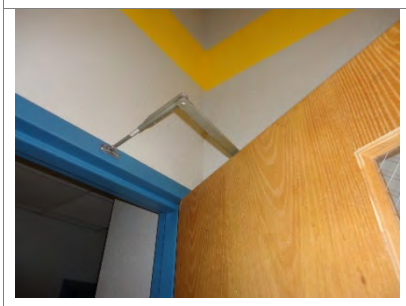
Roofing Deficiency Examples




Interior Construction Deficiency Examples

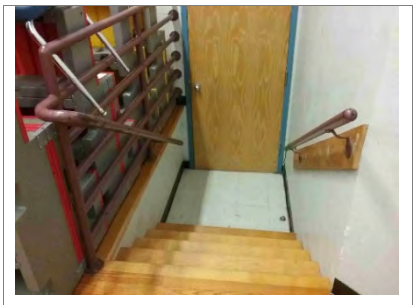
Interior Doors



Stairs Deficiency Examples

Interior Stairs

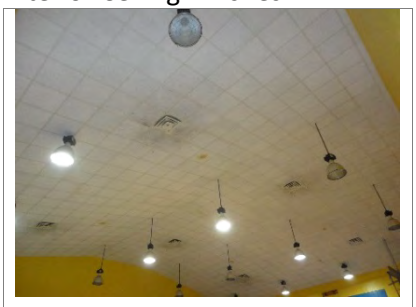


Interior Finishes Deficiency Examples

Interior Wall Finishes


Interior Floor Finishes

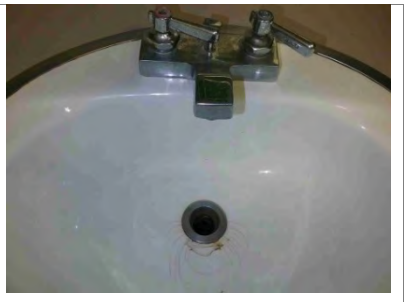
Interior Ceiling Finishes



Plumbing System Deficiency Examples

Plumbing Fixtures










Domestic Water Distribution



Other Plumbing




Mechanical/HVAC System Deficiency Examples









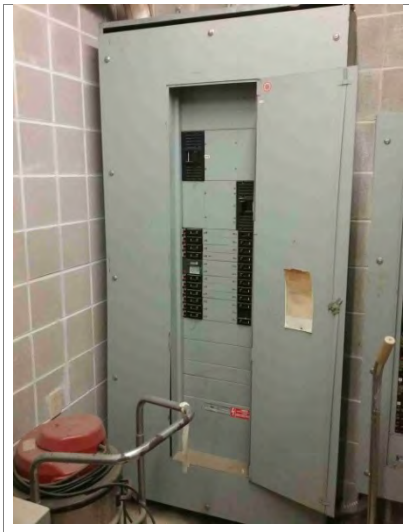

Fire Protection System Deficiency Examples

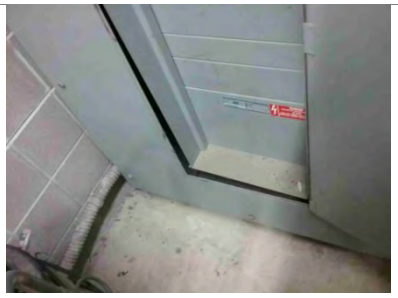
Fire Alarm

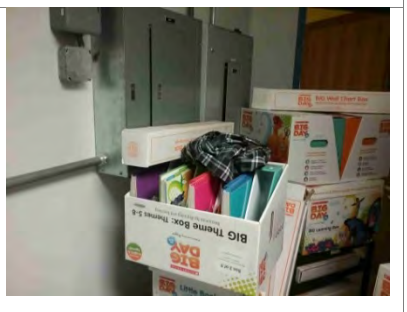

Fire Protection/Suppression

Electrical System Deficiency Examples

Electrical Distribution



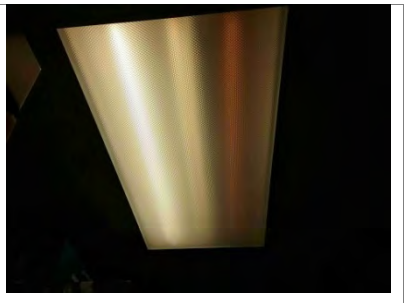


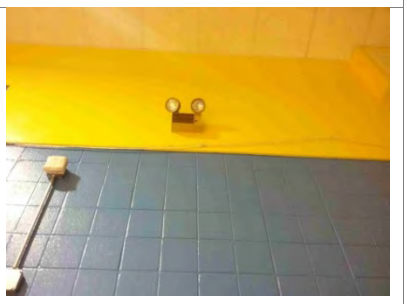





Lighting










Communications & Security

Stand-Alone Classroom Building – BLDG-175B

Building Purpose	Stand-Alone Classroom Building
Building Area	10,857 SF
Inspection Date	July 12, 2016
Inspection Conditions	99°F - Sunny
Facility Condition Index	

System Deficiency Overview

The following table provides a summary of the conditions and deficiencies found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior walls are brick on CMU. There is also metal panel above eight feet to the roof line and on the soffit of overhangs and entrances. The brick and metal panel appeared to be in good condition.	Good
	Exterior Windows	The exterior windows are anodized aluminum frames and single-pane glazing. The exterior windows appeared to be in good condition.	Good
	Exterior Doors	The exterior doors are painted metal doors and painted metal frames with half lites. The mechanical and electrical room doors are painted metal. The exterior doors appeared to be in average condition, There were no weather seals provided. Facility staff reported the doors were not hung correctly and do not have bottom sweeps.	Average
Roofing	The roof is sloped pre-finished standing seam metal roofing. There are flat portions of metal standing seam roofing on the covered walkways. The roof appeared to be in good condition. Facility staff reported leaks on the walkway cover.		Good
Interior Construction	Interior Walls	The interior walls are gypsum board on studs throughout with single-pane wire glass windows in painted metal frames. The interior walls appeared to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Doors	The interior doors are wood veneer doors with wire glass lites and painted metal frames. The interior doors appeared to be in good condition.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior wall finish is paint with some acoustical wall panels in the classrooms and corridors. The interior wall finishes appeared to be in good condition.	Good
	Interior Floor Finishes	The interior floor finish is vinyl composition tile throughout and ceramic tile in the restrooms. The interior floor finishes appeared to be in good condition.	Good
	Interior Ceiling Finishes	The interior ceiling finishes include ACT (acoustical ceiling tile) in the classrooms and main corridor space and painted gypsum board at the classroom entrances and exterior doors. The interior ceiling finishes appeared to be in good condition.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	Typical classrooms contain a single-basin stainless steel sink with a drinking fountain attached. Each pair of classrooms has two single-use restrooms containing floor-mounted vitreous china water closets in the connection between the two classrooms. The restrooms associated with rooms E5 and E6 are dedicated ADA accessible restrooms and may be accessed from the corridor. These restrooms (E5HRR and E6HRR) have a vitreous china sink. A single stainless steel drinking fountain is located in the corridor. A janitorial mop drain was located in ESTO. The majority of the plumbing fixtures appeared to be in good working condition. Poor flow was observed for the drinking fountain in room E5. The mop drain in ESTO was in average working condition with signs of deterioration. An odor was observed coming from the restroom in room E6 (E6HRR).	Average
	Domestic Water Distribution	A small electric water heater was found underneath the sink in room E1. The unit is newer and in good condition. The plumbing distribution equipment was in average	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		condition with minor corrosion and rust on piping connecting to some of the sinks throughout the building. The domestic water system was in average condition with typical wear and tear associated with the system's age and general daily use.	
	Other Plumbing	System not present.	N/A
Mechanical/ HVAC	The HVAC system is composed of geothermal heat pump systems, a make-up air unit, and air conditioning condensing units. The heat pump systems and AHU are listed on the floorplan in classrooms and in the E central corridor (COR E). These units are suspected to be stored in the ceiling and not accessible. It was reported in the facility interview that the geothermal units require excessive maintenance and that units in rooms E6 and E7 have functionality issues. The HVAC system was in average condition. Some units showed signs of degradation, rust, and corrosion. Multiple HVAC units were using R-22 refrigerant, which is an outdated refrigerant that is being phased out of use.		Average
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns/ annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is controlled by the Silent Knight control panel. The fire alarm system was in good condition, but the majority of the end devices are near or past their design life.	Good
	Fire Protection/ Suppression	The building does not contain a fire suppression system. There is a fire extinguisher present. Visual assessment of the fire extinguisher determined it was in good condition and the annual inspection was observed to be up-to-date.	NA
Electrical	Electrical Distribution	Distribution for the building is located in rooms EELEC and MAHU5. Four panels and two transformers provide distribution for the building. The electrical distribution equipment was in good condition. No major deficiencies were found during the assessment.	Good

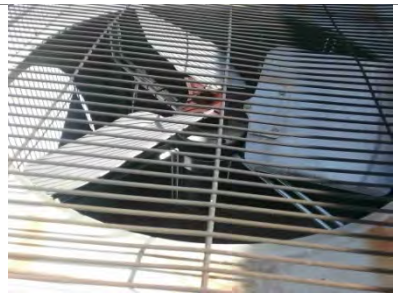
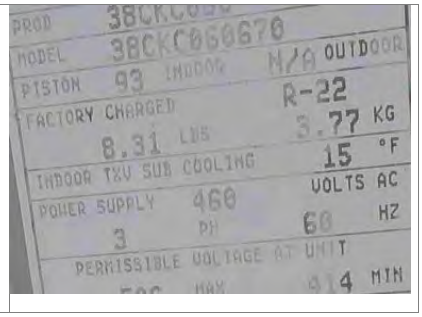
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Lighting	The building's exterior lighting consists of metal-halide luminaires at the main entrance, the rear egress, and the exterior HVAC equipment on the southwest side of the building. The interior lighting primarily consists of T8 fluorescent luminaires. The lighting for the building was in good condition. Observed minor deficiencies included missing bulbs in storage areas and an exterior metal-halide bulb past its typical design service life. One exterior outlet was found to have a melted and damaged cover. An uncovered junction box was found in the main electrical room. Exit signs were found to be in good condition.	Good
	Communications & Security	The building is equipped with telecommunications systems with the main equipment found in EELEC and CUSTOFC. Networking Wi-Fi access points are installed throughout the building. VOIP telephones are used for voice communications. The building security is made up of surveillance cameras, motion detectors, and a proximity card access system. There is a single exterior surveillance camera overlooking the campus playground. The playground camera was found to have an open junction box for the device wiring.	Good

Plumbing System Deficiency Examples

Plumbing Fixtures


Domestic Water Distribution


Mechanical/HVAC System Deficiency Examples

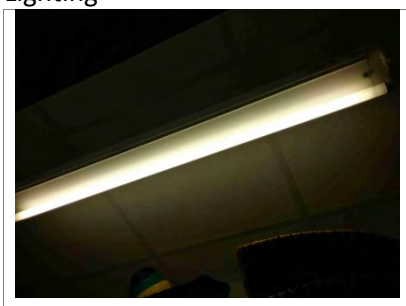




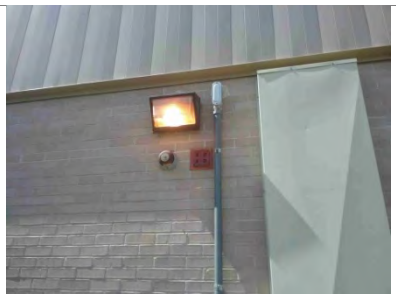
Fire Protection

Fire Alarm

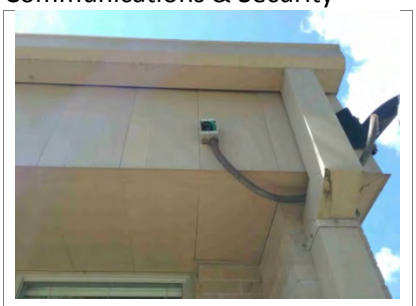
Electrical System Deficiency Examples

Lighting





Communications & Security



Widen Elementary School Campus Summary of Recommendations

This document is based on current 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

1. Provide regularly scheduled pest control and management around the property.
2. Provide security fencing to prevent access to the roof.
3. Provide weather stripping and door sweeps at all exterior doors.

Plumbing

1. Replace aged plumbing fixtures to maintain a functioning system.
2. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing to prevent further deterioration.
3. Inspect, clean and repair plumbing in multiple restrooms that are emitting an unpleasant odor.

Mechanical/HVAC

1. Assess the condition of in-ceiling heat pump units. Repair or replace as necessary.
2. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing to prevent further deterioration.
3. Replace HVAC units that use R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. These systems may need to be replaced before they meet their design life due to refrigeration restrictions.

Fire Protection

1. Replace worn or dated fire alarm end devices.

Electrical

1. Replace bulbs in luminaires throughout campus that have burned out.
2. Replace all outdated or damaged luminaires with LED luminaires with dimming capabilities.
3. Replace exterior electrical receptacle covers that are damaged.
4. Install junction box covers for any conduit throughout the campus.
5. Install additional exterior luminaires on both buildings to provide adequate lighting.

Main School Building Recommendations

Exterior

1. Further investigate for settlement and drainage issues at sidewalks on the east side.
2. Further investigate for foundation cracks near the kitchen loading dock stair.

Roofing

1. Further investigate to identify possible leaks in the standing seam roofing over the library and modified bitumen roofing over the kitchen.
2. Further investigate downspouts and connections to the storm drain system.
3. Repair or patch covered walkway metal roofing.

Interior Construction

1. Repaint interior doors (if existing is painted) and repaint frames in the A-wing.

Interior Finishes

1. Repaint stair railings at stage stairs.
2. Patch and paint wall damage throughout the A-wing.
3. Replace rubber cover base where missing in A-wing.
4. Replace carpeting in the library.
5. Replace ceiling tiles in the gymnasium surrounding supply air vents. Provide regular filter replacement to HVAC units.

Plumbing

1. Replace sinks that were observed to be cracked.
2. Investigate the sink in room D2 that had a note to clean out behind it, and repair as necessary.
3. Repair water closets that were observed to not be functioning properly.
4. Repair faucets that were observed to be leaking on the cafeteria hand washing sink.
5. Replace water heaters that are showing signs of deterioration and are beyond their expected design life before failure occurs.
6. Repair faucets on sinks that are not functioning properly.
7. Repair or replace any damaged or missing piping insulation as needed.
8. Repair piping in the kitchen that is leaking onto the floor.
9. Clean and flush out all floor drains to ensure adequate drainage; it was reported these are not draining properly.

Mechanical/HVAC

1. Replace HVAC equipment that is beyond its expected design life before failure occurs.
2. Assess condition of in-ceiling heat pump units. Repair or replace as necessary.
3. Repair heat pump units that feed room D5 and the gymnasium office that were not working properly.
4. Repair boiler (B-2) that was observed to have back vent cover removed.
5. Repair any equipment that was noted with excessive noise/vibration.
6. Repair HVAC equipment noted to have evidence of leaks.
7. Repair the in-ceiling heat pump unit and surrounding ductwork in room A8 that was observed to have pieces on the floor and be exposed through the ceiling.
8. Replace HVAC units that use R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. These systems may need to be replaced before they meet their design life due to refrigeration restrictions.
9. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing to prevent further deterioration.
10. Provide regular filter replacement to HVAC units to reduce staining on the ceiling tile.

Fire Protection

1. Inspect fire extinguishers that are out of date on annual inspections; replace if necessary.

Electrical

1. Immediately provide missing breaker cover plates for all panels with open slots, as these instances should be considered life safety hazards.
2. Install fasteners in the large GE panelboard located in MAINELEC to properly secure the front cover.
3. Replace the door seal for the large roof top Siemens panelboard.
4. Relocate storage items that interfere with the access of panelboards, specifically in rooms BKRM and CAFELEC.
5. Remove items that are stored on top of building transformers. This should be considered a life safety hazard due to fire potential.
6. Replace corroded electrical safety switches for roof top HVAC units.
7. Replace light switches that are arcing.
8. Replace and properly route damaged roof top flexible conduit for HVAC and ventilation equipment.

9. Remove abandoned Token Ring receptacles that remain within the building.
10. Investigate and repair security system faults and consider faculty improvement requests noted within this report.
11. Install additional circuits for the cafeteria and kitchen area, as noted by faculty.
12. Install additional lighting for building exits and emergency luminaires within the corridors.
13. Investigate the water infiltration issue with the kitchen lighting.
14. Troubleshoot and repair circuit trips associated with corroded conduit in the foundation.

Stand-Alone Classroom Building Recommendations

Plumbing

1. Repair the drinking fountain in room E5.

Mechanical/HVAC

1. Repair geothermal heat pump units in the ceiling above rooms E6 and E7 that were reported to have functional issues with the air conditioning units.

Electrical

1. Install a conduit junction box cover for exterior surveillance camera overlooking the playground.

Widen 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.

- 170007
  - Replace door closers.
  - Replace carpet floor covering.
  - Replace air return filter grills in the classrooms.
  - Replace the circulation water pumps, motors, piping, and insulation.
  - Replace condensing unit piping insulation.
  - Make interior of Area 4 & 5 in BLDG-175A ADA/TAS compliant.
  - Make interior of BLDG-175B ADA/TAS compliant.
  - Regrout floor sink in janitorial closet.
  - Install roof access ladder.