Harris Elementary School Site Summary

Address	1711 E Wheless Lane Austin, TX 78724
Number of Permanent Campus Facilities	3
Original Year of Construction	1955
Total Campus Building Area (combined)	57,232 SF

Introduction

The Harris Elementary School campus is located at 1711 Wheless Lane in Austin, Texas. Harris Elementary School was established in 1955, and consists of three campus buildings. The Main Building (BLDG-118A) includes administration offices, classrooms, cafeteria, and gymnasium. The administrative offices were renovated in the 1980's. The Stand-Alone Classroom Building (BLDG-118B) is a newer building constructed in the 1980s/90s. The Stand-Alone Music Hall (BLDG-118C) is another stand-alone building that was completed in March of 2016. The three buildings are linked by a series of exterior covered sidewalks.

Main School Building – BLDG-118A

Building Purpose	Administrative, Classrooms, Cafeteria and Gym
Building Area	41,954 SF
Inspection Date	June 28-29, 2016
Inspection Conditions	June 28 - 95°F and sunny and late thunderstorms June 29 - 95°F and mostly 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 of a brick and cement plaster façade. The classroom wings have verandas which serve as corridors to these classrooms. These verandas are protected above by painted, roof form-board soffits. The walls and soffits appeared to be in good condition. Steel columns supporting the outer edges of the veranda roof/soffits were being painted at the time of the assessment. An isolated location was observed where sheet metal housing once sealed a utility penetration at the base of a wall. It has become dislodged which would allow pests and water to possibly enter the building. The interiors of the walls in the 300-west wing appeared to have been subjected to moisture intrusion. There was rot along the interior base of the exterior south wall in room 308. Paint was peeling from the interior face of the north walls of room 309 & room 310. A rain event occurred during the assessment. Water was observed seeping onto the floor from the interior face of the north exterior wall in room 312.	Average
	Exterior Windows	The exterior windows consist of single pane glazing units with aluminum frames. Overall, all of the windows appeared to be in average condition. However, windows in the administration and main entrance area appeared to be in very poor condition. The glazing seals were observed to be	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		deteriorated. The paint finish of the lintels located at the heads of the windows was failing. The sealant installed at the perimeter of the units was degraded.	
	Exterior Doors	The main entrance doors are solid-core wood with a stained finish and are set in a painted wood frame. All other exterior doors are painted hollow-metal and are set in painted, hollow-metal frames. The entry doors appeared to be in very poor condition. All other doors appeared to be serviceable though it was reported that doors between the 300-wing and the corridors did not close properly. It was also reported that exterior doors adjacent to Mechanical room 100 experienced leaking. All of the exterior doors lacked weather-stripping.	Poor
Roofing	There are two primary types of roof systems that have been installed on this building. The oldest being a modified bitumen and the other a newer single-ply membrane. There are patches applied in various locations on the modified bitumen roof. The link canopy between BLDG-118A and BLDG-118B is covered by a short length of corrugated metal panel roof. All roof areas drain to perimeter roof gutters with downspouts that discharge at grade to splash blocks. The gymnasium roof includes eight skylights which are each approximately 48”x48” wide. The different sections of modified bitumen roof appeared to have been installed all around the same time and showed signs of deterioration, as much of the integral, granular ballast has washed away. The various areas of single-ply membrane roof appeared to have all been installed at a later date. The single-ply roof system and flexible flashings appeared to be in good condition, though there are areas where the protective top membrane has deteriorated, thus exposing the layer below to ultra violet light degradation. Several trees appeared to be making contact with the surface of the roof. This observation is consistent with a report of dripping water in the newer addition to the cafeteria. The southeast downspout of the gymnasium roof was bent practically closed shut at the gutter. The outer domes of two of the gymnasium skylights are broken. Metal flashings, drip edges, gutters, and downspouts in most roof areas appeared to be in good condition except along the north edge of the administration area. Gutter straps are dis-engaged and the front edge of the gutter is bent. It was observed that some pipe supports were not properly seated, and in one location, it had punctured the membrane.		Average
Interior Construction	Interior Walls	Interior walls are primarily of original structural clay tile or brick. Newer walls are of gypsum wallboard on conventional stud wall framing or of concrete masonry units. Some walls that were original brick exterior walls are now enclosed to form interior walls. Interior windows are installed between the main corridor and the cafeteria, administration, and the library. Interior	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		windows are also installed between the kitchen and the cafeteria. Walls and interior windows appeared to be in good condition.	
	Interior Doors	The mix of new and older interior doors are of solid-core wood construction. Some have view panels. These doors are either stained or painted. The older doors are installed in painted wood frames. Newer doors are installed in painted hollow-metal frames. The newer doors including hardware were observed to be in good condition. Older doors and their hardware were in average to poor condition. Older doors were gouged and dented. The older hardware was loose, worn, and ill fitting.	Average
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	The main corridor has a run of hard tile treads with abrasive material applied to the treads. Adjacent to the stair run is a ramp with a resilient truncated dome rubber finish. Narrow wood stairs service the cafeteria stage. All stairs and handrails appeared to be in good condition.	Good
Interior Finishes	Interior Wall Finishes	The primary wall finish throughout the building is structural glazed tile. Natural brick is the finish between some classrooms and in the corridors. There is a ceramic tile wall finish in the restrooms and kitchen. Newer wall finishes are paint on gypsum wallboard such as in the administration area. The administration area is in good condition and is noted by the staff to have been remodeled in the 1980s. Classroom wings have fiberboard finish (Tectum Panels) above veranda windows. Stained wood paneling, natural brick, structural glazed tile, and painted gypsum board are the finishes on walls dividing the classrooms. The finish in the administration area was observed to be in good condition. The area was remodeled in the 1980s. Other finishes appeared to be in average condition.	Average
	Interior Floor Finishes	The primary floor finish throughout the building is resilient tile. Porcelain tile is installed in the restrooms and kitchen. Vinyl base is installed at all walls except in the kitchen and restrooms. In these two rooms, the wall	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		tile forms the base. Athletic flooring tiles are installed in the gymnasium. Broadloom carpet is installed in the library. The cafeteria stage floor is wood plank. The library carpet is torn and the seams are worn. The cafeteria stage floor is in good condition but the finish is worn. Tiles are missing in the gymnasium electrical equipment room and there is an unsealed hole in the floor of this space. Tile is damaged in room 309. It was reported that the rubber sheet floor finish at the main corridor ramp and the resilient tile in the gymnasium were becoming unglued but evidence of this was not observed while on site.	
	Interior Ceiling Finishes	2'x2' vinyl-faced, lay-in tile is installed in the kitchen. The gymnasium does not have a ceiling and is open to the painted bottom of the roof structure above. Painted gypsum wallboard is installed at the staff restroom. Otherwise, 2'x4' lay-in ceiling tile & grid is installed throughout the building. Open penetrations through the ceiling of 200-wing Electrical Equipment Closet were observed that could potentially allow the entry of pests. The 2'x4' tile appeared to be sagging, miss-matched, and warped in many areas.	Average
Conveying	The building is equipped with an ACME lead screw passenger lift for wheelchair access to the cafeteria stage. The lift was noted as having a maximum weight capacity of 750 pounds. This lift was observed to be in excellent condition as it was installed in late 2015 and no operational issues were reported by the facility staff.		Excellent
Plumbing	Plumbing Fixtures	The building contains predominantly single-use restrooms throughout the facility, with multi-use restrooms found outside of the library. Typical restrooms have floor mounted vitreous china water closets with manual flush valves. Additionally, wall hung vitreous china urinals with manual flush valves are located in the dedicated men's restrooms. Typical classrooms contain a single basin vitreous china sinks with a drinking fountain attached. Stainless steel and vitreous china drinking fountains can be found throughout the building in the corridors. A stainless steel handwashing trough is found outside the cafeteria. The restroom plumbing fixtures are in average condition. The fixtures were typically aged and in the 100- and 200-wings of the building were reported to be original to the building but still operational. The sink in	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		the administration restroom was observed to be leaking, additionally the sink had a hot water handle, but had no hot water source connected. classroom 307 contained a sink but did not contain a drinking fountain. There is a shower located in the gymnasium office; the shower was full of clothes and other items, therefore functionality of the fixture and drain could not be assessed. Visual assessment of the shower did not show any major deficiencies. Handwashing trough appeared to not be draining quickly and to have a clog. A commercial kitchen is located in the school's cafeteria. The kitchen contains stainless steel kitchen equipment, including a three basin prep sink. It also has various wall mounted vitreous china sinks for personal use. One of the knobs on the bathroom sink located inside the kitchen was observed to deliver no flow. The building also has service sinks located in various janitorial closets. These were in average to poor condition, some showing signs of leaks and corrosion around the base. One of the janitorial sinks in the mechanical storage closet off the 100-wing (mech-100-mech) showed severe leaking, flooding into a mop bucket that was full, and then all over the floor of the closet. Majority of plumbing fixtures are in working condition, but show minor signs of deterioration. Multiple plumbing fixtures show signs of corrosion around their base. Aged plumbing fixtures should be replaced in order to maintain a functioning system.	
	Domestic Water Distribution	Domestic hot water is supplied to the administration office, the nurse's office, and the gymnasium restroom via small 4-6 gallon water heaters. Additionally there is a larger 69-gallon water heater in the mechanical storage closet off of the 100-wing (mech-100-mech). It is possible this heater feeds the kitchen as no water heater was found when inspecting the kitchen. Domestic hot water is not supplied to the classroom plumbing fixtures. The domestic water system is in average condition with typical wear and tear associated with the system's age and general daily use. The large heater in mech-100-mech was aged and out of date, with some wires dangling off the side and was observed to be making a whistling and clinking noise during assessment. The kitchen was reported to have issues	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		consistently receiving hot water in the facility interview. The plumbing distribution equipment was observed to be in average condition with damaged insulation and corrosion and rust observed on piping throughout the building.	
	Other Plumbing	Exposed insulated piping was observed to be running along the ceiling and walls in various different rooms throughout the building. Metal floor drains were observed in the bathroom and kitchen areas. It was reported in the facility interview that the dishwasher floor drain is not properly sized. Visual assessment did not show any obvious clogs but drains in bathrooms off of the 100-wing and in the corridor outside the library were observed to be emitting an unpleasant odor. It was reported in the interview minutes that the kitchen drain line and grease trap is undersized and has odor problems. Rain water drains were observed around the outside of the building. Some of these were observed to be clogged with debris.	Poor
Mechanical/ HVAC	The building's HVAC (heating, ventilating, and air conditioning) system is composed of geothermal heat pumps, RTUs (roof top units), roof top AHUs (air handling units), and split systems for individual zone temperature controls. The administration office, cafeteria, gymnasium, and library are controlled using RTUs and AHUs as well as split systems containing heat pumps and cooling condenser units. Classrooms are temperature controlled using a geothermal heat pump system designated for each classroom. Multiple roof top exhaust fans ranging in size serve the building. The HVAC system is in average condition; however, some pieces of equipment are past their expected design life and show signs of degradation and minimal signs of rust and corrosion. Geothermal units are aged and out of date. Water source heat pumps for the units were not accessible, assumed to be inside the unit and in average condition. It was reported that some of these units have been known to leak onto the floor. Condensation leaks were observed on the ceiling in the library, additionally it was reported in the facility interview that condensation has been known to leak in the cafeteria. Two heat pumps were found in the gymnasium storage, the ground around the pipes feeding these pumps is found to be all dug up leaving a hole in ground. Several of the units use R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. An energy recovery unit on the roof was found to have the power switched to off. In the mechanical room off the 200-wing there was a refrigerated aftercooler and dryer that had no apparent connections and was no longer in service. The geothermal unit found in the corridor across from the cafeteria was missing its control panel and was not operational. Exhaust fans for the girl's bathroom between classrooms 103/104 and 201/202 are not working.		Average

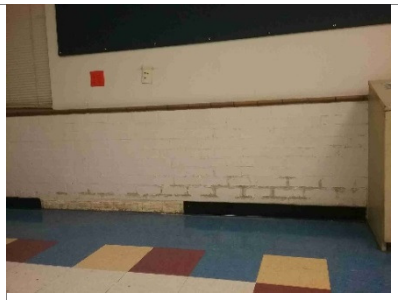
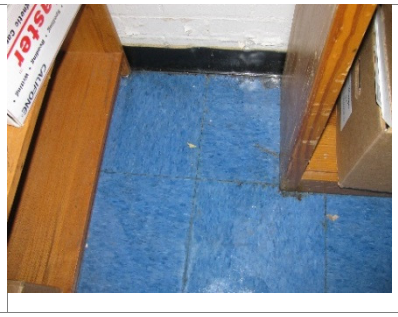
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns/annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system was observed to be in average condition due to some of the fire alarm end devices being aged or worn from outdoor exposure. One heat detector, within room STO300, is improperly secured and is hanging. The campus faculty has reported that the fire alarm randomly trips for the building.	Average
	Fire Protection/ Suppression	The fire suppression system consists of fire extinguishers throughout the building. Visual assessment determined that these are in average condition and up to date on their annual inspections. Additionally, fire suppression nozzles were found over the range, a fire suppression tank could not be found but suspected it is possibly in the ceiling or in the food storage room that was not accessible.	Average
Electrical	Electrical Distribution	The electrical service enters the building at the 208Y/120-volt 2000-amp main switchboard located in the fenced-in electrical utility area on the north end of the complex. The main switchboard feeds several main panelboards which distribute to smaller panelboards. The building does not have a lightning protection system. The electrical distribution equipment was observed to be in average condition. The majority of the assets have been replaced or added in the past 20 years. There are several asset and non-asset panels that appeared original to the 1955 construction or from the 1960s and have exceeded their life expectancy. The first is an unnamed 225- amp Trumbull Electric panel in the main entrance corridor, west of the administration office. Second is Panel E, a 200-amp GE (General Electric) panel, located in the main C1 corridor nears the 300-wing. The third is an unnamed 200-amp GE panel located in room CUSTOFC. The fourth is Panel G located within the gymnasium. The capacity and manufacturer of the panel is unknown due to a missing data plate. This panel is improperly installed and allows for access to the wiring on the sides. There are also several exposed wire leads that are visible and could potentially be a life safety concern if they are live. The fifth is Panel G, a 100-amp Trumbull Electric panel, located on the cafeteria wall within corridor C1. The	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		sixth is a 100-amp GE panel located in the bathroom connection between rooms 105 and 106. The seventh is a 100-amp GE panel located between rooms 205 and 206. There is an assortment of electrical shutoff switches in the building that have exceeded their life expectancy. There is a large junction panel on the exterior of the building in the fenced in electrical utility area located on the north end of the building. This panel has an exposed knockout port that provides a pathway for water infiltration and animal life into the building, not to mention damage to internal wiring.	
	Lighting	The building's exterior lighting consists of metal-halide and LED (light-emitting diode) luminaires. Exterior lighting is predominately present on the main entrance of the building and at the kitchen unloading area. Exterior lighting is also present on the covered walkway on the classroom wings. The interior lighting consists of primarily fluorescent light luminaries throughout the building. The lighting for the building was observed to be in average condition. Many interior luminaires appeared to be aged past their design life. Observed deficiencies include missing lenses, missing bulbs, and burned out bulbs. Some luminaires appeared to have been abandoned and not removed. There are exit signs present in the building; however several appeared to be dim or partially visible at the time of assessment. The building has a variety of deficiencies in branch wiring. Several conduit junction boxes were exposed. There is also several areas where cabling has been cut and left in place. Many of the light switches throughout the building are severely dated and have exceeded their life expectancy. There are also older electrical receptacles in the classrooms that are worn and have exceeded their useful life. Worn light switches and electrical receptacles can create life safety issues due to internal arching when used.	Average
	Communications & Security	There is a Gemini security system including surveillance cameras in the building. The building classrooms also feature motion detectors. There is a public address system and timekeeping system. Both appeared to be functioning properly. The building is equipped with tele/data systems, but the	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		main backbone equipment is located in an inaccessible room. Some classrooms have hardwired telephones, but it appeared the VOIP (voice over internet protocol) is utilized for communications. The building also has receptacles for an early IBM Token Ring network that is most likely no longer in use. Several areas of the building have old networking cabling that is improperly secured and eroded. There are also areas where communication cabling is exposed in improperly covered outlets or loose conduit. There is also a large portion of networking/telephone cabling on the roof that is unsecured and damaged from weather exposure.	

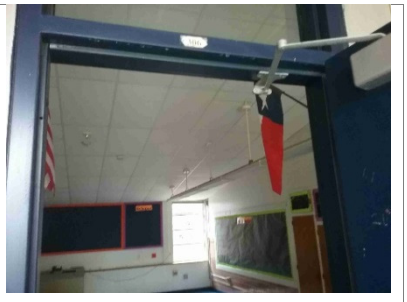
Exterior System Deficiency Examples

Exterior Walls

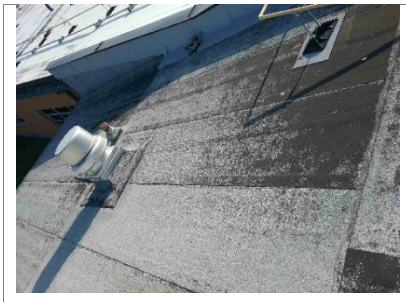
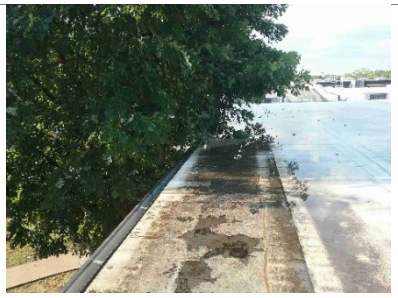




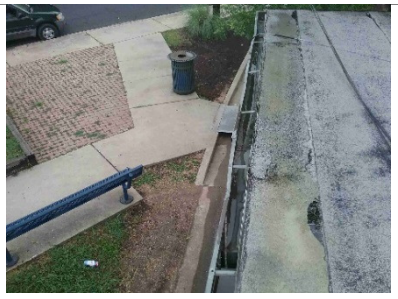

Exterior Windows


Exterior Doors

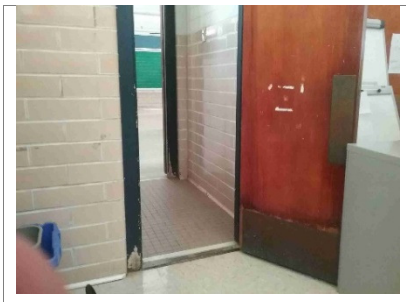
Roofing Deficiency Examples


Interior Construction Deficiency Examples

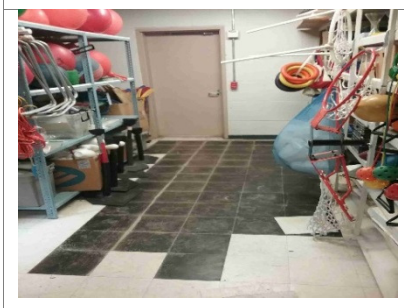
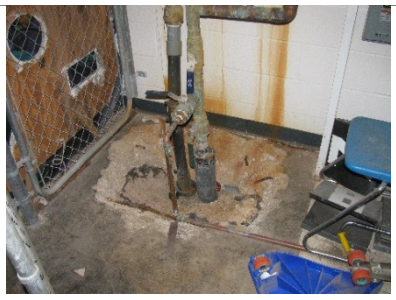
Interior Doors



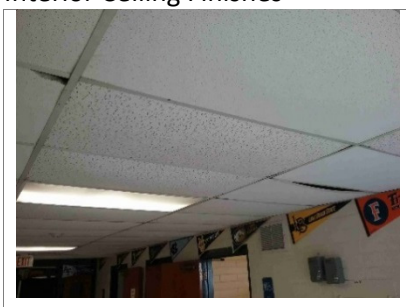

Interior Finishes Deficiency Examples

Interior Floor Finishes



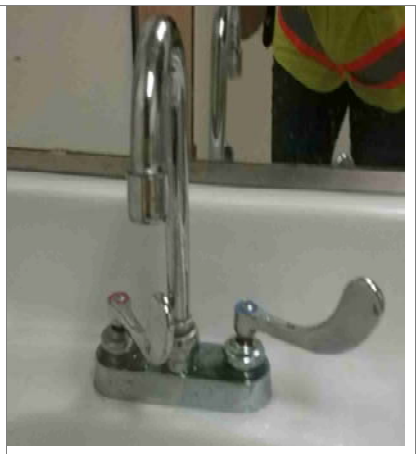

Interior Ceiling Finishes

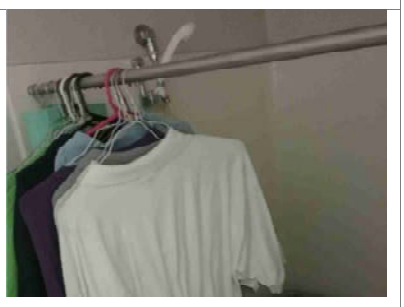



Plumbing System Deficiency Examples

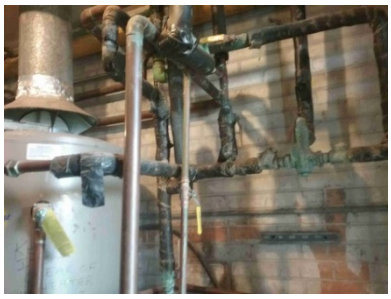
Plumbing Fixtures

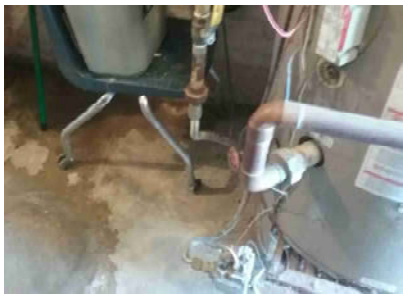




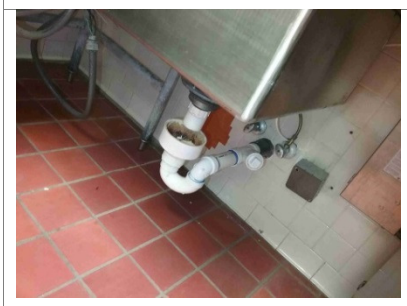




Domestic Water Distribution





Other Plumbing



Mechanical/HVAC System Deficiency Examples



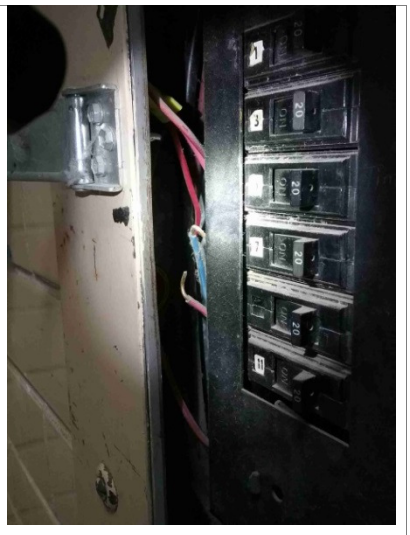



Fire Protection System Deficiency Examples

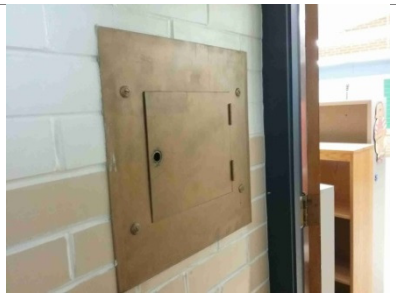
Fire Alarm


Electrical System Deficiency Examples

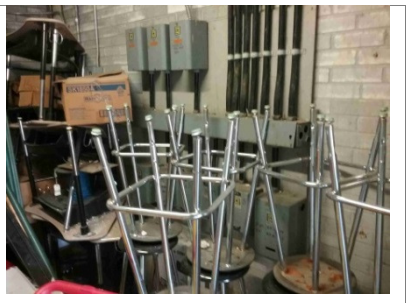
Electrical Distribution

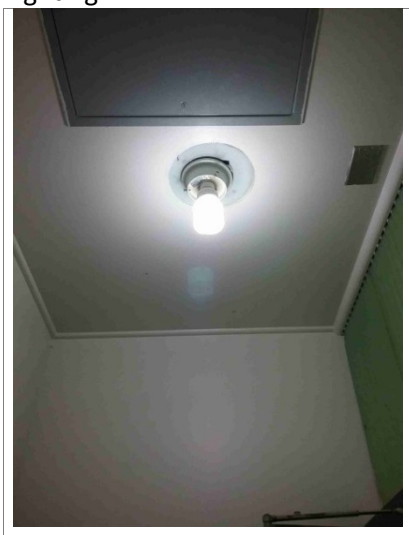






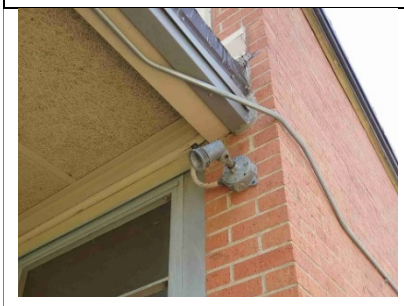
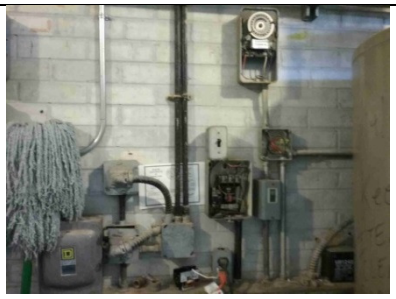


Lighting



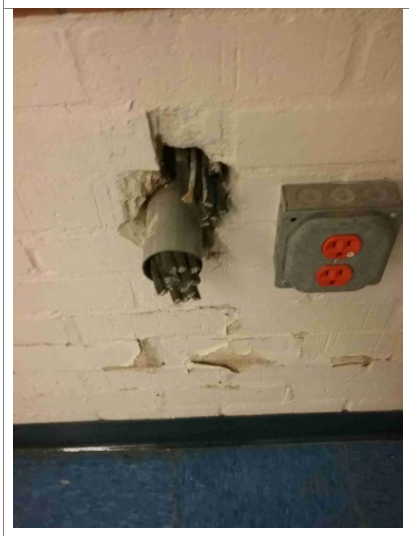




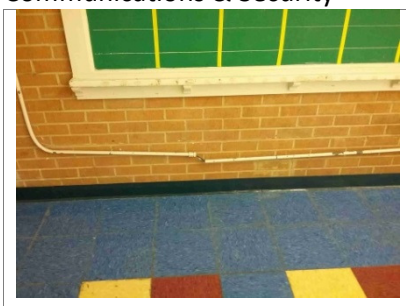
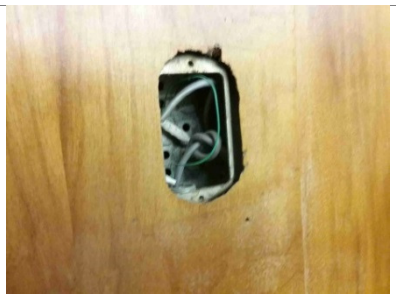



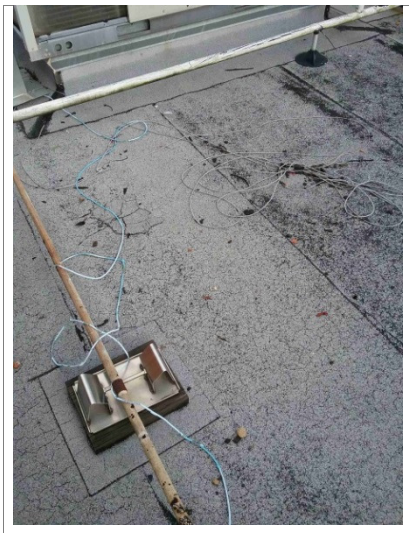


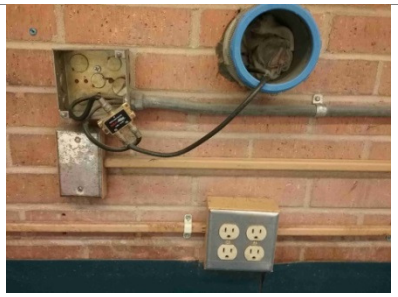


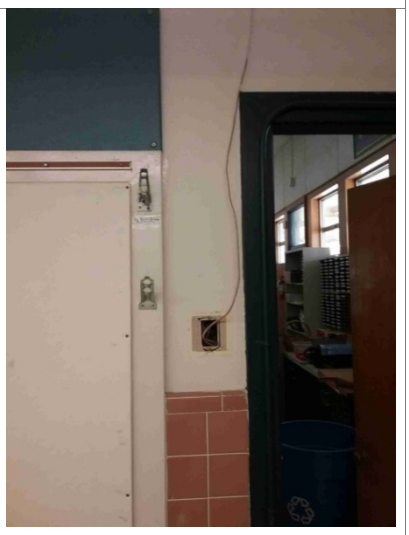


Communications & Security





Stand-Alone Classrooms – BLDG-118B

Building Purpose	Classrooms
Building Area	14,112 SF
Inspection Date	June 29, 2016
Inspection Conditions	95°F and mostly 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 finish is entirely masonry. The east & west (end) walls are entirely brick. The north & south (long) walls are brick with concrete masonry unit coursing at the base. Plaster soffits are installed at the entries. The exterior walls and soffits were observed to be in good condition except for some compromised sealant at the masonry control joints.	Good
	Exterior Windows	The windows are a mix of fixed and single-hung aluminum units. All windows have single-glazed lights. Windows appeared to be in good condition.	Good
	Exterior Doors	Exterior doors are painted hollow-metal doors with half, vision panels. These are installed in painted, hollow-metal frames. Though doors were observed to be in good condition, the doors lack complete weather-stripping.	Good
Roofing	The roofing consists of a modified bitumen membrane which slopes slightly toward metal gutters and downspouts. The roof appeared to be in serviceable condition, but is beginning to show signs of wear. The granular ballast is beginning to wash away from the top of the membrane and blisters are appearing at the sheet joints. It was reported that water from the roof was entering room 401. Metal drip edges, gutters, and downspouts appeared to be in good condition. The painted, metal downspout boots are showing rust.		Average
Interior Construction	Interior Walls	All interior walls are constructed of gypsum wallboard on conventional stud wall framing. Walls appeared to be in good condition.	Good

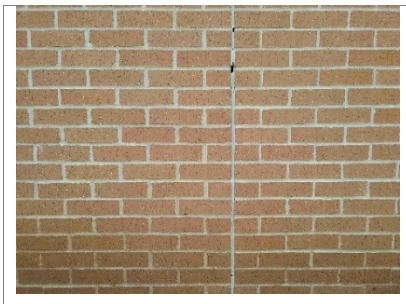
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Doors	Interior doors are stained and are of solid-core wood construction set in painted, hollow-metal frames. While all doors, frames, and hardware appeared to be in good condition, the closer hardware on the door to classroom 401 needs to be re-attached to the door frame head.	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 painted gypsum wallboard throughout. No deficiencies were observed on the interior wall finishes.	Good
	Interior Floor Finishes	Resilient floor tile is installed throughout the building. Vinyl cove base is installed at the floor perimeter. The floor finish is in good condition, and though the base is showing some signs of wear and deterioration, it too is in good condition.	Good
	Interior Ceiling Finishes	2'x2' acoustic lay-in tile and grid is installed in the corridors. 2'x4' acoustic lay-in tile and grid is installed in the rooms. All ceiling tile assemblies were observed to be well aligned and in good condition.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building's classrooms contain a single basin stainless steel sink with a drinking fountain attached. Each pair of classrooms had two single-use restrooms containing a floor mounted vitreous china water closet in the connection between the two classrooms. A teacher's single use restroom is located in the corridor outside of classroom 402 that contains a floor mounted vitreous china water closet and wall mounted vitreous china sink. Classroom 411, the art room, contains three stainless steel basin sinks and one large wall mounted vitreous china sink. Additionally it contains a single use bathroom with a floor mounted vitreous china water closet and wall mounted vitreous china sink.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The fixtures were observed to be in average to good working condition. The sink in the teacher's restroom only had hot water feeding it. The building also has a mop drain located in the custodial closet (C400). It is in average condition; some showing signs of leaks and degradation.	
	Domestic Water Distribution	A water heater, approximately 20-gallon capacity, was found in the janitorial closet (CC400). The heater is mounted above head height, making it difficult to inspect. It was observed to be in good working condition. The plumbing distribution equipment was observed to be in average condition with damaged insulation and corrosion and rust observed on piping in some of the spaces.	Average
Mechanical/ HVAC	The building uses a split-system with roof top condenser air conditioner unit, AHU in the mezzanine, and a heat pump unit for each individual classroom. The majority of the heat pump units were installed in 1997. Multiple exhaust fans serve the building's restroom facilities. The HVAC system was observed to be in average condition. The AHU in the mezzanine was enclosed from all three sides and manufacturing information was not able to be gathered, but the unit appeared to be in average working condition. Several of the heat pump units use R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. Heat pump feeding classroom 411 was observed to be operating louder than the other units. The roof top condenser unit was observed to be making an abnormal vibrating noise when shutting down. Exhaust fans appeared to be in good working condition.		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 was observed to be in good condition.	Good
	Fire Protection/ Suppression	No sprinkler systems were detected in the building. Visual assessment of the fire extinguishers determined they were in good condition and observed to be up to date on inspections.	Good
Electrical	Electrical Distribution	The electrical service appears to enter the building on the south-west side from a pole mounted transformer. All electrical distribution panels are located within exterior room ELEC400. The room naming convention found on the circuit directories for each panel do not match the naming convention found on the current floor plans.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		Branch wiring was found to be in good condition. There were two instances were junction boxes or electrical components were missing covers and had wiring exposed, isolated within the HVAC mechanical rooms throughout the building. No major deficiencies were found during the assessment.	
	Lighting	The building's exterior lighting consists of metal-halide and LED luminaires. The interior lighting consists of primarily T8 fluorescent luminaires flush mounted in the ceiling. The lighting for the building was observed to be in good condition. The luminaire for room BKRM400 is missing the fixture cover.	Good
	Communications & Security	Interior security cameras are located in the building corridors and the classrooms have motion detectors. No security deficiencies were observed during the assessment. The timeclock system appeared to be in good condition. The building is equipped with tele/data systems. One LAN (local area network) receptacle is improperly installed and has networking cabling exposed through the wall.	Good

Exterior System Deficiency Examples

Exterior Walls



Exterior Doors

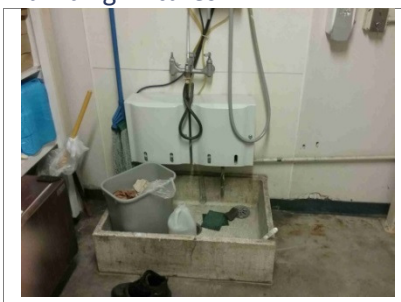
Roofing Deficiency Examples

Interior Construction Deficiency Examples

Interior Doors

Plumbing System Deficiency Examples

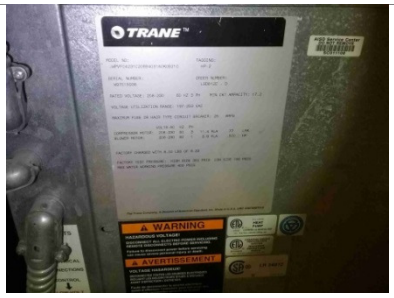
Plumbing Fixtures



Domestic Water Distribution System

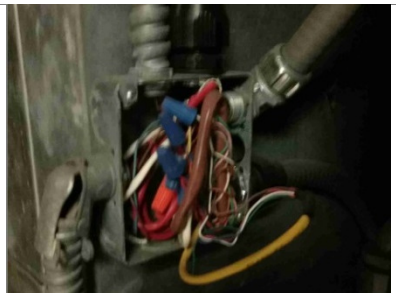
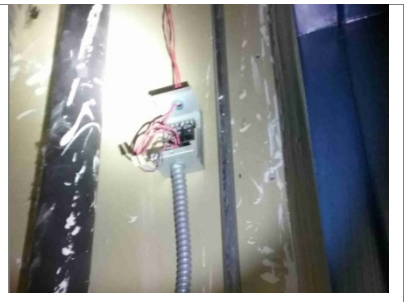

Mechanical/HVAC System Deficiency Examples



Electrical

Lighting

Communications & Security

Stand-Alone Music Hall– BLDG-118C

Building Purpose	Multi-Purpose Classroom
Building Area	1,166 SF
Inspection Date	June 29, 2016
Inspection Conditions	95°F and mostly 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 wall finish consists of brick installed on the upper portion of the wall and concrete masonry units installed on the lower four courses (32" high).	Excellent
	Exterior Windows	The exterior windows are single-glazed lights set in painted, hollow-metal frames.	Excellent
	Exterior Doors	The only exterior door assembly consists of a single, painted, hollow-metal door set in a painted, hollow-metal frame. The frame consists of two, single-glazed sidelights and a single-glazed transom.	Excellent
Roofing	The roof system consists of a single-ply membrane which slopes slightly to perimeter metal gutters and downspouts. Downspouts discharge to a below-grade drainage system. This system was installed when the building was completed in March of this present year and is in excellent condition.		Excellent
Interior Construction	Interior Walls	Walls consists of gypsum wallboard applied to conventional stud wall framing.	Excellent
	Interior Doors	All doors are stained, solid-core wood set in painted, hollow-metal frames.	Excellent
	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	Painted gypsum wallboard is installed in all three rooms. The toilet room has a ceramic tile wainscot on all four walls.	Excellent

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Floor Finishes	Resilient tile and vinyl base is installed in the office and main assembly room. Porcelain tile is installed in the toilet room.	
	Interior Ceiling Finishes	2'x4' acoustic, lay-in ceiling tiles and grid are installed throughout the building.	Excellent
Plumbing	Plumbing Fixtures	The music hall contains a single use restroom facility with a floor mounted vitreous china water closet and wall mounted vitreous china sink. Two stainless steel basin sinks with attached water fountain are found inside the room.	Excellent
	Domestic Water Distribution	Two point of use electric water heaters were found underneath the classroom sinks. One of the two was not able to be inspected because the bottom of the sink was enclosed. It is assumed the unit is identical to the inspected one found to be in excellent condition. An electrical panel for the building mentioned feed to a third water heater but only two were found. The plumbing distribution equipment was observed to be in excellent condition.	Excellent
Mechanical/ HVAC	The building contains a roof top packaged heating and cooling unit, the unit was manufactured in 2015 and appears to be in excellent condition with no deficiencies to report. Roof top exhaust fans were also found to be in excellent condition.		Excellent
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horn/strobe combos, a pull station, and detectors. The fire alarm system was observed to be in excellent condition with no deficiencies found during the assessment.	Excellent
	Fire Protection/ Suppression	No sprinkler systems were detected in the building. Visual assessment of the fire extinguishers determined they were in excellent condition.	Excellent
Electrical	Electrical Distribution	The electrical feed is sourced from Panel MTDP located within the Main School Building. One 225-amp Eaton panel distributes electricity through the building. No deficiencies were found during the assessment.	Excellent
	Lighting	The building's exterior lighting consists of three metal-halide luminaires and one LED luminaire. The interior lighting consists of flush ceiling fluorescent luminaires. The lighting for the building was observed to be in great condition. No deficiencies were found during the assessment.	Excellent

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Communications & Security	The building has no external or internal security cameras due to the overall building size and close proximity to the Main School Building. There is one motion detector located within the main classroom area. No deficiencies were found during the assessment. The building utilizes VOIP for communication.	Excellent

Harris 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

Roofing

1. Inspect all roof areas for isolated instances of possible current or near future failure. Patch or repair areas to avoid interior building damage.

Interior Construction

1. Inspect the perimeter of all exterior doors for missing or damaged weather-stripping. Weather-stripping should either be replaced where damaged, or doors should be otherwise retro-fit for new where none existed before. The meeting stile of double doors are particular locations were weather-stripping was observed to be missing.

Plumbing

1. Replace aged plumbing fixtures in order to maintain a functioning system.
2. Repair sinks where there is evidence of corrosion or leaks.
3. Repair or replace any damaged or missing piping insulation as needed at all facilities.
4. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, re-painting, and/or repairing by any other means to prevent further deterioration.

Mechanical/HVAC

1. 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 reach the end of their design life due to refrigeration restrictions.
2. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, re-painting, and/or repairing by any other means to prevent further deterioration.
3. Address any equipment at all of the campus facilities that were noted with excessive noise/vibration by repairing the motor, changing the belt, or any other means to promote efficiency.
4. Replace HVAC equipment that is aged beyond its expected design life.

Electrical

1. Remove any floor receptacles found in the classroom wings as they are being phased-out of use district-wide.
2. Consider replacing all outdated or poor condition luminaires with LED luminaires with dimming capabilities.
3. Replace bulbs in dimly lit exit luminaires or consider replacing with LED fixtures.
4. Repair issues with electrical branch wiring conduit and communication system conduit. This includes loose conduit, exposed junction boxes, and exposed receptacles.
5. Replace electrical receptacles and lighting switches that have exceeded life expectancy.

Main School Building Recommendations

Exterior

1. Inspect the exterior perimeter for holes or utility penetrations that require to be sealed. Seal all penetrations.
2. Investigate and correct the source of the moisture damage to floors and walls at the interior perimeter of the west 300-wing. Ceilings do not appear to be damaged and therefore moisture intrusion could either be wicking from the foundation or entering through wall/window assemblies.

3. Replace or repair windows in the administration and main entry areas. Repairs should include the replacement of glazing compound around glass panes. Re-paint steel lintels above the window units. Inspect the sealant & flashing around the perimeter of the window units for compromised conditions. Correct conditions as necessary.
4. Replace the main entry doors adjacent to the administration area and install new hardware.

Roofing

1. Trim trees away from roof areas and remove debris from gutters.
2. Repair gutters along the north edge of the administration area.
3. Patch the single-ply roofing in areas where the top, protective film has deteriorated and is no longer present. Investigate the modified bitumen roof areas where the membrane is blistered. Patch and/or repair as required.
4. Re-seat utility pipe/conduit support chairs and blocks to the surface of the roof membrane. Patch/repair roof areas damaged by faulty or missing supports.
5. Repair the top of the downspout on the southeast corner of the gymnasium to allow for proper discharge.
6. Replace the shattered, exterior domes of the gymnasium skylights.

Interior Construction

1. Survey the condition of interior doors. For the most part, interior doors are in serviceable condition, but replace or refurbish door and door hardware observed to be in poor condition.
2. Seal the utility penetrations in the ceiling of Electrical Closet-200.

Interior Finishes

1. Replace the library carpet with a new carpet tile system.
2. Refinish the wood cafeteria stage floor to maintain a uniform appearance.
3. Replace missing floor tiles in the gymnasium electrical closet. Fill the dished-out area in the southwest corner of the room with grout/concrete level to the top of the floor.
4. Repair and replace corridor ceiling tiles that are broken, sagging or mis-aligned.
5. Repair/replace finishes in west 300-wing once the solution to the moisture problems there are resolved.

Conveying

1. Perform annual inspections of the wheelchair lift for stage access.

Plumbing

1. Repair leak flooding the floor in mech-100-mech, and clean up any standing water.
2. Repair clogged hand washing trough outside of the cafeteria.
3. Verify functionality of the gymnasium shower.
4. Electric water heaters that are beyond their expected design life need to be replaced before failure occurs.
5. Inspect plumbing in bathrooms that are emitting an unpleasant odor; clean and flush or repair as necessary.
6. Clean and flush out all floor drains to ensure adequate drainage, it was reported these are not draining properly.
7. Verify sizing of grease trap and kitchen drains, repair or replace as necessary.
8. Repair or replace fixtures that have separate hot and cold water handle but do not have both a hot and cold water connection.
9. Clean out storm and condensate exterior drains to avoid plugging and backup.
10. Repair any equipment that was noted with excessive noise/vibration to promote efficiency.

Mechanical/HVAC

1. Repair or replace the geothermal well systems that are approaching end of useful life.
2. Repair source of condensation leaks found on ceiling and then repair damaged ceiling surrounding the leak.
3. Backfill ground around heat pumps found in the gymnasium storage.

4. Remove any HVAC equipment that is no longer in use but has been abandoned in place.
5. Repair or replace exhaust fans that are not functioning.

Fire Protection

1. Conduct a detailed inspection to determine the cause for the detection system being set off in error to ensure it is not a result of defective controls.
2. Repair improperly mounted heat detector in room STO300.
3. Replace aged fire alarm devices in the Main School Building.

Electrical

1. Replace all panel boards in the main school that appear original to construction and severely aged past typical design life. These panels are highlighted in the Condition and Deficiency Overview section of this report.
2. Investigate the operation of dated electrical distribution shutoff switches throughout the building and replace as required.
3. Repair or replace luminaires with missing lenses, missing bulbs, and burned out bulbs.
4. Remove exterior light fixtures no longer in service and properly de-terminate wiring.
5. Install a plug for the open knockout port on the large junction box near the main feed to the building (located in the fenced in electrical utility area).
6. Replace dated and worn lighting switches and electrical receptacles throughout building and classrooms.
7. Repair loose electrical conduit and receptacle covers within the cafeteria area.
8. Repair loose communication cable conduit in classroom areas.
9. Install covers on missing junction boxes and receptacles for telephone and communication conduit.
10. Remove damaged telephone and networking cabling on the roof and on the side of the building in the fenced in electrical utility area.

Stand-Alone Classroom Building Recommendations

Exterior

1. Repair sealant at masonry control joints.

Roofing

1. Inspect the roof for observed deterioration of ballast and membrane buckling. Patch and/or repaired as required.
2. Clean downspout boots as required and apply a new paint finish.

Interior Construction

1. Re-attach the closer hardware installed on corridor door to room 401 to the head of the door frame.

Plumbing

1. Repair or replace fixtures that have separate hot and cold water handle but do not have both a hot and cold water connection.
2. Repair janitorial mop drain that shows degradation and cracks.

Mechanical/HVAC

1. Repair any equipment that was noted with excessive noise/vibration to promote efficiency.

Electrical

1. Repair incorrect installation of LAN receptacle cover.
2. Correct panelboard circuit directories to match current naming convention of building classrooms.
3. Install correct junction box covers on HVAC wiring within the mechanical rooms.
4. Replace BKRM400 luminaire lens.