Lamar Middle School Site Summary

Address	6201 Wynona Avenue Austin, TX 78757
Number of Permanent Campus Facilities	4
Original Year of Construction	1955
Total Campus Building Area (combined)	121,593 SF

Introduction

The Lamar Middle School campus is located at 6201 Wynona Avenue in Austin, TX. Lamar Middle School was established in 1955, and consists of the Main School Building (BLDG-045A) along with three additional campus buildings. These permanent campus buildings consist of two separate classroom buildings (Stand-Alone Band Hall [BLDG-045B] and Stand-Alone Classroom [BLDG-045C]) and a Mechanical Room Building (BLDG-045D). The three added buildings were constructed in the year 2000.

Note that many of the recommendations provided in this report are listed as included in the Scope of Work for the 2013 Bond Program.

Main School Building – BLDG-045A

Building Purpose	Administration Offices, Classrooms, Cafeteria and Gymnasium
Building Area	105,203 SF
Inspection Date	June 14-16, 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 single story building, consists of a brick façade. A painted metal eave extends approximately three feet over the edge of the wall on the majority of the building. The exterior of the building was observed to be in average condition with visual signs of age. The top corners of some of the brick walls were missing bricks and there were several other missing bricks across the building. The foundation wall was observed to be in good condition except for several places of erosion and cracking. At the corners of the east side of the building, “v” shaped hairline cracks were observed at the foundation wall corners. At several other locations, rebar was observed as exposed from eroded concrete. There were two unsealed pipe penetrations near the loading dock leading into the kitchen and the crawl space entry doors were not locked closed. These could be areas of potential pest entrance.	Average
	Exterior Windows	A portion of the window system consists of single pane glazing set in a metal framing system. The remaining portion of the windows consists of double pane glazing set in an updated aluminum framing system. The window units are installed in horizontal bands. The window system which appeared original to the building was observed to be in poor condition due to	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		mismatched glazing panes, broken panes, and cracked sealant. The aluminum framed window system, in average condition, was also observed to have pinholes to the outside and condensation between panes. The foil sheathing that has been placed over the windows was observed to be replaced with plywood where foil possibly failed or was removed. The appearance of the foil was observed to be in poor condition. It was reported that the window latches are failing around the campus.	
	Exterior Doors	There is one main public entry located at the west side of the building, near the library and café. The entry doors are glazed in painted metal frames, set in horizontal bands of windows and in painted metal frames. The system appears to be original to the building and is covered by a deep awning of painted metal. The exterior doors around the building are manually operated. Near the loading dock, a manually operated wooden roll-up door leads to classroom 502, an art room. The exterior doors appeared to be in good condition needing only minor repair. However, the doorframe leading to the kitchen from the loading dock appeared deteriorated from rust at the bottom of the frame. Some doors were observed with surface scratches from general wear and use. The wood roll-up door appeared to be in working condition, but the painted finish on the door was observed to be in poor condition as it was peeling and blistering.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Roofing	Built-up asphalt with granular topping material covers about two-thirds of the building while a single ply membrane material covers the majority of the 100-, 200-, and 400-wings. The majority of the roof was estimated to have been installed 15-20 years ago due to the observed lightly aged condition of the materials. There are six skylights on the roof, three of which open into the exterior side of the main entry and three of which open into the interior side of the main entry. The roof surfaces were observed to be in good condition. The skylights appeared clean and leak-free. There were small patches of disturbed gravel at the built-up roof above the main entrance and in the valley joints. Expected discoloration was observed at the valleys. A possible source of ponding/leakage was observed at the refrigeration fan, evidenced by a patch of discolored gravel. There was also visible cracking and deterioration at the flashing above the kitchen. The single ply membrane roof, constituting about a third of the roof, appeared to be more worn and sun-weathered. Many gaps were observed where the membrane sheets overlapped and there were many scratches on the membrane. There was extreme deterioration of the metal panel eave in the courtyard.		Good
Interior Construction	Interior Walls	The interior walls are constructed of concrete masonry unit (CMU) block. Some walls are furred-out with a gypsum board finish. The construction of the walls was observed to be in average condition. There were several holes observed needing minor repairs. Several of the original locker room dividing partitions, constructed with ceramic-faced masonry units, were broken.	Average
	Interior Doors	The majority of the classroom doors were painted metal with glazed vision panels in metal frames. There are four folding doors in the building: two wooden doors in the cafeteria lunch line and two gate corridor dividers. The metal interior doors and frames were observed to be in average condition. The painted finish on many doors was excessively scratched. The door to room 209 was observed to catch on the floor and not close properly. The wooden doors in the administration wing were observed to be in good condition, although the hardware was observed to be dated and one door was missing hardware or it had been removed. There were instances of damage above cased openings. The wooden folding doors in the cafeteria were observed to be dated and extremely difficult to operate. The folding gates in the corridors appeared to be seldom utilized.	Average
	Interior Specialties	There are wall-mounted lockers installed along the 100-, 200-, and 400-wing corridors. They are painted and estimated to be 20+ years old.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The wall-mounted lockers were in poor condition, showed excessive wear and tear, and an estimated one in five lockers in the corridors was found to have dysfunctional latches. The boys' gymnasium lockers were in average condition, exhibiting strong wear and tear on the exterior of the lockers. The girls' gymnasium lockers were in good condition; however, one locker was pushed into its housing.	
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	There are two concrete stair and ramp systems in the building, which are finished in laminate. One ramp and adjacent two-step stair is in the 400-wing corridor. The second system is in the corridor adjacent to the large gymnasium. In the health room, there is a wooden stair leading to the upper mezzanine. The systems were observed to be in average condition, though the handrail of the 400-wing ramp was discolored and unclean. The health room stair was observed to be unstable and have an unsuitable rating.	Average
Interior Finishes	Interior Wall Finishes	The wall finishes throughout the building include painted and ceramic faced masonry unit walls with wood paneling and interior windows. Several rooms have painted gypsum board walls, and many classrooms have a combination of all finishes. The majority of the interior finishes appeared to be original to the building except the painted gypsum board walls. Wall finishes throughout the building were observed to be in average condition, needing only cosmetic restoration and cleaning, though the materials appeared outdated. The wood paneling on the walls especially appeared outdated. In the 500-wing, the classrooms appeared unfinished, with various patched wall materials and loose wires. The kitchen finishes were observed to be clean and in good condition.	Average
	Interior Floor Finishes	The floor finishes throughout the building include linoleum floor tile with ceramic face masonry base or rubber base. The library and administration wing are finished in carpet, and the gymnasiums are finished with a wooden athletic flooring material. The kitchen and some restrooms have ceramic tile floors. The linoleum floor appeared to be well maintained and in average condition considering its age. It was reported that the floor tile adhesive in the 200-wing is breaking down and tiles are becoming loose. The ceramic-faced	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		base was found to be in average condition but excessively dirty, while the rubber base near classroom 115 was found to be in poor condition, as it was extremely dry and discolored.	
	Interior Ceiling Finishes	The ceiling finishes vary throughout the building and include painted woodwool panels, painted oriented strand board (OSB), and acoustical ceiling tile (ACT). Much of the ceiling was observed to be damaged and in poor condition. Water damage and staining was noted to affect an estimated third of the ceiling, regardless of material. This is reportedly caused by leaking condensate water from mechanical equipment. Holes and deterioration of the ceilings were observed in various rooms. In the corridor, several discolored spots were observed. In the library, the ceiling was found to be in poor condition, except the gypsum board portion (est. 450 sf.). In the library, water stains were observed at every panel joint, as were black spots on the ACT tees, possibly evidence of mold. A strong mildew odor was also detected in a significant portion of the classrooms.	Poor
Conveying	There is a mechanical wheelchair lift backstage of the cafeteria. It was reported to be in good working condition and has no apparent deficiencies.		Good
Plumbing	Plumbing Fixtures	The building has both single-user and multi-user restrooms for students and staff located throughout the facility. Typical restrooms have wall-hung, porcelain lavatories with manual faucets along with floor-mounted, porcelain toilets with manual flush valves. There are wall-hung, porcelain urinals with manual flush valves in the males' restrooms. The building also has multiple janitor closets with utility sinks. Typical classrooms have a single bowl stainless steel sink with a drinking fountain attachment, or a single bowl porcelain washbasin along with an individual drinking fountain. Water coolers and bottle fillers can be found throughout the main corridors of the building. A commercial kitchen serves the school's cafeteria located within the building. The kitchen has wall-mounted vitreous china sinks for personal use and stainless steel kitchen equipment throughout including one, two, and three-basin dish/prep sinks. Plumbing fixtures were observed to be in average condition with the exception of wall-hung toilets in the males' restrooms in poor condition. These are	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		reportedly being damaged by the students, especially in restroom BRR300. The restrooms' 'push-type' faucets were often found to stick in the on-position. It was reported that the fixtures are reported aged mostly in the 100-, 200-, and 400-wing.	
	Domestic Water Distribution	The sole water supply for the Lamar Middle School campus was found along Wynona Avenue, with double meter isolation and no evidence of a backflow prevention device for individual buildings or the main campus supply line. Domestic hot water for administration, kitchen/cafeteria, and nurse staff was supplied by three small electric hot water heaters with capacities of 30 gallons or less. Domestic hot water is not supplied for student restrooms or locker/shower areas. The domestic hot water system was observed to be in average. There is potential galvanized piping in the facility.	Average
	Other Plumbing	Deficiencies were noted with regard to the roof leaders, such as cracked entries, outlets discharging to piles of trash, and lack of supports. Sanitary sewer header vents and gas piping appeared in good condition. Staff interviews report the sanitary lines in the 100-, 200-, and 400-wings are near the end of their service life.	Average
Mechanical/ HVAC	Seven 7.5 to 40 ton packaged air conditioning units and two smaller split packaged systems supply cool air from the rooftop level to the kitchen/cafeteria, gymnasium/locker room, and main corridor areas. Classrooms were typically served by fan coil units, which are served by the chiller plant (BLDG-045D). Administrative offices and a number of isolated corridors were cooled by ten 4 to 8-ton ground level, outside condenser/indoor air handler split systems. Several indoor modular, ceiling-hung, or mezzanine-mounted air handling units circulate air in the big and small gymnasiums and the 500-wing "COR1" corridor areas. Four air handling units located inside mechanical rooms, ranging in size from to 15 to 17 tons, circulate air for some classrooms. The primary temperature control unit for the building (with exception of the administrative offices) is located in the 400-wing mechanical room adjacent to AHU-401. Multiple exhaust fans of various sizes were mounted on the rooftop level. Several wall exhaust units were present in the gymnasium areas. Two gas/water tube boilers serving the administration, kitchen/cafeteria, and nurse areas were not in operation and appeared to be partially dismantled. A 1920MBH gas/water tube boiler located in the mezzanine above the gymnasium mechanical room appeared to be supplying heat to air handlers for 500-wing corridor COR1.		Average

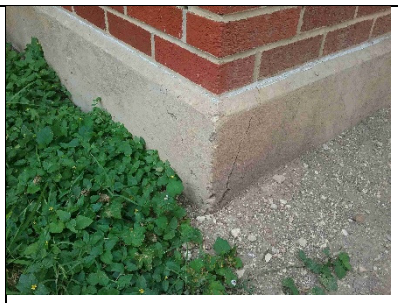
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	This was reportedly nonfunctional. Multiple exhaust fans of various sizes mounted on the rooftop level appeared in mostly good condition, with a minority in average to poor condition. Some, such as EF-10 (SC002476) and EF-NE (SC002483), despite appearing relatively new, delivered a loud, erratic noise during operation. One rooftop vent stack (above the 200-wing) was severely corroded. The condition of the packaged air conditioning units varied considerably, as some equipment was more recently installed (i.e., the administration offices and part of the big gymnasium), but most others appeared beyond their typical design life, with operating noise, wear and tear, mildew buildup, and exterior corrosion issues. Staff reports that facility HVAC is not properly balanced, as some rooms are too cold while others are too warm. It is also reported that the HVAC units and fresh air units do not function together with reliability. Facility staff reported functional issues with the rooftop A/C units for the gymnasium areas, and condensation pans not draining properly. The air handling units for the big and small gymnasiums and the 500-wing "COR1" corridor areas were mostly inaccessible for assessment, but indicated good to average condition, with instances of corrosion, missing fasteners, and exposed electrical connections. The split packaged system serving the administrative offices appeared in good condition. Missing fasteners and denting were common observations on exhaust fans. Two exhaust vents had significant corrosion (one in roof section A-12, the other in A-29).		
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 5820XL control panel. Re-wiring of fire electrical system in the 500-wing is occurring this summer. The fire alarm system was observed to be in good condition, but there are areas where fire alarm end devices are aged past their design life or have been vandalized. The self-closing smoke doors in "Corridor 8" are malfunctioning leaving the doors permanently open, and the alarm is on in perpetuity. Panels are behind the CMU and are inaccessible to staff.	Good
	Fire Protection/ Suppression	The fire suppression system consists of fire extinguishers throughout the building. Visual inspection showed these are in average condition.	Average
Electrical	Electrical Distribution	The electrical service for the main building is 277/480-volt 4000-amp. It originates from a 1500kVA utility transformer that feeds a 4000A main switchboard 'MSB' located at the exterior of the building, near the	Poor

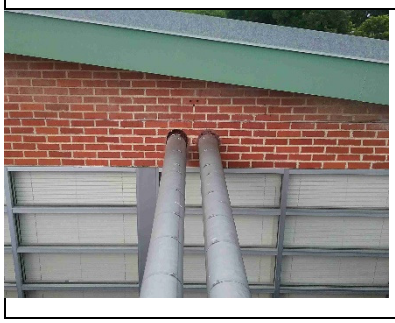
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		Mechanical Room Building. The service feeds transformers and low voltage panelboards, which are located in various electrical rooms throughout the main building and in other buildings on the campus. There are nine distribution transformers rated at 480-volt primary that step-down the voltage 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 observed to be in average to poor condition, with a majority in poor condition. A majority of the assets were observed with corrosion. There are several panelboards from the original construction and they are at end of their useful life, especially those in the 500-wing classrooms and in the gymnasium areas. It was also reported that 500-wing does not have adequate quantity of electrical receptacles.	
	Lighting	The building's exterior lighting consists of mostly HID luminaries. Several LED luminaries were observed at the loading dock. There is only one pole mounted light fixture in the south parking lot and one pedestrian height pole mounted light fixture at the north parking lot. The interior lighting primarily consists of T8 fluorescent luminaires, most of which appeared to have been installed as recently as five years ago. The classroom wings, library, cafeteria, and similar areas have direct/indirect pendant fixtures. The big and small gymnasiums have fluorescent high bay fixtures with wire guards and the gymnasium support areas (such as locker rooms, coach's offices, corridors, similar areas) have surface mount vandal resistant fluorescent wrap fixtures. The 200, 300, and 400-wings appeared to have occupancy sensors in the majority of the areas, with exception of the cafeteria, which had all manual controls. The 100- and 500-wings appeared to lack occupancy sensors. However, both the big and small gymnasiums have occupancy sensors. The lighting for the building was observed to be in average to poor condition, with a majority in poor condition. Most of the exterior luminaires appeared to be aged past their typical design life and was lacking throughout the campus. Many interior luminaires were observed with burned out lamps. Specifically, most of	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		the light fixtures in the big gymnasium were observed with burned out lamps. General observed deficiencies included broken lenses, inconsistent color temperatures, and non-functional fixtures. There are exit signs present in the building, however, most appeared to be from the original construction. Several areas appeared to have emergency egress fixtures either from the original construction or from more than 20 years ago. However, it appeared that the 100-, 200-, and 400-wings lacked emergency lighting all together.	
	Communications & Security	There is a Gemini security system, including surveillance cameras. There are two public address system headends in the facility, one new and one old. The building has an outdated school bell system. The building is equipped with tele/data systems, but the main backbone equipment is located in an inaccessible room. There are Wi-Fi access hubs throughout the facility. It was reported that the security system is working, but are aged and experience blind spots. It was reported that both public address system headends are working and have no issues. The Wi-Fi access hubs appeared to be in good condition, however, it was reported that the Wi-Fi signal is weak throughout the campus.	Good

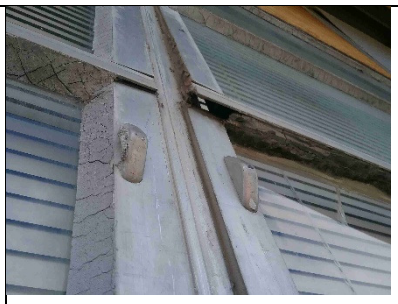
Exterior System Deficiency Examples

Exterior Walls



Exterior Windows



Exterior Doors

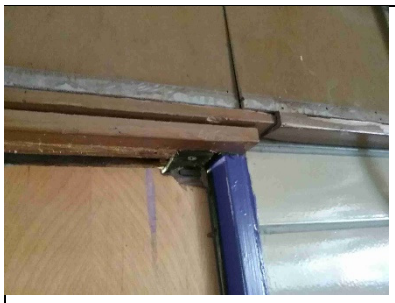


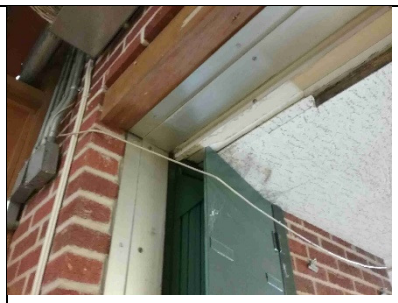
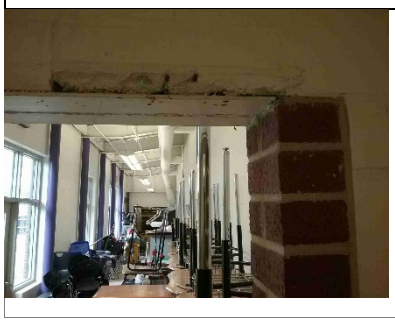
Roofing Deficiency Examples

Interior Construction Deficiency Examples

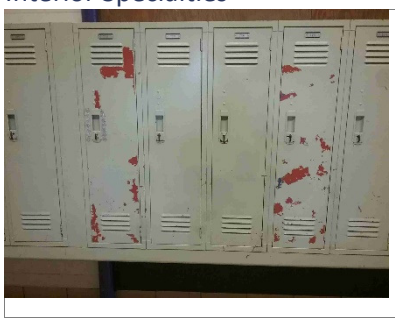
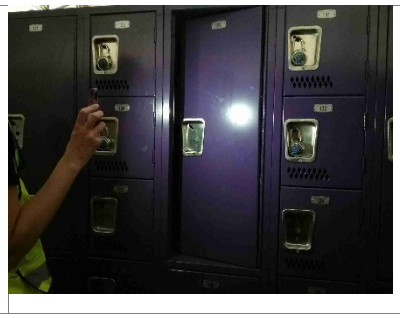
Interior Walls

Interior Doors



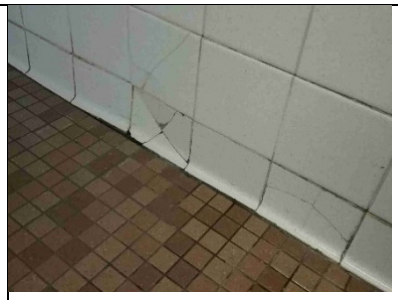
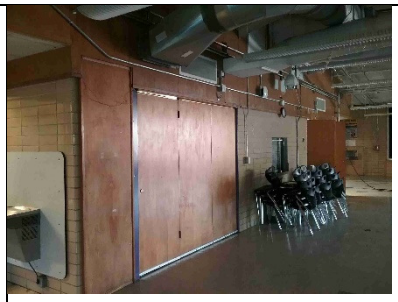



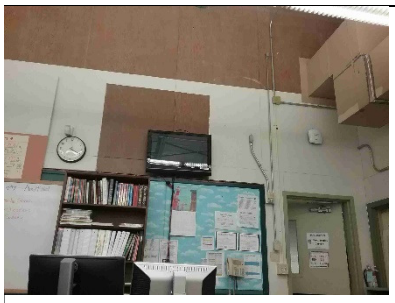

Interior Specialties

Interior Finish Deficiency Examples

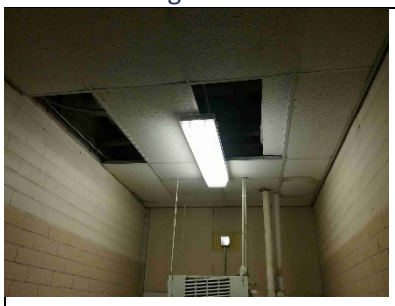
Interior Wall Finishes

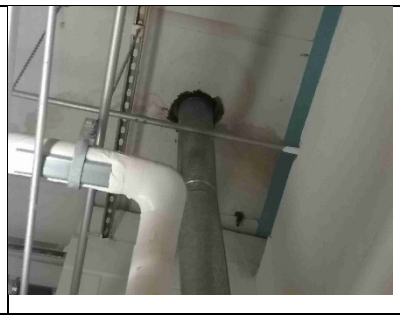






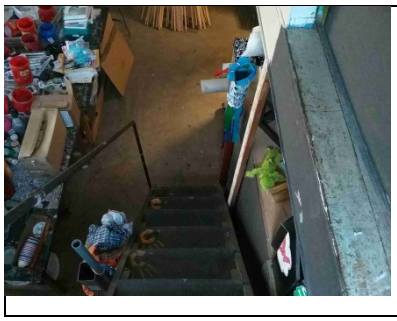
Interior Floor Finishes

Interior Ceiling Finishes




Interior Stairs



Plumbing System Deficiency Examples

Plumbing Fixtures


Other Plumbing

Mechanical/HVAC System Deficiency Examples



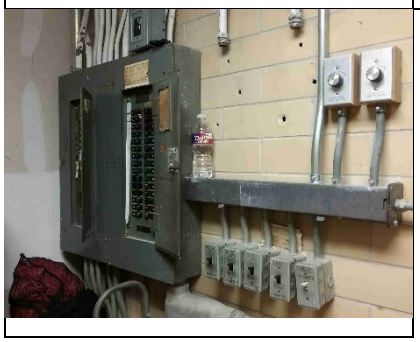


Fire Protection

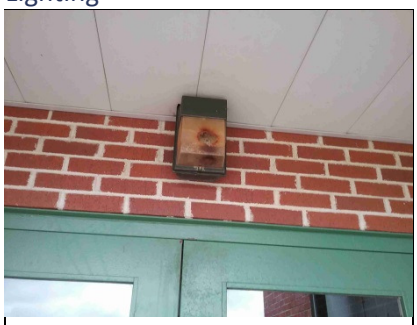
Fire Alarm

Electrical

Electrical Distribution



Lighting



Stand-Alone Band Hall – BLDG-045B

Building Purpose	Band Hall
Building Area	9,031 SF
Inspection Date	June 14-16, 2016
Inspection Conditions	95° F, sunny

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 of BLDG-045B, a single story building, consists of a brick façade with flat metal panel accents. An eave of flat metal panels extends approximately six feet over the edge of the wall on the majority of the building. The exterior walls of the building were observed to be in good condition, needing only regular maintenance and care. One aluminum downspout was observed to be extremely dented and damaged.	Good
	Exterior Windows	The window system consists of double pane fixed windows in aluminum frames. Installed in horizontal bands, the window units begin 14 feet above finish floor and span to the top of wall. The exterior windows of the building were observed to be in good condition needing only cleaning. Excessive bird droppings were observed on the windows and frames.	Good
	Exterior Doors	There are two main public entries located at the north side of the building. The entry doors are half glazed, painted metal double doors set in storefront window systems. All of the exterior doors in the building are manually operated. The doors were observed to be in good condition, though some paint was chipped in various locations.	Good
Roofing	The roof for the building is built-up asphalt with granular topping. The roof was inaccessible and was not assessed.		N/A
Interior	Interior Walls	The interior walls are CMU construction with areas of	Good

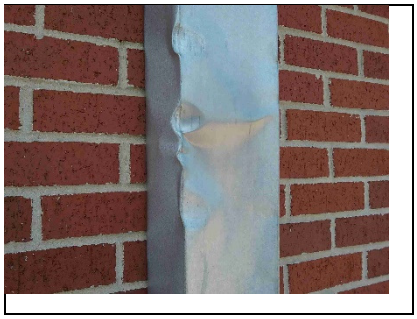
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Construction		gypsum board finish. It is assumed that the private practice rooms are constructed with a sound damping assembly. The interior walls were observed to be in good condition except for one exposed hole intended for an electrical box, which had not been installed.	
	Interior Doors	The doors are painted metal in painted metal frames with lever hardware. Several of the interior doors were observed to have excessive scratches on the paint finish.	Average
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	Connecting BLDG-045B and BLDG-045C is a large expanse of terracing concrete connected with cast-in-place ramps and steps. The majority of the stairs were observed to be in good condition, and no immediate structural issues were observed on site. The surfaces of the handrails were observed to be worn. The supports of many handrails were set in rust-stained or cracking concrete. Several instances of eroded concrete were observed.	Good
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior walls are finished with paint, and some walls are accented with painted murals. The walls were observed to be in good condition. The wall of one private practice room was observed to have a chip in the gypsum board.	Good
	Interior Floor Finishes	The floor finish consists of linoleum floor tile with rubber base throughout the building. The flooring was observed to be in good condition. The rubber base was observed to be in failing condition, as it was discolored, and cracking throughout the corridor.	Average
	Interior Ceiling Finishes	The majority of the ceiling is ACT with exposed metal deck in some portions and gypsum board in the restrooms. The ceiling was found to be in good condition; except for severely water damaged tiles in the corridor by monitor M05.66. The MUSLAB and STO702 were each observed to be missing ceiling tiles.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building has one pair of multi-user restrooms for students. Typical restrooms have wall-hung, porcelain lavatories with manual faucets along with floor-mounted,	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		porcelain toilets with manual flush valves. There are wall-hung, porcelain urinals with manual flush valves in dedicated men's restrooms Plumbing fixtures were observed to be in good condition.	
	Domestic Water Distribution	Domestic hot water is not supplied to this building.	N/A
	Other Plumbing	There were several deficiencies observed. The inlet line to the rainwater harvest tank lacked supports. There was a potentially abandoned 6" PVC roof leader drain line partially exposed, with an open cleanout access filled with rocks. Other than these observed deficiencies, the other plumbing system components were in good condition.	Good
Mechanical/ HVAC	Chilled water is supplied to the packaged air conditioning unit in the building's mechanical room from the Chiller Plant (BLDG-045D). One rooftop exhaust fan evacuates air for the building; it was inaccessible for assessment due to roof height/pitch. Ceiling-hung exposed ductwork originating from the packaged AC unit in the mechanical room distributes air to the building. One 30 ton water-cooled, electric heat packaged air conditioning unit supplies fresh cool air for the facility. It was found to be in average condition, as it was leaking condensate and the control unit monitor was missing.		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 tied to the campus main fire alarm system and was observed to be in good condition.	Good
	Fire Protection/ Suppression	There is no fire suppression system aside from wall-mounted encased fire extinguishers. They appeared to be in average condition.	Average
Electrical	Electrical Distribution	There is a 250A, 480/277V panel 'HG' that is fed from panel 'DP2' (located in the Stand-Alone Classroom – BLDG-045C). Panel 'HG' serves a 480-208/120V transformer that then serves a 208/120V branch panel to serve the 120V loads in the building. The system was observed to be in good condition. The building does not have a lightning protection system.	Good
	Lighting	The building's exterior lighting primarily consists of HID wall packs. The interior lighting primarily consists of T8 pendant mounted direct/indirect fluorescent luminaires in the classrooms, 2x4 fluorescent fixtures in the corridors, and 1x4 surface mounted wraps in the	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		restrooms. Emergency lighting is accomplished via battery packs in select fixtures. Select areas have occupancy sensors. The lighting for the building was observed to be in good condition.	
	Communications & Security	There is a Gemini security system, including surveillance cameras. The public address system is tied to the campus system. The building is equipped with tele/data systems, but the main backbone equipment is located in an inaccessible room and was not assessed. Both security and PA systems were observed to be in good condition with no reported deficiencies. Wi-Fi access hubs were observed in the building and appeared to be in good condition.	Good

Exterior System Deficiency Examples

Exterior Walls

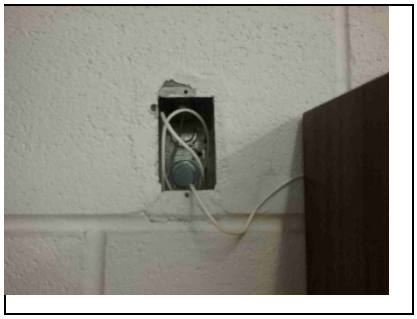


Exterior Windows

Exterior Doors

Interior Construction Deficiency Examples

Interior Walls



Interior Doors

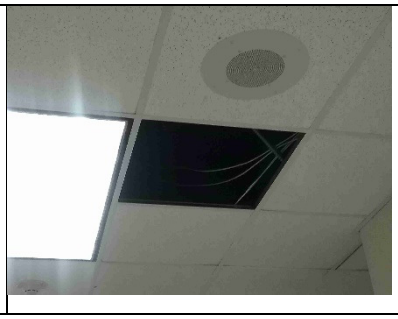
Stair Deficiency Examples

Exterior Stairs

Interior Finish Deficiency Examples

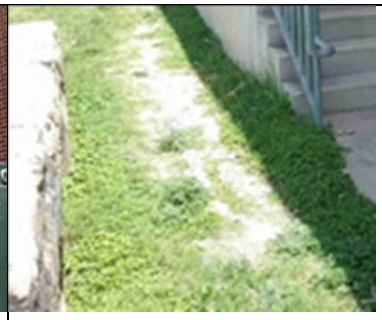
Interior Floor Finishes

Interior Ceiling Finishes



Plumbing System Deficiency Examples

Other Plumbing



Mechanical/HVAC System Deficiency Examples

Stand-Alone Classroom Building – BLDG-045C

Building Purpose	Classrooms
Building Area	5,353 SF
Inspection Date	June 14-16, 2016
Inspection Conditions	95° F, sunny

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 of BLDG-045C, a single story building, consists of a brick façade with flat metal panel accents. An eave of flat metal panels extends about four feet over the edge of the wall on the majority of the building. The exterior was observed to be in good condition. The only noted deficiency was slightly chipped paint visible on the steel beams supporting the eave.	Good
	Exterior Windows	The window system consists of double pane fixed windows in aluminum frames. The windows are installed in horizontal bands and the window units begin 14 feet above finish floor and span to the top of the wall. No deficiencies were observed of the exterior windows.	Good
	Exterior Doors	There is one main public entry located at the southwest side of the building. The entry doors are half glazed, painted metal double doors set in storefront window systems. All of the exterior doors in the building are manually operated. The doors were observed to be in good condition. The metal frame to the entry door was observed to have normal wear and tear with chipped paint at the edges of the door.	Good
Roofing	The roof for the building is built-up asphalt with granular topping. The roof was inaccessible and was not assessed.		N/A
Interior Construction	Interior Walls	The interior walls are CMU construction with select areas finished with gypsum board. The CMU walls were observed to be in good condition	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		except for missing electrical boxes and some unsealed penetrations. Holes were visible in the gypsum board furr-outs in some classrooms. Storage room walls were observed to have unsealed penetrations.	
	Interior Doors	The doors are painted metal in painted metal frames. Several of the interior doorframes were observed to have excessive scratching of the paint finish. The doors were observed to be in good condition.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	A large expanse of terracing concrete connected with cast-in-place ramps and steps links BLDG-045B and BLDG-045C. The majority of the stairs were observed to be in good condition, and no immediate structural issues were observed on site. The surfaces of the handrails were observed to be worn. The supports of many handrails were set in rust-stained or cracking concrete. Several instances of eroded concrete were observed.	Good
	Interior Stairs	There is a linoleum-faced ramp in the corridor allowing access to the stage height of room 604. The ramp structure was observed to be in good condition, but the handrail was noted to have excessive wear and tear.	Good
Interior Finishes	Interior Wall Finishes	The interior walls are painted CMU and gypsum board. The walls were observed to require repainting in several areas to maintain a uniform appearance. Examples were observed in the restrooms and in the corridor. The dance room wall finishes were observed to have small holes.	Average
	Interior Floor Finishes	The floor finish consists of linoleum floor tile with rubber base. The floor was observed to be in good condition. The rubber base was observed to be in failing condition, as it was discolored, cracked, and peeling from the wall.	Poor
	Interior Ceiling Finishes	The majority of the ceiling is ACT with exposed metal deck in some portions and gypsum board in the restrooms. Near the main entrance, a large water stain was observed on one ceiling tile.	Average
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building has one pair of single-user restrooms. The restrooms have wall-hung, porcelain lavatories with	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		manual faucets along with floor-mounted, porcelain toilets with manual flush valves. Plumbing fixtures were found to be in good condition.	
	Domestic Water Distribution	Plumbing fixtures are serviced with hot water from a 50-gallon electric hot water heater located in the janitorial closet/storage room (STO600). The heater was observed to be in good condition with no identified or reported deficiencies.	Good
	Other Plumbing	Roof leaders were piped to a storm water catch basin. They were observed to be in good condition.	Good
Mechanical/ HVAC	Chilled water is supplied to the packaged air conditioning unit in the building's mechanical room from the Chiller Plant (BLDG-045D). One rooftop exhaust fan evacuates air for the building. The roof was inaccessible for assessment. Ceiling-hung exposed ductwork originating from the packaged AC unit in the mechanical room distributes air to the building. One 17-ton water-cooled, electric heat packaged air conditioning unit supplies fresh cool air for the facility. All of the equipment was found to be in good condition.		Good
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 tied to the campus main fire alarm system and was observed to be in good condition.	Good
	Fire Protection/ Suppression	There is no fire suppression system aside from wall-mounted encased fire extinguishers. They were observed to be in average condition.	Average
Electrical	Electrical Distribution	There is a 400A, 480/277V panel 'DP2' that is fed from the main switchboard 'MSB' (located just outside the Mechanical Room Building). Panel 'DP2' serves a 480-208/120V transformer that then serves a 208/120V branch panel to serve the 120V loads in the building. The building does not have a lightning protection system. The system was observed to be in good condition.	Good
	Lighting	The building's exterior lighting consists of mostly HID wall packs. The interior lighting consists of primarily T8 pendant mounted direct/indirect fluorescent luminaires in the classrooms, 2x4 fluorescent fixtures in the corridors, and 1x4 surface mounted wraps in the restrooms. Emergency lighting is accomplished via battery packs in select fixtures. Select areas have occupancy sensors.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The lighting for the building was observed to be in good condition.	
	Communications & Security	There is a Gemini security system including surveillance cameras. The public address system is tied to the campus system. The building is equipped with tele/data systems, but the main backbone equipment is located in an inaccessible room and was not assessed. Both security and PA systems were observed to be in good condition with no reported deficiencies. Wi-Fi access hubs were observed in the building and appeared to be in good condition.	Good

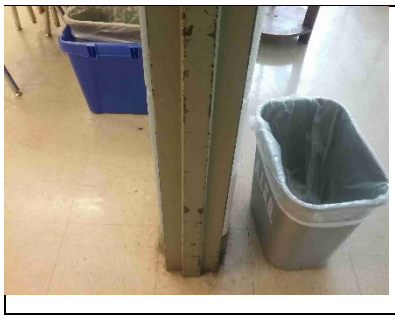
Exterior System Deficiency Examples

Exterior Doors

Interior Construction Deficiency Examples

Interior Walls

Interior Doors

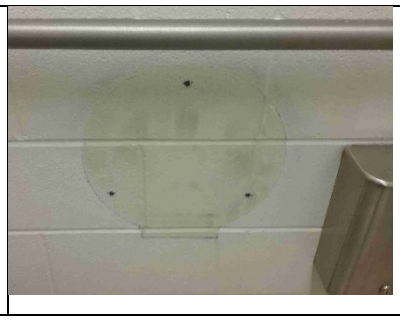


Stair Deficiency Examples

Interior Ramp

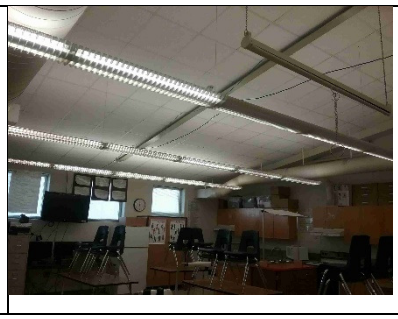
Interior Finish Deficiency Examples

Interior Wall Finishes



Interior Floor Finishes

Interior Ceiling Finishes



Mechanical Room Building – BLDG-045D

Building Purpose	Mechanical Room Building
Building Area	2,003 SF
Inspection Date	June 14-16, 2016
Inspection Conditions	95° F, sunny

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 of BLDG-045D consists of painted CMU walls on a concrete slab on grade. The building has aluminum coping and the southeast exterior of the building is surrounded by wooden louvers to screen the mechanical equipment. There are two metal louvers set through the wall. On the northwest wall of the building, hairline cracks were observed to follow the mortar joints of the CMU. Along the concrete foundation of the same wall, spalling and rust colored stains from a door frame were observed. Discoloration was observed at several of the mortar joints and top of wall, possibly from moisture seepage through the wall. The concrete platform for exterior mechanical equipment was observed to be separating from the CMU wall of the building. The metal louvers were observed to be in good condition.	Good
	Exterior Windows	System not present.	N/A
	Exterior Doors	There are two entries into the main space, each a set of painted metal double doors with louvers. The separated ELECCHLR room is accessed through a single painted metal door from the exterior. The door hardware was noted to be in good condition, except for a broken catch on the north door. The door frame of the south door exhibited evidence of rust, and staining of the concrete below was observed. Slight gapping between the wall and door frame was also observed where sealant was missing.	Good

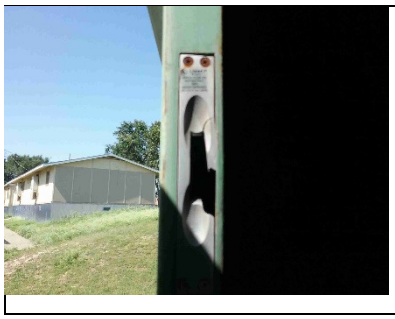
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Roofing	The roof was inaccessible and was not assessed. The roof system contains scuppers and downspouts.		N/A
Interior Construction	Interior Walls	The interior of the building consists of unfinished CMU walls. The two spaces are divided by CMU walls, but both spaces must be accessed from the exterior. The interior of the building was observed to be in good condition except for a hole observed through the CMU wall between the MAINCHLR and ELECCHLR rooms.	Good
	Interior Doors	System not present.	N/A
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	There is a metal utility staircase inside the building, providing access to the exterior mechanical yard. The staircase appeared to be in good condition.	Good
Interior Finishes	Interior Wall Finishes	System not present.	N/A
	Interior Floor Finishes	The floor in this building is concrete slab on grade. Extensive ponding was observed beneath the interior equipment.	Average
	Interior Ceiling Finishes	System not present.	N/A
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	System not present.	N/A
	Domestic Water Distribution	Domestic hot water is not supplied to this building.	N/A
	Other Plumbing	Roof leaders are present. They appeared in good condition and were piped to a storm water catch basin.	Good
Mechanical/ HVAC	Two centrifugal, water-cooled chiller units supply two galvanized steel cooling towers in the mechanical yard of the building. Four rooftop exhaust fans exhaust air from the building; however, they were inaccessible for assessment due to roof height. Ceiling-hung exposed ductwork originating from the packaged AC unit in the mechanical room distributes air to the building. The cooling equipment was found to be in average condition. Both chiller units had damaged seams on the outer skin of their evaporator tanks and were leaking water. One of the cooling towers (CT-1) had full rust-through penetration at several areas. Cooling water pumps CWP-3 and CWP-1 appeared to be out of service with internal corrosion issues. Both cooling towers exhibited slight exterior corrosion throughout and slight absorption rack damage.		Average
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as	Good

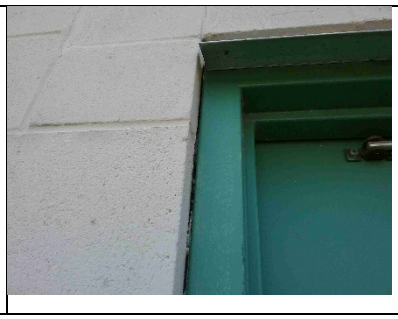
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		horns/annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is tied to the campus main fire alarm system and was observed to be in good condition.	
	Fire Protection/ Suppression	There is no fire suppression system aside from wall-mounted encased fire extinguishers. They appeared in average condition.	Average
Electrical	Electrical Distribution	There is a 1200A, 480/277V panel 'DCP' that is fed from the main switchboard 'MSB' (located just outside the Mechanical Room Building). Panel 'DCP' serves a 480-208/120V transformer that then serves a 208/120V branch panel to serve the 120V loads in the building. It also serves a motor control center, which feeds all the mechanical equipment in the building. The building does not have a lightning protection system. The system was observed to be in good condition.	Good
	Lighting	The building's exterior lighting primarily consists of HID wall packs. The interior lighting primarily consists of T8 pendant mounted low-bay chain hung fluorescent luminaires. Emergency lighting was not observed inside the building. Select areas have occupancy sensors. The lighting for the building was observed to be in good condition.	Good
	Communications & Security	System not present.	N/A

Exterior System Deficiency Examples

Exterior Walls

Exterior Doors





Interior Construction Deficiency Examples

Interior Walls

Interior Finish Deficiency Examples

Interior Floor Finishes

Mechanical/HVAC System Deficiency Examples



Lamar Middle 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

Mechanical/HVAC

1. Schedule replacement by the year 2020 of all HVAC units currently using R-22 refrigerant.

Electrical

1. Repair or replace all electrical equipment affected by corrosion or rust. If the corrosion/rust is beyond the enclosure then replacement is suggested.
2. Remove any floor receptacles, as these are being phased out of use district-wide.
3. Replace all outdated luminaires with LED luminaires with dimming capabilities.
4. Replace all existing exit signs with LED fixtures and add more exit signs where required for all buildings.
5. Provide additional cameras to eliminate potential blind spots and where required for all buildings, particularly at all building entry access points. Provide additional card access points where required by the School.
6. Provide lightning protection system for all buildings as required.
7. Provide LED egress lighting where required for all buildings.
8. Provide additional security cameras to eliminate potential blind spots.

Main School Building Recommendations

Exterior

1. Seal the open pipe penetrations at the loading dock.
2. Provide a proper lock on the crawl space entry doors at the loading dock.
3. Replace entire remaining original window system to match updated aluminum frame system.
4. Replace the windowpanes that have condensation between panes in rooms 108, 115 and 204. Reseal for moisture penetration and monitor other windows.
5. Replace missing bricks and install steel angle at top corners to ensure eave support.
6. Replace missing downspout boots and provide splash blocks at each downspout to divert water away from building.
7. Replace mangled air vent covers.
8. Reseal aluminum frame windows in 200-wing to eliminate gaps.
9. Replace the rusted frame of the double doors leading from the loading dock to the kitchen.
10. Replace missing windowsill flashing cap at east wall of 200-wing.
11. Repaint exterior wood roll-up door.

Roofing

1. Heat-weld gaps in membrane roofing.
2. Reposition granular topping to cover exposed patches of asphalt.
3. Repair deteriorating asphalt curb on built-up roof.
4. Check discolored spots for thru-roof leaks and replace drip pans under equipment to prevent further water leakage.

5. Replace failing metal paneling in the courtyard with a weather resistant coated metal panel. Provide further investigate to determine the source of damage and repair after resolution.

Interior Construction

1. Identify source of mildew odor and mitigate.
2. Replace all wall-mounted corridor lockers with new lockers.
3. Replace folding wooden doors in the cafeteria with updated system.
12. Reset the door to room 209 so that it is not caught on the floor as it opens.
13. Replace metal screen closet door in the males' dressing room.
14. Broken ceramic faced masonry walls in the male and female dressing rooms. Repair to match original finish.
15. Reconstruct access to upper mezzanine in the health room due to an unstable stair and unsuitable railing.
16. Repair (furr-out) frames around damaged cased openings throughout building.
17. Add door hardware to door with missing lever or install a swing door if no lever is necessary.
18. Repaint interior doors showing excessive wear and tear.

Interior Finishes

1. Replace entire woodwool and OSB ceiling with updated system and finishes. Replace damaged and water stained ACT tiles after sources of water damage are identified and repaired.
2. Provide cover solid cover plates were missing and wire is exposed.
3. Deep clean ceramic faced base and walls throughout building.
4. Replace aged and deteriorated rubber base.
5. Refinish the walls of the 500-wing classrooms and rewire classroom 500 so that wiring is not draped across room.

Plumbing

1. Replace wall-hung toilets with floor-mounted models in the males' restrooms (if not all restrooms).
2. Investigate maintenance on or alternatives for 'push-type' restroom faucets, which commonly stick in on position.
3. Install proper supports for piping to rainwater harvesting tank.
4. Replace sanitary lines in 100-, 200-, and 400-wings.

Mechanical/HVAC

1. Consider replacing packaged rooftop system AHU-1 / SC002345, as it made erratic noise during operation, was leaking, is nearing the end of its typical design life, and had significant damage to its radiator fins.
2. Consider repairing or replacing exhaust fan EF-10, which was missing exterior fasteners, and made an erratic noise during operation.
3. Consider replacing the air-cooled condenser ten feet (plan) west of rooftop exhaust fan EF-10, as it was corroded and had damaged radiator fins.
4. Consider secure mounting of all small, rooftop mounted split systems. Most were observed resting on unsecured wood planks.

Fire Protection

1. Reprogram the existing fire alarm system such that the self-closing smoke doors in "Corridor 8" close/function as designed.
2. Relocate panels are that are behind CMU to a location that is fully accessible to staff.
3. Replace aged fire alarm devices.

Electrical

1. Replace all outdated panelboards in the Main School Building, specifically in the 500-wing (rooms 500, 502, art, and health), as they are severely aged past typical design life.

2. Provide additional electrical receptacles where needed, particularly in the 500-wing classrooms.
3. Verify the condition of tele/data system/equipment in the Main School Building, as it was inaccessible.
4. Add additional data drops in classroom as requested by facility staff.

Stand-Alone Band Hall Recommendations

Exterior

1. Clean bird droppings on windows with a power-washing system.
2. Replace dented portion of downspout with new segment. Consider installing protective barrier below head height.
3. Exterior: Assess structural condition of deteriorated concrete steps. Repair failing portions of steps.
4. Exterior: Seal cracks in concrete at handrails.

Interior Construction

1. Replace all rubber wall base with new rubber base.
2. Sand and refinish door leading to room CHOIRPRA.
3. Replace missing ceiling tiles in storage rooms.
4. Replace damaged ceiling tiles in corridor after source of damage is identified and repaired.

Plumbing

1. Investigate partially exposed 6” PVC line and nearby open, debris-filled cleanout near Mechanical Room entrance. If active sanitary sewer line, recommend proper cover and rehab of cleanout. If inactive roof leader discharge piping, recommend removal.
2. Provide proper supports for inlet piping to rainwater harvest tank.

Mechanical/HVAC

1. Recommend replacing monitor display and investigating leaking condensate for packaged, water-cooled AC unit AHU-601 / SC002334.

Stand-Alone Classroom Recommendations

Exterior Construction

1. Repaint damaged exterior doors.

Interior Construction

1. Seal around penetrations in storage room.
2. Install electrical boxes or cover openings in walls at various locations in the building.

Stairs

1. Sand and paint interior ramp handrail.

Interior Finishes

1. Replace damaged ceiling tiles. Install tile after source of damage has been identified and repaired.
2. Replace all rubber base with new rubber base.
3. Sand and paint door frames.

Mechanical Room Building Recommendations

Exterior

1. Clean rust stains from concrete.

2. Replace rusted doorframe and provide joint sealant at joints around doorframes and adjacent walls.
3. Repair cracked CMU and foundation walls.

Interior Construction

1. Repair and patch the hole in the damaged CMU wall.
2. Ensure ponding water has no ill effect on equipment, curb, or concrete floor integrity. Reassess, if necessary.

Plumbing

1. Confirm status of cooling water pumps CWP-1 and CWP-3 and investigate cause of apparent tuberculation.

Mechanical/HVAC

1. Investigate structural integrity of cooling tower CT-1, which had significant rust penetration at several points on exterior sheeting. This cooling tower also had slight absorption rack damage and leaks.
2. Recommend structural repair of the evaporator tanks on both chiller units (CH-1 and CH-2), which had failed outer skin seams and apparent leaks.

CRAWL SPACE – Lamar MS – Main Building (BLDG-045A)

Building Purpose	Administrative, Classrooms, Gym, and Cafeteria
Inspection Date	August 17, 2016, (Morning)
Inspection Conditions	75° - Rainy & Humid (Heavy rainfall over past several days)

Crawl Space System Deficiency Overview

NOTES CONCERNING CRAWL SPACE OBSERVATIONS: The campus appeared to have poor drainage in general and we found that many of the crawl spaces held standing water (up to 9 inches deep), so our observations in several areas were limited to what could be seen from the hatch or areaway opening. Several areaways had grates with padlocks we were unable to open or covers that were screwed down, so crawl spaces adjacent to those areaways were not be observed. Other crawl spaces were inaccessible because the hatch doors were not operable. Observations below apply to the eight crawl spaces we observed; refer to the attached plan for areaway and access hatch locations.

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
Soil, Drainage, Ventilation & Access	Soil Below Building, Site Drainage in Crawl Space	Eight (8) crawl spaces were observed at the following locations: Areaways A, B, C, G, J and Access Hatches L, M, O. Soil in Areaway A was damp and had a small area of ponding water near the areaway entrance. Areaway B was holding roughly 3 inches of standing water and could only be observed from the areaway entrance. Areaway C had standing water approximately 1 inch deep throughout the entire crawl space. The crawl space under Areaway G was holding roughly 6 to 9 inches of standing water and condensation was present under pipes. The soil under Areaway J was moist around the perimeter but dry in the interior of the space. Soil in Access Hatch L was dry. Soil in Access Hatch M was dry with no signs of water infiltration observed. Soil in Access Hatch O was damp with condensation observed on underside of the slab. Soil/Drainage deficiencies: • Poor site grading allows surface water to infiltrate crawl spaces • Standing water in most crawl spaces, indicates inadequate drainage in crawl space.	Poor
	Soil Retainers	N/A – No soil retainers or carton forms were visible in the crawl space areas observed.	N/A

	Areaways/Ventilation	Eight (8) areaways were located outside around the main building and two (2) were located in room AHU-401. Areaway grating was padlocked or screwed closed. Grating was clogged with leaves and debris, likely contributing to poor ventilation in the crawl spaces. Rusted grating was observed oat several areaways. Several areaways also had low curb heights allowing surface runoff to drain into the areaways and floor the crawl spaces. Areaway/ventilation deficiencies: • Inaccessible areaways (locked, blocked, screwed down) • Areaway grates clogged with debris (limiting ventilation) • Condensation on pipes and underside of slabs indicate poor ventilation • Low curb heights allow water into crawl spaces • Mild to significant corrosion on metal grates	Average
	Access Hatches	Seven (7) wall access hatches were located around the perimeter of the main building. Soil had accumulated in front of the door for Access Hatch K making it inoperable. Access hatch deficiencies: • Access Hatch K was inoperable due to poor grading in front of hatch door • Mild corrosion on some hatch frames	Average
Exposed Structure	Exposed Columns & Tops of Foundations	Columns/piers support perimeter grade beams and suspended interior beams. Honeycombing and minor spalling was observed on a few columns. Column/Foundation deficiencies: • Minor to significant honeycombing on some columns	Good
	Exposed Faces of Perimeter Walls / Beams	Perimeter of crawl spaces are enclosed with deep concrete grade beams. Perimeter beams were generally in good condition, with some exposed reinforcement that was corroded, one location showing signs of significant corrosion. Perimeter wall/beam deficiencies: • Exposed/corroded reinforcement	Good

	Exposed Portions of Suspended Floor Beams Above	Concrete beams span between columns and/or perimeter beams. Beams appeared in good condition with minor honeycombing. Damage at a pipe penetration was observed at one location. Beam deficiencies. • Honeycombing • Slab damage at pipe penetration	Good
	Underside of Suspended Floor Slabs Above	Cast-in-place slab and beam floor system was observed. Slab had minor spalling in some areas and exposed/ corroded reinforcement. Damage at pipe penetrations was observed in a few locations. Slab deficiencies. • Honeycombing with exposed/corroded reinforcement • Minor slab spalling • Exposed corroded reinforcement • Damage at pipe penetrations	Good
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	A variety of piping was suspended in crawl spaces. PVC, cast iron and copper piping was observed. Several pipes and support hangers were rusted (some significantly). Several pipes had degraded and/or missing insulation. A broken pipe was observed in Areaway B, although it was not clear if this pipe had been abandoned or was still in use. Pipe deficiencies: • Corroded pipes and support hangers • Broken pipe in Areaway B • Degraded and/or missing insulation	Average
	Exposed Ductwork	N/A – No exposed ductwork was present in the crawl space areas observed.	N/A
	MEP Equipment	N/A – No MEP equipment was present in the crawl space areas observed.	N/A
	Spray Fireproofing/ Insulation	N/A – No spray fireproofing or insulation was present in the crawl space areas observed.	N/A

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

 Ponding water due to poor drainage	 Standing water in crawl space due to poor drainage	 Condensation on underside of slab indicates poor ventilation
 Wire mesh attached to areaway grate is screwed into concrete, areaway inaccessible	 Areaway is screwed closed and inoperable	 Low areaway curbs permit surface water to flow into crawl spaces
 Areaway grate is corroded	 Bottom of hatch door is below grade and inoperable	

Exposed Structure

Column honeycombing

Exposed/corroded reinforcement in perimeter beam

Beam honeycombing

Pipes penetrating beam & rusted

Slab honeycombing

Exposed/corroded slab reinforcement

Slab spalling

Pipes, Ducts, Equipment & Fireproofing

 Broken pipe (unclear if pipe is in use)	 Pipes rusted (some significantly)	 Rusted hangers
 Degraded pipe insulation	 Missing/damaged pipe insulation	

Lamar HS – Campus Summary of Crawl Space 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.

Main Building Recommendations

Soil, Drainage, Ventilation & Access

1. Re-grade site to create positive drainage away from building
2. Investigate adequacy of site drainage system
3. Investigate crawl space drainage and implement drainage system in crawl spaces
4. Investigate need for improved ventilation
5. Retrofit areaway curbs to prevent infiltration of surface water into areaways
6. Replace locks, remove screws and re-grade as needed so all areaways and hatches are accessible
7. Clean corroded areaway grates & paint with a rust-inhibitive primer

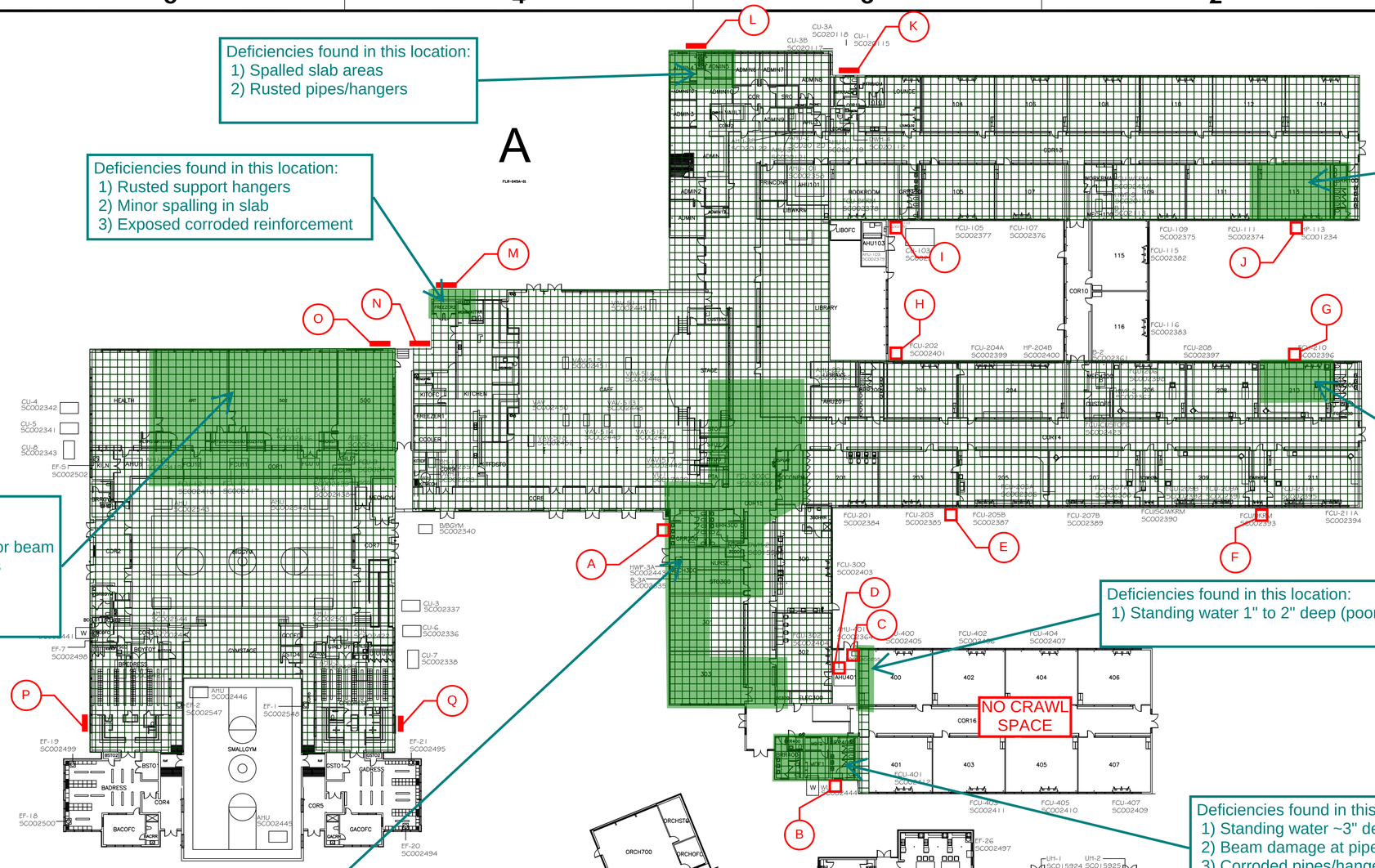
Exposed Structure

1. Clean exposed reinforcement and paint with a rust-inhibiting primer to prevent further corrosion (applies to columns, beams and slabs)

Pipes, Ducts, Equipment & Fireproofing

1. Investigate broken pipe lying on ground of crawl space
2. Replace significantly corroded pipes and hangers
3. Replace degraded/torn pipe insulation

DRAFT



Deficiencies found in this location:
1) Spalled slab areas
2) Rusted pipes/hangers

Deficiencies found in this location:
1) Rusted support hangers
2) Minor spalling in slab
3) Exposed corroded reinforcement

Deficiencies found in this location:
1) Moist soil around perimeter
2) Honeycombing at columns
3) Honeycombing on floor beams
4) Spalling on underside of floor slab
5) Exposed reinforcement in slab
6) Rusted pipes and support hangers
7) Pipe insulation degraded/torn

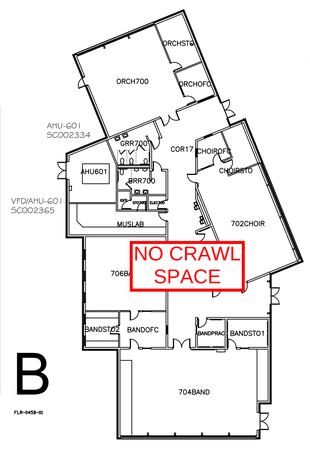
Deficiencies found in this location:
1) Standing water 6"-8" deep (poor drainage)
2) Condensation underside of pipes
3) Minor spalling/honeycombing on column
4) Minor spalling underside of floor slab
5) Rusted pipes
6) Pipe insulation degraded/torn

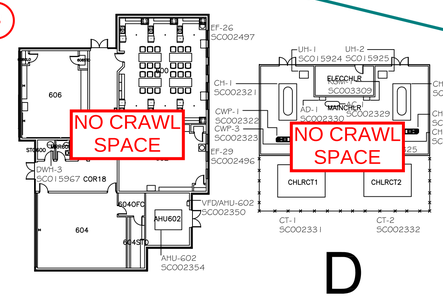
Deficiencies found in this location:
1) Damp soil
2) Honeycombing on suspended floor beam
3) Slab damage at pipe penetrations
4) Exposed slab reinforcement
5) Rusted pipes & support hangers

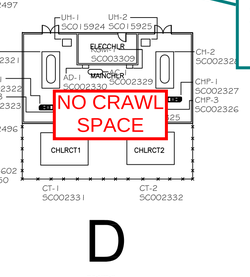
Deficiencies found in this location:
1) Standing water 1" to 2" deep (poor drainage)

Deficiencies found in this location:
1) Standing water ~3" deep (poor drainage)
2) Beam damage at pipe penetrations
3) Corroded pipes/hangers

Deficiencies found in this location:
1) Damp soil
2) Standing water (roughly 1") near areaway entrance
3) Honeycombing on perimeter column
4) Corroded exposed reinforcement at bottom of perimeter beam
5) Minor spalling on underside of suspended beams
6) Exposed reinforcement in suspended beams
7) Rusted pipes and support hangers







ACCESS HATCH OBSERVED DURING SITE VISIT

AREAWAY OBSERVED DURING SITE VISIT

APPROXIMATE LIMITS OF CRAWLSPACE OBSERVED DURING SITE VISIT

APPROXIMATE LIMITS OF CRAWLSPACE PER AVAILABLE PLANS AND SITE OBSERVATIONS

NORTH

REVISIONS				
MARK	DESCRIPTION	BY	DATE	APPR

REFERENCE DRAWINGS

APPROVALS	DRAWN	CHECKED	APPROVED
BY	S.P.		
DATE	4/16/10		

AUSTIN I.S.D.
DEPARTMENT OF CONSTRUCTION MANAGEMENT

LAMAR MIDDLE SCHOOL
6201 Wynona AUSTIN, TX
FLOOR PLAN
FIRST FLOOR

SCALE	SIZE	DRAWING NUMBER	SHEET	REV.
1" = 30'	D	04501	1 OF 1	0

DRAFT

Lamar Middle School Site Summary

Site/Civil Assessment

Address	6201 Wynona, Austin, TX 78757
Number of Permanent Campus Facilities	4
Original Year of Construction	1955
Total Campus Area	14 Acres
Data Collection Method	Desktop, Site Visit
Site Visit/Assessor	1/12/2017 / C. Morris

Introduction

The Lamar MS campus is located at 6201 Wynona in Austin, Texas. Lamar MS was established in 1955, and consists of the main campus building, band, theater, and mechanical buildings.

Development Information

Watershed	Shoal Creek
Total Impervious Cover	44%
Allowable Impervious Cover	100%
Barton Spring Recharge Zone	No

Data from "AISD District Wide Impervious Cover Simplified 12-1-16" spreadsheet, Prepared by Fayez Kazi/Civilitude, on December 1, 2016.

Parking and Drives

Parking and Drives	Configuration	Size (SF)
Visitor Parking	19 CB 4 HC	3,400
Staff Parking	83 CB 2 HC	41, 000
Student Parking	No	-
Parent Drop-Off	Yes	20,250
Service/Mechanical Yard	Yes	3,200
Bus Drop-Off Area	Yes	11,500

HC – Accessible Parking, CB – Combined Parking

System Deficiency Overview

The following table provides a summary of the systems and their respective conditions found by each discipline. Refer to the AISD_FCA_Lamar_MS_Site_Civil_ Exhibit for additional information.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Site Improvements	Roadways	Roadway 1 (R1) is in good condition. R1 is one-way and enters off of White Horse Trail on the north side of the campus. It is made of asphalt and has raised painted curbs. It serves as a parent drop-off with faculty parking locations along the right and left sides. Visitor parking is also marked along the painted curbs. The pavement is of Good quality with some raveling and minimal cracking. Painted curbs designate no parking and fire lane areas. The paint is very faded and in some cases barely legible. The striping for parking spaces is in good condition. Additionally, the pavement markings (arrows) for thru traffic are faded and worn. There are four handicapped parking spaces marked with two signs. One area of handicapped parking is curb parking and one sign serves two spaces. The remaining handicapped space is missing a vertical sign. One 40 LF section of concrete curb and gutter shows major signs of cracking and failure. Roadway 2 (R2) is in good condition. R2 is one-way and enters off of Wynona on the west side of the campus. It is made of asphalt and has raised painted curbs. It serves as a parent drop-off with faculty parking locations along both the right and left sides. Visitor parking is also marked along the painted curbs. The pavement is of good quality with some raveling and small patched areas. The striping and pavement markings are in average condition. Crack seal has	Roadway 1 Good Roadway 2 Good Roadway 3 Poor Loading Dock Good Overall: Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		been performed within the last few years. Roadway 3 (R3) is in poor condition. R3 is one-way and enters off of the southbound side of Burnet Road on the east side of the campus. It is made of asphalt and has raised painted curbs. It serves as the bus pick-up/drop-off with no additional parking for parents, staff or visitors. The pavement is of poor quality with heavy alligator cracking, potholing, multiple asphalt patches, crack sealing, longitudinal cracking and major raveling. There is also heavy damage to the raised curb in multiple locations. The loading dock is in good condition and is located on the west side of the campus with entry to the dock along Wynona. The pavement is made of concrete and has raised concrete curbs. There is one major area of pavement failure at the loading dock, with other minor traverse cracks developing. There is no backing bumper along the dock, and it has been reported that periodically, delivery trucks damage the overhead gutter systems along the roof as a result. Two dumpsters were observed in the loading dock area. Roadway Deficiencies: · R1– minimal raveling, minor cracking, faded painted curbs and lane arrows. · R2– minimal raveling, crack-seal and patches. · R3– heavy alligator and longitudinal cracking, major raveling, patches, with crack-seal · Loading Dock – large concrete pavement failure, no bumper at dock	
	Parking Lots	P1 is in good condition. There is one parking lot (P1) on campus with access coming from Wynona on the west side. The parking lot is connected to R2 and serves as faculty and overflow parking. The pavement is asphalt and is showing signs of raveling and longitudinal cracking. Several cracks had previously been crack sealed. P1 has raised concrete curbs with curb cuts along the west side. The curb cuts allow runoff to drain into an adjacent detention area. Each curb cut is blocked with silt. Parking Lot Deficiencies: · P1 – raveling, bleeding, longitudinal cracking, crack sealing · P1 – curb cuts with silt impacting flow	Good
	Pedestrian Paving	The sidewalks are in average condition with little variations between sections. One wooden sidewalk bridge was found as well as several areas where additional sidewalks may be required or removed. Heavy foot traffic across the campus has worn down the grass to topsoil. There were several areas of broken or heaving sidewalks, utility cut sidewalks and areas with major drop-offs at the edges. Each of these areas has been identified and noted on the overall site map.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		Pedestrian Paving Deficiencies: · Wooden sidewalk bridge · Sidewalk construction · Failing sidewalk · Topsoil level-up · Missing sidewalk handrails	
	Site Development	There is one large bike rack on the west side of campus; however, another bike rack on the east side of campus is needed. The fencing around the property is approximately 5' tall and is in average condition. The two dumpsters in P1 do not have approach slabs. A crack on the west corner of the foundation is present on the main building on the west side of campus. There are two water storage containers found on campus. The first is a 2,500-gallon container located just north of the basketball court. This container collects rainwater from the adjacent building that is used to water the garden nearby. The tank does not overflow to an underground drain. The second storage container is located on the west side of the main building and serves as a condensate collection tank. It was reported that during the hot, humid summers, this 1,200-gallon tank can fill up in 5 days. The tank does not overflow to an underground drain. There is one pest hole on campus located in Courtyard 4 (CY4). Pigeons and pigeon droppings are present on the building just north of the tennis courts. Large piles of droppings are present along the window ledges. Site Development Deficiencies: · Bike rack needed on east side · No dumpster pads and approach slabs · Storage tanks do not have overflow lines · Cracked building corner foundation · Pest hole in CY4 · Pigeons and pigeon droppings	Poor
	Site Drainage	The property drains from the east side to the west side. The overall drainage of the property is poor, and there are several areas of concern. There is a drainage swale between the track and the building to the north. The downstream side of the swale terminates at a headwall. The 12" drainage pipe sticking through the headwall is buried, which does not allow water to enter the pipe and leave the property. Upon further inspection, the outfall to the pipe on the west side of the campus is severely silted up and will not allow positive drainage.	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		It was reported that there is a drainage issue on the northwest side of the basketball court. Water ponding was observed there. Further observation showed the drainage inlet adjacent to the northwest corner of the court has been surrounded with bricks which do not allow water to enter the inlet easily. A majority of the building downspouts drain into an underground drainage system with the remainder of the downspouts draining onto sidewalks, splashpads, or natural ground. Several downspouts are crushed, damaged and/or clogged. Many condensate lines are broken or do not drain into the vertical sleeve leading to underground systems. Several condensate lines are in good condition but do not line up with the sleeves, leaving them to discharge directly to the ground. Drainage inlets and outfalls have sediment and debris, which does not allow for adequate drainage. Site Drainage Deficiencies: · Drainage swale with buried pipe · Drainage inlet surrounded by bricks · Crushed, damaged and clogged downspouts · Broken or nonfunctioning condensate lines · Courtyard gutter/drainage issue · Silt and debris in inlets and outfalls	
	Courtyards	There are four courtyards on campus. The first courtyard (CY1) is located in the center of campus. This courtyard area has a fabric-covered canopy and several picnic tables. The lighting in CY1 is inadequate. Lighting attached to the nearby buildings does not illuminate the area. Landscaping in CY1 is average. The second courtyard (CY2) can be accessed from the Library. This area has large trees, and the landscaping is overgrown and covered with leaves from the winter months. Several picnic tables are found in CY2.It was reported that there is a drainage issue in Courtyard 2 (CY2) related to runoff of rainwater that misses the gutter system. Upon further inspection, the gutter system along the southern corner of the building may actually be higher than the gutter leading to the downspout. This would create a ponding issue in the gutter, making it appear that the runoff is “missing” the gutter system. It is important to note that runoff from the gutter systems inside the courtyard goes to an underground drainage system. Water spilling over the gutter is not contained and therefore drains along the base of the building and into the crawlspace vent. Access to Courtyards 3 and 4 (CY3 and CY4) is mainly from the outside area only. CY3 and CY4 are along the north side of the campus. These two	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		courtyards are more just areas in between the two buildings and not designated for student use. CY4 contains a small chicken coop. Maintenance and landscaping for CY3 and CY4 are much better than for CY2; however, downspouts for CY3 and CY4 discharge directly onto soil. Courtyard Deficiencies: · Inadequate lighting · Landscaping neglect · Downspouts discharge onto soil	
	Landscaping	The landscaping is in average condition. Heavy leaves and debris are found in courtyards and other areas where fall foliage cannot be blown away. There are many areas on campus that have minimal or no grass. In between classes, students occupied the courtyards and play fields, and it has taken its toll on the vegetation. The brick wall at the flowerbed along the main entrance is cracked and broken. Landscaping Deficiencies: · Heavy leaves and debris · Worn grass · Broken flowerbed	Average
Site Utilities	Water Supply	There were no problems observed related to the Water Supply Water Supply Deficiencies: · N/A	Good
	Sanitary Sewer	The fiberglass grease sampling enclosure is located along the west side of campus off of Wynona. Sanitary Sewer Deficiencies: · N/A	Good
	Storm Sewer	The storm sewer system seems to be functioning as intended. Aside from CY2, no other areas of concern were reported or observed. Storm Sewer Deficiencies: · N/A	Average
	Detention Pond	There are two detention ponds located on the west side of campus. The first is located adjacent to P1, while the second is located by the solar panels toward the north end of the campus. Both detention ponds seem to be of adequate	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		size and appear to be functioning as intended. Detention Pond Deficiencies: · N/A	
	Other Site Mechanical Utilities	There are two areas that lack topsoil over the top of the underground utility irrigation or drainage system. The first is along the stairway landing immediately north of the basketball court. The other appears to be an irrigation line and is along the ridge separating the basketball court and CY1. Other Utilities Deficiencies: · Topsoil needed over utilities · Loose wiring and broken conduit with exposed electrical wires, see Exhibit Note 18.	Average

Site Improvement Deficiency Examples

Roadways

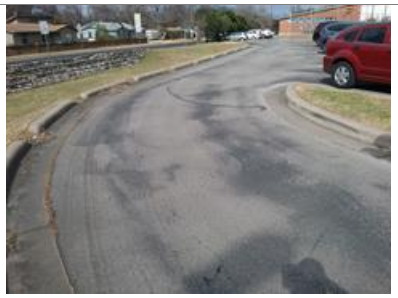
Alligator cracking R3

Raveling and failed curb R3

Failing concrete loading dock

Parking Lots

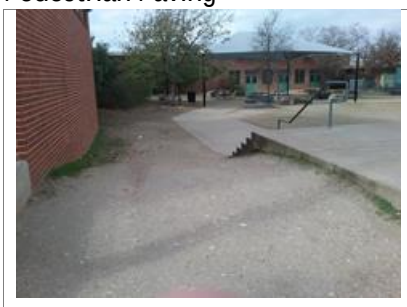
Reveling/bleeding P1



Curb cuts with silt P1

Failing curb HC parking along R1

Pedestrian Paving

		
Sidewalk without handrails	Sidewalk without topsoil at edges	Failing wooden sidewalk

Site Development

		
Makeshift bike rack (east side of campus)	Dumpster without pads	Storage tank without overflow

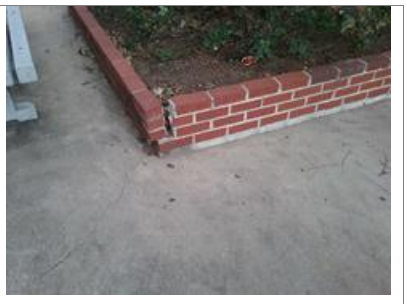
Site Drainage

		
Downspout does not tie underground	Maintain inlet	Outfall blocked

Courtyards

		
Inadequate lighting	Landscaping neglect	Downspouts damaged, discharge onto soil

Landscaping

		
Maintain landscaping in CY2	Worn grass	Broken flowerbed retaining wall

Other Site Mechanical Utilities

		
Lack of topsoil at underground utility	Loose wiring	Broken conduit with exposed electrical wires

Play Fields

Areas presented in table are approximate.

Playfields	Count	Size (SF)
Basketball Courts	1	3,450
Tennis Courts	2	11,000
Soccer/Multi-Purpose Field	1	62,800
Baseball/Softball Field	-	-
Bleacher Seating	2	120
Track	1	400 m
Green Space	1	187,600
Football Field	-	-
Playscapes	-	-

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Playfields	Basketball Courts	There is a basketball court that is in decent condition. It was reported that there is a drainage issue on the northwest side of the basketball court. Water ponding was observed there.	Good
	Tennis Courts	There are two tennis courts along the west side of the campus. The surface of the courts is in average condition with several areas with large pits developing on the north end by the wooden practice wall. The practice wall is currently under construction and has been removed. The fencing around the tennis courts is in average condition. There is a large hole about the size of a basketball in the southern fence. The bottom portion of the fencing in this area has been raised to allow access. Additionally, there are two basketball goals installed along the south ends of the tennis courts. There are no lights designated specifically for the tennis courts; however, there is one light along the north area of the courts. Tennis Court Deficiencies: · Surface pitting · No practice wall · Holes in fencing · No lighting	Average
	Soccer/Multi-Purpose Field	The soccer field is in good condition and seems to be adequately drained. No deficiencies were observed with the	Good

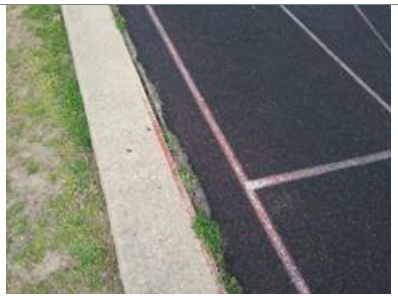
		field. No lighting was observed at the soccer field. Soccer Field Deficiencies: · No lighting	
	Baseball/Softball Field	System not present.	
	Bleacher Seating	The bleachers along the west side of the soccer/multi-purpose field do not have a concrete pad underneath them. Bleacher Seating Deficiencies: · No concrete pad underneath bleachers	Average
	Track	There is a 1 400-meter track along the southeast corner of the campus that is in poor condition. The surface of the track is rubber and is in average condition. There are several large areas along the west side that are coming unraveled. The pavement marking along the west side of the track is very faded, and concrete curb is beginning to pull away from the track. There is separation of anywhere from ¼" to 1". A small 1-foot section along the interior of the curb is failing at the north end of the track. There is exposed rebar at the joint, but it does not appear to be an immediate safety issue. The east side of the track is in better condition with no surface or curb issues and better lane lines and numbers. Track Deficiencies: · Surface tearing along west side · Faded pavement markings · Concrete curb separation along west side · Failing curb with exposed rebar	Poor
	Green Space	There is a large area of green space on the southwest side of campus. This area is adjacent to the track and pole vault area. The area is adequately maintained and seems to have positive drainage. No lighting was observed in this area. Green Space Deficiencies: · No lighting	Average
	Football Field	System not present.	
	Playscapes	System not present.	

Playfield Deficiency Examples

Play Fields

		
Raveling track surface (west side)	Fencing/cracking at tennis courts	Bleachers without concrete pad

Play Fields

		
Faded lane markings	Curb pulling away from track	Broken curb along interior of track

Summary of Recommendations

This document is based on information provided by staff during interview, site visit and additional desktop measurements using Google Earth. This document provides recommendations for corrective actions. The following recommendations provide a summary of the findings.

Site/Civil Recommendations

Roadways

1. Resurface asphalt roadways.
2. Repair curb and gutter sections that have cracks.
3. Repaint fire lane markings.
4. Repair loading dock and add bumper.

Parking Lots

1. Maintain cracks by crack sealing.
2. Clear silt from curb cuts.

Pedestrian Paving

1. Replace pedestrian paving that is heaving and has cracks.
2. Replace wooden bridges that are deteriorated.
3. Level-up at sidewalk edges as necessary.
4. Add handrails where needed along sidewalks.

Site Development

1. Construct concrete approach pavement at dumpsters.
2. Add bike rack to east side of campus.
3. Add overflow lines to underground drains to storage tanks
4. Fill in pest holes.
5. Add pigeon spikes at problem area(s).
6. Evaluate corner foundation with structural engineer.

Site Drainage

1. Add topsoil at exposed underground utilities.
2. Remove obstructions from drainage inlets and outfalls.
3. Repair downspouts and condensate lines.

Courtyards

1. Install more lighting.
2. Evaluate gutter system with professional at CY2 to determine solution.
3. CY3 and CY4 Reroute downspouts to prevent flooding

Landscaping

1. Remove leaves and debris and maintain landscaping.
2. Add concrete pad and/or sidewalks in high traffic areas.
3. Repair cracking brick flowerbed.

Other Site Mechanical Utilities

1. Add topsoil over utilities, then seed and deter traffic.
2. Repair loose wiring.

Tennis Courts

1. Minor surface patching.
2. Practice wall is currently under construction. Finish construction.
3. Repair holes in fencing.
4. Add lighting as necessary.

Soccer/Multi-Purpose Field

1. Add lighting as necessary.

Bleacher Seating

1. Install concrete bleacher pad

Track

1. Patch track surface on the west side.
2. Repaint lane numerals.
3. Repair concrete curb along west side.
4. Repair concrete curb at exposed rebar.

Green Space

1. Add lighting as necessary.

DRAFT

0 25 50 100 150
Feet

N

Legend

(1) Recommended Improvements

Drainage Improvement

Pavement Improvement

Sidewalk Improvement

NOTES:

1. LEVEL-UP TOPSOIL AT SIDEWALK EDGES
2. PEST ISSUE
3. EROSION ISSUE
4. INLET / OUTFALL CLEANOUT
5. DOWNSPOUT DAMAGE OR CLEANOUT ISSUE
6. BROKEN CONDENSATE LINE
7. TRASH DUMPSTER WITHOUT PAD(S)
8. CURB CUTS BLOCKED FOR DRAINAGE
9. TRACK SURFACE DAMAGED
10. TRACK CURB PULLING AWAY (GAP)
11. RAIN WATER BARREL WITHOUT OVERFLOW LINE
12. HEAVING SIDWALK PAVERS
13. CRACKED OR DAMAGED SIDEWALK
14. REMOVE MISCELLANEOUS CONCRETE
15. EROSION AT HEADWALL & TOP OF RCP
16. DOWNED SIGN
17. LOOSE UTILITY WIRES
18. BROKEN CONDUIT / WIRES EXPOSED
19. EROSION AT STAIRS LANDING
20. FIBERGLASS ENCLOSED GREASE BOX
21. CRACKED BUILDING FOUNDATION
22. FAILING CONCRETE PAVEMENT (LOADING DOCK)
23. MISSING RUBBER / WOODEN BUMPER (LOADING DOCK)
24. MAKESHIFT BIKE RACK
25. MISSING SIDEWALK RAILS / STEEP DROP OFF
26. BROKEN CURB
27. BROKEN WOODEN SIDEWALK
28. DAMAGED FENCE
29. LANDSCAPING ISSUE
30. CRAWL SPACE VENT / INLET
31. RAVELING ASPHALT PAVEMENT
32. MISSING CONCRETE APPROACH SLAB AT DUMPSTER
33. MISSING CONCRETE PAD UNDER BLEACHERS
34. BLEEDING ASPHALT PAVEMENT
35. ALLIGATOR CRACKING
36. FADED PAVEMENT MARKINGS
37. FADED PAINTED CURB
38. RUNOFF SPILLING OVER GUTTER
39. BIKE RACK
40. ASPHALT PAVEMENT RECONSTRUCTION
41. HEAVY POTHOLING
42. DAMAGED CURB
43. FAILING PAVEMENT AT CURB AND GUTTER
44. ASPHALT PATCH

Map Date: 2/23/2017

AUSTIN Independent School District

AECOM

Lamar MS
6201 Wynona Ave