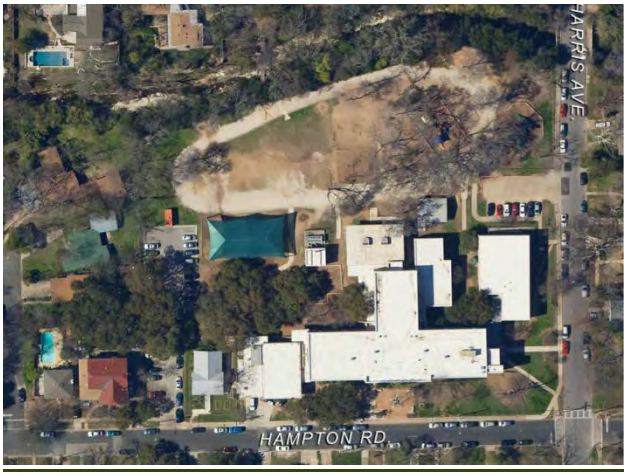
Lee Elementary School Site Summary

Address	3308 Hampton Road Austin, TX 78705
Number of Permanent Campus Facilities	4
Original Year of Construction	BLDG-121A – 1939 BLDG-121C - 1998 BLDG-121B – 1939 BLDG-PS006 - 1939
Total Campus Building Area (combined)	46,328 SF



Introduction

Lee Elementary School is located at 3308 Hampton Road in Austin, Texas. The campus is comprised of four buildings. The main building (BLDG-121A) contains classrooms, administration spaces, the cafeteria, the gymnasium, and a large auditorium. The main building, constructed in 1939, appears to have had a subsequent addition of classrooms and an elevator tower. A small mechanical building (BLDG-121B), built in 1939, is a one room building containing mechanical equipment and a kiln. On the north side of the campus is a stand-alone library building (BLDG-121C) that contains a library and large meeting space with associate support spaces. This structure was built in 1998. Finally, a small house (BLDG-121D) sits on the south side of the campus and contains two classrooms. This wood frame structure was built in 1939. The library building is connected to the main building via a covered sidewalk while the house on the south side is connected by an uncovered sidewalk.

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
7/28/16	Interview	00	9/9/16	Draft Issue
7/28/16	Assessment	01	12/22/16	Added comments from PM Andrew Miller as indicated on email dated 10/31/16. See pages 8, 32, 34, and 36.
9/26/16	Cluster Meeting (Attended)			
9/27/16	Follow-Up			

Main School Building – BLDG-121A

Building Purpose	Administration, Classrooms
Building Area	38,880 SF
Inspection Date	July 28, 2016
Inspection Conditions	Sunny and hot
Facility Condition Index	

System Deficiency Overview

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior walls are comprised of brick with stone accent on the original building and tile accents on the addition. The kitchen and cafeteria area includes some painted steel structural elements and a stucco soffit. The exterior walls were observed to be in average condition. Cracking in the brick work that shears through bricks was noted in several locations. The source of cracking could not be determined during the assessment but appeared to be limited to the exterior brick wythe. Cracking at the soffit was noted at the kitchen and cafeteria at regular intervals suggesting that the damage was the result of creep in the supporting structure of the stucco. Water appeared to be entering the joint between the concrete eyebrows and the adjoining brick wall as evidenced by staining on the brick. Minor physical damage was noted where a probe had been mounted on the exterior or where elements previously attached to the brick were removed. The loading dock area was noted has having both cracking in the brick and concrete elements, along with rusting of the edge angle of the dock and the support column base.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Exterior Windows	The exterior windows are a mixture of fixed, single hung, casement and glass block construction. Window panes are constructed with both acrylic and fiberglass. Some of the window systems appear to be replacements and other are clearly original to the building. The exterior windows were observed to be in average condition. All sealants observed at windows appeared chalky and cracked. Casement and fixed windows original to the building where seen to be rusting. Surface-installed window tinting on the east side of the building was pealing off the windows. From the interior only one unit, in the auditorium, showed evidence of water leakage. From the interior and exterior glass block units were observed to be damaged.	Average
	Exterior Doors	The exterior doors are a mixture of wood doors in wood frames at most entrances and hollow metal doors mounted in hollow metal frames in mechanical spaces. The exterior doors were observed to be in average condition. It was noted in some instances there are collection of finish issues on the wood doors. This was primarily due to physical damage or failure in the paint system resulting in blistering of paint. At the auditorium exterior exit some of the painted wood veneer is missing. At the vestibule for these doors, a security grill has been installed across the opening. The grill is not designed for exiting and could be left padlocked while the building is occupied. This has created a hazard. Termite damage was noted at the exterior exit for the gymnasium.	Average
Roofing	The roofing system is a modified bitumen type installation. The roofing system was observed to be in poor condition. The various roof surfaces of the system appear to have been installed all at the same time. However, this system has reached the end of its service life. The cap sheet of the system was observed to be separating at the joints between sheets. Sealants at the parapet walls were chalky and hard limiting pliability during expansion and contraction of the parapet cap flashing. Ponding was evident throughout the roof area and debris in the form of beer bottles were gathered around some scuppers. Leaks were reported in the mechanical closet and the second floor.		Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Interior Construction	Interior Walls	The interior walls are a mixture of masonry systems with plaster applied and a limited amount of gypsum board construction. The average condition assessment for this system is the result of the quantity and quality of conditions noted. Deficiencies observed were limited to cracking in the plaster systems indicating movement in the masonry behind, and damage to the gypsum board wall system around an expansion joint between the original building and an addition in corridor C2. While not a wall system, the millwork on the second floor at the bathrooms was observed to be in poor condition along with holes in the wall system at the backsplash area.	Average
	Interior Doors	The interior doors are wood hung in wood frames in the original building and wood doors hung in hollow metal frames in the addition. Doors original to the construction of the building are painted, while in the building addition the door finish is a stained veneer. The interior doors were observed to be in average condition. Two doors were observed as catching on the floor inhibiting their ability to open fully. Doors, particularly those in the gymnasium had significant damage to the paint on them. In the gymnasium the door hardware is mismatched with one door in a pair have a modern crash bar type panic hardware while the other had the older bar type exit hardware.	Average
	Interior Specialties	While there were no lockers in the facility, the auditorium fixed seating should be addressed. The existing seating is original to the building and wooden with fold up seats. These seats were noted to have significant aging and finish issues. In one instance noted the seat was missing.	Average
Stairs	Exterior Stairs	The exterior stairs are cast-in-place concrete left raw or with a terrazzo finish place on top. Railings are exclusively painted metal pipe type construction. The exterior stairs are of average condition. The complexity of matching the 1939 construction and materials will provided a challenge to their repair along with the effort to correct other conditions led to this rating. Cracking and damage to the stairs particularly to the original terrazzo covered elements dominate the condition issues with the stairs. Some cracking observed will create potential long term issues and the	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		potential for water infiltration into the cracks during a freeze thaw cycle could lead to more damage. In a limited number of locations the railing configuration was cause for concern. At the loading dock the guardrail portion of the railing is set below 42". At the auditorium exterior exit the concrete railing is damaged where the stair transitions, leaving reinforcing exposed along with a 6" to 8" gap between the concrete and metal railings. Railings on stairs on the west side of the building were observed to have 18" openings in them regardless of the height of the stair.	
	Interior Stairs	The interior stairs are cast-in-place concrete with a terrazzo topping. Railings serving these stairs are wall mounted wood with a round cross section. The stairs were observed to be in good condition. The wood railings were observed to not meet the current code standards; however, these are not required to do so due to the age of the structure. The terrazzo treads were noted to lack any anti-slip material at the tread edge.	Good
Interior Finishes	Interior Wall Finishes	The interior wall finishes are paint systems over gypsum board, plaster or masonry units in most areas. In bathrooms, ceramic wall tile is used. The interior wall finishes were in average condition. At window sills, it appeared that glazed masonry units were used and not properly prepared to accept the paint. On plaster portions of the walls the paint was observed to be pealing or blistering. In some cases this failure of the paint system was thought to be the result of the number of paint layers that were present. Alternatively, the lack of adhesion may have been caused by the application of latex paint to a masonry wall system with a strong vapor drive to the inside of the building as a result of modern air-conditioning.	Average
	Interior Floor Finishes	The interior floor finishes include vinyl composition tile (VCT) installed over a wood substrate or concrete, terrazzo, quarry tile and ceramic tile. A wood strip floor is installed at the stage while sheet vinyl is installed in the gymnasium. The interior floor finishes were in good condition. Despite being installed over a wood substrate the VCT in the classrooms appeared to have little telegraphing or condition issues that was observed in other schools of a similar era. At the exterior exit from corridor C2 minor	Good

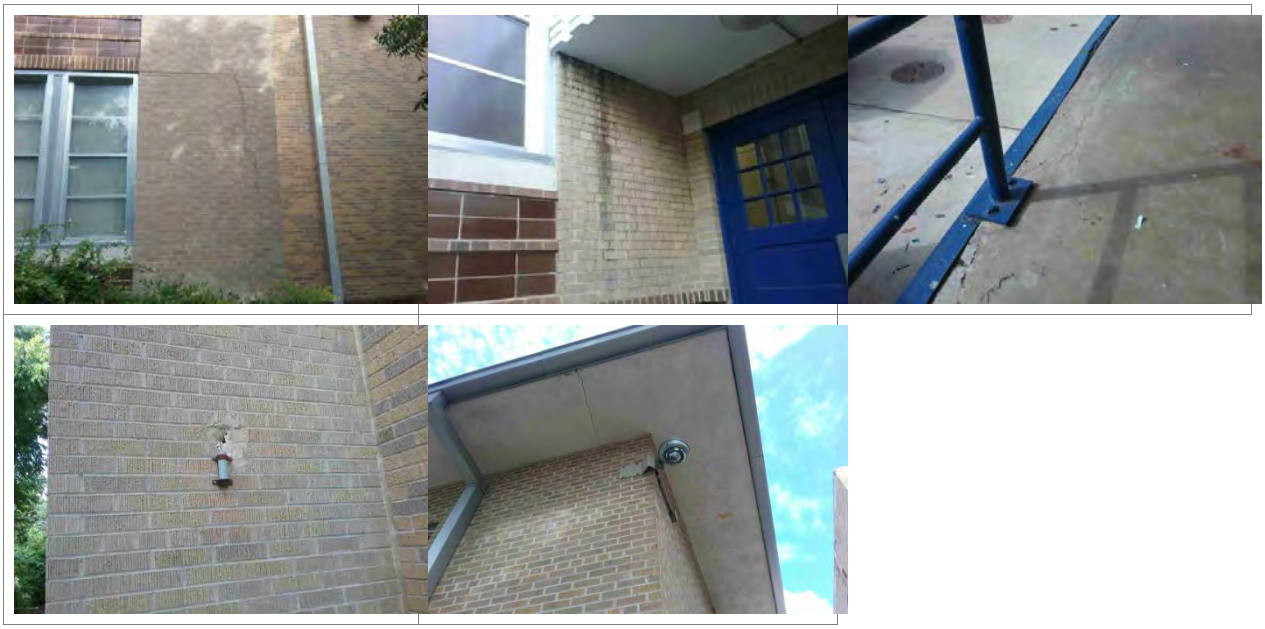
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		damage was observed along with lifting of the floor tile at the expansion joint in the same hallway. In the bathroom at the lounge the ceramic floor tile was observed to be damaged. In the same area a hump in the floor of the lounge was observed. Terrazzo cracks were noted traversing the corridors. The stage appeared to have been expanded and the new section exhibited cupping suggesting moisture underneath the flooring. Also on the stage the mechanical units mounted on north and south sides were observed to be mounted on damaged flooring. This suggested that there is insufficient structural support under the units.	
	Interior Ceiling Finishes	The interior ceiling finishes are a mixture of 12" by 12" and 12" by 24" tiles adhered to the ceiling structure and 2x4 suspended ceiling systems. A limited amount of gypsum board ceilings are used in the building as well. The gymnasium contains a suspended ceiling system with an wood fiber type acoustical panel infill. The interior ceiling finishes were observed to be in poor condition. A significant portion of the adhered tiles were observed to be releasing from their substrate. Evidence of past issues was also observed. Humidity damage was noted in corridor C2 and the 100-wing classrooms. A significant amount of water or moisture damage was observed on the ceiling system materials.	Poor
Conveying	There is an elevator on the north end of the building that serves two floors. No inspection certificate was found but the elevator was functioning well and appeared to be in good condition.		Good
Plumbing	Plumbing Fixtures	The building has public restrooms for men and women, students, and separate staff restrooms located throughout the facility. These restrooms generally have vitreous china hand sinks in counters with manual faucets, along with vitreous china, floor-mount/wall toilets with manual flushing mechanisms, and vitreous china, wall-hung urinals in the men's restrooms with manual flushing mechanisms. There are service sinks found in the janitor closets, and water coolers located throughout the facility, typically near the public restrooms. The restroom plumbing fixtures were observed to be in poor condition as the fixtures were typically aged. Several water closets and urinals within the boy's and girl's restrooms were found to have deficient flush valves. The water fountains are serviceable. The wash	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		sinks in the faculty rest room on the second floor are pieced together with different faucets and do not have hot water. There is a sump pump in the basement mechanical room that was not working. At the time of observation, the floor had several inches of standing water.	
	Domestic Water Distribution	All of the plumbing fixtures are serviced with domestic cold water. There is a gas water heater within the kitchen space. In the boy's restroom adjacent the auditorium the urinals were not able to flush correctly due to the fact that they were not served with the correct size water line. In addition to the urinals, there were other water closets that were not flushing correctly. This also appeared to be due to low water pressure at the valve. Most of the other observed fixtures appeared to be serviceable. Due to the age of the fixtures as well as the quantity of deficiencies observed the system is rated as poor.	Poor
	Other Plumbing	The roof drains are equipped with metal grate covers to prevent debris from entering the drainage system. The roof drains appeared to be in good condition. However, the floor drain in the basement mechanical room was not draining at the time of observation.	Average
Mechanical/ HVAC	The major mechanical equipment consists of indoor chilled/hot water single zone air handling units, an air cooled chiller and gas fired boilers. In addition to the items above, the building utilized ground source heat pumps (GSHP). All AHUs (air handling units) are located in mechanical closets. They are located on the stage of the auditorium and in the basement to the outside of the auditorium and gymnasium. The AHUs in the stage closets were observed to be aged and in excess of their service dates as well as exhibiting multiple water leaks. The AHU in the basement mechanical room was in similar condition. The GSHPs serving the classrooms on both levels were also aged. One GSHP (HP-2) on the first level has been recently removed from the ground loop and replaced with a new DX console unit. A condensing unit on the roof of the multi-story part of the building was observed to have considerable hail damage. The kitchen was reportedly served by a packed DX unit mounted on a platform outside of the kitchen. This unit was unable to be observed due to its location. The gymnasium was reportedly served by two RTUs that were not accessible Outside air for the classrooms was understood to be served from a chilled water AHU located on the roof of the second story.		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 combinations, pull stations, and detectors. The fire alarm system appeared to be in good condition.	Good
	Fire Protection/ Suppression	The building is protected by portable fire extinguishers placed throughout the facility. All observed portable fire extinguishers had inspection tags dated within the last year as required.	Good
Electrical	Electrical Distribution	The electrical service enters the building from the utility pole at the street, underground to the 120/208-volt 1600-amp main switchboard “SWB” located at the rear of the stage. The service distributes through branch panelboards, and equipment which are located in various electrical rooms throughout the building. The electrical distribution equipment appeared to be in good condition. The building does not have a lightning protection system.	Good
	Lighting	The building exterior lighting consists of downlights and HID (high intensity discharge) light fixtures that are located along the entire perimeter. The interior lighting consists of 2’x4’ fluorescent recessed troffers and 1’x4’ fluorescent surface mounted light fixtures. The interior and exterior lighting appeared to be in good condition. There were exit signs present in the building which appeared to be in good working condition. Andrew Miller AISD Construction Management reported that the emergency luminaire at the north stairwell blinks.	Good
	Communications & Security	There is a security system including surveillance cameras in the building. There is a public address system and tele/data system in the building. The systems appeared to be in good condition with no deficiencies to report.	Good

Exterior System Deficiency Examples

Exterior Walls



Exterior Windows

Exterior Doors

Roofing Deficiency Examples

Interior Construction Deficiency Examples

Interior Walls

Interior Doors

Interior specialties

Stairs Deficiency Examples

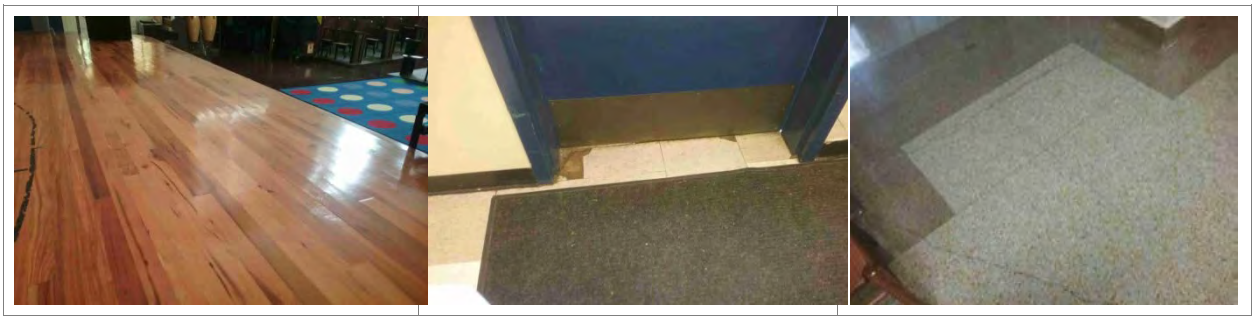
Exterior Stairs

Interior Stairs

Interior Finishes Deficiency Examples

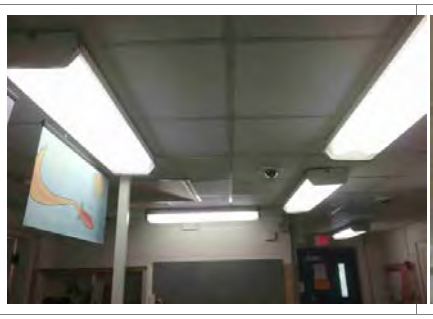
Interior Wall Finishes

Interior Floor Finishes



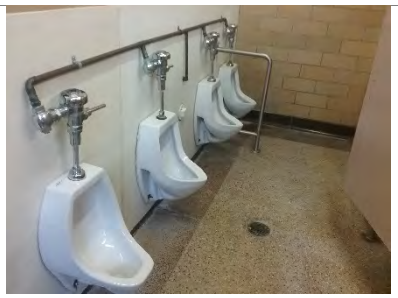
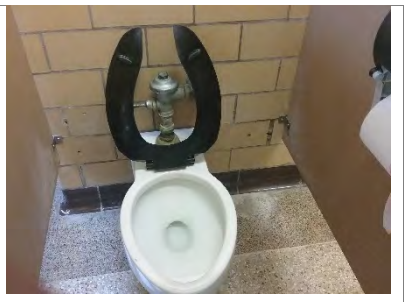


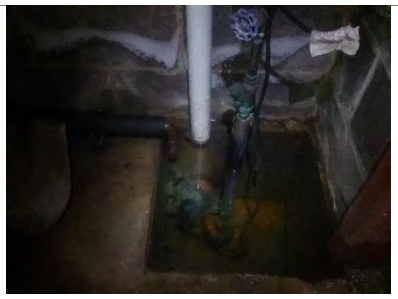

Interior Ceiling Finishes

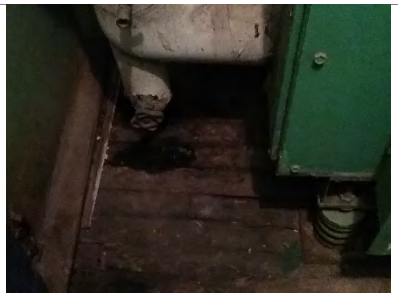
Plumbing System Deficiency Examples

Domestic Water Distribution



Mechanical/HVAC System Deficiency Examples


Mechanical Building. – BLDG-121B

Building Purpose	Mechanical Equipment and Kiln Housing
Building Area	460 SF
Inspection Date	July 28, 2016
Inspection Conditions	Sunny and hot
Facility Condition Index	

System Deficiency Overview

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior walls are masonry in the form of brick with stone banding and decorative metal tiles. The exterior walls are in average condition. The condition of this system is the result of the wear and tear of a structure from the 1930's. While deficiencies noted are few, limited to the lack of a collector head and downspout for roof drainage, the structure could use some cleaning and attention.	Average
	Exterior Windows	The exterior windows are steel frame type construction likely original to the structure. The exterior windows were observed to be in poor condition. Although limited to two units, both these units exhibited rust on the metal frame and glazing replaced with fiber glass panels which have aged to the point of showing a fuzziness that is the result of breakdown of the base material.	Poor
	Exterior Doors	The one exterior double door unit is a wood door slab with glass lites and louvers set in a wood frame. The door system was observed to be in poor condition due to rot at the base of the frame, aged hinges, and damage at the base of the astragal.	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Roofing	The roofing system is a modified bitumen type installation. The roof surface is inaccessible due to the lack of a roof scuttle or exterior ladder system. This roofing system was observed to be in poor condition This roof was observed from the adjacent building. This system appears to be aged out. The cap sheet of the system was separating at the joints between sheets. Ponding was evident throughout the roof area. The condition of the interior ceiling finishes was suggestive of significant water infiltration at some point.		Poor
Interior Construction	Interior Walls	System no present.	N/A
	Interior Doors	System no present.	N/A
	Interior Specialties	System no present.	N/A
Stairs	Exterior Stairs	System no present.	N/A
	Interior Stairs	System no present.	N/A
Interior Finishes	Interior Wall Finishes	The interior wall surface is the exposed brick of the exterior wall system. The interior wall finishes were observed to be in average condition due to age. No deficiencies were noted.	Average
	Interior Floor Finishes	Only exposed concrete floors are present in the building. The interior floor finishes were observed to be in average condition due to age and abuse. The floors were observed to be in functional condition. The presence of water from mechanical equipment was noted on the floor surface but did not appear to causing damage.	Average
	Interior Ceiling Finishes	The interior ceiling is comprised of a plaster and lath system. The interior ceiling finishes were observed to be in poor condition. The ceiling finish system was observed to have significant portions missing exposing the underside of the roof and the structural elements. The bar joist construction appeared to have rust developing on it and the precast concrete panel that is used as the substrate for the roofing appeared cracked.	Poor
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	None	Good
	Domestic Water Distribution	The make-up water for the heating and chilled water system is served by the domestic water system form the main building. This system appeared to be in good condition.	Good

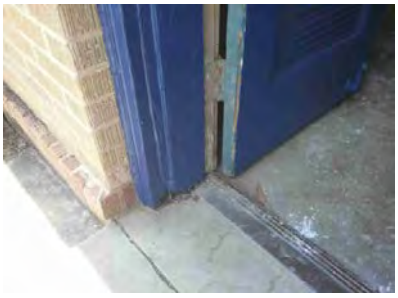
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Other Plumbing	System not present. There were no roof drains to be observed, the building has a scupper system.	N/A
Mechanical/ HVAC	The major mechanical equipment consists of one boiler, one chiller and four pumps. The boiler is in excess of its service date and is in poor condition. It was stated in the interview that the boiler was not expected to make it through the next winter. The pumps are in excess of their service dates. The chiller appeared in good and serviceable condition. Due to the boilers and pump being past their service dates the system rating is average.		Average
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horn/strobe combinations, pull station, and smoke detectors. The fire alarm system appeared to be in good condition.	Good
	Fire Protection/ Suppression	The building is protected by portable fire extinguishers placed throughout the facility.	Good
Electrical	Electrical Distribution	In the mechanical boiler room, the electrical service consists of an 800-amp distribution panel “DP” feeding the mechanical equipment in the same room. The electrical distribution equipment appeared to be in good condition. The building does not have a lightning protection system.	Good
	Lighting	The interior lighting consists of 1’x4’ surface mounted fluorescent light fixtures. The lighting for the building appeared to be in good condition.	Good
	Communications & Security	System not present.	N/A

Exterior System Deficiency Examples

Exterior Walls

Exterior Windows

Exterior Doors



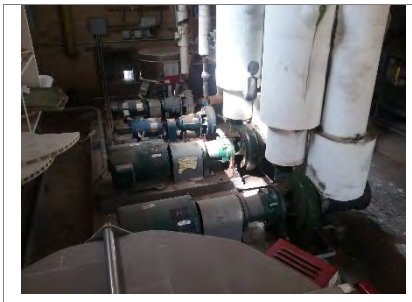
Roofing Deficiency Examples

Interior Finish Deficiency Examples

Interior Floor Finishes

Interior Ceiling Finishes

Mechanical/HVAC System Deficiency Examples



Stand-Alone Library Building. – BLDG-121C

Building Purpose	Library
Building Area	5,679 SF
Inspection Date	July 28, 2016
Inspection Conditions	Sunny and hot
Facility Condition Index	

System Deficiency Overview

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior walls are constructed of brick with accents comprised of brick, glazed masonry units and stone. The exterior walls were observed to be in good condition. However, it was observed that minerals were leaching out of the masonry below two to three of the window units. This was suggestive of moisture infiltration and potential damage. On other portions of the brickwork uncontrolled run-off from the roof appeared to be staining the surface.	Good
	Exterior Windows	The exterior window units are single hung or fixed aluminum frames with single pane glazing systems. The exterior windows were observed to be in average condition. No Deficiencies were noted	Average
	Exterior Doors	The exterior doors are hollow metal door units hung in hollow metal frames. The exterior doors were observed to be in average condition. Only minor finish issues were noted on these units in the paint systems coating them.	Good
Roofing	The roofing system is a modified bitumen type installation. The roof surface is inaccessible due to the lack of a roof scuttle or exterior ladder system. The roof was observed to be in poor condition from the adjacent building. This system appears to be aged out. The cap sheet of the system is separating at the joints between sheets. Ponding was evident throughout the roof area. Failure of sealant at gravel stop joints were indicated along with uncontrolled runoff. The rain water collection system was observed to be incorrectly installed. It was observed that the overflow control may be undersized and the joint between the downspout		Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	and the tank piping located below the highest level the water can obtain creating a back flow issue.		
Interior Construction	Interior Walls	The interior walls are gypsum board construction with paint systems or brick used for finishes. The interior walls were observed to be in average condition. No deficiencies were noted in the interior wall construction.	Average
	Interior Doors	The interior doors are solid core wood slabs mounted in hollow metal frames. The interior doors were observed to be in good condition. Minor finish condition issues were observed.	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 finishes are limited to paint applied to gypsum wall board construction and exposed brick accents. The interior wall finishes were observed to be in average condition. No deficiencies were noted in the interior wall finishes.	Average
	Interior Floor Finishes	Carpet and vinyl composition tile are used as floor finishes in the building along with ceramic tile in the bathrooms. The interior floor finishes were observed to be in average condition. No deficiencies were noted in the floor finishes.	Average
	Interior Ceiling Finishes	The interior ceilings are comprised of a 2'x4' suspended ceiling tile system with gypsum board accents in areas and the bathrooms. The interior ceiling finishes were observed to be in average condition.	Average
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building has one restroom for male students and one restroom for female students and staff. These restrooms generally have vitreous china hand sinks in counters with manual faucets, along with vitreous china, wall mounted toilets with manual flushing mechanisms. There is no janitorial closet. The restroom plumbing fixtures were observed to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Domestic Water Distribution	All of the plumbing fixtures are serviced with domestic cold water from the central distribution system. There is one electric water heater located on the mezzanine to serve the restroom lavatories as well as the sink in the library office. The plumbing distribution equipment was observed to be in good condition.	Good
	Other Plumbing	System not present. There were no roof drains to be observed, the building has a scupper system	N/A
Mechanical/ HVAC	The major mechanical equipment consists of indoor horizontal chilled/heating water air handling units. The AHUs are served with chilled and heating water from the central plant building. The area around the AHUs show evidence of multiple leaks as well as damaged insulation at the piping immediate to the AHUs The air handling units themselves appear to be in good condition. The rating for this equipment is average due to the evidenced leakage around the AHUs.		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 combinations, pull stations, and detectors. The fire alarm system appeared to be in good condition.	Good
	Fire Protection/ Suppression	The building is protected by portable fire extinguishers placed within the facility. All observed portable fire extinguishers were observed to be in good condition with inspection tags dated within the last year, as required.	Good
Electrical	Electrical Distribution	The electrical service enters the building from the 600-amp service disconnect on the exterior to the 120/208-volt 600-amp panelboard “MC” located in the Mezzanine. The service distributes through the 225-amp branch panelboard “MCA”, also in the Mezzanine. The electrical distribution equipment appeared to be in good condition. The building does not have a lightning protection system.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Lighting	The building exterior lighting consists of HID (high intensity discharge) light fixtures that are located along the entire perimeter. The interior lighting consists of 2'x4' fluorescent recessed troffers. The interior and exterior lighting appeared to be in good condition. The only item noted during the assessment was the presence of water in a light fixture. There were exit signs present in the building and appeared to be in good working condition.	Good
	Communications & Security	There is a security system including surveillance cameras in the building. There is a public address system and tele/data system in the building. The systems appeared to be in good condition with no deficiencies to report.	Good

Exterior System Deficiency Examples

Exterior Walls

Exterior Doors

Roofing Deficiency Examples

Interior Finish Deficiency Examples

Interior Ceiling Finishes

Mechanical/HVAC System Deficiency Examples

House – BLDG-121D

Building Purpose	Classroom building
Building Area	1,310 SF
Inspection Date	July, 28 2016
Inspection Conditions	Sunny and hot
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 system appears to be the original wooden siding. This structure may have significance to the district but it does not appear to be designated a historic structure as evidenced by the lack of a City of Austin plaque. The exterior walls were observed to be in poor condition due to significant wear and tear was on the structure. Deficiencies noted included condition issues with the wood siding, the paint systems and holes in the exterior.	Poor
	Exterior Windows	The exterior windows are wood frame and sash windows that appear to be original to the structure. The wood windows all appeared in poor condition, with a host of conditions that required significant effort to mitigate. Windows were noted to be broken. Wood elements were observed to be rotting along with glazing putty failing. Acrylic glazing units were also installed in some sashes. In all cases paint systems were failing.	Poor
	Exterior Doors	The exterior doors are solid wood doors mounted in wood frames. The exterior doors were noted as in poor condition - a state of falling apart. The front door had joints between the various elements that were opening up indicating the door is aging out. The doors appeared to be residential doors pressed into service in this institutional setting.	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Roofing	The roofing system is comprised of asphalt shingles on a steep slope. The roof area is inaccessible do to the sloping and lack of ladder access. The roofing system was observed to be in good condition as it appears to have been installed relatively recently. No deficiencies were noted.		Good
Interior Construction	Interior Walls	The interior walls are gypsum board wall construction. The interior walls were observed to be in good condition. No deficiencies were noted.	Good
	Interior Doors	The interior doors are six panel raised panel wood doors mounted in wood frames. The interior doors were observed to be in average condition. No deficiencies were noted.	Average
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	There is one set of steps on the west side of the building that are cast-in-place concrete stairs with a pipe railing. The exterior stairs were observed to be in average condition. The landing at the doors was noted to be below the door threshold by a significant amount creating a trip hazard. The railing was observed to potentially non-compliant with code requirements for guardrails given the height of the stairs and the configuration with the door.	Average
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior wall finishes are paint systems over gypsum board partitions or fiber-reinforced plastic (FRP) panels installed over gypsum board in the bathrooms. The interior wall finishes were observed to be in good condition. No deficiencies were noted.	Good
	Interior Floor Finishes	The interior floor finishes include VCT in most areas over a wood substrate and ceramic tile in the bathrooms. The interior floor finishes were observed to be in average condition. It was reported that the VCT in the building has issues with adhering to the substrate. As a result they have lifted while a buffer was applied.	Average
	Interior Ceiling Finishes	The interior ceiling systems are a 2'x4' suspended ceiling system. The interior ceiling finishes were in good condition. No deficiencies were noted.	Good
Conveying	System not present		N/A
Plumbing	Plumbing Fixtures	The building has one restroom for male students and one restroom for female students and staff. These	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		restrooms generally have vitreous china hand sinks in counters with manual faucets, along with vitreous china, wall mounted toilets with manual flushing mechanisms. There was no janitorial closet. The restroom plumbing fixtures were observed to be in good condition.	
	Domestic Water Distribution	All of the plumbing fixtures are serviced with domestic cold water from the central distribution system. There are no identified water heaters. The plumbing distribution equipment was observed to be in good condition.	Good
	Other Plumbing	No system present. There were no roof drains to be observed, the building has a scupper system	N/A
Mechanical/ HVAC	The major mechanical equipment consists of exterior wall mounted packaged DX units. These units appeared to be in good condition at the time of observation.		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 combinations, pull stations, and detectors. The fire alarm system appeared to be in good condition.	Good
	Fire Protection/ Suppression	The building is protected by portable fire extinguishers placed throughout the facility. All observed portable fire extinguishers appeared to be in good condition with inspection tags dated within the last year, as required.	Good
Electrical	Electrical Distribution	The electrical service enters the building from a utility pole to an exterior panel and meter. The exterior electrical panel board appeared to be in good condition. It was locked and it was not possible to determine size at the time of the assessment. The building does not have a lightning protection system.	Good
	Lighting	The building exterior lighting consists of HID (high intensity discharge) light fixtures that are located along the entire perimeter. The interior lighting consists of 2'x4' fluorescent recessed troffers. The interior and exterior lighting appeared to be in good condition. There were exit signs present in the building and appeared to be in good working condition.	Good

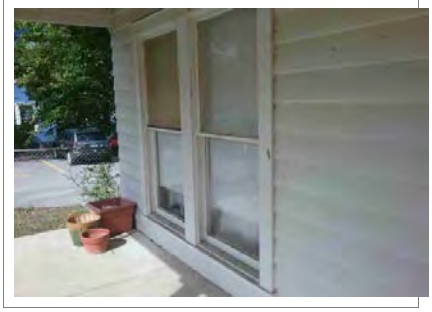
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Communications & Security	There is a security system including surveillance cameras in the building. There is a public address system and tele/data system in the building. The systems appeared to be in good condition with no deficiencies to report.	Good

Exterior System Deficiency Examples

Exterior Walls

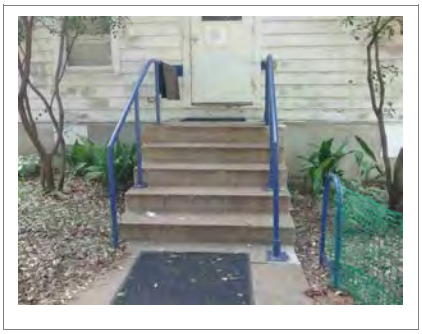

Exterior Windows



Exterior Doors


Stairs



Lee Elementary School Campus Summary of Recommendations

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

Campus Recommendations

Exterior

1. Install floor system at crawlspace below auditorium.

Roofing

1. Replace roofing throughout the campus with the exception of the house (BLDG-121D).

Plumbing

2. Continue to conduct preventative maintenance on aged plumbing fixtures and/or plan for replacement in the future as fixtures continue to age at all associated campus facilities.
3. Repair or replace any damaged or missing piping insulation as needed at all facilities.
4. Clean and flush out all of the roof and interior floor drainage piping at all facilities.
5. Investigate and repair the cause of low water pressure.

Mechanical/HVAC

1. Adjust HVAC controls or other equipment, such as dehumidifiers, installed to assist the HVAC equipment in mitigating the humidity observed in all facilities. If any of the HVAC equipment is planned to be replaced, such as any of the AHUs or package units, it should be replaced with an updated asset that includes an integral dehumidification that will assist with humidity issues.
2. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset in all facilities by cleaning, re-painting, and/or repairing by any other means to prevent further deterioration.
3. Repair or replace any damaged or missing piping insulation as needed at all facilities.
4. 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.
5. Repair any observed leaks to prevent water damage to the asset, its piping, support beams, or any other sub-assets. Once leaks are addressed in all facilities, repair or replace any water damaged components as needed.
6. Repair or replace any fin assemblies of HVAC equipment that shows extensive wear and tear. Consider adding a protective fence around any of the units on the exterior ground level that could be vandalized or damaged by students/civilians, particularly at the weight room / shop facility.
7. Plan and track for equipment that uses R-22 refrigerant in all facilities. The refrigerant is being phased out of manufacturing and construction use in the near future, and thus will make all equipment obsolete.
8. Ensure routine preventative maintenance is conducted for cleaning ductwork to promote efficient and clean air flows to all of the facilities' spaces.
9. Install air curtains at the entry doors/vestibules as needed.
10. Further investigate the return grilles and corridor HVAC balancing. Facility staff reported that the corridor spaces throughout the main school and gymnasium facilities were poorly conditioned and stated that the lack of return air grilles could be the source of the problem. Note that if air curtains are to be installed this study should be conducted after the installation.
11. Create a test and balance as well as a commissioning plan for any newly replaced equipment including their support systems such as chilled water or heating water as well. New equipment may have different performance compared to the old.

Fire Protection

1. Continue annual inspections of the fire protection system (at the main school) and the portable fire extinguishers (at all facilities).
2. Consider installing and providing fire protection to the school campus.

Electrical

1. Review the exterior lighting levels and repair/replace as needed to insure security and safety.
2. Provide egress lighting where required for all buildings.

Main School Building (BLDG-121A) Recommendations

Exterior

1. Investigate cracks at exterior brick and concrete elements for any structural implications.
2. Replace existing soffit material and determine if the support structure requires stiffening.
3. Repair damage to brick.
4. Replace metal elements at loading dock with galvanized elements.
5. Waterproof joint between eyebrows and brick walls.
6. Restore original metal windows.
7. Paint lintels with a rust inhibiting paint system.
8. Replace acrylic and fiberglass window panes with glass glazing.
9. Remove failing tinting film applied to windows. Replace with new tinting or glazing with integral shading.
10. Investigate leaking at window on the north side of the auditorium and repair as required.
11. Remove existing sealants at windows and replace with new.
12. Replace damaged glass block units.
13. Replace door frame at the gymnasium exit.
14. Audit doors for finish issues and repaint as required.
15. Remove security grill at auditorium exterior exit. If a plane of security is required at this location then a door or gate system should be installed with proper exiting hardware.

Interior Construction

1. Investigate source of cracks in plaster finish systems.
2. Repair and reframe gypsum board wall system in corridor C2 at the expansion joint. Install corner guards at outside corners of this constriction in the hallway.
3. Repair finish system on doors with damaged paint and veneer.
4. Investigate doors rubbing the floors. Repair floor system, replace hinges, or plane the doors.
5. Refurbish or replace auditorium seating.
6. Replace millwork at second floor bathrooms.

Stairs

1. Repair damage at terrazzo stair systems.
2. Install guard rail at loading dock at appropriate height.
3. Seal cracks at stairs to guard against water infiltration.
4. Evaluate railings or exterior stairs for fall risk to determine if the modern code standard should be applied to those railing. Replace railings as necessary.
5. Evaluate interior stair treads for need of anti-slip treatment.

Interior Finishes

1. Remove paint systems from plaster and glazed block at exterior walls of classrooms and administration areas. Properly prepare substrate and repaint.

2. Review original construction and select a paint system for the interior of the exterior walls that is appropriate for the anticipated vapor drive through the wall.
3. Repair and repaint the walls in the stage area.
4. Replace the quarry tile at the kitchen.
5. Remove floor tile and substrate in the lounge bathroom. Install a firmer substrate and replace the tile.
6. Repair or replace VCT in corridor C2.
7. Investigate cracking at terrazzo.
8. Investigate the hump in the floor in the LOUNGE.
9. Investigate source of water stains on ceiling tiles.
10. Remove all acoustical tiles adhered to the ceiling. Install a suspended ceiling system with associated lighting and HVAC distribution in rooms 1, 2, 5, 6, 8, ADMIN2, NURSE, cafeteria, and 12 - 15.
11. Repair or reinstall suspended ceiling system where out of plumb in the kitchen and corridor C3.
12. Investigate cupping of stage. Address moisture infiltration or humidity levels in the auditorium.
13. Properly support the mechanical units at the stage.

Mechanical/HVAC

1. Consider replacement of the cafeteria HVAC unit.

Plumbing

1. Repair or replace sump pump in lower mechanical room outside of gymnasium.

Electrical

1. Repair or replace blinking emergency luminaire at north stairwell.

Mechanical Building (BLDG-121B) Recommendations

Exterior

1. Install a collector head and downspout system at the roof scupper.
2. Clean existing brickwork and investigate rust stains at metal inset tiles
3. Restore existing windows to remove rust and replace fiberglass with glass panes.
4. Repair or replace exterior doors.

Interior Finishes

1. Remove existing plaster ceiling system if allowed by code, otherwise, repair and replace as required.
2. Review condition of roof structural elements and substrate for soundness.
3. Coat bar joist with rust inhibiting coating.
4. Diagnose leaking equipment and remove debris from floor for verification of condition.

Mechanical/HVAC

1. Create a plan to replace the boiler.
2. Create a plan to replace the heating and chilled water pumps.

Stand-Alone Library (BLDG-121C) Recommendations

Exterior

1. Investigate mineral leaching from masonry for possible moisture infiltration.
2. Review hollow metal doors and frames for repair to the paint system.

Mechanical/HVAC

1. Add additional controls to the air handling units to assist in leak controls.

Electrical

1. Investigate the presence of water in light fixture and address appropriately.

House (BLDG-121D) Recommendations

Exterior

1. Review significance of structure to the district. If the structure is historic, then it should be restored and maintained. If the structure is not of historic significance, an appropriate re-cladding of the structure in durable materials that has a lower maintenance factor should be undertaken. This should include a shift away from residential grade wood siding and wood windows. It is recommended that the entire building envelope be replaced.
2. Replace all windows with metal or metal clad wood windows.
3. Replace all doors and frames with a more durable system.

Stairs

1. Replace exterior stair with code compliant configuration allowing for an even transition from outside to inside.

Interior Finishes

1. Reinstall existing VCT such that it is fully adhered to the substrate.

Lee Elementary School Planned Future Improvements

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

2013 Bond Planned Improvements from PM Andrew Miller on 10/31/16.

- 2013.
  - Address windows in auditorium.
  - Add dumpster enclosure.
  - Replace and support of mechanical units at stage.

CRAWL SPACE – Lee ES – Main School Building (BLDG-121A)

Building Purpose	Administrative, Classrooms, Gym, and Cafeteria
Inspection Date	August 31, 2016, (Morning)
Inspection Conditions	82° - Sunny & Dry

Crawl Space 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
Soil, Drainage, Ventilation & Access	Soil Below Building, Site Drainage in Crawl Space	The soil under the building was dry throughout the main building. In the northwest access hatch, the soil was lightly saturated around the edges of the building. The crawl space at the south of the main building had soil that was saturated in a path originating from the east exterior wall, which implies that water is infiltrating from the ground surface outside the building into the crawl space. No drainage system was found under the main building (nor was one detailed in the available plans). While no drainage system seems to be detailed in the plans for the northwest classroom addition, one pipe was observed running half-buried in the soil that could be a drainage pipe; the top of the half-buried pipe is broken open for approximately ten feet. A large pit was observed near a column/pier in the northeast corner of the building; the reason for the pit could not be determined from the plans. Outside the door to the northwest crawl space a pit was holding water and overflowing; there was a pump in the pit but it was not turned on. In the northwest classroom addition, water was entering the crawl space through a partially enclosed old stair case. Soil/Drainage deficiencies: • Damp soil in isolated locations • Exterior site grading may not be properly draining water away from building along the east perimeter • Water infiltration through abandoned staircase in northwest classroom addition • Busted open half-buried pipe	Average
	Soil Retainers	No soil retainers were found during the crawl space investigation nor were any detailed in the existing drawings.	N/A
	Areaways/Ventilation	The main building did not contain any areaways. Ventilation was achieved through small 6”x12” vents in the wall. Cross	Average

		ventilation seemed adequate but likely does not meet current standards. Condensation was noted on the pipes and in one location on the underside of slab above a large group of pipes. Water infiltration did not appear to be from wall vents. Areaway/ventilation deficiencies: • Inadequate ventilation, condensation on pipes & underside of slab	
	Access Hatches	Access to the crawl space was through doors at all locations. At all four doors, the doors and surrounding walls appeared to be in good condition. There was an additional door in the gym storage room that led to the crawl space under the auditorium; this door had wide open louvers and cool air from the conditioned school interior was spilling into the crawl space. Access deficiencies: • Louvered door is wasting school air conditioning and has potential to let harmful odors into school	Good
Exposed Structure	Exposed Columns & Tops of Foundations	Drilled piers for the main building were not visible above ground level. The columns above piers typically showed signs of honeycombing; sometimes the honeycombing was patched. Observed patches appeared in good condition. In the northwest corner of the building the columns extending from piers were steel. One drilled pier in the northwest corner of the building had a large pit around it exposing the pier. Reason for the pit was unknown and could not be found in the plans. Column/Foundation deficiencies: • Honeycombing on columns	Average
	Exposed Faces of Perimeter Walls / Beams	The original building had cast-in-place suspended perimeter beams with a thin skirt wall below if the bottom of beam was above existing grade. The south 1951 cafeteria addition had cast-in-place perimeter walls on a strip footing. The northwest 1986 classroom addition has a mix of CMU exterior walls and light-gage metal stud walls. The stud walls are supported on a concrete grade beam. In the crawl space area under the stage, there is a cast-in-place wall under the stair case. This wall as a large (3'x2)' hole that has been knocked out of the wall and the reinforcing in the hole is exposed and corroded. Diagonal cracks were observed in the concrete perimeter wall on the southeast corner of the cafeteria at the wall vent corners. In the northwest addition, moderate corrosion has occurred at the bottom of the light-gage metal wall framing.	Average

		Perimeter wall/beam deficiencies: • Diagonal cracks in perimeter wall at vent opening • Corrosion at base of metal stud wall framing • Hole in stage wall with exposed/corroded reinforcing	
	Exposed Portions of Interior Floor Beams Above	Interior suspended floor beams were predominantly concrete. Steel wide-flange floor beams were used in the northwest classroom addition. In the suspended concrete beam near the large hole in the stage wall (mentioned above), there is a longitudinal crack along the beam. Multiple grout patches were found throughout the crawl space on the interior suspended beams and those observed appeared in decent condition. Beam deficiencies: • Longitudinal crack in beam near hole in stage wall • Honeycombing in concrete beams	Average
	Underside of Suspended Floor Slabs Above	The floor system under the auditorium and the kitchen/cafeteria consisted of cast-in-place flat slabs spanning between interior beams and perimeter walls. The floor framing under the northwest classroom addition consisted of open-web steel joists supporting metal deck and concrete topping. The classroom addition steel floor framing could not be observed because it was covered by insulation and chicken wire. In the south region of the original construction, the slab was composed of cast-in-place concrete pan joists. Honeycombing was found throughout the concrete slab systems. Under the auditorium, there was a small spall with exposed reinforcing on the underside of the slab. Under the kitchen, moisture was observed on the underside of the slab; the reason for the condensation appears to be from a broken pipe located under the slab. Under the kitchen there was damage to the slab in two locations where pipes penetrated the slab: one location had spalling and exposed/corroded reinforcing, and the other location showed signs of slab repair but the damage and/or repair was concealed behind screwed-in-place plywood and could be not observed. In the southwest area of the original construction there was lot of concrete repair patchwork evident on the pan joists, as well as exposed/corroded reinforcing in the pan joists and honeycombing in the pan joist webs. Slab deficiencies: • Spalled concrete with exposed/corroded reinforcing on walls, beams, slabs and pan joists • Several previous concrete repair patches failing • Honeycombing prevalent for all concrete components • Damage to slab at pipe penetrations	Average

Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	Cast iron pipes and PVC pipes were present throughout the crawl space. Almost all pipes were suspended. Pipe hangers appeared to be predominantly old with new hangers used sporadically throughout the crawl space. In some areas the pipe insulation had been cut back around joints and in others it was beginning to deteriorate. Condensation was observed on pipes throughout the crawl space, which may indicate that pipe insulation is needed. Cast iron pipes were typically found with mild to moderate rust. In the crawl space under the cafeteria there was one pipe that appeared cracked open close to the underside of slab. Pipe deficiencies: • Rusting in cast iron pipes • Pipes were condensating, and appeared to be creating condensation on underside of slab • Heavy rusting in pipe hangers • Cast iron pipe with broken top under cafeteria • Broken pipe in northwest section of building	Average
	Exposed Ductwork	Ductwork was only found in the northwest corner of the building under the classroom addition. No issues were observed with the ductwork in this area.	Good
	MEP Equipment	No MEP equipment was present in the crawl space areas observed.	N/A
	Spray Fireproofing/ Insulation	No fireproofing was present in the crawl space areas observed. Insulation was only found under the northwest classroom addition. The insulation was deteriorating and collapsing in places. Fireproofing/Insulation deficiencies: • Insulation deteriorating and detaching from underside of metal floor deck	Poor

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

 Water infiltration from abandoned staircase	 Water infiltration from under east perimeter	 Damp soil around perimeter of northwest crawl space
 Large pipe in soil may be a drainage pipe, top of pipe is broken open for a length of roughly 10ft	 Pit holding water outside northwest access to crawl space, sump turned off	 Moisture on underside of slab

Exposed Structure

 Large pit near interior pier/column	 Honeycombing/chopping in column	 Large hole in wall adjacent to staircase

Diagonal crack coming from wall vent

corrosion at bottom of metal stud wall framing

Longitudinal crack in interior suspended beam

Minor honeycombing in suspended beam

Honeycombing in slab at exposed formwork chair

Spalling and exposed/corroded reinforcing at pipe penetration

Slab damage/repair covered by plywood

Exposed longitudinal reinf'g in pan joist

Pipes, Ducts, Equipment & Fireproofing

Large cluster of sweating pipes

Heavily rusted pipe, top of pipe busted open (circled in red)

Rusted pipe supports

Insulation removed at joint, pipe rusting, and pipe sweating

Deteriorating pipe insulation

Deteriorated/falling insulation below slab

CRAWL SPACE – Lee ES – Stand-Alone Library Building (BLDG-121C)

Building Purpose	Library
Inspection Date	August 31, 2016, (Morning)
Inspection Conditions	82° - Sunny & Dry

Crawl Space 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
Soil, Drainage, Ventilation & Access	Soil Below Building, Site Drainage in Crawl Space	The soil under the library building was primarily dry, except damp soil was observed below sweating pipes. Clay sump pits with pipes in the bottom to drain the water out formed the drainage system. The sump pits were in the same location as indicated in the plans. Soil/Drainage deficiencies: • Soil wet under sweating pipes.	Good
	Soil Retainers	Soil retainers were not observed during the site investigation nor were they found detailed in the existing plans.	N/A

	Areaways/Ventilation	Ventilation for the crawl space was obtained by small vents in the wall throughout the crawl space. Ventilation under this building was poor and likely does not meet current code requirements. Areaway/ventilation deficiencies: • Poor cross-ventilation likely	Average
	Access Hatches	The only access into the crawl space was through an exterior wall hatch on the northwest side of the building. No issues with the access hatch were observed.	Good
Exposed Structure	Exposed Columns & Tops of Foundations	The tops of drilled piers appeared in good condition, although the steel columns on top of the piers were covered with spray fireproofing and could not be fully inspected.	N/A
	Exposed Faces of Perimeter Walls / Beams	Cast-in-place concrete grade beams frame the perimeter of the building. CMU walls span from top of grade beam to underside of steel floor framing. The grade beams were generally below ground and could not be observed. The interior faces of the CMU walls were mostly covered in spray fireproofing and could not be fully observed. In the north wall of the crawl space, there is a diagonal steel tube in the plane of the CMU wall that was severely corroded at its base. Perimeter wall/beam deficiencies: • Heavily corroded diagonal tube brace in plane of CMU wall	N/A
	Exposed Portions of Interior Floor Beams Above	Interior floor beams consisted of conventional steel framing and open-web steel joists. Beam and joists were covered in spray fireproofing and could not be inspected.	N/A
	Underside of Suspended Floor Slabs Above	The underside of the metal deck slab was covered in spray fireproofing and could not be inspected.	N/A
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	Cast iron pipes and PVC pipes were observed in the crawl space. Mild rusting was found on the cast iron pipes and pipe hangers. Almost all the pipes were sweating, causing trails of damp soil beneath the pipes. Pipe deficiencies: • Rusted pipes and pipe hangers • Pipes sweating, potentially insufficient insulation	Average

	Exposed Ductwork	No ductwork was present in the crawl space area observed.	N/A
	MEP Equipment	No MEP equipment was present in the crawl space area observed.	N/A
	Spray Fireproofing/ Insulation	Spray fireproofing covered the surfaces of all the structural components in the crawl space. No issues were found with the spray fireproofing. Neither rigid nor soft insulation was present in the crawl space area observed.	Good

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

Damp soil under sweating pipes

Exposed Structure

Diagonal brace with corroded base

Corrosion at diagonal tube base

Pipes, Ducts, Equipment & Fireproofing

 Minor rusting in pipe hangers	 Moisture dripping from hanging pipes	

Lee ES – 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 School Building Recommendations

Soil, Drainage, Ventilation & Access

1. Investigate need for additional ventilation
2. Investigate site grading, re-grade as needed to promote drainage of water away from the building
3. Seal stair case in the northwest classroom addition so that moisture does not get into crawl space

Exposed Structure

1. Clean exposed/rusting reinforcement at spalled/honeycombed areas and patch concrete
2. Replace failing concrete repair patches
3. Monitor diagonal crack in perimeter wall; if crack spreads or widens then determine & remediate problem and repair crack

Pipes, Ducts, Equipment & Fireproofing

1. Replace broken pipes
2. Clean rusted pipes and paint to prevent further corrosion or replace pipes
3. Replace rusted pipe hangers
4. Replace deteriorating pipe insulation
5. Replace falling/degraded insulation below slab in the northwest classroom addition

Stand-Alone Library Building Recommendations

Soil, Drainage, Ventilation & Access

1. Investigate need for additional ventilation

Exposed Structure

2. Clean rust from diagonal tube base and paint exposed steel with two coats of a rust-inhibiting primer

Pipes, Ducts, Equipment & Fireproofing

3. Clean rusted pipes and paint to protect from further corrosion
4. Replace rusted pipe hangers

DRAFT

DEFICIENCIES FOUND IN THIS LOCATION:
1) WATER SEEPING UNDER SOUTHEAST WALL AND INTO CRAWL SPACE
2) EXPOSED/CORRODED REINFORCING IN PAN JOIST WEBS
3) HONEYCOMBING IN WEBS OF PAN JOISTS
4) SOME CONCRETE REPAIR PATCHES SPALLING OR DETACHING AT EDGES
5) RUSTING PIPES & PIPE HANGERS
6) PIPE INSULATION REMOVED/DETERIORATING
7) PIPES SWEATING

DEFICIENCIES FOUND IN THIS LOCATION:
1) MOISTURE ENTERING CRAWL SPACE THROUGH AN ENCLOSED ABANDONED STAIRCASE.
2) INSULATION FALLING/DETERIORATED
3) LARGE PIT EXTRACTED AROUND DRILLED SHAFT IN BACK SOUTHERN PART OF CRAWL SPACE
4) LARGE CONCRETE PIT FULL OF WATER RIGHT OUTSIDE OF ACCESS DOOR, SUMP NOT OPERATIONAL
5) PIPE IN GROUND BROKEN OPEN
6) BASES OF LIGHT-GAGE METAL STUD WALLS RUSTED

NOTE: MOST OF THE STRUCTURE IS COVERED IN SPRAY FIREPROOFING AND COULD NOT BE OBSERVED.

DEFICIENCIES FOUND IN THIS LOCATION:
1) INADEQUATE VENTILATION
2) PIPES ARE SWEATING AND DRIPPING ON SOIL
3) DIAGONAL TUBE BRASE HAS RUSTED BASE

DEFICIENCIES FOUND IN THIS LOCATION:
1) DIAGONAL CRACK IN EXTERIOR WALL
2) HONEYCOMBING ON INTERIOR BEAMS, SLABS & COLUMNS
3) EXPOSED REINFORCING & DAMAGED SLABS AT PIPE PENETRATIONS
4) BROKEN PIPE
5) RUSTED CAST IRON PIPES AND PIPE HANGERS
6) CONDENSATION ON UNDERSIDE OF SLAB

LOUVERED DOOR CONNECTS GYM STORAGE TO CRAWL SPACE HERE.

ACCESS THROUGH SMALL DOUBLE DOOR HERE

ACCESS THROUGH SMALL DOOR IN MECH. ROOM BELOW

ACCESS THROUGH SIDEWALL HATCH HERE

ACCESS THROUGH EXTERIOR DOOR HERE

ACCESS THROUGH SIDEWALL HATCH HERE

DEFICIENCIES FOUND IN THIS LOCATION:
1) LARGE HOLE IN INTERIOR CONCRETE WALL, REINF EXPOSED & CORRODED
2) LONGITUDINAL CRACK IN BEAM ADJACENT TO HOLE IN WALL
3) HONEYCOMBING ON UNDERSIDE OF SLAB
4) SPALL WITH EXPOSED REINFORCEMENT ON UNDERSIDE OF SLAB
5) CAST IRON PIPES AND PVC PIPES ARE SWEATING
6) RUSTED CAST IRON PIPES & METAL HANGERS

APPROXIMATE LIMITS OF CRAWLSPACE OBSERVED DURING SITE VISIT

APPROXIMATE LIMITS OF CRAWLSPACE PER AVAILABLE PLANS AND SITE OBSERVATIONS

AUSTIN I.S.D.

DEPARTMENT OF CONSTRUCTION MANAGEMENT

LEE ELEMENTARY SCHOOL

3308 Hampton Rd.
Austin, Texas

FLOOR PLAN
1ST FLOOR

APPROVALS		
DRAWN	CHECKED	APPROVED
J.R.		
05/07/12		
DWG: 121-FLR-01		SHEET
DRAWING SCALE		1 OF 2
1/16" = 1'-0"		