Langford Elementary School Site Summary

Address	2206 Blue Meadow Drive Austin, TX
Number of Permanent Campus Facilities	4
Original Year of Construction	1980, 1996, 2010 and 2016
Total Campus Building Area (combined)	79,509 SF

Introduction

The Langford Elementary School campus is located at 2206 Blue Meadow Drive in Austin, Texas. Langford Elementary School was established in 1980, and consists of four permanent campus buildings. The Main School Building (BLDG-168A) includes administration offices, classrooms, gymnasium, and cafeteria. The other permanent campus buildings are two Stand-Alone Classroom Buildings (BLDG-168B, constructed in 1996, and BLDG-168C, constructed in 2010) and a Stand-Alone Multi-Purpose Classroom Building (BLDG-168D), completed in 2016. The buildings are connected by exterior covered walkways.

The Main School Building (BLDG-168A) was under construction during the assessment. The majority of the work was being performed on the HVAC (heating, ventilating, and air conditioning) system on the roof and ceiling areas. There was additional work being done in the art room, library, and corridor C5 due to recent roof leaks and damage to the interior finishes. The front parking area was renovated in 2016 to make the entrance accessible.

Main School Building – BLDG-168A

Building Purpose	Administrative, Classrooms, Gymnasium and Cafeteria
Building Area	32,100 SF
Inspection Date	August 4, 2016
Inspection Conditions	96°F, Partly Cloudy
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 a brick façade on CMU (concrete masonry unit) support structure. There are exterior covered walkways and overhangs that have a painted stucco soffit. The exterior brick walls were observed to be in average condition due to age, dirt and possible water staining. There was a crack in the brick and mortar above the windows outside rooms 501 and 502. There were also cracks below the windows on the south façade under the covered walkway outside the music classroom. The foundation at this location also had hairline cracks. Facility staff reported a pest issue. The campus staff also reported issues with security and vandalism on the roof. Canopies on the front of the building at the main entrance are reported in the interview to have reached their life span and need to be replaced: pictures or observations?	Average
	Exterior Windows	The exterior windows are aluminum frames with single-pane glazing with an operable lower panel. The top portion of the window systems has an opaque panel. The windows were observed to be in good condition. Facility staff reported that classrooms did not have sufficient quantity of windows.	Average
	Exterior Doors	The exterior doors are painted metal doors with vision glass in the upper half. The doors have painted hollow metal frames with integral transom frames above that	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		appear to have been glass at one point but are now opaque panels. The exterior doors were observed to be in average condition due to age and peeling paint. Facility staff requested all exterior doors be replaced. The exterior door at corridor C5 reportedly did not function properly.	
Roofing	The roof covering is modified bitumen with various pre-finished metal caps on dividing walls that extend above the roof level. There is a prefinished metal fascia at the perimeter. There are no gutters and downspouts except for a small section at the main entrance. There is a roof hatch in the gymnasium storage room. The roof covering appeared to be in poor condition. Construction crews were replacing the mechanical units on the roof and patching the surrounding roof covering at the time of the assessment. Construction crews were repairing significant damage to the interior ceiling, wall, and floor finishes in the 100-wing, 400-wing, and library due to roof leaks. Approximately 50% of the ceiling tile had been removed for repairs due to roof leaks and mechanical ductwork replacement. It was unknown how much of the existing roof covering would be repaired. There was evidence of ponding water on roof areas A-04, A-07, and A-08. There were bubbles and previously patched areas on the A-01 roof covering. The absence of roof gutters contributed to dirt accumulation on the exterior brick façade. The roof hatch finish was rusted. Facility staff reported vandalism on the roofs with access possible from pipes, canopies, ledges and other exterior infrastructure.		Poor
Interior Construction	Interior Walls	The interior walls are a mixture of CMU and gypsum board on metal studs. There are movable wall panels dividing classrooms in the 500-wing and between the 200- and 300-wings. There are movable partitions along corridors C4 and C7 to the adjoining classrooms. A movable partition wall separates the gymnasium and cafeteria. There are corrugated movable divider walls in the offices of each classroom wing. The interior walls were observed to be in average condition due to age. There was a crack above the millwork in the staff lounge, which suggested possible settlement. All of the movable partitions and corrugated dividers were aged and likely not used often. The movable partition in the gymnasium and cafeteria was aged and reportedly deteriorating. Facility staff requested the partition be replaced.	Average
	Interior Doors	The interior doors are wood veneer in painted hollow metal frames. The classroom doors have integral sidelite windows with vision glass on the top and an opaque panel at the bottom quarter. The doors also have vision panels into the classrooms. The interior doors were observed to be in good	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		condition with a few areas of wear, specifically at the bottom of the doors at the classroom restrooms.	
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	The exterior stairs on the southeast side of the building are concrete with a painted metal railing. There is an adjacent concrete ramp also with a painted metal railing. The exterior stairs appeared to be in good condition.	Good
	Interior Stairs	There are rubber-covered steps at the stage leading into the cafeteria and at each side exit from the stage area. The interior stairs appeared to be in good condition with no visible issues.	Good
Interior Finishes	Interior Wall Finishes	The majority of the interior wall finish is paint. The restrooms have ceramic wall tiles on the lower half and paint above. The movable walls along the corridors have a chalkboard surface inside the classrooms and a fabric finish in the corridor. Between classrooms, the movable wall finish is fabric. There is wood paneling on classroom walls as well. The movable walls were observed to be in poor condition with torn fabric and scratched finish. The movable walls were significantly dated. The paint finish throughout the school appeared to be in average condition due to age, excluding the areas that were under construction at the time of the assessment. An isolated area of the walls finishes were removed down to the studs in classroom 400 due to the recent roof leaks. A portion of the drywall paper was removed as well. The library walls had already been repaired at the time of the assessment.	Average
	Interior Floor Finishes	The flooring finishes include VCT (vinyl composition tile) throughout the school in the corridors, classrooms, gymnasium, and cafeteria. The stage has wood flooring with rubber treads and risers. There is vinyl sheet flooring in the classroom restrooms and the administrative restrooms. The larger restrooms with multiple stalls have ceramic tile. The kitchen has ceramic tile. The library and administrative areas have carpet. The interior floor finishes were observed to be in average condition due to age, wear, and discoloration. The sheet flooring in all the classroom restrooms was discolored and worn. The ceramic tile in the kitchen was	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		aged, and the finish appeared to have deteriorated. The carpet in the administration area was worn, and an area of the cove base was damaged possibly due to construction that occurred. A portion of VCT and rubber cove base in rooms 400 and 401 was damaged due to the recent roof leaks being addressed. It is unknown if the tiles will be replaced as part of the repair work that was taking place.	
	Interior Ceiling Finishes	The interior ceiling finish is a 2x4 ACT (acoustic ceiling tile) and metal grid system. The gymnasium has tectum panels at the roof structure. The cafeteria has a suspended ACT and grid. The restrooms have a painted gypsum board finish. The library has a more recently installed 2x2 ACT and grid system. Approximately 30% of the ACT in the building had been removed during the construction projects taking place at the time of the assessment. It was unknown if original or new ceiling tiles would be used when repairs were complete. The ceiling finishes were observed to be in average condition due to the age of the ceiling finish in undisturbed areas. Tiles were mismatched.	Average
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building contains predominantly single-use restrooms. Multi-use restrooms are in the gymnasium and administration areas. Typical restrooms have floor-mounted vitreous china water closets with manual flush valves. Wall-hung vitreous china urinals with manual flush valves are located in the dedicated male multi-use restrooms. Typical classrooms contain a single-basin stainless steel sink with a drinking fountain attached. Additionally, personal use basin sinks are in the art, library, and administration areas. Stainless steel and vitreous china drinking fountains are in the corridors of the building. A shower is in the restroom off the gymnasium office. A commercial kitchen is located in the school's cafeteria. The kitchen contains stainless steel kitchen equipment, including one triple-basin prep sink and one double-basin prep sink. It also has various wall-mounted stainless steel and vitreous china sinks for personal use. A stainless steel handwashing sink is in the cafeteria area. The building also has service sinks located in various janitorial closets. The school was under major construction during the	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		assessment, and as a result, the water was turned off to the kitchen, so functionality of the fixtures could not be assessed. The sink in LIBLIT was covered in plastic due to construction and was not able to be assessed for functionality. Plumbing fixtures were observed to be in average condition, showing minor signs of deterioration due to age. The drinking fountain in room 204 was observed to stick in the on position. The sink in room 205 was leaking from the faucet. The restroom off 100 had a clogged water closet. The shower in the restroom off the gymnasium office had low flow. The janitorial mops sinks were observed to be in average condition, with some showing signs of corrosion around the base.	
	Domestic Water Distribution	Domestic hot water to the kitchen is provided by a 99-gallon GWH (gas water heater) stored in the main mechanical room (MAINMECH). No other water heaters are in the building. Domestic hot water is not supplied to the classroom plumbing fixtures. The GWH was observed to be newer and in good condition but was reported in the facility interview to be undersized. Distribution plumbing appeared to be in average condition with minor signs of corrosion and deterioration due to age. The sinks in rooms 204, 303 and 503 were emitting a musty smell from underneath and had evidence of water damage, potentially due to leakage. It was noted that recent rain had caused certain areas of the building to flood, possibly causing the damage.	Average
	Other Plumbing	Other plumbing is in average condition with signs of degradation associated with age. The restroom off room 508 was emitting a musty smell, potentially coming from the drain. It was noted that some areas had flooded recently, and cleanup was still underway. No evidence of flooding was observed in this restroom but could potentially be the source of the smell. The male restroom off the gymnasium (BHRRGYM) was emitting a smell from the floor drain. Roof drain grates were excessively rusted and corroded. Storm drains had signs of corrosion and rust. Kitchen and restroom floor drains were observed to be in good to average condition. Floor drains in mechanical and electrical rooms were degraded and had signs of corrosion.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Mechanical/ HVAC	The majority of the building's HVAC system was in the process of being removed and replaced with new equipment at the time of assessment. The main mechanical room (MAINMECH) only contains a hot water pump and a chilled water pump. Two newer chillers are mounted on the roof above the main mechanical room. Two new makeup air units and a RTU (roof top unit) are located on the roof. During the assessment, multiple other packaged air conditioning RTUs and AHUs (air handling units) were being installed. An older cabinet fan is located on the roof. Rooms marked as AHU rooms on the floorplan were found to be empty, as their units were being removed as part of the renovation. Ductwork is being rerouted and replaced as part of the new HVAC system. Various sized EFs) (exhaust fans) feed the building. A large ventilation unit located on the roof was found with damaged conduit, but also appeared to be disconnected and abandoned in-place. Make up air units, chillers and RTUs were observed to be in excellent to good condition. The cabinet fan on the roof was original to the building and appeared to be no longer in operation. The EFs in the restrooms off rooms 502, 503, and 508 were excessively loud. Roof top vents and EFs were aged and rusted. At the time of assessment, the system appeared to be in poor condition due to multiple units not yet installed or partially installed, with ductwork still being replaced. It is expected when the renovations are complete the system will be in good condition.		Poor
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as strobes, horn/strobe combinations, pull stations, and detectors. Detection and indication are present throughout the building. Due to active on-site construction, several classroom areas and corridors could not be properly assessed due to missing ceiling tiles which typically hold end devices. The fire alarm system appeared to be in average condition. Many of the fire alarm end devices appeared to be reaching their end of service life expectancy. There were some end devices that appeared to be original to the school's construction.	Average
	Fire Protection/ Suppression	A fire suppression system is present for the range hood in the kitchen with a tank mounted to the wall at the ceiling. No other fire suppression system is present in the building. Fire extinguishers are located throughout the building. Visual assessment showed these appeared to be in average condition. The fire extinguishers off the 100-, 200- and 500-wings, gymnasium and MAINMECH and in the art room were out of date on their annual inspection.	Average
Electrical	Electrical Distribution	The electrical service enters the building at the 277/480-	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		volt, 1600-amp main switchboard located outside room MAINMECH, on the east side of the building. The service feeds transformers and high-voltage panelboards located in various electrical rooms throughout the building. The building does not have a lightning protection system. The electrical distribution equipment appeared to be in average condition. The majority of the electrical panelboards and transformers throughout the building were original to construction with roughly 15 years remaining on their service life expectancy. Panel K had several missing breaker covers. This condition should be considered a life safety hazard, and breaker covers should be installed immediately. Panel K also had a loose front cover due to several missing screws. Panel H/A, located in AHU5MECH, had a missing door latch. A few transformers were observed with cosmetic damage to their housings, but this should not affect operation. School faculty reported that the recently installed MCC (motor control center) tripped the main panel of the school. It was reported that this was a problem within the equipment programming and that AISD Service Center staff could not make the necessary repairs. Faculty have requested the installation of a main disconnect for the electrical service, along with a service upgrade. Faculty have reported that a majority of the building's panelboards had circuits at full capacity and would require upgrades for future electrical additions.	
	Lighting	The building's exterior lighting consists of wall-mount and canopy-style metal-halide luminaires with a few LED (light-emitting diode) luminaires. Exterior lighting is located around the building's exterior walls, covered walkways, and building egresses. The interior lighting consists primarily of recessed troffer fluorescent luminaires, although some storage/custodial rooms have various downlight-style luminaires. Classrooms have occupancy sensors for lighting activation. Due to ongoing construction during the assessment, large portions of the ceiling were removed or power was turned off. As a result, a full assessment of the interior lighting could not be performed. The lighting for the building appeared to be in average condition. Many exterior luminaires were discolored or aged past their design life. Observed interior lighting	Average

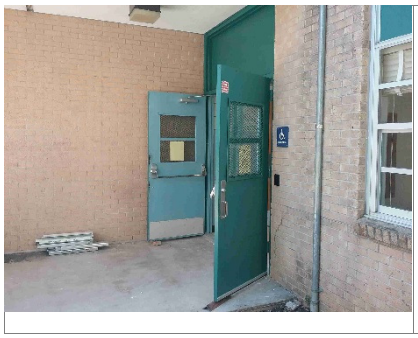
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		deficiencies included non-functional luminaires, burned-out lamps, or missing luminaire covers. Some classrooms had non-functional lighting, but this was attributed to the ongoing construction. No major deficiencies were observed with the building's branch wiring. Several exit sign luminaires were found dim or non-functional. Faculty requested additional electrical outlets throughout the building, especially within computer rooms. It was reported that the majority of the interior luminaires were original to the building and had exceeded service life expectancy. Faculty reported that the covered walkway canopy luminaires were damaged from water infiltration from the direct mounting through the metal roofing. It was requested that these luminaires be replaced with installation to prevent water infiltration. The covered walkways also need to be repaired. Emergency lighting battery packs above the covered walkways were reported to be in poor condition due to direct exposure rain. Faculty reported that several wall-mounted exterior luminaires were blocked by trees around the building. Faculty requested that exterior wall-mounted metal-halide luminaires be upgraded to LED luminaires. Faculity also report that there is not enough lighting in the building.	
	Communications & Security	The building is equipped with telecommunication and data systems, with the main backbone equipment located in room MDF (main distribution frame) (inaccessible due to construction). Room CAFESTO1 houses dated telephone distribution equipment. Networking Wi-Fi access points are installed throughout the building. VOIP (voice over internet protocol) is used for voice communications. The building security is made of surveillance cameras, motion detectors, and a proximity card access system. Exterior surveillance cameras overlook the portable buildings area and the main entrance. Observed interior surveillance cameras are located within the administrative area and at the main entrance to the building. Due to the lack of ceiling panels throughout the building, other interior cameras were not found. Motion detectors are installed throughout the building for the security system.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The communications and security systems were observed to be in average condition. The majority of the building's classrooms have new networking cable being installed, and as a result, receptacles were loose or removed. Faculty requested additional networking receptacles in the computer room. Faculty reported a number of issues with the building's security. The faculty requested a controlled entry access to the school. The building is typically under lockdown due to neighborhood issues. It was reported that the cafeteria surveillance camera had poor resolution and needed to be upgraded. Faculty requested additional surveillance cameras throughout the interior and exterior of the building, especially around covered walkway areas that adjoin the buildings. Faculty requested a surveillance camera and an intercom system for the kitchen unloading area.	

Exterior System Deficiency Examples

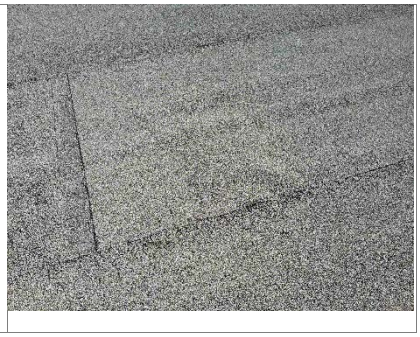
Exterior Walls

Exterior Doors



Roofing Deficiency Examples

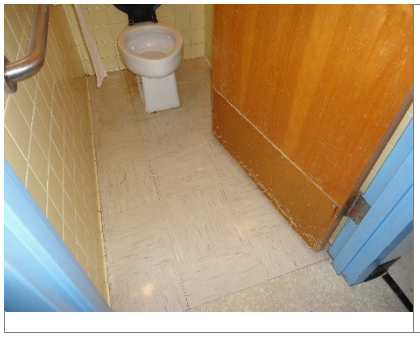




Interior Construction Deficiency Examples

Interior Walls

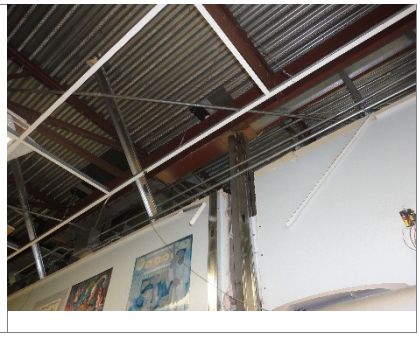

Interior Doors



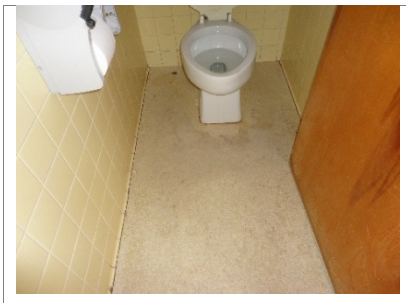
Interior Finishes Deficiency Examples

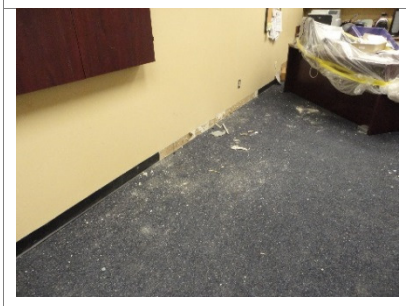
Interior Wall Finishes





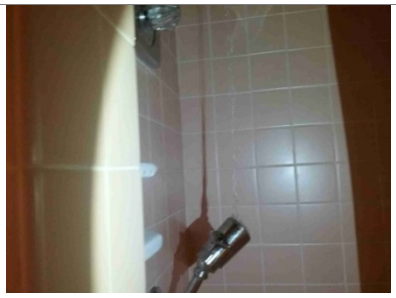
Interior Floor Finishes

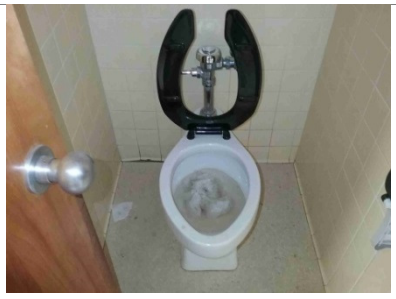
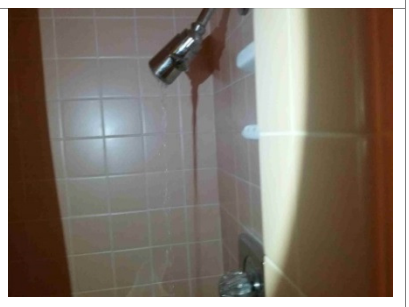


Plumbing System Deficiency Examples

Plumbing Fixtures

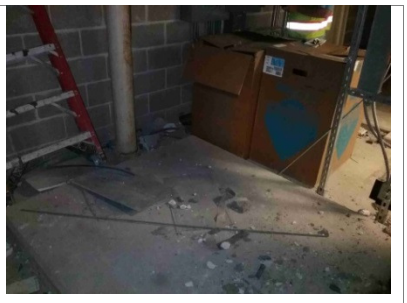





Domestic Water Distribution

Other Plumbing

Mechanical/HVAC System Deficiency Examples






Fire Protection System Deficiency Examples

Fire Alarm

Fire Protection/Suppression



Electrical System Deficiency Examples

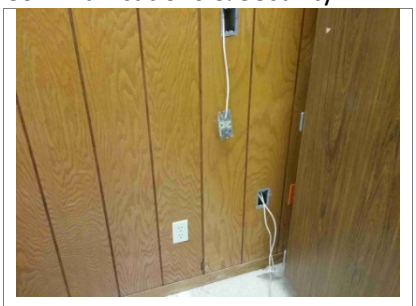
Electrical Distribution



Lighting



Communications & Security



Stand-Alone Classroom Building – BLDG-168B

Building Purpose	Classrooms
Building Area	8,753 SF
Inspection Date	August 4, 2016
Inspection Conditions	99°F, Partly Cloudy
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 a brick façade with control joints spaced evenly along the perimeter. The north and south walls extend above the roof slope, creating a parapet. The east and west walls meet the roof edge with a painted stucco soffit. There is a small portion of painted stucco above the exterior windows. The exterior walls were observed to be in average condition due to age. There was a hole in the soil at the foundation on the northwest corner. This either was a bush or plant that was removed or an erosion problem associated with the nearby downspout. There were three angles bolted to the foundation on the north side, possibly to remedy a brick support or foundation issue in the past. No current issues were reported by facility staff.	Average
	Exterior Windows	The exterior windows are aluminum frames with single-pane glazing. The lower portions of the windows have translucent film applied to the interior of the glass. The exterior windows were observed to be in average condition due to age. The translucent film had minor scratches.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Exterior Doors	The exterior doors are painted hollow metal frames and painted metal doors. The doors have wire glass half lites glazing, metal guards on the outside and metal kick plates at the bottom of the doors on the interior. The exterior doors were observed to be in average condition due to age. There were minor scratches in the paint finish.	Average
Roofing	The roof covering is modified bitumen with pre-finished gutters and downspouts. The north and south walls extend beyond the roof pitch and have pre-finished metal parapet caps. The roof covering appeared to be in average condition due to age with no visible leaks on the interior finishes. There was only one piece of mechanical equipment on the roof, and there was no roof access ladder. The roof covering was visible from BLDG-168A and BLDG-168C.		Average
Interior Construction	Interior Walls	The interior walls are gypsum board on metal studs. The interior walls were observed to be in good condition with no visible structural issues.	Good
	Interior Doors	The interior doors are wood veneer with painted metal frames. The doors to the classrooms have wire glass vision panels and integral wire glass side lites. There are metal kick plates at the bottom of each door on the interior of the classrooms. The interior doors were observed to be in good condidtion.	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 paint with a plastic laminate wainscoting in the corridor. The plastic laminate has painted wood trim at the top with coat hooks. The classrooms have tack boards around the chalkboards. The classroom restrooms have a ceramic tile on the lower half of the wall and paint above. The interior wall finishes appeared to be in good condition.	Good
	Interior Floor Finishes	The interior floor finishes include VCT in the classrooms and corridor. The restroom floor finish is ceramic tile. The flooring finishes appeared to be in good condition with a few areas that had tiles replaced. The replacement tiles did not match the color of the original tile.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Ceiling Finishes	The interior ceiling finish is 2x4 ACT and grid system in the corridor and classrooms. There is painted gypsum board ceilings in the restrooms. The ceiling finishes appeared to be in good condition.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	A single-use faculty restroom is off the central corridor of the building. Single-use restrooms are in each individual classroom. The restrooms contain floor-mounted vitreous china water closets. Classrooms contain stainless steel basin sinks with drinking fountain attached. Stainless steel drinking fountains were observed in the central corridor. A janitorial mop sink was located in CC600CCUST. The majority of the plumbing fixtures were observed to be in average working condition with some fixtures showing corrosion on the connections. The restroom off room 601 was making a loud clunking noise when flushed. Restroom FHRR had evidence of leaks around the base of the water closet. The sink in FHRR was leaking from the faucet.	Average
	Domestic Water Distribution	No water heaters are in the building; hot water is not fed to plumbing fixtures in this building. Distribution plumbing appeared to be in average condition. Minor corrosion was observed on distribution plumbing.	Average
	Other Plumbing	Other plumbing appears to be in average condition with signs of degradation associated with age. Storm drains had rust on their grates. Floor drains in the restrooms were observed to be in good condition. Floor drains in the MECH rooms had signs of corrosion and degradation.	Average
Mechanical/ HVAC	The building's HVAC system is composed of through-wall packaged heat pump systems and EFs for the restrooms. EFs appeared to be in good condition. Packaged heat pump systems were original to the building and had signs of age and rust. They use R-22 refrigerant, which is aged and out of date. Some of the units were making a buzzing sound during operation. HP-7, feeding classroom 605, had evidence of leakage on the ground surrounding the unit.		Average
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as strobes, horn/strobe combinations, pull stations, and detectors. The fire alarm system is controlled by a Silent Knight control panel.	Good

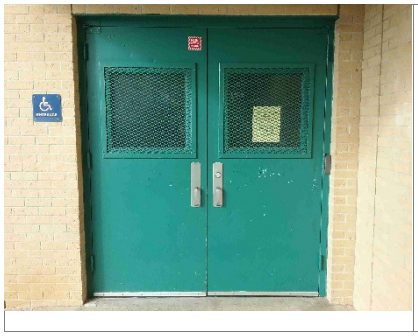
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The fire alarm system appeared to be in good condition.	
	Fire Protection/ Suppression	A fire suppression system does not exist in the building. Two fire extinguishers are present. The extinguishers were observed to be in average condition. One was last inspected in January 2015 and is out of date with its annual inspection. The second had its inspection tag stamped with a year but not a month. It was stamped as last inspected in 2015. It was assumed to be inspected at the same time as the other extinguisher and also out of date with its annual inspection.	N/A
Electrical	Electrical Distribution	Distribution for the building is located in room ELEC600. The electrical distribution equipment was observed to be in good condition. No major deficiencies were found during the assessment. Faculty reported that a majority of the building's panelboards have circuits at full capacity and will require upgrades for future electrical additions.	Good
	Lighting	The building's exterior lighting consists of wall-mounted and canopy metal-halide luminaires. Exterior luminaires are located at the building egresses and on the building's exterior walls. Interior lighting is predominantly comprised of recessed troffer fluorescent luminaires. Interior lighting is activated by occupancy sensors. The lighting for the building appeared to be in good condition. Two pole-mounted exterior luminaires were found with missing lens covers. One of these luminaires was also missing a lamp. The faculty restroom for the building was found to have a non-functional luminaire. It was reported that the majority of the interior luminaires were original to the building and had exceeded service life expectancy. Faculty requested that exterior wall-mounted metal-halide luminaires be upgraded to LED luminaires.	Good
	Communications & Security	The building is equipped with telecommunication and data systems with the main equipment located in BKRM600 and ELEC600. Networking Wi-Fi access points are installed throughout the building. VOIP is used for voice communications. The building security consists of exterior surveillance cameras, motion detectors, and a proximity card access system. There is one exterior surveillance camera that	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		overlooks the north-end of the facility. There are two interior surveillance cameras at each end of the main corridor that overlook the building entrances. The communications and security systems were observed to be in good condition.	

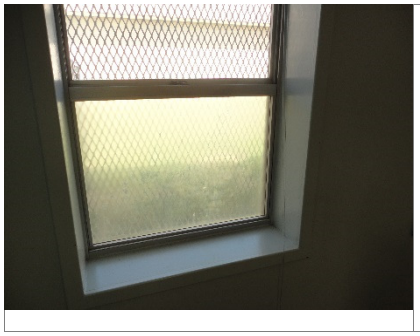
Exterior System Deficiency Examples

Exterior Walls

Exterior Doors



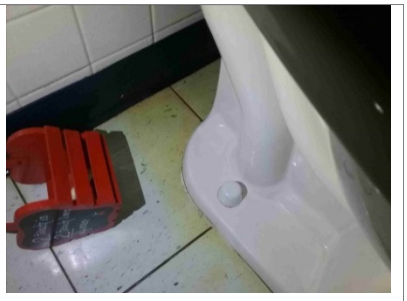
Exterior Windows



Interior Floor Finihes

Plumbing System Deficiency Examples

Plumbing Fixtures

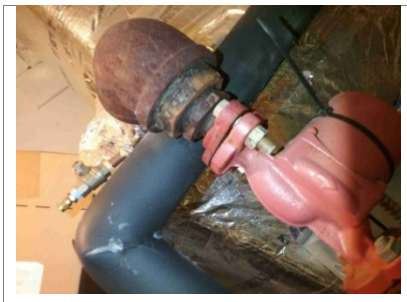
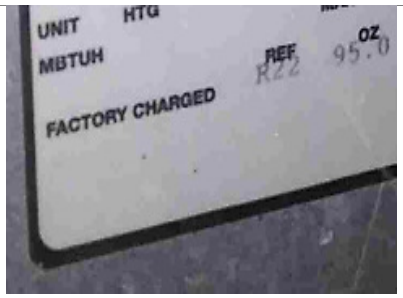


Domestic Water Distribution

Other Plumbing



Mechanical/HVAC System Deficiency Examples

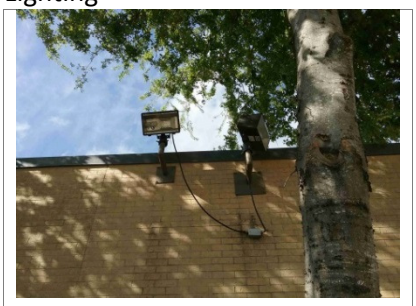




Fire Protection

Fire Protection/Suppression

Electrical System Deficiency Examples

Lighting



Stand-Alone Classroom Building – BLDG-168C

Building Purpose	Classrooms
Building Area	11,831 SF
Inspection Date	August 4, 2016
Inspection Conditions	99° Partly Cloudy
Facility Condition Index	

System Deficiency Overview

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior walls are brick façade constructed in 2010. There is brick wainscot accent color and decorative brick pattern on the restroom exterior walls. The building has metal siding above the canopy covering the three entrance doors. The exterior walls were observed to be in good condition.	Good
	Exterior Windows	The exterior windows are single-pane aluminum frame windows with an operable lower pane. There are transom windows in the classrooms that consist of Kalwall panels in lieu of vision glass. There are full-height, painted hollow metal framed, single-pane windows at the three entrances. The exterior windows were observed to be in good condition.	Good
	Exterior Doors	The exterior doors are painted metal with painted metal frames. The doors have half vision glass. The doors and frames are integral to the full-height window system at the entrances. Facility staff reported a leak at the door or window on the east side. The exterior doors were observed to be in good condition.	Good
Roofing	The roof covering is a smooth modified bitumen with a pre-finished metal parapet cap. The roof has a pitched Kalwall skylight that extends the length of the building. There are pre-finished metal roof systems over each of the entrances that are lower than the main roof.		Good

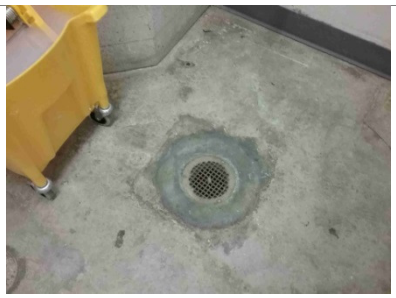
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	The roof covering appeared to be in good condition with some minor repairs needed. There was one area of cracking on the southwest corner of the skylight.		
Interior Construction	Interior Walls	The interior walls are gypsum board on metal studs with transom windows in the walls between the classrooms and corridors. The walls were observed to be in good condition with control joints in appropriate locations at door and window corners.	Good
	Interior Doors	The interior doors are wood veneer with painted hollow metal frames. The classroom doors have half vision glass panels. There are matching painted hollow metal single-pane transom windows above the classroom doors. The interior doors were observed to be in good condition.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior wall finishes consist of paint throughout with a plastic laminate wainscot in the corridor with tack strips at the transition from laminate to paint. The restrooms have a ceramic tile up to 4'-8" with paint above. The interior finishes were observed to be in good condition.	Good
	Interior Floor Finishes	The interior floor finish consists of VCT throughout with ceramic tile flooring in the restrooms. The interior floor finishes were observed to be in good condition.	Good
	Interior Ceiling Finishes	The interior ceiling finish in the classrooms is a 2x2 ACT and grid. The restrooms have painted gypsum board ceilings. The ceiling finish is painted gypsum board at each of the three entrances with suspended acoustic ceiling panels attached. The corridor ceiling includes the Kalwall skylight and painted gypsum board furr downs. The furr downs also have acoustic tectum panels. There are exposed painted structural beams that support the skylight. The interior ceiling finishes were observed to be in good condition.	Good
Conveying	System not present.		N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Plumbing	Plumbing Fixtures	A single-use faculty restroom is off the central corridor. Single-use restrooms are found in each individual classroom. The restrooms contain floor-mounted vitreous china water closets. Classrooms contain stainless steel basin sinks with drinking fountain attached. Stainless steel drinking fountains were observed in the central corridor. A janitorial mop sink is located in CC700. The plumbing fixtures were original to the building, which was constructed in 2010. Plumbing fixtures were observed to be in good condition with no deficiencies.	Good
	Domestic Water Distribution	A water heater is in the custodial closet mounted above head. The nameplate was facing the wall and not accessible. The unit appeared to be in good condition. Domestic water distribution was observed to be in good condition.	Good
	Other Plumbing	Other plumbing appears be in average condition with signs of degradation. Floor drains were observed to be in average condition, showing minor signs of deterioration and corrosion. Roof drains had rusted grates; one roof drain was missing the grate, allowing for potential blockage.	Average
Mechanical/ HVAC	The building's HVAC system is composed of a roof top AHU, split systems for the individual rooms with roof top condenser units and through-wall indoor heat pump units. The HVAC equipment is 6 years old and was observed to be in good condition. No deficiencies were observed.		Good
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as strobes, horn/strobe combinations, pull stations, and detectors. The fire alarm system appeared to be in good condition. No deficiencies were observed during the assessment.	Good
	Fire Protection/ Suppression	A fire suppression system does not exist in the building. Two fire extinguishers were present and appeared to be in average condition. Both were out of date on their annual inspection.	N/A
Electrical	Electrical Distribution	Electrical distribution for the building is located in room ELEC700. The electrical distribution equipment appeared to be in good condition. Faculty reported that undersized occupancy sensors control the building's HVAC equipment and were causing the equipment power packs to fuse together. As	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		a result, the HVAC equipment would not function or it ran continuously. Faculty requested that the occupancy sensors be upgraded.	
	Lighting	The building's exterior lighting is primarily composed of wall-mount metal-halide luminaires on the building walls. Exterior egress lighting is canopy luminaires, but it could not be determined if they are metal-halide or LED lamps. The interior lighting consists primarily of recessed troffer and recessed downlight fluorescent luminaires. Interior lighting is activated by occupancy sensors. The lighting for the building appeared to be in good condition. All classrooms had at least one recessed downlight that was non-functional. The luminaire for the C14 restroom vestibule between rooms 704 and 702 was non-functional. The faculty restroom was found to have extremely dim lighting. The building had two exterior electrical receptacles with broken covers, one on the roof and one on the rear egress of the building. Also, several interior corridor electrical receptacles appeared to have corrosion, possibly due to water infiltration. Faculty reported a similar problem to the HVAC system's for undersized occupancy sensors that activate classroom lighting. Faculty requested that exterior wall-mounted metal-halide luminaires be upgraded to LED luminaires.	Good
	Communications & Security	The building is equipped with data systems, with the main equipment located in room IDF-C. Networking Wi-Fi access points are installed throughout the building. VOIP is used for voice communications. The building's security consists of surveillance cameras, motion detectors, and a proximity access card system. Two exterior surveillance cameras are located on the northwest and northeast ends of the building. These cameras overlook the playscape and the uncovered walkways that lead to the portable buildings. Three interior surveillance cameras monitor each entrance to the building. Motion detectors are installed throughout the building for the security system. The communications and security systems were observed to be in good condition.	Good

Roofing Deficiency Examples

Other Plumbing



Fire Protection

Fire Suppression System Deficiency Examples

Electric System Deficiency Examples

Lighting

Stand-Alone Multi-Purpose Classroom Building – BLDG-168D

Building Purpose	Classrooms
Building Area	1,260 SF
Inspection Date	August 4, 2016
Inspection Conditions	99°F, Partly Cloudy
Facility Condition Index	

System Deficiency Overview

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior walls are brick façade with painted stucco sections around doors and windows. There are pre-finished metal overhangs over the windows and doors. The exterior walls appeared to be in excellent condition as the building was completed in April 2016.	Excellent
	Exterior Windows	The exterior windows are double-pane aluminum-framed windows. The transom windows have polygal panels in lieu of glass. The exterior windows were observed to be in excellent condition.	Excellent
	Exterior Doors	The exterior door is painted metal in a painted hollow metal frame with integral side lites on both sides of the door. The top half of the side lite is vision glass and the lower half is opaque panel. The exterior doors were observed to be in excellent condition.	Excellent
Roofing	The roof covering is modified bitumen with a pre-finished metal fascia, gutters, and downspouts. There is a roof ladder with a locked security cage on the north side of the building. The roof also has a pre-finished metal panel screen to cover the mechanical units from view. The roof covering appeared to be in excellent condition and is expected based on the construction completion date. The lock on the roof ladder was still under the control of the contractor; therefore, the roof area was inaccessible. However, the roof was visible from the main school building.		Excellent

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Interior Construction	Interior Walls	The interior wall construction is gypsum board on metal studs. The interior walls were observed to be in excellent condition.	Excellent
	Interior Doors	The interior doors are wood veneer doors in painted hollow metal frames. The interior doors were observed to be in excellent condition.	Excellent
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior finishes consist of paint throughout and ceramic tile wainscot in the restroom with paint above. The interior finishes were observed to be in excellent condition.	Excellent
	Interior Floor Finishes	The interior floor finishes include VCT throughout with ceramic tile flooring in the restroom. The interior floor finishes were observed to be in excellent condition.	Excellent
	Interior Ceiling Finishes	The interior ceiling finish is a 2x2 ACT and grid system with 2x4 light fixtures. The restroom has a painted gypsum board ceiling. The interior ceiling finishes were observed to be in excellent condition.	Excellent
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	A single-use restroom is in the building. It contains a floor-mounted vitreous china water closet. Two stainless steel basin sinks are in the classroom. Plumbing fixtures are less than a year old and appeared to be in excellent condition.	Excellent
	Domestic Water Distribution	The building is brand new. No water heaters were observed in the building. No hot water is fed to any of the fixtures in the building. Distribution plumbing fed the fixtures and appeared to be in excellent condition.	Excellent
	Other Plumbing	The restroom contains a floor drain. The drain appeared to be in excellent condition. No other plumbing was observed.	Excellent
Mechanical/ HVAC	RTUs serve the building. The roof top was not accessible as the ladder was locked. Units were assumed to be in excellent condition since the building is brand new. The EF in the restroom appeared to be in excellent condition.		Excellent

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 strobes, horn/strobe combinations, pull stations, and detectors. The fire alarm system appeared to be in excellent condition.	Excellent
	Fire Protection/ Suppression	A fire suppression system does not exist in the building. The fire extinguisher appeared to be in excellent condition and up to date on its annual inspection.	N/A
Electrical	Electrical Distribution	Electrical distribution for the building is located in room STORAGE 101 (naming from the construction drawing). The electrical distribution equipment appeared to be in excellent condition.	Excellent
	Lighting	The exterior lighting consists of wall-mounted and canopy LED luminaires located on the building's exterior and on the connecting covered walkway. The interior lighting appears to consist of suspended strip and recessed downlight LED luminaires. The lighting for the building appeared to be in excellent condition. No deficiencies were observed during the assessment.	Excellent
	Communications & Security	The building is equipped with data systems, with the main equipment located in room STORAGE 101. VOIP is used for voice communications. The building security consists of motion detectors. The communications and security systems were observed to be in excellent condition.	Excellent

Langford Elementary School Campus Summary of Recommendations

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

Campus Recommendations

Exterior

1. Provide pest control for the entire campus.
2. Review all outdoor piping, ledges and climbing points to minimize roof access.
3. Provide perimeter security to control walk-through traffic at all hours.
4. Provide general interior and exterior surveillance throughout the facility, including the loading dock specifically.

Fire Protection

1. Inspect fire extinguishers that are out of date on their annual inspection, and replace if necessary.

Electrical

1. Replace interior and exterior luminaires that are damaged or have exceeded their service life expectancy with LED luminaires.
2. Replace burned-out lamps and missing lens covers for all luminaires throughout the facility.
3. Complete a lighting study to determine if lighting is adequate in the facility.
4. Replace canopy luminaires that have evidence of water infiltration, and install proper mounts for the covered walkways. Holes in covered walkway should be repaired.

Main School Building Recommendations

Exterior

1. Repair cracks on the north and south brick walls adjacent to windows. Perform an additional structural evaluation to determine the cause of the exterior cracking.
2. Replace exterior windows?
3. Replace exterior doors that are not functioning.

Roofing

1. Replace the roofing . Ensure all areas have sufficient slope to drain to the building perimeter.
2. Provide gutters and downspouts at the building perimeter.

Interior Construction

1. Further investigate the cracks in the CMU in the staff lounge.
2. Replace the movable wall partition in the gymnasium and cafeteria.
3. Replace the movable partitions in corridors C4 and C7.

Interior Finishes

1. Replace the flooring in classroom restrooms.
2. Replace the ceramic tile flooring in the kitchen.
3. Replace the carpet in the administrative areas.
4. Replace the VCT in rooms 400 and 401.
5. Refinish damaged door finishes
6. Replace rubber base cove if it is not replaces as part of current construction activities.

Plumbing

1. Verify the functionality of kitchen fixtures and sink in LIBLIT, and repair or replace as necessary.
2. Repair or replace water closets that are not flushing properly.
3. Repair sinks that are not functioning properly or leaking.
4. Repair drinking fountains that are not functioning properly.
5. Repair or replace the shower in the gymnasium office that is not functioning properly.
6. Replace plumbing fixtures that are beyond their expected design life before failure occurs.
7. Inspect, clean, and repair plumbing in restrooms that are emitting an unpleasant odor.
8. Clean and flush all plumbing fixtures and floor drains to remove and prevent odors.
9. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing to prevent further deterioration.
10. Replace water heaters that are showing signs of deterioration and are beyond their expected design life before failure occurs.
1. Evaluate the capacity of the water heater versus demand to feed the kitchen, and replace with a larger unit or install a secondary unit, if necessary.

Mechanical/HVAC

1. Verify new HVAC system and all components are functioning properly with the contractor within equipment and installation warrenty periods.
2. Remove all HVAC equipment that is no longer in use and has been abandoned in place, patch or repair roofing or finishes where equipment is removed. .
3. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing to prevent further deterioration.
4. Repair EFs with excessive vibration and noise.

Fire Protection

1. Replace fire alarm end devices that have exceeded their service life expectancy.

Electrical

1. Repair Panel K's loose front cover, and install missing breaker slot covers, as this should be considered a life safety hazard.
2. Install a cabinet latch for Panel H/A in AHU5MECH.
3. Have the MCC trip settings adjusted by a qualified technician to prevent main panel trips.
4. Install a main disconnect for the main service feed, as requested by faculty.
5. Consider upgrading the service feed, as requested by faculty.
6. Upgrade panelboards throughout the facility that have reached full capacity, as requested by faculty.
7. Ensure all abandoned roof top HVAC equipment is properly de-terminated from electrical sources and seal conduit to prevent water infiltration.
8. Install additional electrical receptacles throughout the building, especially within the computer room.
9. Install additional networking receptacles for computer rooms.
10. Relocate emergency lighting battery packs located above covered walkways to prevent damage from weather exposure.
11. Relocate wall-mounted exterior luminaires that are blocked by trees.
12. Replace damaged luminairs or luminaires that have exceeded service life expectancy.
13. Ensure networking receptacle cover plates are installed throughout the building.
14. Investigate the security issues reported by faculty: the addition of a controlled access to the school, installation of a higher resolution cafeteria surveillance camera, additional interior/exterior surveillance cameras, and the addition of a surveillance and intercom system to the kitchen unloading area.

Stand-Alone Classroom Building B Recommendations

Exterior

1. Fill in the hole at foundation on the northwest corner of the building.
2. Further investigate possible ongoing issues at the foundation or brick veneer on the north exterior wall where the steel angles have been installed.

Plumbing

1. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing to prevent further deterioration.
2. Repair water closets that are not functioning properly.
3. Repair sinks that are not functioning properly.

Mechanical/HVAC

1. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing to prevent further deterioration.
2. Repair any HVAC equipment with excessive vibration and noise.
3. Repair any HVAC equipment observed to be leaking.
4. Replace HVAC units that use R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. These systems may need to be replaced before they meet their design life due to refrigeration restrictions.

Electrical

1. Upgrade panelboards throughout the facility that have reached full capacity, as requested by faculty.

Stand-Alone Classroom Building C Recommendations

Exterior

1. Repair the leak reported at the east entrance.

Roofing

1. Repair the Kalwall panel at the southwest corner of the skylight.
2. Replace the roof drain cover at the northeast roof drain.

Plumbing

1. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing to prevent further deterioration.
2. Replace the missing grate from the roof drain.

Electrical

1. Investigate corrosion on the corridor-located electrical receptacles.
2. Upgrade building occupancy sensors that control the HVAC and lighting equipment to prevent damage to equipment power packs.
3. Replace covers on exterior electrical receptacles that are broken or missing.

CRAWL SPACE – Langford ES – Main School Building (BLDG-168A)

Building Purpose	Administrative, Library, Classrooms, Gym, and Cafeteria
Inspection Date	August 18, 2016
Inspection Conditions	87°F – Overcast with Recent Rainfall

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	Soil below building was mostly dry. Some areas on the perimeter of the building were damp. Source of water is likely seepage through soil from recent rainfall. Concrete flumes and drains were observed. Soil/Drainage deficiencies: • Damp soil around building perimeter and at isolated interior locations • Drainage flumes contained some dirt and rocks that may impede water flow	Good
	Soil Retainers & Carton Forms	Concrete soil retaining panels around perimeter of building appeared to be in good condition. At a few isolated locations the soil retainers had shifted or rotated. Soil retainer deficiencies: • Shifted/rotated soil retainers at a few locations	Good
	Areaways/Ventilation	One large areaway is located on the east side of the building. We did not go in that areaway or observe it. Ventilation seemed adequate near the east access point (main mechanical room). The north side of the crawl space was extremely warm, humid and poorly ventilated. Condensation was observed under the slab. Areaway/ventilation deficiencies: • Poor ventilation in north area	Average

	Access Hatches	We accessed the east side of the crawl space through a wall hatch in the main mechanical room. The hatch door was propped open. Temporary boards were placed as a ramp into the crawl space. We accessed the northwest side of the crawlspace through a floor hatch in a mechanical room. No deficiencies were observed.	Good
Exposed Structure	Columns & Exposed Tops of Foundations (Piers or Footings)	Square cast-in-place concrete columns showed spalling and diagonal cracks near their tops. Retrofits consisting of steel "boxes" were observed at the top of many columns. One column observed was jacketed with steel plates and had two additional supports made of stacked stone near it. Details for the retrofitted columns were not found in the available historical plans. Column deficiencies: • Spalling and shear cracks at top of columns	Average
	Inside Faces of Perimeter Walls / Grade Beams	Suspended perimeter beams spanned between columns and were cast-in-place. Overall beams appeared in good condition, with some minor spalls, honeycombs and/or rusted rebar in isolated locations. Perimeter wall/beam deficiencies: • Some cracks and honeycombing	Good
	Exposed Faces of Suspended Floor Beams Above	Exterior and interior suspended floor beams were mostly in good condition. Some beams had large cracks that had been repaired with epoxy injection. Minor spalling/honeycombing was observed on some beams. Beam deficiencies: • Minor spalling/honeycombing	Average
	Underside of Suspended Floor Slabs Above	Floor slabs consisted of precast deck panels. Observed deck panels were in generally good condition. Floor Slab deficiencies: • Exposed/corroded reinforcement (likely insufficient concrete cover) observed in one location	Good
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes	Pipe deficiencies: • Rusted hangers and rods • Pipe insulation in poor condition • Condensation on outside of pipes and/or pipe insulation	Average

	Exposed Ductwork	N/A –Exposed ductwork was not observed	N/A
	MEP Equipment	N/A – No MEP equipment was observed in the crawl spaces.	N/A
	Spray Fireproofing/ Insulation	N/A – No spray fireproofing or insulation was observed in the crawl spaces.	N/A

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

Damp soil

Damp soil due to water infiltration along perimeter

Dirt and rocks in drainage flume

Condensation on underside of precast deck

Shifted/rotated soil retaining panels

Exposed Structure

Column retrofit steel “box”

Epoxy injected crack in beam above column

Diagonal crack at top of column, Minor beam and column spalling/honeycombing

Column jacketed with steel retrofit and supported on either side by stacked masonry

Beam with large crack that was epoxy injected

Exposed reinforcement under precast slab. Condensation under slab.

Pipes, Ducts, Equipment & Fireproofing

Rusting hanger rods

Rusting hanger support

Condensation on pipe

Pipe insulation in poor condition

CRAWL SPACE – Langford ES – Classroom Addition (BLDG-168B)

Building Purpose	Classroom Addition
Inspection Date	August 18, 2016
Inspection Conditions	87°F – Overcast with Recent Rainfall

Crawl Space System Deficiency Overview

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

NOTES CONCERNING CRAWL SPACE OBSERVATIONS:
The classroom addition (BLDG 168B) east of the main school building has three areaways on the west side of the building and a small access door to the crawl space on the east side of the building. The grates on the areaways had all been welded in place, and while the master key worked on the east hatch door lock, the door was bent relative to the frame and could not be opened. As such, we could not access the crawl space under this building to make any observations.

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

Areaway with grate welded down

Door bent & could not be opened

CRAWL SPACE – Langford ES – Classroom Addition (BLDG-168C)

Building Purpose	Classroom Addition
Inspection Date	August 18, 2016
Inspection Conditions	87°F – Overcast with Recent Rainfall

NOTES CONCERNING CRAWL SPACE OBSERVATIONS:

The classroom addition (BLDG 168C) north of the main school building has a suspended ground level floor framing constructed on 8" tall void forms and has no crawlspace (according to the structural plans dated 2009).

Langford 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 (BLDG-168A)

Soil, Drainage, Ventilation & Access

1. Clean drainage flumes
2. Investigate the need for improved ventilation

Exposed Structure

1. Repair significant cracks and spalls on beams and columns.
2. Repair locations with significant honeycombing on beams and columns.
3. Clean any exposed, corroded reinforcement and patch surrounding concrete.

Pipes, Ducts, Equipment & Fireproofing

1. Replace rusted hangers and hanger rods.
2. Replace degraded pipe insulation.
3. Check for any leaking pipes.

Classroom Addition (East) Building Recommendations (BLDG-168B)

NOTE: Crawl space could not be observed – conditions unknown.

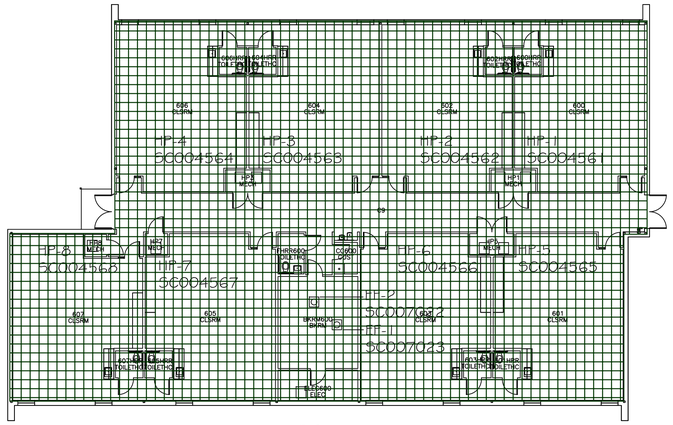
Soil, Drainage, Ventilation & Access

1. Repair access door so it can be opened and crawl space can be accessed.

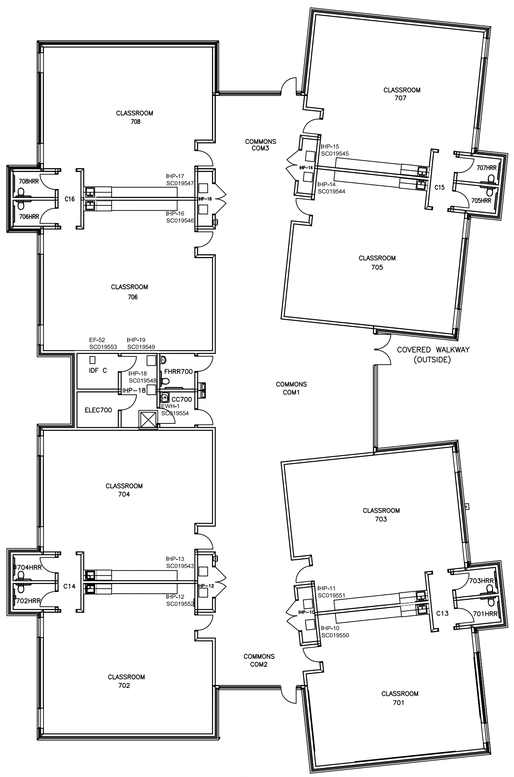
DRAFT

B

FLR-168B-01



BUILDING C IS AN ADDITION CONSTRUCTED ON 8" VOIDS - NO CRAWL SPACE



C

FLR-168C-01

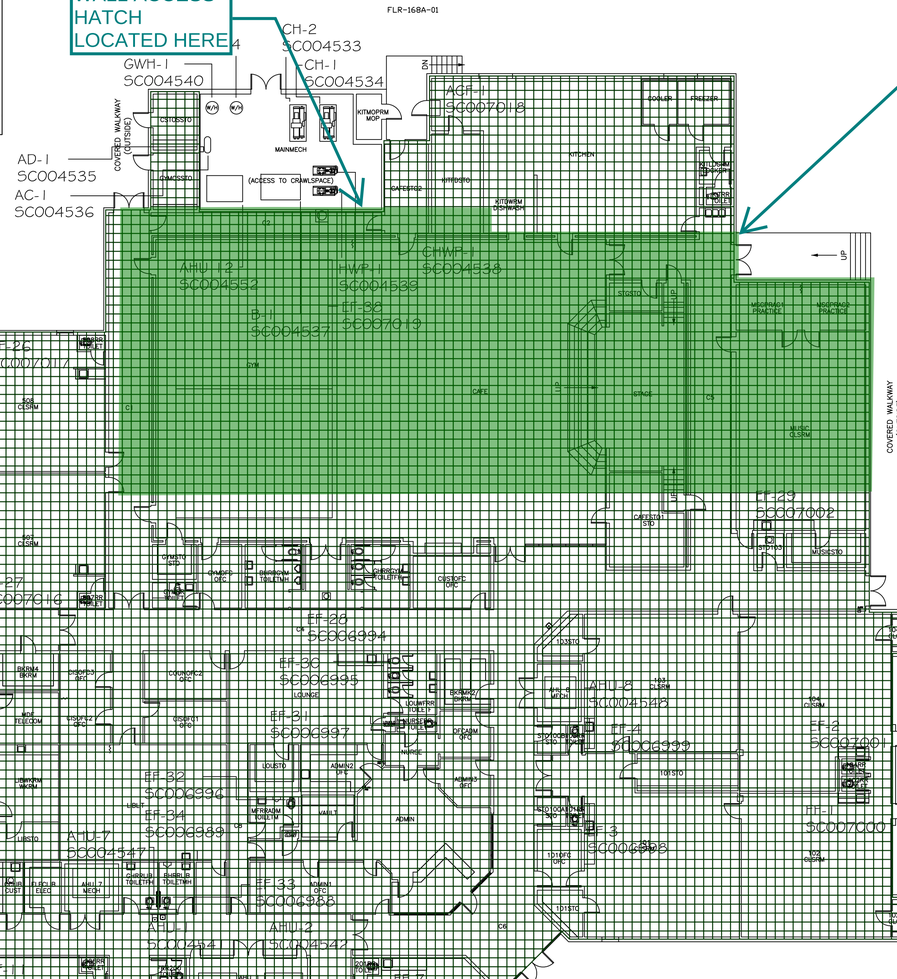
DEFICIENCIES OBSERVED IN THIS LOCATION:

1) DAMP SOIL IN ISOLATED LOCATIONS
2) MINOR SPALLING ON COLUMNS
3) RUSTED HANGERS AND RODS
4) DEGRADED PIPE INSULATION
5) CRACKS/SPALLS IN BEAMS AND COLUMNS
6) MINOR HONEYCOMBING

A

FLR-168A-01

WALL ACCESS HATCH LOCATED HERE



FLOOR ACCESS HATCH LOCATED HERE

DEFICIENCIES OBSERVED IN THIS LOCATION:

1) POOR VENTILATION (HUMID AND HOT)
2) MINOR SPALLING ON COLUMNS
3) RUSTED HANGERS AND RODS
4) CRACKS IN BEAMS AND COLUMNS
5) RETROFITTED BEAMS AND COLUMNS
6) DEGRADED PIPE INSULATION (DAMP AND IN POOR CONDITION)

APPROXIMATE LIMITS OF CRAWLSPACE OBSERVED DURING SITE VISIT

APPROXIMATE LIMITS OF CRAWLSPACE PER AVAILABLE PLANS AND SITE OBSERVATIONS

NORTH

AUSTIN I.S.D.

DEPARTMENT OF CONSTRUCTION MANAGEMENT

LANGFORD ELEMENTARY SCHOOL

2206 Blue Meadow
Austin, Texas

FLOOR PLAN
FIRST FLOOR

APPROVALS		
DRAWN	CHECKED	APPROVED
J.R.		
12/05/10		

DWG: 168-FLR-01	SHEET
DRAWING SCALE	1 OF 1
1/16"=1'-0"	