Travis Heights Elementary School Site Summary

Address	2010 Alameda Drive Austin, TX 78704
Number of Permanent Campus Facilities	3
Original Year of Construction	1938
Total Campus Building Area (combined)	45,576 SF

Introduction

The Travis Heights Elementary School campus is located at 2010 Alameda Dr. in Austin, Texas. Travis Heights Elementary School was established in 1938, and consists of the primary school along with two additional campus buildings. These permanent campus buildings include the Main School Building (BLDG-140A) opened in 1938, the Gymnasium Building (BLDG-140B) opened in 1985, and the Stand-Alone Classroom (BLDG-140C) opened in 1994. The buildings are connected to one another by a series of exterior covered concrete sidewalks.

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
6/22/16	Interview	00	8/19/16	Draft Issue
6/28/16 - 6/29/16	Assessment	01	1/13/17	Added comments from PM Rick Kaven as indicated on email dated 10/29/16. See page 32.
9/8/16	Cluster Meeting (Not Attended)			
10/7/16	Follow-Up			

Main School Building – BLDG-140A

Building Purpose	Administration, Classrooms
Building Area	40,576 SF
Inspection Date	June 28-29, 2016
Inspection Conditions	80°F - 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 of the building consists of a brick façade with a concrete structure. The exterior walls were observed to be in good condition, with isolated areas in need of cleaning due to organic growth. It was observed that rodents may enter the building by following HVAC (heating, ventilating, and air conditioning) penetrations at condenser units. Foundation cracks were observed near the corners of the Main School Building mostly in the rear elevations. Some minor mortar cracks appear around the brick directly above these cracks. Expansion joint sealant was deteriorated or missing in several places but generally in good condition. Due to active construction of a new addition, the entire façade was not observed.	Good
	Exterior Windows	The exterior windows consist of single-pane glazing units with clear anodized aluminum storefront frames. All windows have been replaced throughout the building except in the stairway of the 300-wing, the south side of 100-wing and the south side of the kitchen. It was reported that the window adjacent to the library office was leaking; however, no evidence of this was observed. Some lower basement windows have expanded metal covering the glass to minimize unauthorized access.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Exterior Doors	There is one main public entryway located at the northeast side of the building. All exterior doors are hollow metal with mostly original hollow metal frames. The exterior doors were observed to be in good condition with minor paint finish issues fading primarily those facing the sun. All of the doors observed lacked the proper weather stripping or silencers which caused air infiltration between the frame and door. This also created noise when the door closed. Many of the exterior light kits in the doors have been replaced with acrylic over the years. These have been severely scratched due to cleaning procedures. The kitchen door did not close properly and the doorframe showed signs of rust.	Good
Roofing	The roof material covering the majority of the building appears to be PVC/TPO (polyvinyl chloride/thermoplastic membrane) and a couple of older areas of modified bitumen. There is a connecting covered walkway with a corrugated metal roof between the Main School Building and the Gymnasium Building. The building has a couple roof systems installed at different times. The majority of roof surfaces were observed to be in average condition. The isolated areas of the modified bitumen roofs where the top sheet was deteriorated to the point that the cover board was exposed, were over the 200- and 300-wings. The east side of the building, over the 200- and 300-wings were observed to be in poor condition. Leaks were reported in the 300-wing and ceiling damage was visible in this area. There was rusting observed on the flashings of these wings. The corrugated metal roof over the walkway appeared to be in good condition.		Average
Interior Construction	Interior Walls	The interior partitions original to the building are predominately constructed of SGT (structural glazed tile), CMU (concrete masonry unit) along the exterior walls and hard plaster walls on the interior. The administration offices and the library have a combination of painted gypsum board construction and CMU. The interior SGT partitions appeared to be in good condition with instances of minor chipping observed on some wall surfaces. Some gypsum corridor walls are covered with a wainscot of 1”x2” ceramic tile which appears to be in good condition.	Good
	Interior Doors	The portions of the building consist of newer solid core wood oak doors and in original hollow metal doorframes and hollow metal framed interior windows. The 300-wing addition has original birch doors and hardware from 1985. The interior doors and frames were observed to be in	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		good condition. Scratches and finish damage was observed on the solid core doors. The doors located in the 300-wing were in less than good condition. The hardware finish was missing in spots, the door finishes were scratched and dull but still functional. The classroom hardware throughout was showing signs of extensive use but the hardware on the exterior doors appeared to be in good condition.	
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	The building consists of concrete ramps and stairs with steel nosing or stainless steel nosing treads. Half of all of the stairs and ramp railings observed were painted steel or galvanized finished. Many of the painted railings were in need of repainting, but appeared to be in good condition.	Good
	Interior Stairs	The stairs are concrete with steel railings. The wall-mounted handrails are typically wood. The finish of these systems are in good condition.	Good
Interior Finishes	Interior Wall Finishes	The building has undergone multiple renovations since its original construction in 1938. Most spaces were updated and appear to be in good condition. Plaster and structural glazed tile walls are in good condition from the original construction. Painted gypsum walls inside the library and administration are also in good condition. The restroom walls appear to be original to the construction of 4”x4” tile, but in average condition. The corridor walls are wainscot of tile or SGT. Building staff reported the persistent odor of urine in the basement restrooms and this condition was observed during the assessment. These surrounding walls were in average condition otherwise.	Good
	Interior Floor Finishes	There is 12”x12” resilient floor tile throughout the building which is not original construction. Original ceramic tile floor is present in the restrooms. The cafeteria and building extension floors have multiple areas patched with various colored tiles. The administration offices and library are finished with carpet that was observed to be in good condition. It appears there have been multiple renovations and patches to the quarry tile flooring in the kitchen. The flooring appeared to be in good condition throughout the building.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Ceiling Finishes	The building consists of predominately 2x4 acoustical lay-in ceiling tile. Some areas of plaster or a hard ceiling were present in the utility areas. Most of the ceiling tile in the building has been replaced over time. A mix of old and new tiles was observed in many of the spaces. The ceiling in room 11 consisted of exposed beams with acoustical spray insulation. No damaged ceiling tiles were observed in the kitchen though this area has been reporting roof leaks. The corridor adjacent to room 104 has reported damaged ceiling tile but this was not observed at this visit. Reports of leaks in the 300-wing may be confirmed by water damaged tiles in the area. The ceiling system was observed to be in average condition.	Average
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building has public restrooms for students and separate staff restrooms located throughout the facility. These restrooms generally have vitreous china hand sinks with manual faucets, along with vitreous china toilets with manual flushing mechanisms. There are service sinks found in the janitorial closets, trough-style stainless steel handwashing sinks located in the corridor, and water fountains located throughout the facility, typically near the public restrooms. The restroom plumbing fixtures were observed to be in average condition as the fixtures were aged but still operational with noticeable wear. Building staff reported repeated toilet flushing and backup issues in several restrooms throughout the building. It is unknown if the issues are caused by the sanitary piping lines or by malfunctioning fixtures. The kitchen included additional plumbing fixtures such as stainless steel wash sinks and a small restroom equipped with a vitreous china wall toilet and sink. These plumbing fixtures were observed to be in average condition. There appears to be a sink that was removed from room 35. The cabinet was observed to contain water lines and drain plumbing that was capped off, but no sink was observed.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Domestic Water Distribution	The sinks located throughout the facility, with the exception of the kitchen are not equipped with hot water. The sinks located in the kitchen are serviced with hot water from a gas water heater GWH-1 that was located in the kitchen mechanical room. The water heater was observed to be functioning, however nearing the end of its useful life due to age and use. The flue collar appeared to be disassembled and hanging from the flue duct exposing the penetration to the concrete deck above. The plumbing distribution equipment was observed to be in average condition based upon the deficiencies of the water heater mentioned above, and with damaged insulation and corroded piping observed in some areas.	Average
	Other Plumbing	There were no roof drains observed. Floor drains were observed in the interior portion of the building. An area drain appeared to be clogged and had standing water on the northwest side of the building. The condensate lines associated with the RTUs (roof top units) appeared to be aged and damaged. The condensate line associated with RTU-4 was observed to be cut and disassembled. The gas lines associated with the RTUs appeared to be rusting. It was reported that wastewater backed into the kitchen multiple times in the last month. It is suspected that the line from the grease trap is clogged downstream causing the reoccurring problem.	Poor
Mechanical/ HVAC	The major mechanical equipment consists of package RTUs located on the roof, floor mounted units which appear to be ground source heat pumps, as well as split systems providing cooling in select areas of the building. These serve the HVAC system along with roof-mounted and wall-mounted exhaust fans. It was reported that all new air conditioning units are being installed this summer with the exception of the following units which were estimated to be approximately five years in age: • Cafeteria; • Kitchen; • Gymnasium; and • Office. Eight RTUs, ranging in capacity from an estimated 5 to 18 tons, are located on the roof. Twenty-six ground-mounted units that appeared to be ground source heat pumps were located in the classrooms and select other areas. The RTUs and ground mounted units appeared to be aged and needing replacement. Eight other split-system AHUs (air handling units) are located throughout the interior of the facility and range from an estimated 2 to 5 tons in capacity. These AHUs appeared to provide supplemental cooling in locations throughout the facility. They		Poor

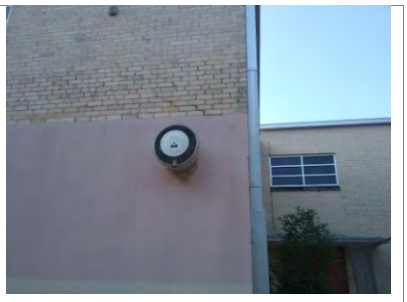
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	were observed to be in good condition as most of them appeared to be installed in 2008. Additional deficiencies observed included general aging of the equipment, as well as damaged insulation on condensate piping. Supplemental mechanical equipment for the HVAC system also includes exhaust fans and wall-mounted FCUs (fan coil units). Roof top and wall-mounted exhaust fans generally appeared to be outdated. The wall-mounted exhaust fans appeared to serve bathroom exhaust. The roof top exhaust fan over the kitchen was much larger and vibrated excessively. The wall mounted FCUs were observed to serve supplemental cooling for rooms PTAOFC and CUSTOFC. The FCUs were observed to be in good condition and were replacements for aged FCUs that were abandoned in place. The HVAC system was observed to be in poor condition with all of the prior mentioned deficiencies.		
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of an alarm and signaling devices such as horns/annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is controlled by the Silent Knight control panel. The fire alarm system was observed to be in good condition, but there are areas where fire alarm devices appeared to be aged. The fire alarm pull stations at the exit doors were observed to have vandal proof shields applied.	Good
	Fire Protection/ Suppression	There are no fire sprinkler systems installed in the building. Fire extinguishers were located throughout the building and were observed to have been inspected within the last year. A fire extinguisher was located in the electrical room on the east side of the building.	Good
Electrical	Electrical Distribution	The electrical service enters the building at the 120/208-volt 1600-amp main switchboard located in the main electrical room ELEC32 in the Main School Building 140A basement floor. The service feeds distribution panels and branch panels throughout the buildings. The building does not have a lightning protection system. The electrical distribution equipment was observed to be in poor condition. Several open j-boxes with exposed wiring were observed in Electrical Room TC Equipment Room on the east side of Building 140A. In Building 140A, there were panels that serve 300-wing and room 22 that were identified as Federal Pacific which have been identified as a life safety hazard. During the assessment, an electrical contractor was on site and stated that the existing electrical gear was being replaced with new equipment.	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Lighting	The building's exterior lighting consists of wall mounted HID (high-intensity discharge), and surface mounted incandescent fixtures with cracked or missing lenses. The interior lighting consists of primarily 2x4 acrylic lay-in fixtures with T8 fluorescent luminaires and some offices and classrooms have indirect pendant mounted fluorescents. The lighting for the building was observed to be in poor condition. Many interior and exterior luminaires appeared to be aged and past their design life; observed deficiencies include broken lenses, inconsistent color temperatures, missing bulbs, and exposed conduit to light fixtures in restrooms. There are exit signs present in the building; however several appeared to be aged. It was observed that some of the corridor lighting utilized emergency battery packs for emergency lighting.	Poor
	Communications & Security	There is a Gemini security system including surveillance cameras in the building. There is a public address system in the building and it was observed to be in good condition with no reported deficiencies. The building is equipped with tele/data systems, but the facility reported that in the kitchen area, the intercom does not work.	Average

Exterior System Deficiency Examples

Exterior Walls






Exterior Windows

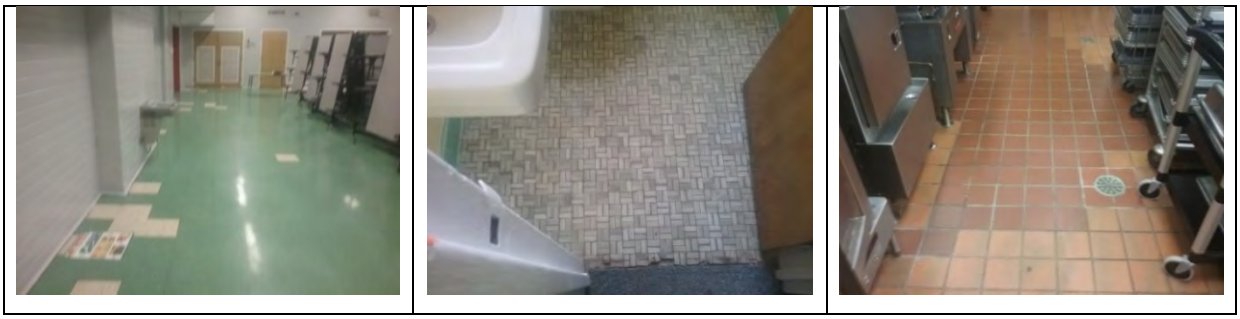

Exterior Doors

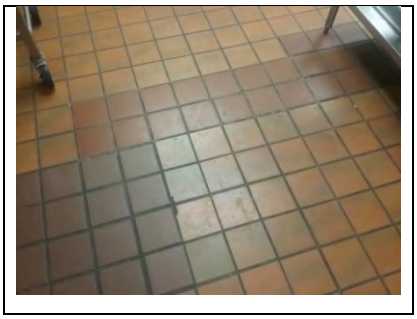


Roofing Deficiency Examples

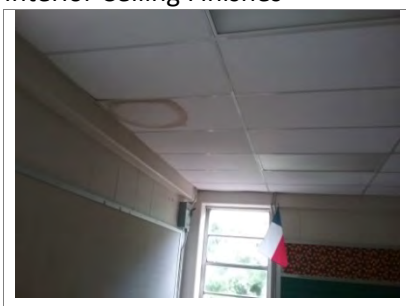
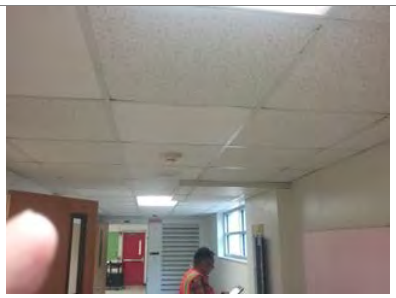
Interior Finishes Deficiency Examples

Interior Floor Finishes



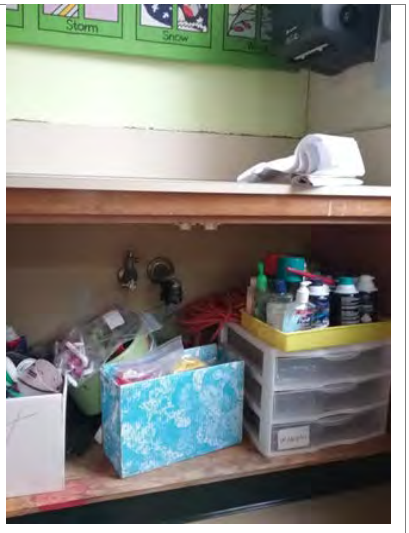


Interior Ceiling Finishes


Plumbing System Deficiency Examples

Plumbing Fixtures

Domestic Water Distribution

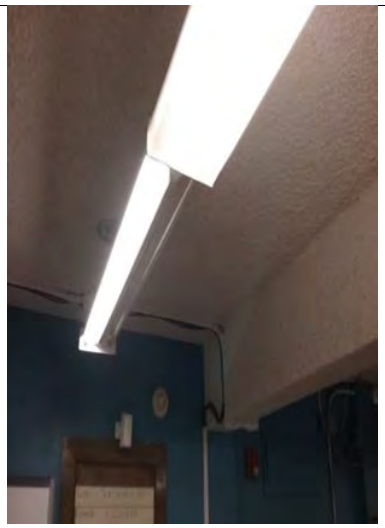
Other Plumbing

Mechanical/HVAC System Deficiency Examples

Electrical System Deficiency Examples

Electrical Distribution

Lighting



Gymnasium Building – BLDG-140B

Building Purpose	Gymnasium/Stage
Building Area	5,060 SF
Inspection Date	June 28-29, 2016
Inspection Conditions	80°F - 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 of the building consists of a brick/metal panel façade with concrete structure. The exterior walls were observed to be in average condition, with the majority of north and east facing walls in need of cleaning due to stains from organic growth. Metal panels appear to be in average condition but are very dirty.	Average
	Exterior Windows	The exterior windows consist of single-pane glazing units with bronze aluminum window frames. Some windows are opaque. All windows are original throughout the building and were observed to be in average condition. All were observed to be very dirty.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Exterior Doors	There are two main public entryways located at the north east and south west sides of the building. All exterior doors are hollow metal with original hollow metal frames. Many of these doors have had the window glazing replaced with acrylic panels which have been severely scratched over time. The exterior doors were observed to be in average condition with minor fading paint finishes on primarily those facing the sun. All of the doors observed lacked the proper weather stripping or silencers which caused air infiltration between the frame and door. These created noise when the door closed. Some doorframes were observed to show signs of rust.	Average
Roofing	The low slope roof was inaccessible to the team. The sloped metal roof elements appear to be in good condition as observed from grade. The ladder to the roof was pad locked and was not accessible.		N/A
Interior Construction	Interior Walls	Interior walls of the gymnasium are full height painted CMU. Most office and stage walls are stud-framed with painted gypsum board. The interior walls were observed to be in good condition.	Good
	Interior Doors	Interior doors are solid core wood doors in hollow metal frames which appear to be original to the building. These systems were observed to be in good condition.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	Exterior ramps and stairs are concrete construction. The stairs typically have 2” stainless steel nosing with abrasive tread and galvanized steel handrails. These systems were observed to be in good condition.	Good
	Interior Stairs	Interior stairs are concrete at the stage exit doors and wood at stage access. Handrails are typically wall mounted and constructed of wood. These systems were observed to be in good condition.	Good
Interior Finishes	Interior Wall Finishes	Most surfaces are painted and were observed to be in good condition. The restrooms have ceramic tile or FRP (fiber-reinforced-plastic) panels and were also observed to be in good condition.	Good
	Interior Floor Finishes	The floor consists of a 12”x12” cushioned athletic flooring tile that was observed to be in good condition. The office area is resilient tile and the restroom is ceramic tile. The stage area is finished with wood flooring and was observed to be scratched in several areas, but in good condition considering the age and wear.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Ceiling Finishes	Interior ceilings are 2x4 acoustical lay-in tile and were observed to be in good condition.	Good
Conveying	The gym is equipped with a lift that provides access to the stage area. The lift was reported to be fairly new, but the building reported that it has stopped functioning for an unknown reason		Poor
Plumbing	Plumbing Fixtures	The building has public male and female restrooms for students and a separate office restroom located in the coach's office. The male and female restrooms have vitreous china hand sinks with manual faucets (no hot water service), along with vitreous china toilets with manual flushing mechanisms. There is a shower in the office restroom and was observed to be operational. There is a water fountain located in the gymnasium area. The restroom plumbing fixtures were observed to be in average condition as the fixtures were typically aged but still operational with noticeable wear due to their age.	Average
	Domestic Water Distribution	The sinks located in the gym are not equipped with hot water. The mechanical drawings indicated an EWH (electric water heater) EWH-1 to be located in the office and serve the office restroom. The power to the gymnasium was observed to be off at the time of assessment. It was also inaccessible during the assessment and heating performance could not be verified. Building staff did not report any issues with hot water service in the gymnasium area.	Average
	Other Plumbing	Floor drains are located in the janitorial closet, male and female restrooms and were aged but operational.	Average
Mechanical/ HVAC	The major mechanical equipment consists of five split system air conditioning units providing cooling to the gymnasium. These serve the HVAC system. The split system air conditioning units were located in the mezzanine above the auditorium stage. The units appeared to be installed in 2012 and were observed to be in good condition. The condensing units associated with the split system units were located within a gated area on the north side of the building. They appeared to be in good condition. One exhaust fan was observed to serve the office restroom exhaust. It appeared to be in average condition due to its age. The HVAC system was observed to be in good condition in the gymnasium.		Good
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of an alarm and signaling devices such as horns/annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is controlled by the Silent Knight control panel. The fire alarm system was observed to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The fire alarm pull stations at the exit doors were observed to have vandal proof shields applied.	
	Fire Protection/ Suppression	System not present.	N/A
Electrical	Electrical Distribution	The electrical service enters the building at the rear of the gym from panel H that is 120/208-volt 400-amps. This panel serves branch circuits for the gym along with the air conditioning system that appeared to be in good condition.	Good
	Lighting	The building's exterior lighting consists of wall-mounted HID, and surface mounted incandescent fixtures. Some light fixtures are broken or missing lenses. These lights were appeared to be in poor condition. The interior lighting consists of 2x4 acrylic surface mounted T8 fluorescent fixtures with wire guards for protection. There are exit signs present in the building; however several appeared to be non-functional at the time of assessment. The exit lighting appeared to be in poor condition.	Poor
	Communications & Security	There is a Gemini security system including surveillance cameras in the building. The system was observed to be in good working condition. There is a public address system in the building and it was observed to be in good condition with no reported deficiencies.	Good

Exterior System Deficiency Examples

Exterior Walls

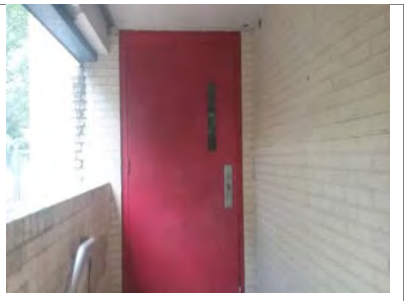





Exterior Windows


Exterior Doors

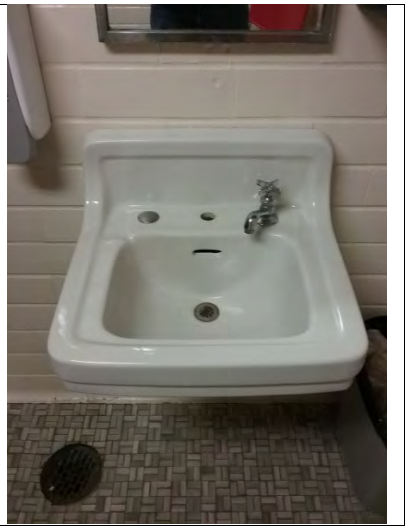




Roofing Deficiency Examples

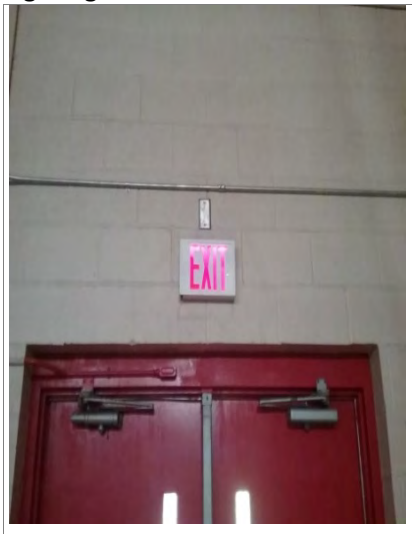

Plumbing System Deficiency Examples

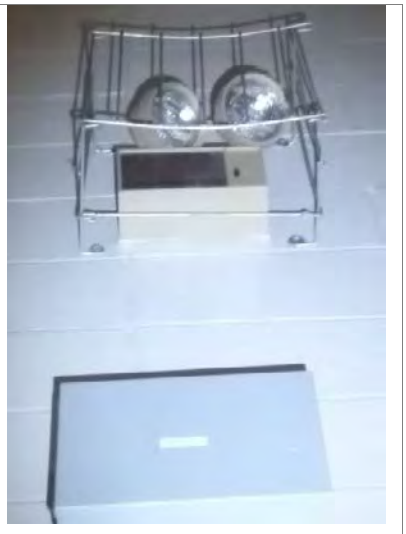
Plumbing Fixtures

Electrical System Deficiency Examples

Lighting



Stand-Alone Classroom – BLDG-140C

Building Purpose	Stand-Alone Classroom
Building Area	14,021 SF
Inspection Date	June 28-29, 2016
Inspection Conditions	80°F - 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 of the building consists of a brick façade with concrete structure. The exterior walls were observed to be in good condition, with isolated areas in need of cleaning due to staining from organic growth. Expansion joint sealant was deteriorated or missing in several areas but generally observed to be in good condition. Unsealed penetrations at exterior walls around air conditioning units may allow rodents and insects to enter the building.	Good
	Exterior Windows	The exterior windows consist of single-pane glazing units with clear anodized aluminum storefront frames. All windows have been replaced throughout the building and were observed to be in good condition.	Good
	Exterior Doors	There are two main entries located at the north and east faces of the building. All exterior doors are hollow metal with original hollow metal frames. The exterior doors were observed to be in good condition with minor fading paint primarily on those facing the sun.	Good
Roofing	The roof material covering the majority of the building appears to be EPDM (ethylene propylene diene terpolymer). There is a covered walkway with a corrugated metal roof that leads to the courtyard of the Main School Building. The majority of roof surfaces were observed to be in average condition with the exception of isolated areas where the roof had darkened possibly due to previous instances standing or ponding water. It was observed that debris had collected along the edges of the roof. Further investigation may be necessary to understand		Average

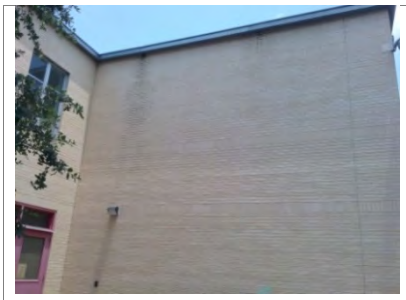
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	the severity of the condition as it was reported that spaces below have experienced leaking. No active leaks were observed during the assessment. The corrugated metal roof over the walkway appeared to be in good condition.		
Interior Construction	Interior Walls	Interior wall construction is predominately gypsum board over stud framing. The interior walls appeared to be in good condition and no severe damage was observed	Good
	Interior Doors	Interior doors consist of solid core wood doors in painted hollow metal frames. Hardware was observed to be in good operating order.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	Exterior ramps and stairs are concrete construction. The stairs typically have 2" stainless steel nosings with abrasive tread and painted or galvanized steel handrails. These systems appear to be in good condition.	Good
	Interior Stairs	Interior stairs are concrete with resilient tile. One 12"x12" resilient tile is missing at landing. Handrails are typically painted tube steel. These systems appear to be in good condition.	Good
Interior Finishes	Interior Wall Finishes	The interior partitions of the classrooms and corridor are a combination of painted gypsum board construction and ceramic tile or FRP in restrooms. The interior restroom walls appeared to be in good condition. The gypsum corridor walls are covered with a wainscot of 12"x12" ceramic tile which appears to be in good condition.	Good
	Interior Floor Finishes	There is 12"x12" resilient floor tile found throughout the building. Original ceramic tile floor is present in the restrooms. The flooring appeared to be in good condition as observed throughout the building. The only missing tile is in the interior stairway landing.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Ceiling Finishes	The building consists of predominately 2'x4' acoustical lay-in ceiling tile. Some areas of plaster or hard ceiling were present in the utility areas. Reports of leaks in the 400-wing may be confirmed by water damaged tiles in the area. Most ceiling tiles are original to the construction of this building. Several damaged ceiling tiles were observed near the outside walls of the classrooms throughout this building. The staff reported leaks in similar areas of this building. This is also consistent with dark areas on roof above. The ceiling finishes are in good condition.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building has male and female restrooms for students located in each classroom. These restrooms have vitreous china hand sinks with manual faucets, along with vitreous china toilets with manual flushing mechanisms. There are service sinks in the janitorial closets and water coolers located in the corridor. Each classroom is equipped with a stainless steel wash sink with an integrated water fountain. The restroom plumbing fixtures were observed to be in average condition as the fixtures were typically aged but still operational with noticeable wear due to age.	Average
	Domestic Water Distribution	The sinks located throughout the facility are not equipped with hot water.	Average
	Other Plumbing	There are no roof drains to observe.	Average
Mechanical/ HVAC	The major mechanical equipment consists of two RTUs located on the roof, floor mounted units which appeared to be ground source heat pumps, as well as split systems providing cooling in select areas of the building. These serve the HVAC system along with plenum-mounted restroom exhaust fans. Two RTUs, which appeared to be similar in size and estimated to be approximately 25 tons each, provided additional cooling and outside airflow to the building. Thirteen ground-mounted units that appeared to be ground source heat pumps were located in the classrooms and in the corridor. The RTUs and ground mounted units appeared to be aged and requiring replacement. Two split-system AHUs are located throughout the interior of the facility and are estimated to be 5 tons each in capacity. These AHUs appeared to provide supplemental cooling in select classrooms. They were observed to be in good condition as they appeared to be installed in 2012. Additional deficiencies observed include general aging of the equipment, as well as damaged insulation on condensate piping. Supplemental mechanical equipment for the HVAC system also includes plenum-mounted restroom exhaust. The exhaust fans generally appeared to be outdated and requiring replacement.		Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	The HVAC system was observed to be in poor condition with all of the prior mentioned deficiencies.		
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of an alarm and signaling devices such as horns/annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is controlled by the Silent Knight control panel. The fire alarm system was observed to be in good condition. The fire alarm pull stations at the exit doors is observed to have vandal proof shields applied.	Good
	Fire Protection/ Suppression	System not present.	N/A
Electrical	Electrical Distribution	The electrical service for this building is being served from the Main School Buildings electrical room which is 120/208-volt 400-amps. The service feeds branch panels throughout the building. The electrical distribution equipment was observed to be in good condition.	Good
	Lighting	The building's exterior lighting consists of wall mounted HID, and surface mounted incandescent fixtures. Cracked or missing lenses were observed on the exterior fixtures. The interior lighting consists of primarily 2'x4' acrylic lay-in T8 fluorescent luminaires and some offices and classrooms have indirect pendant mounted fluorescents. The lighting for the building was observed to be in poor condition. Many exterior luminaires had broken lenses or housings and appeared to be aged past their design life. Observed deficiencies include broken lenses, inconsistent color temperatures, and non-functional fixtures. There are exit signs present in the building; and appeared to be in working condition but aged.	Poor
	Communications & Security	There is a Gemini security system including surveillance cameras in the building that appeared to be in average condition with no reported issues from the facility. The building is equipped with tele/data systems, which appeared in average condition.	Average

Exterior System Deficiency Examples

Exterior Walls



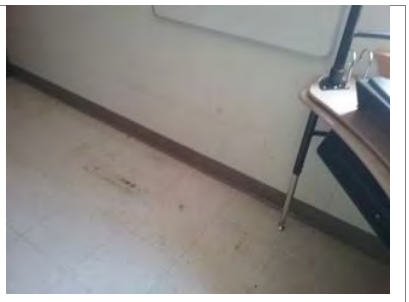

Roofing Deficiency Examples



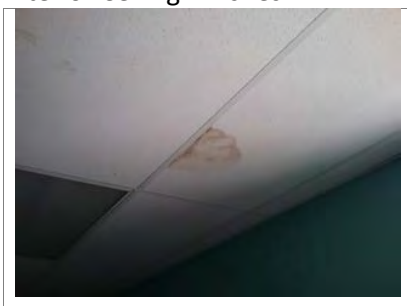


Interior Finishes Deficiency Examples

Interior Floor Finishes

Interior Ceiling Finishes




Plumbing System Deficiency Examples

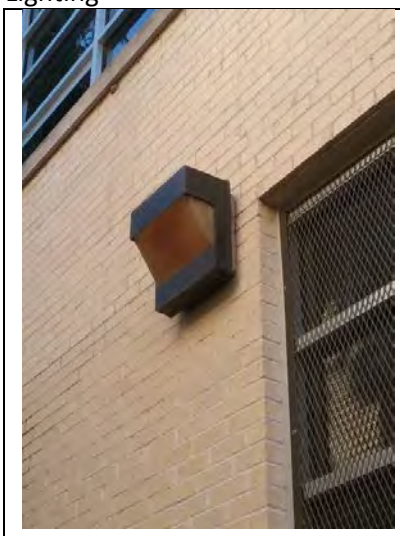
Plumbing Fixtures

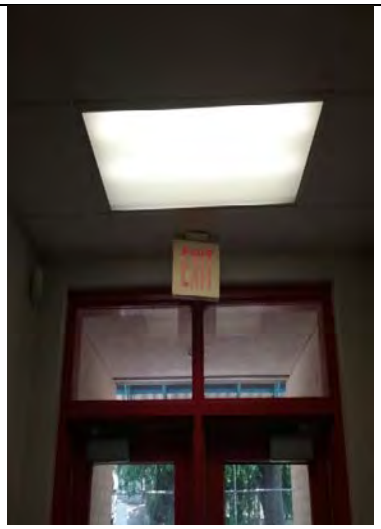
Mechanical/HVAC System Deficiency Examples



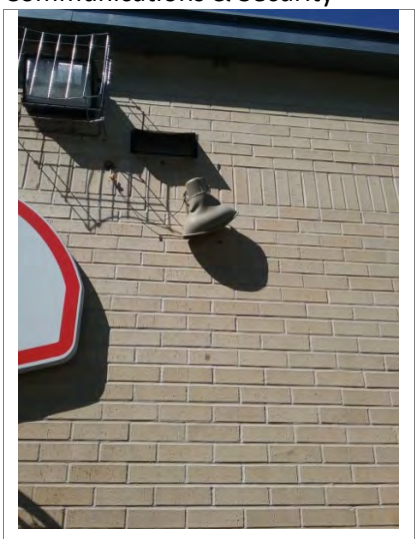
Electrical System Deficiency Examples

Lighting



Communications & Security



Travis Heights Elementary School Campus Summary of Recommendations

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

Campus Recommendations

Roofing

1. Further investigate all roof areas observed with dark areas and areas of damage in order to replace/repair damaged & deteriorated areas of the roofing.

Plumbing

1. Continuing preventative maintenance on aged plumbing fixtures and/or planning for replacement in the future as fixtures continue to age at all associated campus facilities.
2. Repair or replace any damaged or missing piping insulation as needed at all facilities.
3. Paint/protect gas lines from further rusting as needed at all facilities.

Mechanical/HVAC

1. Address any rust or corrosion observed to 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.
2. Repair or replace any damaged or missing piping insulation as needed at all facilities.
3. Plan for replacement of the ground source fan coil units as these units appear to be past their design life.

Electrical

1. Immediately provide missing cover plates for all electrical j-boxes that were noted open, as these instances should be considered life safety hazards.
2. Repair or replace all electrical equipment affected by corrosion or rust. If the corrosion/rust is beyond the enclosure then replacement is suggested.
3. Remove any floor receptacles as they are being phased out of use district-wide.
4. Replace all outdated luminaires with LED (light emitting diode) luminaires with dimming capabilities.
5. Replace all existing exit signs with LED fixtures and add more exit signs where required for all buildings.
6. Remove all Federal Pacific panels and replace with new panels throughout all buildings.

Main School Building Recommendations

Roofing

1. Patch roofing where apparent leaking is occurring.
2. Replace rusted flashings and gutters over the 300 -wing.

Exterior

1. Replace/repair old leaking windows and damage to adjacent finishes.
2. Ensure all exterior door window kits under the covered breezeway are laminated glass, not acrylic.
3. Investigate and block access points for rodent pathways following the HVAC condensing unit piping.
4. Conduct further investigation into the foundation movement observed on the north elevation. Structural monitoring may be required but could be caused by aging brick and mortar construction.
5. Some brick/mortar may need to be repointed after solution of brick and foundation movement has been resolved.

Stairs

1. Repaint stair handrails and pickets already painted with a very hard architectural coating, to minimize the need for repainting as often.

Interior Finishes

1. Replace damaged ceiling tiles. Monitor and repair roof leaks as needed to prevent further damage to ceiling tiles.
2. Investigate walls around basement toilets where urine may be saturating adjacent non pervious construction.
3. Replace missing resilient floor tile and mismatched resilient floor tiles.

Plumbing

1. Track install years of water heater and plan for replacement as the typical design service life for a water heater is 10 to 15 years.
2. Replace flue collar on water heater and seal penetration.
3. Clean out area drain to eliminate standing water on northwest side of building.
4. Repair or replace any damaged or missing piping insulation as needed at all facilities.
5. Paint/protect gas lines from further rusting as needed at all facilities.

Mechanical/HVAC

1. Address any rust or corrosion observed to 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.
2. Repair or replace any damaged or missing piping insulation as needed at all facilities.
3. Plan for replacement of the ground source fan coil units as these units appear to be past their design life.
4. Remove abandoned FCUs from rooms PTAOFC and CUSTOFC.

Electrical

1. Replace all panel boards in the corridors that have been identified as Federal Pacific as they are a life safety issue.
2. Re-lamp all fixtures that have missing or burned out bulbs.

Gymnasium Building Recommendations

Exterior

1. Clean exterior masonry and windows of organic materials.

Stairs

1. Remove excess debris and dirt on landings. May require some regarding at bottom of stairs.

Interior Finishes

1. May need to refinish stage in the future.

Plumbing

1. Verify operation of EWH-1 serving the office restroom and shower.

Conveying

1. Repair broken lift and continue annual inspections of the lift.

Electrical

1. Replace existing 2x4 fluorescents with high bay type lighting.

Stand-Alone Classroom Recommendations

Exterior

1. Clean masonry of organic growth and seal.
2. Investigate and block access points of rodent pathways following the HVAC condensing unit piping.

Roofing

1. Patch areas of apparent leaking.
2. Repair roof traffic pads.
3. Replace rusted flashings and gutters over the 400 -wing

Stairs

1. Replace missing interior floor tile at landing of interior stair.

Interior Finishes

1. Replace damaged ceiling tiles. Monitor and repair roof leaks as needed to prevent further damage to ceiling tiles.

Electrical

1. Re-lamp all fixtures that have missing or burned out bulbs.

Travis Heights 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 Rick Kaven on 10/29/16.

- Summer 2016 and Summer 2017.
  - Installing one 120-TON chiller to handle replacement of 24 new console type classroom AHUs (replacing ground source heat pump units) and the addition of two RTUs.
  - Installing a boiler to provide heating to those units.
  - Hot water and chilled water pumps.
  - Controls.
  - Installing chilled and hot water hydronic piping.
  - Upgrading the electrical system for current and future needs.
  - Plumbing renovations associated with 12 restrooms and gas piping for the boiler.

CRAWL SPACE – Travis Heights ES – Main School Building (BLDG-140A)

Building Purpose	Administrative, Classrooms
Inspection Date	August 26, 2016, (Afternoon)
Inspection Conditions	92° - Sunny & Dry

Crawl Space System Deficiency Overview

NOTES CONCERNING CRAWL SPACE OBSERVATIONS: Access to the crawl space under the Main School Building was very limited. We were able to enter at three different locations, but could not crawl far from the access point in any area due to low clearance, piping, ductwork and/or interior beams.

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	Access Point 1 is located inside construction fence on northwest side of building. Soil was mostly dry with some damp patches. Water may have entered through holes in perimeter beam and below foundation currently opened for construction. Access Point 2 consists of double doors adjacent to the Boiler Room. The soil was dry except for where a PVC pipe was draining out near the ground and a small trench had been dug to channel the water to the perimeter and out from under the foundation. Access Point 3 is a door at the back of the Computer Lab/Communications Room. The soil observed was dry. No drainage system was observed. Soil/Drainage deficiencies: • Limited areas of damp soil • Minimal water infiltration from dripping pipe at Access Point 2 • Air gap at near Boiler Room	Good
	Soil Retainers	N/A – Soil retainers were not observed; it is unclear whether soil retainers were specified but were concealed below ground, or if soil retainers were not specified for the original construction.	N/A
	Areaways/Ventilation	Areaways were not present in the areas observed. Crawl spaces were humid and had stagnant air. Vents observed at Access Point 3 were clogged with dirt, debris.	Average

		Areaway/ventilation deficiencies: • Poor ventilation • Clogged vents	
	Access Hatches	At Access Point 1 there was not a typical hatch, but rather a hole had been cut in the perimeter beam for construction access. Construction fencing had to be moved, and the inspectors had to climb down a large drop and then up a significant height to reach the hole. At Access Point 2, access was difficult due to construction fencing. At Access Point 3, the door was not locked. This poses a potential safety concern for children. We observed another access hatch on the north corner of the Main School Building. This hatch had grating which could not be removed. Access hatch deficiencies: • Access was temporarily difficult and unsafe due to construction activity • Access hatch on north of building could not be opened • Door to crawl space in Computer Lab was not locked – poses safety hazard for children.	Average
Exposed Structure	Exposed Columns & Tops of Foundations	Some tops of piers observed near the Boiler Room were poorly formed and had mushroom tops. Square concrete columns were observed to be in generally good condition. Column/Foundation deficiencies: • Honeycombing, spalling, at top of piers • Piers had mushroom tops	Good
	Exposed Faces of Perimeter Walls / Beams	Cast-in-place concrete perimeter walls and suspended beams were observed. Bottom of walls/beams were buried below ground and could not be observed, except at the construction area on the west side where soils adjacent to the suspended perimeter beam had been removed and bottom of beam could be observed. Perimeter wall/beam deficiencies: • Exposed, corroded vertical reinforcement due to insufficient clear cover • Some cracks and patches on walls • Minor honeycombing on bottom of suspended beam • Hole in west perimeter beam appears to have been cut for construction access	Good

	Exposed Portions of Interior Floor Beams Above	Beam/pan joist deficiencies: • Cracks, spalls and honeycombing • Exposed, corroded reinforcement	Average
	Underside of Suspended Floor Slabs Above	Cast-in-place slab and joists formed by pan forms were observed at Access Points 1 and 2. Cast-in-place slab was observed at Access Point 3. Slab/pan joist deficiencies: • Minor spalls under slab • Exposed, corroded reinforcement under slab in limited locations	Good
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	A lot of suspended copper, PVC, steel and cast iron pipes were observed. Some appeared new, others much older. Pipes were not insulated. Pipe hangers appeared in good condition. Pipe deficiencies: • PVC pipe draining out directly to ground	Good
	Exposed Ductwork	A lot of ductwork was observed in Access Point 2. Some was externally insulated. Ductwork deficiencies: • Some damage to insulation of ducts • Inappropriate items stored on ducts	Good
	MEP Equipment	MEP Equipment was not present in the areas observed.	N/A
	Spray Fireproofing/ Insulation	Spray fireproofing or insulation was not present in the areas observed.	N/A

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

Damp soil near Access Point 1

Air gap near Boiler Room

PVC draining onto ground and makeshift drainage channel with running water

Access hatch on north side of building could not be opened

Access Point 1 - Inside construction fence unsafe, difficult to reach and crawl into crawl space

Access Point 3 - Door to crawl space in Computer Lab was not locked & may be a safety hazard for children

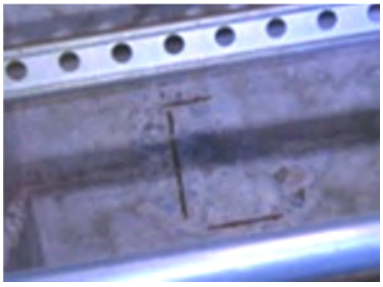
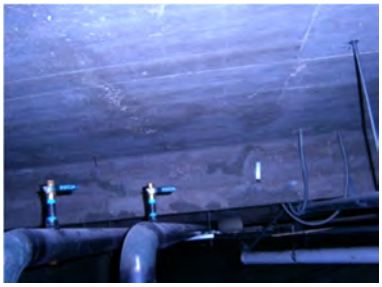
Vent at Access Point 3 clogged with dirt

Exposed Structure

Honeycombing in webs of cast-in-place pan form slab near Boiler Room

Hole in west perimeter beam appears to have been cut for construction access

Mushroom top of pier, honeycombing, near Boiler room

 Some cracking around holes cut in perimeter walls, patching near boiler room	 Minor honeycombing on perimeter beam	 Exposed and rusted reinforcement in webs of pan form slab near Boiler Room
 Exposed reinforcement in underside of slab of pan form slab near Boiler Room	 Patches in interior beam at Access Point 3 near Computer Lab	 Minor spalls under slab at Access Point 3

Pipes, Ducts, Equipment & Fireproofing

 Damage to and patching of duct insulation	 Scary items stored on ductwork near boiler room - **inappropriate for children**	 Scary items stored on piping near boiler room – **inappropriate for children**

CRAWL SPACE – Travis Heights ES – Gymnasium Building (BLDG-140B)

Building Purpose	Gymnasium/Stage
Inspection Date	August 26, 2016 (Afternoon)
Inspection Conditions	92° - Sunny & Dry

Crawl Space System Deficiency Overview

NOTES CONCERNING CRAWL SPACE OBSERVATIONS: Access to the crawl space under Building B was very limited. We could not crawl far from the Access Point due to interior beams with low clearance underneath.

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 under Building B was mostly dry. Some interior beams that should be suspended had soil directly under it. Soil/Drainage deficiencies: • Soil in contact with interior beam	Good
	Soil Retainers	Soil retainers were not observed.	N/A
	Areaways/Ventilation	Areaways were not observed. No Vents were observed. Areaway/ventilation deficiencies: • No cross-ventilation	Average
	Access Hatches	The access hatch was a small metal door on the northwest side corner of the building. Access in crawl space is constrained to a small area around the hatch because surrounding interior beams do not have enough clearance to pass below, thereby blocking off access to most of the crawl space area.	Average
Exposed Structure	Exposed Columns & Tops of Foundations	Piers and columns were not present in the limited area observed.	N/A

	Exposed Faces of Perimeter Walls / Beams	Cast-in-place perimeter beams were observed. It was not clear whether they were suspended or grade supported. Perimeter wall/beam deficiencies: • Steel formwork ties were left in place on all faces of walls and are now corroded	Good
	Exposed Portions of Interior Floor Beams Above	One cast-in-place interior floor beam was present in the limited area observed. There was a square hole cut through the beam approximately 20in x 20in with pipes running through it. No major deficiencies were observed.	Good
	Underside of Suspended Floor Slabs Above	Floor slab is formed with precast hollow core panels. No deficiencies were observed.	Good
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	There were a few pipes observed. Some were insulated. Some were cast iron. Pipe deficiencies: • Rust on cast iron pipes • Rust on pipe hangers • Broken pipe hanger • Pipes improperly propped on CMU on ground	Average
	Exposed Ductwork	No ductwork was present in the limited area observed.	N/A
	MEP Equipment	No MEP equipment was present in the limited area observed.	N/A
	Spray Fireproofing/ Insulation	No fireproofing or insulation was present in the limited area observed.	N/A

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

Soil in contact with interior beam

Hole cut in interior beam is only access to rest of crawl space

Exposed Structure

Formwork accessories left in place in walls

Pipes, Ducts, Equipment & Fireproofing

Pipe improperly supported

Rust on pipe, broken pipe hanger, Pipe improperly supported

CRAWL SPACE – Travis Heights ES – Stand-Alone Classroom (BLDG-140C)

Building Purpose	Stand-Alone Classroom
Inspection Date	August 26, 2016, (Afternoon)
Inspection Conditions	92° - 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	Soil was primarily dry, with small patches of dampness Soil/Drainage deficiencies: • Limited areas of damp soil	Good
	Soil Retainers	Soil retainers were below ground and could not be observed.	N/A
	Areaways/Ventilation	Areaways were not present. Small vents were observed from within crawl space. Fans were observed to be running. No deficiencies observed.	Good
	Access Hatches	The access hatch was a small metal door on the south side of the building. No deficiencies observed.	Good
Exposed Structure	Exposed Columns & Tops of Foundations	No exposed piers or columns were present in the area observed.	N/A
	Exposed Faces of Perimeter Walls / Beams	Cast-in-place perimeter beams were observed. Perimeter wall/beam deficiencies: • Honeycombing on side of beam at access door	Good
	Exposed Portions of Interior Floor Beams Above	Interior floor framing consists of open-web metal joists and metal deck. Beam deficiencies: • Rust on joists	Good

	Underside of Suspended Floor Slabs Above	Floor slab was concrete topping on metal deck. The metal deck was mostly hidden by batt insulation and could not be fully observed. What portions could be observed appeared in good overall condition. Slab deficiencies: • Rust on metal deck	Good
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	There were a lot of pipes of various materials. Pipes and hangers in crawl space area observed appeared in good condition. Pipe deficiencies: • Rust on pipes	Good
	Exposed Ductwork	Exposed ducts did not have exterior insulation and appeared generally in good condition. No deficiencies in ductwork observed.	Good
	MEP Equipment	Fans were observed to be running. An electrical box was observed that was not locked and was shut with duct tape. No other equipment was observed. MEP equipment deficiencies: • Electrical box not locked	Good
	Spray Fireproofing/ Insulation	Batt insulation covered the entire underside of the floor decking. Fireproofing/Insulation deficiencies: • Batt insulation was deteriorating and/or falling off structure	Average

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

Damp soil in areas

Exposed Structure

Minor rust on joists

Minor rust on underside of metal floor deck

Honeycombing at perimeter wall at access door

Pipes, Ducts, Equipment & Fireproofing

Rust on pipes

Electrical box appears to be unlocked and closed with duct tape

Batt insulation deteriorating

 Batt insulation falling down		

Travis Heights 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. Address PVC pipe currently draining directly onto ground.
2. Address air gaps.
3. Investigate need for improved ventilation.
4. Clean clogged vent(s).
5. Address/improve limited access to crawl space.
6. Provide lock for Access Point 3 to address safety hazard.

Exposed Structure

1. Repair areas of pan joists with significant spalling, honeycombing, and/or exposed, corroded reinforcement.
2. Clean and patch bottom of slab with exposed, corroded reinforcement.

Pipes, Ducts, Equipment & Fireproofing

1. Remove inappropriate items stored on ducts.

Gymnasium Building Recommendations

Soil, Drainage, Ventilation & Access

1. Address PVC pipe currently draining directly onto ground.
2. Investigate need for improved ventilation.

Pipes, Ducts, Equipment & Fireproofing

1. Properly support pipes.

Stand-Alone Classroom Recommendations

Soil, Drainage, Ventilation & Access

1. Investigate need for improved ventilation.

Pipes, Ducts, Equipment & Fireproofing

2. Replace degraded and fallen batt insulation.

DRAFT

DEFICIENCIES FOUND IN THIS LOCATION:
1) DAMP SOIL
2) HONEYCOMBING ON BEAMS

DEFICIENCIES FOUND IN THIS LOCATION:
1) PIPES IMPROPERLY SUPPORTED
2) BROKEN PIPE HANGERS
3) SOIL IN CONTACT WITH SUSPENDED BEAM
4) NO VENTILATION

ACCESS THRU WALL HATCH HERE

AREA UNDER CONSTRUCTION, ACCESS THRU HOLE IN PERIMETER BEAM HERE (1)

ACCESS HATCH HERE HAD GRATING WHICH COULD NOT BE REMOVED

ACCESS THRU DOOR HERE (2)

ACCESS THRU DOOR HERE (3)

DEFICIENCIES FOUND IN THIS LOCATION:
1) POOR VENTILATION
2) AIR GAPS
3) PVC PIPE DRAINING ON GROUND
4) HONEYCOMBING, SPALLING, CRACKS ON JOISTS
5) EXPOSED/CORRODED REINFORCEMENT IN PAN JOIST WEBS
6) INAPPROPRIATE ITEMS STORED ON DUCTS

DEFICIENCIES FOUND IN THIS LOCATION:
1) DOOR TO CRAWL SPACE WAS UNLOCKED - SAFETY HAZARD
2) VENTS CLOGGED / POOR VENTILATION
3) SLAB AND BEAM SPALLING AND PATCHES

DEFICIENCIES FOUND IN THIS LOCATION:
1) NO VENTILATION
2) BATT INSULATION DETERIORATING

ACCESS THRU WALL HATCH HERE

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

TRAVIS HEIGHTS ELEMENTARY SCHOOL
2010 Alameda Dr.
Austin, Texas

FLOOR PLAN
GROUND FLOOR

APPROVALS		
DRAWN	CHECKED	APPROVED
J.R.		
05/10/13		
DWG 140-FLR-G1		SHEET
DRAWING SCALE		2 OF 2
1/16"=1'-0"		