Zilker Elementary School Site Summary

Address	1900 Bluebonnet Lane Austin, Texas 78704
Number of Permanent Campus Facilities	4
Original Year of Construction	1950, 1961 and 1990
Total Campus Building Area (combined)	50,941 SF

Introduction

The Zilker Elementary School campus is located at 1900 Bluebonnet Lane in Austin, Texas. Zilker Elementary School was established in 1950 and consists of four permanent buildings. The permanent campus buildings are the Main School Building (BLDG-146A), which includes the administration offices, classrooms, and cafeteria, the Stand-Alone Gymnasium (BLDG-146B), the Stand-Alone Library (BLDG-146C) and the Boiler House (BLDG-146D). The Main School Building and Boiler House were constructed in 1950. The Stand-Alone Gymnasium was added in 1961 and the Stand-Alone Library in 1990. The Library and Gymnasium are connected to the Main School Building by exterior covered sidewalks. The Boiler House is connected to the main school by exterior uncovered sidewalks.

There are plans to replace the majority of classroom and administration office mechanical units, replace select areas of roofing, and bring select restrooms up to TAS/ADA (Texas Accessibility Standards/Americans with Disabilities Act) standards as part of the 2013 Bond Program.

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
8/2/16	Interview	00	9/23/16	Draft Issue
8/15/16	Assessment	01	11/16/16	Added comments from PM Rick Kaven as indicated on email dated 10/28/16.
9/29/16	Cluster Meeting			

Main School Building – BLDG-146A

Building Purpose	Administration Offices, Classrooms and Cafeteria
Building Area	42,029 SF
Inspection Date	August 15, 2016
Inspection Conditions	76°F – Cloudy and raining
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 brick facade on structural concrete block. There are concrete sills at the exterior windows with painted stucco above that extends to the roof line. The 100- and 200-wings have concrete canopies at each exterior classroom door with painted metal support columns. The 300-, 400- and 500-wing classrooms have exterior covered walkways with painted metal support columns and corrugated metal soffit. The 500-wing has metal panels above the walkway that appear to have been transom windows at one time. The 400-wing has louvers at the top and bottom of the exterior wall that have been filled in with plaster and painted on the exterior. The foundation is painted outside Admin 5 and at the south end of the 300-wing. The exterior walls were observed to be in good condition with a few areas that required repair. There were step cracks and cracks through the brick and concrete block near the exterior door on the west side of corridor C4. There were also step cracks on the exterior brick on the west side of corridor C4 at the south end. The painted areas of the foundation were peeling outside Admin 5 and at the south end of the 300-wing. The paint was peeling on the metal covered walkway that leads to the Library from the 300- and 500-wings.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Exterior Windows	The majority of exterior windows are aluminum frame with single-pane clear glazing. The window systems in the 100- and 200-wings have kalwall on the upper half and pairs of operable windows adjacent to the exterior classroom doors. There are transom windows in each classroom between the higher pitched roof and lower flat roof. The 400- and 500-wings have a window system with single-pane clear glazing divided into five equal sections horizontally. The lower two sections are operable. The administration area has black aluminum-framed windows. The restrooms have privacy glass in aluminum frames. The window systems were observed to be in good condition in the classrooms. There were large windows on the north side of the lobby and in the cafeteria that were observed to be in poor condition. The frames were deteriorated and had peeling paint. Reportedly, pest control was working to resolve pest issues in the kitchen and book room.	Good
	Exterior Doors	The main entrance doors are aluminum frame with integral side lites and transom windows. The side lites appear to have a frosted film on the glass. The other exterior doors are painted hollow metal doors in painted hollow metal frames. The doors have wire glass vision panels and kickplates at the bottom. The exterior doors in corridor C4 have integral painted metal side lites with clear glazing on the upper half and solid metal panel on the lower half. The 400- and 500-wings have glazing on the upper half. The majority of exterior doors were observed to be in average condition due to age and exterior exposure in the 300-, 400- and 500-wings. The double doors at the south end of corridor C4 did not close properly. The door to CC500 was deteriorated and had peeling paint.	Average
Roofing	The roof includes a built-up roof covering with gravel surface and a metal gravel stop at the perimeter and a modified bitumen roof covering over the 200-wing, administration areas, and the west side of the cafeteria. The modified bitumen roof covering appeared to be in good condition. The gravel surfaced built-up roofing appeared to be in poor condition. There were large areas of ponding water observed on the surface. There was an active roof leak in room 400, the south wall of 502, and the bookroom. GRR500, CC500 and the west side of the cafeteria had evidence of previous roof leaks. Roof leaks were reported in rooms 200 and 206 by staff. The built-up areas are scheduled to be replaced in 2017 as part of the 2013 Bond Program.		Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Interior Construction	Interior Walls	The majority of interior walls are structural concrete glazed block with painted block above. There are select areas of gypsum board on metal stud framed walls in the cafeteria, lounge and at ceiling height transitions. The interior walls appeared to be in good condition with one area adjacent to the stairs in corridor C3 showing cracks in the mortar of the glazed block.	Good
	Interior Doors	The interior doors are wood doors with painted wood frames in the 100- and 200-wing classrooms. There are painted metal frames with hollow metal doors from the cafeteria to corridor C3. The metal interior doors were observed to be in good condition. The wood interior doors were observed to be in poor condition. The painted frames had peeling paint, and the door finish was worn, specifically at the classroom restroom doors. The louvers in the classroom restroom doors were also damaged and misaligned.	Average
	Interior Specialties	There are four metal lockers in the kitchen restroom. The lockers were observed to be in average condition due to age and the finish had rusted.	Average
Stairs	Exterior Stairs	There are three concrete steps at the main school entrance on the east side. The concrete steps were observed to be in good condition with no visible deficiencies.	Good
	Interior Stairs	There are wood stairs at the rear and front of the stage. There are rubber-covered stairs in corridor C3 with a wall-mounted chair lift. The interior stairs were observed to be in good condition.	Good
Interior Finishes	Interior Wall Finishes	The interior wall finishes are paint throughout the classrooms. Glazed block is present to approximately five feet from the floor and paint above in classrooms, interior corridors, and cafeteria. The admin and multi-stall restrooms have ceramic tile up to five feet from the floor. The classroom restrooms in the 100-, 200- and 300-wings have glazed structural tile as the wall finish. The interior wall finishes were observed to be in good condition and appeared to be well maintained. There were isolated areas of peeling paint in corridors C3 and C4.	Good
	Interior Floor Finishes	The interior floor finishes include VCT (vinyl composition tile) in the classrooms, corridors, and cafeteria. The restrooms and kitchen have ceramic tile. The stage has	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		hardwood flooring as do the steps into the cafeteria. The stairs in corridor C3 have rubber treads and risers. The administration office areas have carpet, and the lounge has VCT. The interior floor finishes were observed to be in average condition with various areas having been replaced at different times. The 100-wing, half of corridor C3, all of corridor C4, and the cafeteria had newer VCT. The 200- and 500-wings had newer VCT as well. The 400-wing and the west half of corridor C3 had aged VCT. Room 400 had water damage. The 400-wing had cracked tiles and discoloration, possibly due to moisture from the slab. Various tiles had been replaced. The top nosing was missing from the rubber-covered steps in corridor C3.	
	Interior Ceiling Finishes	The ceiling finish in the corridors is ACT (acoustic ceiling tile) and grid. The classrooms have what appears to be original ceiling tile at the sloped roof deck and suspended ACT adjacent to the corridors. The administration restrooms have painted gypsum board. BRR500 and GRR500 have painted tectum panels at the roof deck. The interior ceiling finish appeared to be in poor condition due to age and water damage from various roof leaks. The corridor ACT was sagging and misaligned, and is planned to be replaced in 2017 as part of the 2013 Bond Program. The 100-, 200-, 300-, and 500-wings have older ceiling tiles applied at the roof deck. There were discolored and damaged ceiling finishes due to roof leaks in rooms 400 and 502, and in GRR500, CC500 and the bookroom.	Poor
Conveying	The building is equipped with two wheelchair lifts. The first is a 750-lb lift for stage access. The second is a 495-lb lift for the elevated C3 landing. The conveying system appeared to be in good condition. Facility staff reported that the wheelchair lifts were inspected regularly and functioned well.		Good
Plumbing	Plumbing Fixtures	The building contains predominantly single-use restrooms throughout the facility. Multi-use restrooms are located outside the 200-, 300-, and 500-wings. Typical restrooms have floor-mounted vitreous china water closets with manual flush valves. Dedicated male restrooms contain vitreous china urinals with manual flush valves. Restrooms contain vitreous china sinks for handwashing. Some classrooms contain stainless steel basin sinks with drinking fountain attached. Stainless	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		steel drinking fountains can be found in the corridors. A commercial kitchen is located in the school's cafeteria. The kitchen contains stainless steel kitchen equipment, including a triple-basin prep sink. It also has various wall-mounted vitreous china and stainless steel sinks for personal use. A coated cast iron trough handwashing sink with two faucets is located outside the kitchen. The building also has service sinks located in various janitorial closets. Various other rooms such as the lounge and Admin 4 have stainless steel basin sinks for personal use. The majority of the plumbing fixtures were observed to be in average condition, but were aged and showed signs of deterioration. The sink outside the restroom in room 200 had no water flow. Multiple sinks were observed to be rusted and original to the building. The sink in the restroom outside of room 206 was missing its soap pump handle. The triple-basin prep sink in the kitchen had no water flow. The faucet on the sink in GRR500 was damaged and peeling. Multi-use restroom BRR300 was observed to have a clogged urinal that caused leakage across the restroom floor. The janitorial sink in CC500 was leaking from the handles. The toilet in the restroom outside of room 102 had no water flow. The urinal in the male restroom outside of room 205 was leaking. The urinal in the restroom outside of room 101 was observed to have no water flow. Low flow was observed to the urinal in the restroom outside of room 206.	
	Domestic Water Distribution	Domestic hot water to the kitchen is provided by a 99-gallon gas-fired heater located in the KITMECH room. A smaller EWH (electric water heater) is located in the nurse's office to provide heated domestic water to the sink in the adjacent restroom. Domestic hot water is not supplied to the classroom plumbing fixtures. The gas water heater feeding the cafeteria and the EWH for the nurse's office were new and appeared to be in good condition. Distribution plumbing was observed to be aged and had signs of corrosion. The sinks in room 403, Admin 4 and the lounge had evidence of leaks underneath them.	Average

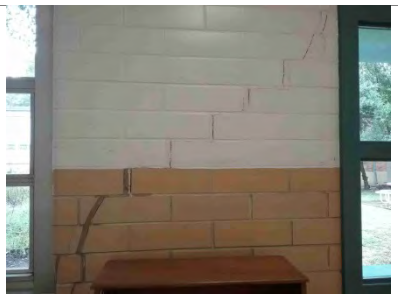
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Other Plumbing	Other plumbing consists of floor drains and a backflow preventer in the kitchen. Associated other plumbing appeared to be in average condition. Floor drains in the mechanical and electrical rooms were aged and corroded. The multi-use male restrooms BRR200 and BRR300 were emitting an odor, potentially coming from the floor drains. A backflow preventer in the kitchen leaked every time the toilet in the kitchen restroom was flushed.	Average
Mechanical/ HVAC	The building's HVAC (heating, ventilating, and air conditioning) system is primarily composed of air conditioner condensing units, AHUs (air handling units), heat pump systems, water source heat pumps, unit ventilators, RTUs (roof top units) and through-wall air conditioner units. Various-sized EFs (exhaust fans) vent the building. Unit ventilators had replaced water source heat pumps in some classrooms. The unit ventilators were newer and appeared to be in good condition. Room 401 had water stains in front of its unit ventilator, but this could have been from the previously replaced water source heat pump. Water source heat pumps were aged and reaching their end of expected design service life. Multiple water source heat pumps were making whirring or vibrating noises during operation. The water source heat pump in room 203 had a water line feeding it off the sink as an additional water source. This is not a typical design or operating condition for these units. Multiple pieces of equipment that were no longer in use and abandoned in place were observed throughout the building. Rooms ADMIN5 and ADMIN6 had heat pumps designated to them on the floorplan, but no units were observed during the assessment. It was assumed these units were in the ceiling. The HVAC system appeared to be in average condition with wear associated with the age of the units. Multiple HVAC units were using R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. EFs throughout the building were reported in the facility interview to not be working properly.		Average
Fire Protection	Fire Alarm	The fire alarm system consists of alarm and signaling devices such as strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is controlled by a Silent Knight control panel. The fire alarm system appeared to be in good condition. One detector end device was found improperly secured in room 303. Corridor C3 was observed with a missing end device. Facility staff reported that the fire alarm system was functioning properly.	Good
	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. Fire extinguishers are located throughout the	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		building. Visual assessment showed the systems to be in average condition. The majority of the fire extinguishers were up to date with their inspections. The fire extinguisher in the corridor outside the cafeteria was out of date on its annual inspection.	
Electrical	Electrical Distribution	The building utilizes 120/240-volt panelboards for electrical distribution. The building receives electrical feed from BLDG-146D. The building does not have a lightning protection system. The electrical distribution equipment appeared to be in good condition. Panel 1P, located in the kitchen, was missing two breaker covers and should be considered a life safety hazard. Panel 1P was also installed within a decommissioned panel cabinet that had cabling exposed. Panel 2P, located in BKRM300, was observed with a broken latch, and was inaccessible.	Good
	Lighting	The building's exterior lighting consists of wall-mounted and canopy fluorescent, metal-halide or high-pressure sodium luminaires. Exterior luminaires are located on the walls, egress points, and covered walkways. Interior lighting is predominantly recessed troffer, suspended, or surface-mounted fluorescent luminaires. Various downlights are in storage rooms, restrooms, and restroom vestibules, including screw-in fixtures with incandescent/CFL (compact fluorescent) lamps. The lighting system appeared to be in average condition. Several exterior luminaires were worn, discolored, or damaged. A few exterior luminaires had lamps nearing their end of design service life. Interior lighting deficiencies were limited to non-functional, burned-out lamps, or dim lighting. Branch wiring deficiencies included outdated or non-functional light switches, damaged faceplates, non-GFCI (ground fault circuit interrupter) electrical receptacles near sinks or water fountains, and exterior electrical receptacles with broken covers or no covers. Interior conduit was observed to be unsecured near the corridor wheelchair lift. Roof top conduit was damaged or unsealed in several areas. Facility staff reported that the lighting within the nurse's office was dim. Facility staff requested that future lighting replacements be LED (light-emitting diode) luminaires. Facility staff also reported that the current	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		exterior lighting was dim and that additional or improved lighting for the portable area, playground area, and kitchen unloading area was required for exterior safety and security.	
	Communications & Security	The building is equipped with telecommunications/data systems with the main equipment located in the inaccessible rooms MDF, IDF-B, and CUSTOFC. Networking Wi-Fi access points are installed throughout the building. The building utilizes traditional telephones for telecommunications. The building's security consists of surveillance cameras, motion detectors, and a proximity card access system. Exterior surveillance cameras overlook outdoor covered walkway areas, the main entrance egress, and the cafeteria egress. Interior surveillance cameras are located throughout corridors overlooking building egresses and within the kitchen. Motion detectors are installed throughout the building. The communications and security systems were observed to be in good condition. No deficiencies were observed during the assessment. Facility staff reported that the data/Wi-Fi system was functioning properly. Facility staff reported that the existing surveillance cameras had poor resolution and requested additional surveillance cameras for the interior corridors and near parking lots.	Good

Exterior System Deficiency Examples

Exterior Walls



Exterior Windows

Exterior Doors

Roofing Deficiency Examples



Interior Construction Deficiency Examples

Interior Walls


Interior Doors



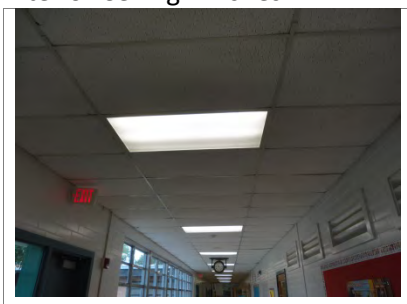
Interior Finishes Deficiency Examples

Interior Wall Finishes

Interior Floor Finishes

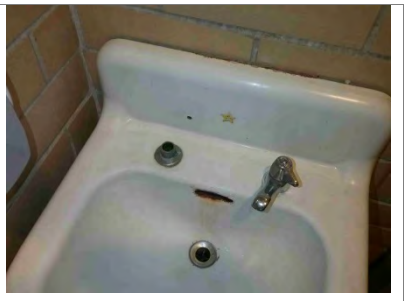


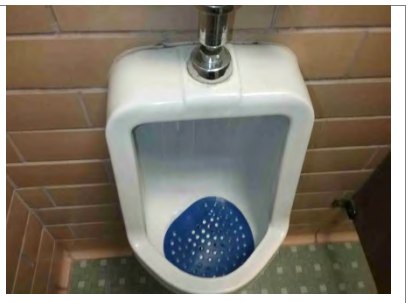
Interior Ceiling Finishes



Plumbing System Deficiency Examples

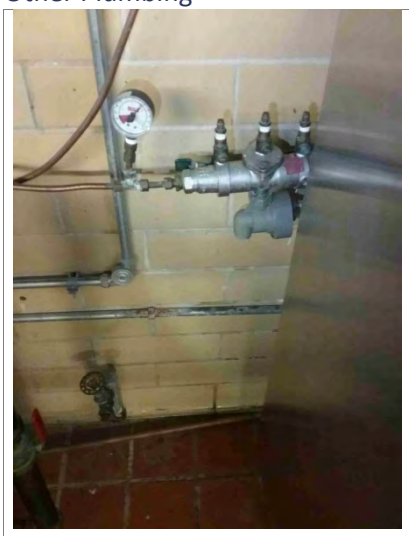
Plumbing Fixtures

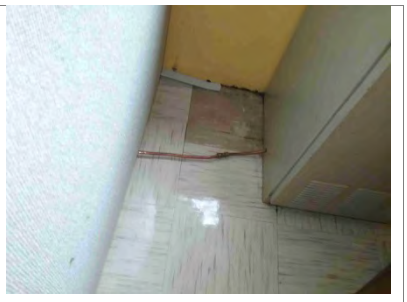



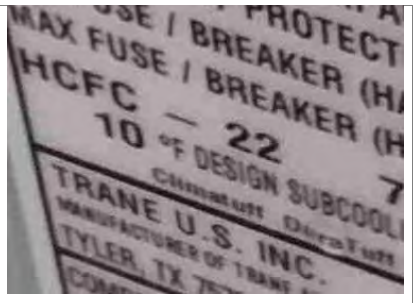
Domestic Water Distribution

Other Plumbing



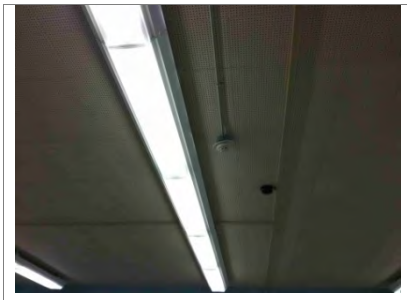
Mechanical/HVAC System Deficiency Examples





Fire Protection System Deficiency Examples

Fire Alarm



Fire Protection/Suppression

Electrical System Deficiency Examples

Electrical Distribution

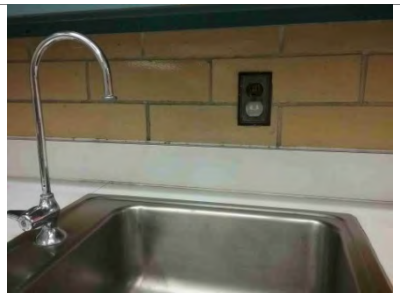


Lighting









Stand-Alone Gymnasium – BLDG-146B

Building Purpose	Gymnasium
Building Area	2,827 SF
Inspection Date	August 15, 2016
Inspection Conditions	76°F - Cloudy and raining
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 and CMU (concrete masonry unit). There are louvers in the CMU walls that have been closed off and painted. The brick façade and painted CMU appeared to be in average condition due to age. There were areas of the brick that were soiled due to water sheeting off the roof.	Average
	Exterior Windows	System not present.	N/A
	Exterior Doors	The exterior doors are painted metal doors and painted metal frames. The two entrance doors have vision panels with wire guards over them. The exterior door out of GYMSTO does not have a window. The exterior doors appeared to be in good condition.	Good
Roofing	The main roof is a sloped modified bitumen roof covering with eight skylights. There is a lower roof area over the storage room and office that is a built-up roof covering. There are gutters on the north edge of the main roof and lower built-up roof. There is no gutter on the south side. There is no roof access ladder, but the majority of the roof is visible from the main school roof. The modified bitumen roof appeared to be in good condition. The lower built-up roof was scheduled to be replaced as part of the 2013 Bond Program.		Good
Interior Construction	Interior Walls	The interior wall is CMU between the Gymnasium and office/storage room as this wall extends to the roof line. The wall between the office and storage room is gypsum board on metal stud construction. The interior walls appeared to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Doors	The interior doors are wood doors with painted metal frames. The office door has vision glass in the upper half. There are metal kickplates that cover the lower half of the doors on the Gymnasium side. The interior doors appeared 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 include paint with small areas of wood panels above the louvers that have been painted shut and filled in on the exterior. The restroom in the office has ceramic wall tile up to four feet above the floor. The interior wall finishes were observed to be in good condition.	Good
	Interior Floor Finishes	The interior floor finishes include athletic tile flooring in the Gymnasium and VCT in the office and storage room. There is ceramic floor tile in the restroom. The interior floor finishes were observed to be in good condition.	Good
	Interior Ceiling Finishes	The interior ceiling is tectum panels at the painted roof structure. There is a painted gypsum board ceiling in the office and restroom and ACT and grid in the storage room. The interior ceiling finishes were observed to be in good condition.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building contains a single-use personal restroom with a single-use shower in the office. The restroom contains a floor-mounted vitreous china water closet and wall-mounted vitreous china hand washing sink. The majority of the plumbing fixtures were observed to be in average condition. The shower located inside the office had items stored in it and was unable to be assessed for operation. Visual assessment determined it appeared to be in average condition.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Domestic Water Distribution	The building has a water heater in the storage room GYMSTO that feeds the shower. The unit was shelf-mounted above head, making it inaccessible. Visual assessment determined that it was newer and appeared to be in good condition. Distribution plumbing appeared to be in good condition with no deficiencies observed.	Good
	Other Plumbing	System not present.	NA
Mechanical/ HVAC	The building's HVAC system is composed of two ceiling-mounted heat pump systems and a through-wall packaged air conditioning unit. Additionally, the restroom contains an EF. Heat pump units were not accessible, and no nameplate information was available, but visual assessment determined no noted deficiencies. These units were reported in the facility interview to be a persistent maintenance issue. The through-wall air conditioning unit was observed to be newer but was cracked. An old radiator unit was no longer functional and abandoned in place. The EF appeared to be in good condition.		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 appeared to be in good condition. No deficiencies were observed. Facility staff reported that the fire alarm system was functioning properly.	Good
	Fire Protection/ Suppression	This system did not exist in the building. A fire extinguisher is located in the office and was up to date on its annual inspection.	N/A
Electrical	Electrical Distribution	The building was not observed with a panelboard installed, possibly blocked by items in a storage room. The building receives electrical feed from BLDG-146A. The building does not have a lightning protection system. The electrical distribution equipment appeared to be in average condition. The electrical safety switches were dated, but were mounted in an elevated position that prevented a thorough assessment. Facility staff reported that the panelboard that provides distribution within the Gymnasium was outdated.	Average
	Lighting	The building's exterior lighting consists of wall-mounted and canopy metal-halide or high-pressure sodium luminaires. Exterior luminaires are located on the exterior walls and covered walkways. Interior lighting is predominantly surface-mounted fluorescent and recessed troffer luminaires.	Average

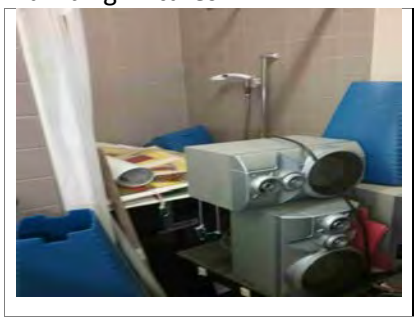
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The lighting system appeared to be in average condition. A few exterior luminaires had lamps nearing their end of design service life. No deficiencies were observed with interior lighting. There was an unknown fixture base on the exterior wall that appeared to be an abandoned luminaire.	
	Communications & Security	The building is equipped with telecommunications/data systems. A networking Wi-Fi access point is installed within the Gymnasium. The building utilizes traditional telephones for telecommunications. The building security consists of a single surveillance camera and motion detectors. A single exterior surveillance camera overlooks the nearby playscape. There are no interior surveillance cameras present. Motion detectors are installed within the building. The communications and security systems were observed to be in good condition. No deficiencies were observed. Facility staff reported that the data/Wi-Fi system was functioning properly. Facility staff requested additional surveillance cameras around the Gymnasium area be installed to enhance safety and security of the building perimeter.	Good

Exterior System Deficiency Examples

Exterior Walls

Plumbing System Deficiency Examples

Plumbing Fixtures

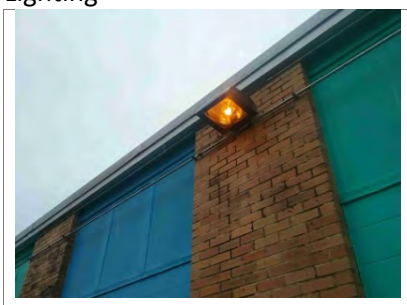


Mechanical/HVAC System Deficiency Examples

Electrical System Deficiency Examples

Electrical Distribution

Lighting



Stand-Alone Library – BLDG-146C

Building Purpose	Library
Building Area	5,488 SF
Inspection Date	August 15, 2016
Inspection Conditions	76°F - Cloudy and raining
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 facade. There are prefinished standing seam metal covers at the doors and windows. There are concrete sills at the windows. The brick exterior appeared to be in good condition.	Good
	Exterior Windows	The exterior windows are anodized aluminum frames and single-pane glazing. The exterior windows appeared to be in good condition.	Good
	Exterior Doors	The exterior doors are painted metal doors and painted metal frames. The main entrance has upper and lower vision panels in the door. The exterior doors appeared to be in good condition.	Good
Roofing	The roof has a gravel-surfaced built-up roof covering with a metal gravel stop at the perimeter. The roof does not have a roof access ladder, but a majority of the roof is visible from the Main School Building roof. There is a lower roof over the entrance corridor to the library that has a pre-finished standing seam metal roof covering. There are downspouts spaced along the perimeter. There is a gutter on the lower roof that drains to a downspout. The roof appeared to be in average condition due to age, but there were no visible areas of ponding. There was evidence of roof leaks on the interior of the LIBCOMP room and above the LIBAVRM along the exterior wall.		Average
Interior Construction	Interior Walls	The majority of interior walls are gypsum board on stud construction. There are metal-framed single-pane wire glass windows between the main library and the library office. There are also painted metal-framed single-pane wire glass windows between the library and corridor C1. The interior walls appeared to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Doors	The interior doors are wood doors with painted metal frames. The doors have wire glass vision panels except for the restroom doors, which are solid. The interior doors were observed to be in good condition.	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	There are exterior concrete stairs on the south side of the library with a painted metal railing. The exterior stairs were observed to be in good condition.	Good
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior wall finish is paint. There is wood trim at the ceiling furr down and above the tackboard mounted above the bookshelves. There is ceramic wall tile up to approximately four feet above the floor in the restroom. The interior wall finishes were observed to be in good condition, except for the area of water damaged gypsum board on the west wall above the LIBAVRM.	Good
	Interior Floor Finishes	The interior floor finish is carpet in the main library. There is VCT in the remainder of the building with the exception of the restroom that is finished with ceramic floor tile. The interior floor finishes were observed to be in good condition.	Good
	Interior Ceiling Finishes	The interior ceiling finishes include ACT and a grid system in the library and painted gypsum board. The LIBAVRM, LIBOFC, C1, and restroom have painted gypsum board ceiling as well. The LIBCOMP room has ACT and a grid system. The interior ceiling finishes were observed to be in good condition except for the discolored ceiling tiles in the LIBCOMP room, likely from roof leaks.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building contains a single-use personal restroom. The restroom contains a floor-mounted vitreous china water closet and wall-mounted vitreous china hand washing sink. The library office (LIBOFC) contains a stainless steel sink for personal use. Plumbing fixtures were observed to be in good condition.	Good
	Domestic Water Distribution	The building has a 10-gallon EWH in the mezzanine to feed the sinks in the library restroom and office.	Good

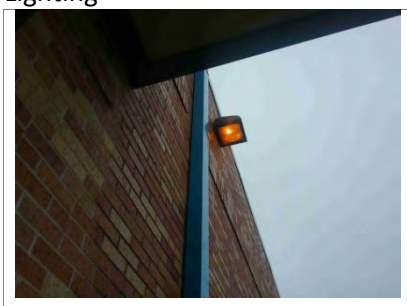
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The water heater was newer and appeared to be in good condition. Distribution plumbing appeared to be in good condition.	
	Other Plumbing	A floor drain is present in the restroom and appeared to be in good condition.	Good
Mechanical/ HVAC	The building's HVAC system is composed of air conditioning condenser units, fan coil units, and a unit ventilator with two AHUs in the mezzanine. EFs are in the computer room LIBCOMP and the restroom LIBHRR. The units were observed to be in good condition and had no noted deficiencies.		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. Facility staff reported that the fire alarm system was functioning properly.	Good
	Fire Protection/ Suppression	A fire extinguisher is located in the building and was up to date on its annual inspection.	N/A
Electrical	Electrical Distribution	The building utilizes an independent electrical service that enters the building at the 120/240D-volt, 200-amp panelboard located in LIBELEC. The building also receives a separate electrical feed from the main distribution panel for the facility. The building does not have a lightning protection system. The electrical distribution equipment appeared to be in good condition. No deficiencies were observed.	Good
	Lighting	The building's exterior lighting consists of wall-mounted and canopy metal-halide or high-pressure sodium luminaires on exterior walls and the covered walkway. The building's exterior also has recessed downlights with unknown lamps on the building overhangs. Interior lighting is predominantly recessed troffer and surface-mounted fluorescent luminaires. The lighting system appeared to be in good condition. One wall-mounted exterior luminaire had a lamp nearing the end of its design service life. All recessed downlights on the building exterior overhangs were non-functional. No interior lighting deficiencies were observed. One interior electrical receptacle on the elevated seating area in the library did not have a faceplate.	Good

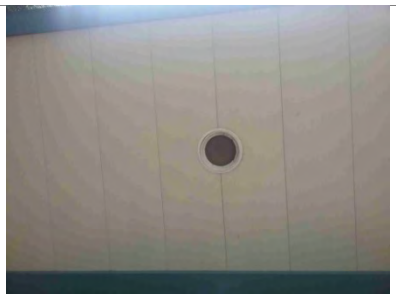
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Communications & Security	The building is equipped with telecommunications/data systems with the main equipment located in LIBOFC. Networking Wi-Fi access points are installed throughout the building. The building utilizes traditional telephones for telecommunications. The building's security consists of surveillance cameras, motion detectors, and a proximity card access system. One exterior surveillance camera overlooks the parking. One interior surveillance camera is located in the main corridor and overlooks the building entrance. Motion detectors are installed throughout the building. The communications and security systems were observed to be in good condition. No deficiencies were observed. Facility staff reported that the data/Wi-Fi system was functioning properly.	Good

Roofing Deficiency Examples

Electric System Deficiency Examples

Lighting





Boiler House – BLDG-146D

Building Purpose	Boiler House (Kiln Room)
Building Area	597 SF
Inspection Date	August 15, 2016
Inspection Conditions	76°F - Cloudy and raining
Facility Condition Index	

System Deficiency Overview

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

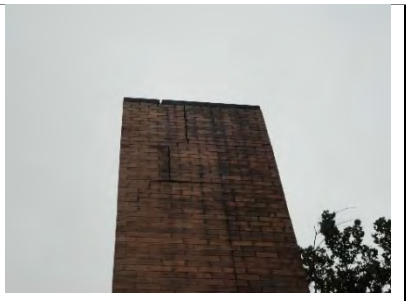
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior walls are brick veneer on structural CMU backup wall. The walls and brick are original to the 1950 construction date. There is a chimney stack on the north façade with fire brick on the interior. The brick veneer appeared to be in average condition due to age. There was an area of dirty brick on the north façade due to a missing section of gutter allowing water to sheet down the brick veneer. There were vertical and horizontal cracks at the top of the chimney, which were planned to be repaired as part of the 2013 Bond Program. It was unknown if the cracks had affected the structural integrity of the chimney.	Average
	Exterior Windows	The exterior windows are painted metal frames with single-pane glazing. There are painted metal guards on the lower half of the window. The exterior windows were observed to be in average condition as they appeared to be original and aged, and there were no visible deficiencies.	Average
	Exterior Doors	The single pair of exterior doors is hollow metal frame and doors with transom windows above. There are windows in the upper half of the door with wire glass. The transom windows also have wire glass. The exterior doors were observed to be in good condition as they appeared to have been replaced in the past ten years.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Roofing	The roof has a gravel-surfaced built-up roof covering. The roof does not have a roof access ladder, but a portion of the roof is visible from the Main School Building's roof. The roof has mechanical equipment and piping supported on structural steel beams mounted on the roof. There are painted metal gutters and downspouts at the perimeter. The roof covering appeared to be in poor condition due to evidence of roof leaks on the interior of the structure. There was an active leak at a pipe penetration through the roof. The leak was directly over an electrical panel. The gutters were dented on the south façade. There was a missing portion of gutter on the north side, allowing water to sheet down the brick façade and over an electrical panel mounted on the exterior wall.		Poor
Interior Construction	Interior Walls	There is a partial height interior wall constructed of structural CMU. The interior walls were observed to be in average condition due to age, but there were no visible deficiencies.	Average
	Interior Doors	There is one interior painted wood door with a wood frame. The interior door appeared to be in average condition due to age.	Average
	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	System not present.	N/A
	Interior Floor Finishes	System not present.	N/A
	Interior Ceiling Finishes	System not present.	N/A
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building contains a single-use personal restroom. The restroom contains a floor-mounted vitreous china water closet and a wall-mounted vitreous china hand washing sink. Plumbing fixtures were observed to be in poor condition. The fixtures are aged and out of date. The water closet had signs of corrosion on its connections and leaked.	Poor
	Domestic Water Distribution	A 40-gallon EWH feeds the restroom sink. The unit was observed to be aged and out of date. Distribution plumbing was aged and corroded.	Poor

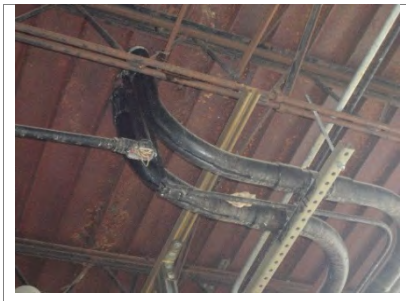
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Other Plumbing	Other plumbing consists of a floor drain. The condition of the floor drain was observed to be poor. The grate was missing from the floor drain and the drain was clogged with debris.	Poor
Mechanical/ HVAC	Minimal HVAC equipment is in the building. An old heat pump unit is wall-mounted but no longer in use and abandoned in place. An EF is present for the KILN and appeared to be in average condition.		Average
Fire Protection	Fire Alarm	System not present.	N/A
	Fire Protection/ Suppression	A fire extinguisher is located in the building and was out of date on its annual inspection.	N/A
Electrical	Electrical Distribution	The electrical service enters the building through the 120/240-volt, 1,200-amp single enclosed breaker panelboard located on the west-side exterior wall. The single enclosed breaker panelboard feeds the 1,200-amp panelboard MSB for electrical distribution. The building also features a single transformer to convert 240 volt to 120/208Y-volt for panelboard MTDP. The building does not have a lightning protection system. The electrical distribution equipment appeared to be in good condition. Panel BP had a missing breaker slot cover, which is a life safety hazard. Panel BP also had a hole cut in the top of the panel.	Good
	Lighting	The building's exterior lighting consists of wall-mounted metal-halide or high-pressure sodium luminaires at the building egress and south exterior wall. Interior lighting is comprised of suspended fluorescent and screw-in incandescent luminaires. The lighting system appeared to be in average condition. One exterior luminaire appeared to have debris within the luminaire. Also, conduit within the building was observed with missing junction box covers.	Average
	Communications & Security	System not present.	N/A

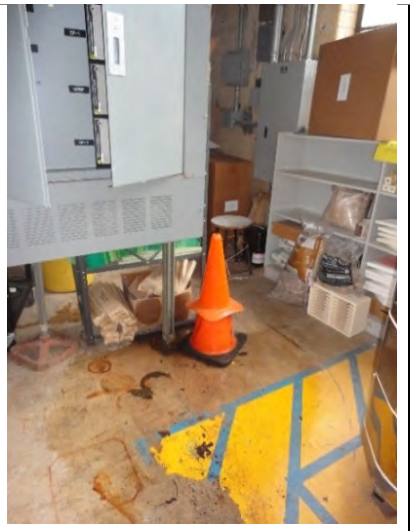
Exterior System Deficiency Examples

Exterior Walls



Roofing Deficiency Examples

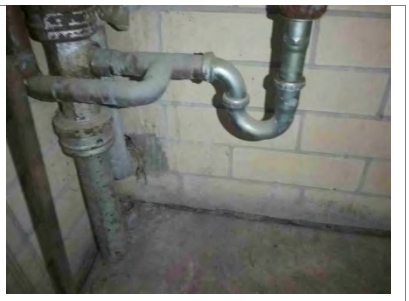




Plumbing System Deficiency Examples

Plumbing Fixtures

Domestic Water Distribution



Other Plumbing

Mechanical/HVAC System Deficiency Examples

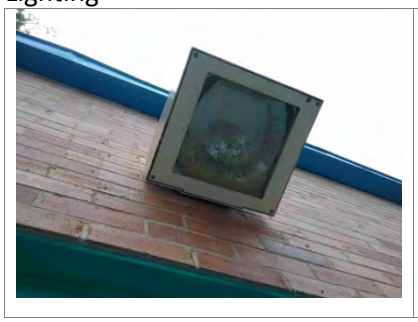
Fire Protection

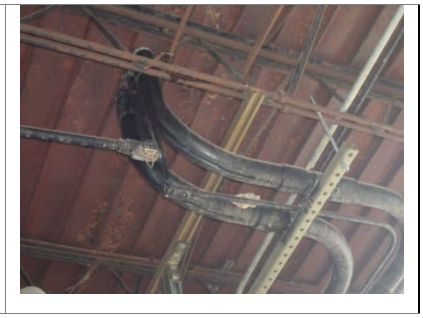
Fire Protection/Suppression

Electrical System Deficiency Examples

Electrical Distribution

Lighting





Zilker 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.

Main School Building Recommendations

Exterior

1. Repair cracks in the brick and block in the 100-wing.
2. Repaint the foundation where exposed.
3. Repaint the soffit of the covered walkway that leads from the 300-wing to the library.
4. Replace the windows at the cafeteria and north side of the lobby.
5. Repair the doors at the south end of corridor C4.
6. Replace the door at CC500.

Interior Construction

1. Repaint interior door frames.
2. Refinish interior wood doors.
3. Repair or replace louvers in classroom restroom doors.
4. Investigate the cracked mortar in the structural block wall adjacent to the stair in corridor C3.
5. Replace lockers in the kitchen restroom.

Interior Finishes

1. Repaint walls in corridors C3 and C4.
2. Replace the VCT in the upper half of corridor C3 and in the 400-wing.
3. Replace the rubber nosing on the top stair in corridor C3.
4. Replace the ceiling tile in the 400- and 500-wings and the bookroom.
5. Repair the ceiling finish in GRR500 and CC500.

Plumbing

1. Repair or replace water closets and urinals that were not functioning properly.
2. Repair or replace sinks that were broken or observed to not work properly.
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. Replace water heaters that are beyond their expected design service life or showing signs of deterioration before failure occurs.
5. Inspect, clean and repair plumbing in multiple restrooms that are emitting an unpleasant odor.
6. Replace plumbing fixtures that are beyond their expected design service life before failure occurs.
7. Clean and flush out all floor drains to ensure adequate drainage; it was reported these are not draining properly.
8. Investigate and repair the source of the leak from the backflow preventer in the kitchen.

Mechanical/HVAC

1. Repair HVAC equipment noted to have evidence of leaks.
2. 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.
3. Replace HVAC equipment that is beyond its expected design service life before failure occurs.
4. Repair any equipment that was noted with excessive noise/vibration.

5. 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 service life due to refrigeration restrictions.
6. Verify the capacity of EFs and replace if necessary.
7. Repair or replace water source heat pumps that are being fed by the in-classroom sinks.
8. Remove any HVAC equipment that is no longer functional and abandoned in place.

Fire Protection

1. Repair the detector end device mounting in room 303.
2. Investigate the open junction box that appears to have fire alarm wiring. Replace the end device or seal with a cover.
3. Inspect fire extinguishers that are out of date on annual inspections, and replace if necessary.

Electrical

1. Install breaker slot covers on kitchen panelboard P1, as this is a life safety hazard.
2. Verify panel P1 is grounded to the outer decommissioned panelboard, and install covers to block access to internal cabling.
3. Replace the latch on panelboard 2P in BKRM300.
4. Replace exterior luminaires that are worn, discolored, or damaged with LED luminaires.
5. Replace lamps in exterior luminaires that have dim orange lighting.
6. Troubleshoot or replace interior luminaire lamps that are non-functional or have burned-out lamps.
7. Upgrade dim interior luminaires with higher lumen fixtures.
8. Replace outdated light switches throughout the building.
9. Replace damaged light switch faceplates throughout building.
10. Replace non-GFCI electrical receptacles that are located near sinks and water fountains with GFCI versions.
11. Replace or install exterior receptacle covers that are missing or broken.
12. Repair or replace damaged or unsealed roof top conduit and the conduit at the corridor wheelchair lift.
13. Improve the lighting within the nurse's office, as requested by facility staff.
14. Install additional or upgrade existing luminaires for the portable building, playground, and kitchen unloading areas, as requested by facility staff.
15. Investigate existing surveillance cameras for poor resolution and upgrade as needed.
16. Install additional surveillance cameras for the interior corridors and near parking lots.

Stand-Alone Gymnasium Recommendations

Exterior

1. Clean soiled brick on south façade.

Roofing

1. Install roof gutter on the south roof edge.

Plumbing

1. Verify the functionality of the shower in the office, and repair if necessary.

Mechanical/HVAC

1. Verify the functionality of ceiling-mounted heat pump units. Replace if they are using 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 service life due to refrigeration restrictions.
2. Remove any HVAC equipment that is no longer functional and abandoned in place.

3. Repair or replace the through-wall packaged unit that was observed to be cracked.

Electrical

1. Investigate the operation of the safety switches and replace as needed.
2. Replace the outdated panelboard, as requested by facility staff.
3. Replace exterior luminaire lamps that are orange and dim.
4. Investigate the existing, possibly abandoned, luminaire base on the exterior for live wiring and properly decommission if determined to be live.
5. Install additional exterior surveillance cameras to enhance safety and security of the building perimeter, as requested by facility staff.

Stand-Alone Library Recommendations

Exterior

1. Repair roof leaks above LIBCOMP and LIBAVRM.

Interior Finishes

1. Repair water damage on the west wall above LIBAVRM.
2. Replace discolored ceiling tiles in LIBCOMP.

Electrical

1. Replace exterior luminaire lamps that are orange and dim.
2. Investigate the operation of exterior recessed downlight luminaires and replace as needed.
3. Install a faceplate on the interior electrical receptacle on the raised seating area of the library.

Boiler House Recommendations

Roofing

1. Replace roof covering.
2. Repair existing gutters and provide additional gutter section over electrical gear.

Plumbing

1. Repair or replace the water closet that was observed to be leaking.
2. 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.
3. Replace water heaters that are beyond their expected design service life or showing signs of deterioration before failure occurs.
4. Replace plumbing fixtures that are beyond their expected design service life before failure occurs.
5. Clean out the floor drain and replace the grate to prevent clogging.

Mechanical/HVAC

1. Remove any HVAC equipment that is no longer functional and abandoned in place.

Fire Protection

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

Electrical

1. Install a breaker slot cover in panelboard BP, and install a plug on the open port, as this is a life safety hazard.
2. Repair the exterior luminaire to prevent debris infiltration.
3. Install junction box covers on open junction boxes.

Zilker 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.

2017 Bond Planned Improvements from PM Rick Kaven on 10/28/16.

- June 2017.
  - Replace 24 classroom ground source heat pumps with verticle DX ventilators made by Bard. These units have the condenser inside the unit.
  - In order to install the Bard units, the windows in the classrooms will have to be revised to install needed vents.
  - Installing two small mini-splits in office and a janitorial closet.
  - Installing local controls for all the units above.
  - Upgrading the electrical to handle the new capacity.
  - In the Gymnasium, we are replacing the two ceiling hung AC (air conditioning) units, removing the EFs and blanking them off.
  - We are replacing the cafeteria stage AC unit.
  - Replace two units in the administration area.
  - Replace the kitchen RTU.
  - Replace sanitary sewer drain lines, but vents don't need replacement.
  - Upgrading some restrooms but scope not yet defined.

CRAWL SPACE – Zilker ES – Main Building (BLDG-146A)

Building Purpose	Administrative offices, Gym, Classrooms, and Cafeteria
Inspection Date	August 31, 2016 & September 27, 2016 January 31, 2017
Inspection Conditions	76° - 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	In the original building and additions the soil in the crawl space was mostly dry to somewhat damp. At the north end of the space below the kitchen, there appeared to be evidence of water infiltration along the perimeter. The crawl space below the 1961 addition had saturated soils. No drainage system was seen in the crawl spaces or specified in the existing plans. Soil/Drainage deficiencies: • Damp soils, water infiltration around building perimeter	Average
	Soil Retainers	Soil retainers, consisting of corrugated metal sheet forms, were present in the original building and the additions and appeared in overall good condition. The existing plans specify corrugated asbestos retainers around all exterior beams and it is not clear whether the asbestos retainers have been replaced or if they are still in use. All corrugated sheeting observed was oriented in the wrong direction, with the flutes running horizontally instead of vertically: when acting as soil retainers the flutes should run vertically to span from beam to soil (corrugated sheeting is intended to span in the direction the flutes). Some soil retainers appeared damaged of degraded. Soil retainer deficiencies: • Soil retainers should be replaced if they contain asbestos • Damaged/degraded soil retainers • Corrugated sheeting oriented in wrong direction	Average

	Areaways/Ventilation	Ventilation is provided by areaways and vents in perimeter beams. Ventilation in the original building is likely inadequate in some areas, particularly where condensation was visible on the slab underside. The additions clearly lacked adequate ventilation based on the stagnant and humid air, sweaty slab, and pipe insulation mold. The areaways were overall in good condition other than minor rusting of the grates and frames. While unconfirmed, some of the curb heights may be too low to adequately prevent water infiltration during a storm event. Areaway/ventilation deficiencies: • Stagnant air / Condensation / Poor ventilation • Areaway curb heights too low & allowing water infiltration	Poor
	Access Hatches	Crawl spaces were accessed by areaways and hatches. Most of the hatches appeared in decent condition other than minor rust on the frames and doors. The surrounding slab concrete for the hatch in one of the additions had been poorly consolidated and reinforcement was visible. The crawl space could not be accessed via a floor hatch in the exterior corridor between room 403 and 302 as the space had filled with construction debris and was walled off from the main crawl space. A side hatch on the Admin5 perimeter wall was screwed shut and inaccessible on September 27, 2016. Access was gained to this side hatch on the return visit on January 31, 2017. The south wall of the 1954 addition had a wall opening (inside the crawl space) which was large enough to peer through only. Access was limited in the additions due to pipe congestion and low clearance. Access hatch deficiencies: • Inaccessible crawl space entryways • Poor slab concrete consolidation / Exposed reinforcement • Minor rust on hatch door	Poor
Exposed Structure	Exposed Columns & Tops of Foundations	The columns and tops of foundations in the original construction and additions appeared to be in good condition and without significant deficiencies.	Good
	Exposed Faces of Perimeter Walls / Beams	Despite moderate honeycombing and one exposed stirrup in the perimeter walls of the original building, the perimeter beams and walls were overall in good condition in both the original building and the additions. Perimeter beam deficiencies: • Mild to moderate honeycombing • Exposed/corroded rebar in wall	Good

	Exposed Portions of Interior Floor Beams Above	Cast-in-place suspended interior concrete beams are supported by concrete columns, perimeter beams and perimeter walls. The floor beams in the original building and the additions were fairly consistent in condition, with moderate defects such as honeycombing, light spalling exposed/corroded reinforcing. Beam deficiencies: • Exposed/corroded reinforcing • Mild spalling • Moderate honeycombing	Average
	Underside of Suspended Floor Slabs Above	The slab system alternated between cast-in-place concrete flat slabs and precast concrete channels; both are supported by the interior floor beams. The flat slabs observed appeared in fair to good condition overall except for some mild to severe exposed/corroded reinforcement and embedded steel items, poor concrete consolidation, and occasional spalls. The precast channels were in worse condition, with large longitudinal cracks and spalls and advanced corrosion in exposed joist bottom bars. Steel angles attached to channel joists are severely corroded. Slab deficiencies: • Poor concrete consolidation • Large longitudinal cracks and spalls in channel joists with exposed/highly corroded bottom bars • Exposed/corroded reinforcing at underside of precast channel slab • Minor spalling at underside of precast channel slab • Severely corroded steel angles attached to sides of channel joists • Severely corroded embedded miscellaneous steel items at underside of flat slab	Poor
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	Observed cast iron pipes and support hangers were often significantly corroded. Some pipes had failed/broken hangers. Pipe insulation was commonly missing, degraded and/or moldy. In a few areas, electric conduit lay directly on the ground. A slight pipe leak was seen in one of the additions and under the admin area during the January 31st visit. Pipe deficiencies: • Pipe leak • Corroded pipes and hangers • Missing pipe insulation, degraded/moldy pipe insulation • Detached conduit laying on ground	Poor

	Exposed Ductwork	Ducts were not present in the crawl space areas observed.	N/A
	MEP Equipment	No MEP equipment was seen in the crawl space areas observed.	N/A
	Spray Fireproofing/ Insulation	Fireproofing and insulation were not present in the crawl space areas observed.	N/A

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

Damp soil due to water infiltration around perimeter of building

Condensation present on slab underside (poor ventilation)

Damaged/degraded soil retainer (possibly made with asbestos)

Crawl space access limited by abundance of pipes & debris

Exposed/corroded reinforcement below hatch frame

Rusted hatch frame & door

Low areaway curb heights may be allowing water to infiltrate the crawl space

Screwed shut access hatch

Exposed Structure

 Moderate honeycombing in suspended perimeter beam	 Badly honeycombed beam, significantly corroded steel supports	 Advanced corrosion on steel support angle attached to channel joist
 Large longitudinal cracks along bottom of channel joists	 Advanced spalling, exposed/corroded reinforcement at bottom of channel joist	 Large cracks, severe spalls and advanced corrosion at bottom of channel joist
 Corroded reinforcement on underside of precast channel slab	 Severe corrosion of misc steel items embedded in cast-in-place flat slab	

Pipes, Ducts, Equipment & Fireproofing

1   Corroded pipes & pipe hangers	 Corroded pipe hanger rod	 Abandoned pipes limit accessibility in crawl space
 Degraded/molding pipe insulation	 Pipe leak, congested pipes limit crawl space access	 Detached conduit

CRAWL SPACE – Zilker ES – Classroom Building (BLDG-146B)

Building Purpose	Classrooms
Inspection Date	August 31, 2016
Inspection Conditions	76° - Sunny & Dry

Crawl Space System Deficiency Overview

The crawl space area for Building "B" could not be accessed as the only known entry point was separated by a beam with low clearance between the soil and beam underside.

CRAWL SPACE – Zilker ES – Stand-Alone Library (BLDG-146C)

Building Purpose	Library
Inspection Date	August 31, 2016 January 31,2017
Inspection Conditions	75° - Sunny & Dry

Crawl Space System Deficiency Overview

On August 31, 2016 when the school was visited the crawl space at Bldg C could not be accessed; the master set of keys did not work and the school's staff did not have a key for the locked side hatch.

On January 31, 2017 we returned to the school with permission to cut the lock to gain access.

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Soil, Drainage, Ventilation & Access	Soil Below Building, Site Drainage in Crawl Space	The soil under the library was generally saturated. There is a large visible drainage path originating from the south west corner of the building leading to a catch basin near the east side of the crawl space. Per drawings, the soil is intentionally sloped to drain at the catch basin. Perimeter beams on the north side of the building were saturated, possibly as a result of water infiltration at the perimeter of the building. Soil/Drainage deficiencies: • Saturated soil • Water infiltration around building perimeter	Average
	Soil Retainers	Concrete soil retainers are located around the entire crawl space. Few retainers were overturned. All remaining intact soil retainers were in good condition. Soil retainer deficiencies: • Overturned concrete soil retainers	Average
	Areaways/Ventilation	Areaways are not present in the building. Ventilation is provided by vents in perimeter beams. Observed vents were in good condition. Ventilation in the crawl space appeared sufficient. Areaway/ventilation deficiencies: • No deficiencies observed	Good

	Access Hatches	The crawl space was accessed through an exterior door located on the south side of the building. The door was secured by a pad lock which had to be cut due to its missing key. The steel frame around the door is heavily corroded. The metal door is slightly bent resulting in a small gap between the door and frame when closed. Access hatch deficiencies: • Corroded steel frame • Bent steel access door • Lock on door was cut to provide access	Average
Exposed Structure	Exposed Columns & Tops of Foundations	The columns and tops of foundations in the library appeared to be in good condition and without significant deficiencies.	Good
	Exposed Faces of Perimeter Walls / Beams	Perimeter beams are approximately 4 feet deep and have about 6 in – 1 ft. of clear space underneath. Perimeter beams had minor honeycombing at the bottom of the beam in isolated locations. Perimeter beam deficiencies: • Mild to moderate honeycombing	Good
	Exposed Portions of Interior Floor Beams Above	Interior beams are supported by concrete columns and perimeter beams. Interior beams were generally in good condition. Exposed reinforcement due to low clear cover was observed in one location. Beam deficiencies: • Exposed reinforcement	Good
	Underside of Suspended Floor Slabs Above	The floor system consisted of open-web steel bar joists supporting a concrete topped metal deck. Metal deck was visually obscured by insulation in a majority of the space. The joists are supported by interior and perimeter concrete beams. Slab deficiencies: • Minor corrosion on bar joists	Average
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	There were few pipes in the crawl space. Observed cast iron pipes had mild corrosion. A pipe with a missing pipe hanger was observed in one location. Pipe deficiencies: • Missing pipe hangers	Average
	Exposed Ductwork	Ducts were not present in the crawl space areas observed.	N/A

	MEP Equipment	No MEP equipment was seen in the crawl space areas observed.	N/A
	Spray Fireproofing/ Insulation	The underside of the deck was covered with insulation panels. Few panels have fallen. Spray Fireproofing/ Insulation deficiencies: • Fallen insulation panels	Average

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

Rusted frame on access door

Overturned soil retainers

Saturated soil & drainage paths

Water infiltration at perimeter

Exposed Structure

Honeycombing on perimeter beam

Exposed reinforcement under beam

Mildly corroded bar joists

Pipes, Ducts, Equipment & Fireproofing

 Missing insulation panels	 Corroded pipe and missing hanger	

CRAWL SPACE – Zilker ES – Classroom Building (BLDG-146D)

Building Purpose	Boiler House
Inspection Date	August 31, 2016
Inspection Conditions	76° - Sunny & Dry

Crawl Space System Deficiency Overview

Building "D" has a slab-on-grade foundation (no crawl space).

Zilker 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.

Building A Recommendations

Soil, Drainage, Ventilation & Access

1. Investigate need for site re-grading to promote positive drainage away from the building perimeters.
2. Investigate need for additional ventilation.
3. Improve existing access points into crawl spaces (find keys, remove screwed down cover, etc.).
4. Determine whether corrugated soil retainers are made with asbestos and replace if necessary.
5. Raise areaway curb heights so top of curbs are 4" minimum above surrounding ground.
6. Clean hatch frames/doors & protect from further corrosion.

Exposed Structure

1. Perform structural analyses to determine whether the floor channel original sections have adequate structural capacity.
2. Repair precast channels to restore structural capacity or retrofit precast channels for additional structural capacity if needed. Repair work would consist of cleaning corroded rebar and patching spalled areas with a structural concrete repair product. Retrofitting channels would likely consist of widening channel joists and adding reinforcement to the structural section or sandwiching with epoxied and bolted steel plates.
3. Clean any exposed corroded reinforcement or embedded/attached steel items and protect from further corrosion by patching surrounding concrete or painting metal with ZRC (whichever is applicable).

Pipes, Ducts, Equipment & Fireproofing

1. Repair leaking pipes.
2. Replace or clean corroded cast iron pipes & protect from further corrosion.
3. Replace heavily corroded hangers/supports.
4. Replace degraded/moldy/missing pipe insulation.
5. Reconnect detached conduit to structure.

Building B Recommendations

Soil, Drainage, Ventilation & Access

1. Re-grade as needed below suspended floor framing with low clearance to allow access further into crawl space, or further investigation is needed with camera to asses.

Building C Recommendations

Soil, Drainage, Ventilation & Access

1. Replace overturned concrete retainers.
2. Replace steel access door and frame.
3. Investigate water infiltration at perimeter of building.

Exposed Structure

1. Add concrete cover to exposed rebar under interior floor beam.

2. Monitor corroding steel bar joists.

Pipes, Ducts, Equipment & Fireproofing

1. Replace missing pipe hangers.
2. Replace fallen insulation panels.

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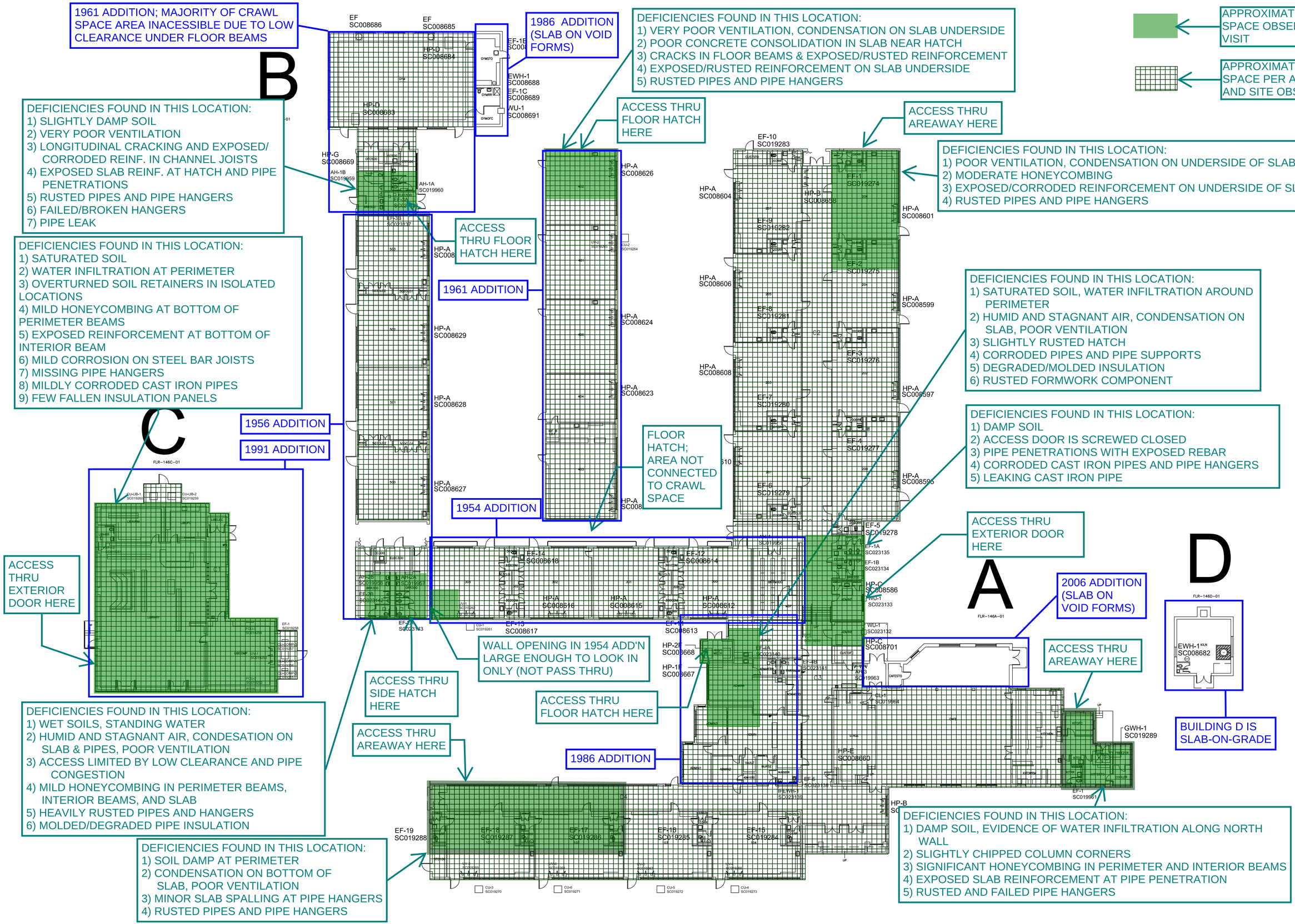

AUSTIN I.S.D.

DEPARTMENT OF CONSTRUCTION MANAGEMENT

ZILKER ELEMENTARY SCHOOL

1900 Bluebonnet Ln.
Austin, Texas

FLOOR PLAN
1ST FLOOR

APPROVALS		
DRAWN	CHECKED	APPROVED
J.R.		
04/16/12		
DWG: 146-FLR-01		SHEET
DRAWING SCALE		
1/16" = 1'-0"		1 OF 1

Zilker ES Site Summary

Site/Civil Assessment

Address	1900 Bluebonnet Ln, Austin, TX 78704
Number of Permanent Campus Facilities	4
Original Year of Construction	1950
Total Campus Area	12 acres
Data Collection Method	Desktop

Introduction

The Zilker ES campus is located at 1900 Bluebonnet Ln. in Austin, Texas. Zilker ES was established in 1950, and consists of the main campus building housing the administrative offices, classrooms, and cafeteria. There are also a standalone classroom building and a standalone library. The fourth building is a boiler house.

Parking and Drives

Parking and Drives	Configuration	Size (SF)
Visitor Parking	- CB - HC	-
Staff Parking	48 CB 2 HC	14,470
Student Parking	No	-
Parent Drop Off	No	-
Service / Mechanical Yard	Yes	2,000
Bus Drop-Off Area	Yes	6,380

HC – Accessible Parking, CB – Combined Parking

System Deficiency Overview

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Site Improvements	Roadways	No site observation was performed. Via Google Earth review, the roadways were observed to be asphalt with concrete driveways. The roadways were observed to be in poor condition. Some areas of the roadways were observed to have severe cracks, potholes, and deterioration.	Poor
	Parking Lots	No site observation was performed. Via Google Earth review, the parking lots were observed to be asphalt. The parking lots were observed to be in average condition. Some areas of the parking lots were observed to have cracks and minor deterioration.	Average
	Pedestrian Paving	No site observation was performed. Via Google Earth review, the pedestrian paving was observed to be concrete. The pedestrian paving was observed to be in average condition. Some areas of the pedestrian paving were observed to have cracks.	Average
	Site Development	No site observation was performed. The site development primarily consists of the main campus building, roadways, parking lots, and playfields. The site development is in poor condition. The staff reported the parking lots are undersized. The trash receptacles were observed to not be placed on concrete pads.	Poor
	Landscaping	No site observation was performed. Via Google Earth review, the site	Average

		landscaping primarily consists of grass, shrubs, and trees. The landscaping was observed to be in average condition. Some areas of landscape were observed to have erosion.	
Site Utilities	Water Supply	Water supply was not observed and staff did not report any issues.	N/A
	Sanitary Sewer	Sanitary sewer was not observed and staff did not report any issues.	N/A
	Storm Sewer	Storm sewer was not observed. Staff reports indicate the storm sewer is in poor condition. Staff reported that area drains between wings clog and are undersized. Staff reported water ponds on the south side of 500 wing.	Poor
	Other Site Mechanical Utilities	Other site mechanical utilities were not observed and staff did not report any issues.	N/A

Site Improvement Deficiency Examples

Roadways

Parking Lots

Landscaping

Site Development

		

Play Fields

Areas presented in table are approximate. Parts of this are in Little Zilker Park.

Playfields	Count	Size (SF)
Basketball Courts	1	6,375
Tennis Courts	2	11,825
Soccer/Multi-Purpose	-	-
Baseball Field	-	-
Bleacher Seating	-	-
Track	1	1,385 LF
Green Space	1	192,330
Football Field	-	-
Playscapes	3	11,600

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Playfields	Basketball Courts	The basketball courts were not observed and staff did not report any issues.	N/A
	Track	No site observation was performed. Via Google Earth review, the track appears to be gravel. The track is in average condition. The track was observed to have some areas of erosion.	Average
	Tennis Courts	The tennis courts were not observed and staff did not report any issues.	N/A
	Green Space	No site observation was performed. Via Google Earth review, the green space was observed to have some bare spots and erosion.	Average
	Playscapes	The playscapes were not observed and staff did not report any issues.	N/A

Track

Summary of Recommendations

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

Site/Civil Recommendations

Roadways

1. Replace roadways and driveways that have cracks, potholes, and deterioration.

Pedestrian Paving

1. Replace pedestrian paving that have cracks.

Site Development

1. Analyze the current site conditions and investigate whether additional parking can be constructed to solve the parking issues reported by staff.
2. Construct concrete pads for the trash receptacles.

Storm Sewer

1. Analyze the current drainage system and investigate whether storm sewer infrastructure or grading can solve flooding issues.

Track

1. Analyze the current drainage system and investigate whether storm sewer infrastructure or grading can solve erosion issues.


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N
ANN ARBOR AVE.
BLUEBONNET LN.
RUNDELL PLACE
Some areas of the track were observed to have erosion.
Some areas of the roadway were observed to have severe cracks, pot holes, and deterioration.
Some areas of the pedestrian paving were observed to have cracks.
Trash receptacles were observed not to be located on concrete pads.
Some areas of the roadway were observed to have severe cracks, pot holes, and deterioration.
Staff reported the number of parking spaces was insufficient.
Austin
Independent School District
ZILKER ELEM. SCHOOL
Date: March 5, 2012
Scale: 1"=100'