Becker Elementary School Site Summary

Address	906 W. Milton Street Austin, TX 78704
Number of Permanent Campus Facilities	4
Original Year of Construction	1936
Total Campus Building Area (combined)	59,669 SF

Introduction

The Becker Elementary School campus is located at 906 W. Milton Street in Austin, TX. Becker Elementary School was established in 1936, and consists of the primary school along with three additional campus buildings. The permanent campus buildings include the Main School Building (BLDG-104A), the Mechanical Building (BLDG-104B), the White House (BLDG-PS035), and the Green House (BLDG-PS036). The White and Green House buildings are houses repurposed for specialty education. They are located across Milton Street from the Main School Building.

Main School Building – BLDG-104A

Building Purpose	Administrative, Classrooms, Cafeteria, and Gymnasium
Building Area	56,835 SF
Inspection Date	July 13-14, 2016
Inspection Conditions	101°F - Sunny
Facility Condition Index	

System Deficiency Overview

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

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior of the building consists of a brick façade with plaster accents. The exterior walls appeared to be in good condition, with isolated areas of discoloration.	Good
	Exterior Windows	The exterior windows vary between single-hung windows in aluminum frames, fixed narrow windows in aluminum frames and glass block. The single-hung windows sit atop concrete sills. The windows were in conditions ranging from good to poor. Some windows in metal frames, original to construction, had deteriorated sealant and rusting frames. The windows in the annex building, original to construction, were loose and rattled in the wind. Some windows frames were rusting. Most of the sills were stained and discolored. The majority of windows were in good condition, but with dirtied frames. It was reported that the classroom windows on the second floor had problems with leaks, but no damage was detected.	Average
	Exterior Doors	There are multiple exterior doors leading into the building. They are metal with narrow lites and are set in a storefront system. The exterior doors were in average condition with peeling paint and paint bleeding onto the glass. Some of the paint on the frames was worn off.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Roofing	The roof material covering the building varies between built-up asphalt with a granular topping, modified bitumen, and a small portion of single-ply membrane. The roof surfaces were in average condition due to discoloration and ponding. Large swaths of discoloration were observed. A strong sewage odor was blowing from the fan above the kitchen. Portions of the gymnasium roof were slightly depressed and discolored. Ridges and folds in the membrane were also observed. A very large portion of the roof had a 1/2-inch deep layer of ponding water. A pipe leading to RTU-2-11 (roof top unit-2-11) was actively dripping. The underside of the gymnasium eave, which is concrete, was discolored from water. Many areas of ponding were observed on the single-ply membrane roof, and an excessive amount of leaves had collected at the parapet walls.		Average
Interior Construction	Interior Walls	The interior walls are built of CMU (concrete masonry unit), brick, and portions of drywall over steel stud construction. The interior partitions appeared to be in good condition with minor areas of damaged drywall.	Good
	Interior Doors	The interior doors are wood in metal frames. Some doors have narrow lights with acrylic glazing. Some doors have wired glazing. The doors were in average condition, typically undamaged, but some frames and door bases were severely damaged from every day use. The acrylic door lites were very scratched. Door 303 was very difficult to close.	Average
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	There is one metal exterior stair used for fire egress from the annex building. It is a two-run stair with diamond plate treads. Corrosion and damage were not observed on the stair, but a large amount of bird droppings were dried on the metal. The space between balusters was more than four inches clear.	Good
	Interior Stairs	There are three staircases in the building, two in the main building and one in the annex. The stairs are concrete with wood handrails. Two of the stairs are finished in terrazzo. The stairs appeared to be in good condition with only a few minor chips in the terrazzo material.	Good
Interior Finishes	Interior Wall Finishes	The interior wall finishes include ceramic-faced masonry units, unpainted brick, painted drywall, and painted acoustical wall panels. The ceramic-faced masonry wall in the gymnasium had damaged grout and adhesive residue. Some of the paint	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		was excessively peeling, and some brick was water stained. The acoustical panels adhered to the corridor walls had some splits in the fabric. Some areas of damaged drywall were observed as well.	
	Interior Floor Finishes	The interior floor finishes are a combination of terrazzo, wood, and linoleum. There is ceramic tile in the restrooms. The library floor is finished in carpet. The cafeteria is finished with linoleum, and the gymnasium with rubber athletic tile. The terrazzo tiles showed very little sign of wear except at the transitions to linoleum. At the transition, both linoleum and terrazzo were cracking, though it was more extreme in the linoleum. Ridges and dents were also observed in the linoleum flooring. The cafeteria floor was in poor condition due to organic growth and calcium/lime staining. The wood floors in the classrooms were being lacquered at the time of assessment, but were in good condition.	Average
	Interior Ceiling Finishes	The majority of interior ceiling finishes include gypsum with popcorn texture and ACT (acoustical ceiling tile). Some wood wool paneling is present in the building. The ceiling appeared to be in poor condition with water damage and bowing tiles. The ceiling in the kitchen had spotting on the ceiling tile tees, but the nature of the spotting could not be determined.	Poor
Conveying	System not present at facility.		N/A
Plumbing	Plumbing Fixtures	The building consists of male and female restrooms on two floors. The typical restroom has vitreous china hand sinks with manual faucets. There are water coolers throughout the building, typically located near a restroom. One of the urinals in the male restroom on the first floor of the annex building did not flush. The male restroom on the second floor had a toilet with a flush knob that stayed in the flush position. There was a urinal that would not flush. There was no hot water distribution to the sinks, which is typical in elementary schools. One of the sinks in the library was missing the handle for the hot water valve.	Good
	Domestic Water Distribution	The water heaters for this building are located near the cafeteria kitchen, the administrative offices, and the gymnasium. EWH-1 next to C1 COR appeared to be in good	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		condition. GWH-1 in the kitchen appeared to be in poor condition. All pipes connected to the unit were corroded and in poor condition. It was observed that the unit was not being maintained.	
	Other Plumbing	Roof drains were present. Several roof drains were corroded. The roof drains located at A13 on the northeast wing were blocked off by debris. Standing water was present near RTU-2-11 located at A17 above the library. No roof drains were observed at this location.	Poor
Mechanical/ HVAC	The major mechanical equipment consists of split system AHUs (air handling units) located in mechanical rooms, packaged RTUs (roof top units), and thru-wall heat pumps in the majority of the classrooms throughout the building. The AHUs that are located in the mechanical rooms are connected to direct expansion, air-cooled condensers. The condenser units on the roof and throughout the building exterior were in good condition. The AHUs associated with these condensers were in good condition as well. Water was leaking from AHUs -9, -10 and -12 located in the AHU 8 MECH room. The heat pumps in the classrooms appeared to be in average condition. These unites were aged, but functional. The exterior housing was typically rusted and showed signs of wear and tear. The FCU (fan coil unit) in the CU COR as well as HP-16 and HP-12 in the storage closets of the annex building were in poor condition. The exterior housings were corroded or aged. The units did not appear to be maintained on a regular basis. The exhaust fan hoods on the roof appeared to be in average condition. There were signs of hail damage and bent supports on some hoods. The other exhaust hoods were in good condition.		Average
Fire Protection	Fire Alarm	The building (including annex) has a fire alarm system that consists of alarm and signaling devices such as horns/ annunciators, strobes, horn/strobe combos, pull stations, and smoke detectors. The fire alarm system is controlled by the Silent Knight 5820XL addressable control panel. The fire alarm system was observed to be in good condition.	Good
	Fire Protection/ Suppression	The building does not have a fire supporesion system. The building is protected by portable fire extinguishers placed throughout. All observed portable fire extinguishers had inspection tags dated within the last year.	N/A
Electrical	Electrical Distribution	There is a 3-phase pad-mounted utility company	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		transformer bank that serves a 3000A 240/120V, 3P, 4W DELTA switchboard located in the main mechanical room (old boiler room). The pad-mounted utility transformer bank appears to be from the original 1936 construction. In 1998, a 75KVA interior distribution K-13 transformer and additional branch circuit panels were installed to distribute clean 208/120V power to additional loads. This work was done for both the main building and the annex building. In 2009, some panels were replaced, and additional panels were added to the distribution system of the main building. Most of the distribution equipment consists of older panels and switchgear that are from the original construction and are still active. Some of the original panels are in corridor areas, for example the 200-wing. The main switchboard is dated and worn out and has six disconnecting means. There is no disconnecting means to interrupt incoming power to the entire switchboard (i.e., main breaker), which could be considered a potential maintenance issue. The 1938 annex building had a separate electrical service. There is a 3-phase pole-mounted utility company transformer bank that serves a 600A 240/120V, 3P, 4W DELTA distribution panel located in the annex main electrical room. The pole-mounted utility bank appeared to be newer. It was reported that the electrical service to the annex needs replacement. The main distribution panel and branch circuit panels that serve the annex were indeed dated and worn out. There is a 600A main disconnect switch for the main distribution panel that interrupts incoming power to the panel. The facility does not have a lightning protection system. The annex building classrooms have rotary switches for the ceiling fans. These were observed to be functioning; however, there was humming, and the ceiling fans did not run at full speed. The electrical distribution at this facility was observed to be in poor condition. A majority of the assets were corroded. There were also screws missing from the housing enclosure of some of the units that should be replaced. Three panelboards were missing breaker covers, and the bussing was exposed behind the breaker board. This condition could be considered a life safety hazard. An active Federal Pacific panelboard	

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		'1PZF' was in the janitorial closet in the 500-wing. In the kitchen, there was conduit stubbed up through the floor with exposed wires, which could be a potential safety concern. The disposal in the kitchen had an outdated and worn-out combination starter disconnect switch. The clean power transformers added in 1998 were hot to touch and were humming, which could indicate they are overloaded.	
	Lighting	The majority of the lighting at the main school building consists of 2x4 fluorescent fixtures. The 500-wing corridor area has surface-mounted 1x4 fluorescent fixtures. Classrooms have 2x4 lensed fluorescent fixtures. There are no occupancy sensors present in the building. The exit signs appeared to be newer and functioning. Emergency lighting is accomplished by integral emergency lighting on designated exit signs. It was observed that there is inadequate emergency lighting throughout the building, which is a potential life safety issue. Gymnasium administration areas have 2x4 surface-mounted fixtures. The gymnasium has HID (high-intensity discharge) lowbay lighting, and some bulbs were out. There are also lowbay 1x4 fluorescent fixtures, some of which have emergency battery packs. There were some outdated emergency lighting in the gymnasium. The kitchen has 2x4 fluorescent fixtures and no occupancy sensors. The kitchen has one emergency lighting fixture that is not functioning. There is insufficient lighting at the location of panels M and L in the kitchen. The annex building has 1x4 surface-mounted fluorescent fixtures throughout. Restrooms have 2x4 lay-in lensed fixtures. Exit signs are similar to those in the main building; however, none appeared to be functional. There are no occupancy sensors in the annex. It was reported that there is no lighting in the crawlspace and that mechanical room AHU-14 has substandard conditions; however, the lighting was newer and found to be adequate for a mechanical room. Exterior lighting was observed to be lacking at the facility, which could be considered a safety concern.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		Exterior lighting was very dated and worn out. Most is HID, with some CFL (compact fluorescent lamp) fixtures and even some incandescent fixtures. Specifically, it was reported that there was no exterior lighting at the main entrance and by the dumpster and there was poor lighting by the kitchen loading dock. The lighting for the building was in average-to-poor condition. Many interior and exterior light fixtures appeared to be aged past their typical design service life. Observed deficiencies included broken lenses, inconsistent color temperatures, and non-functional fixtures. There are exit signs present in the building, one of which was observed to be from the 1936 original construction. Several appeared to be non-functional at the time of assessment.	
	Communications & Security	There is a public address system in the building. There is a Gemini security system including surveillance cameras at the facility. The building is equipped with telecommunications systems. The security cameras throughout the building are in good condition. However, it was reported that there is poor camera coverage at the exterior of the building, no camera coverage at the annex building (200- and 400-wings), and poor camera coverage at the entry door on the west end of corridor C4, adjacent to room 106. The public address system appeared to be in average condition.; however, it was reported that the corridors, portables, and various rooms in the main building and annex building have no public address services. The school bell and clock system appears to be from the original construction. There is an outdated Dukane public address system located in the gymnasium, which appears to be serving the gymnasium and the cafeteria. The main backbone equipment for the telecommunications system is located in an inaccessible room. Wi-Fi access points are present throughout the facility and appeared to be in good condition.	Poor

Exterior System Deficiency Examples

Exterior Walls

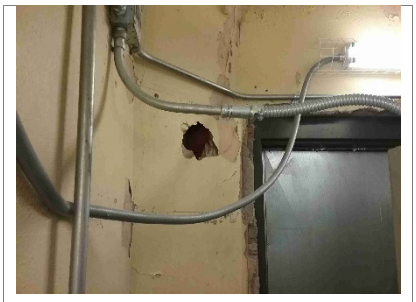
Exterior Windows

Exterior Doors

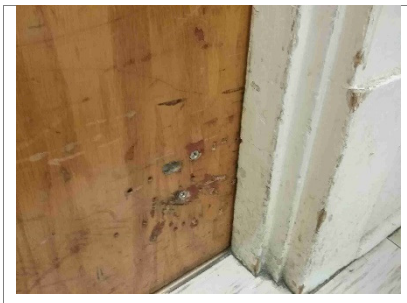
Roofing Deficiency Examples


Interior Construction Deficiency Examples

Interior Walls



Interior Doors



Stairs Deficiency Examples

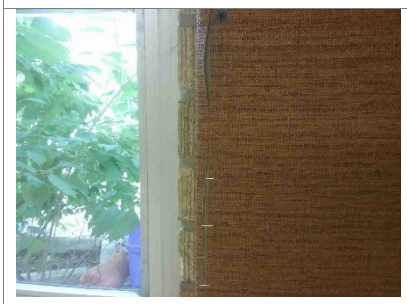
Exterior Stairs


Interior Stairs

Interior Finishes Deficiency Examples

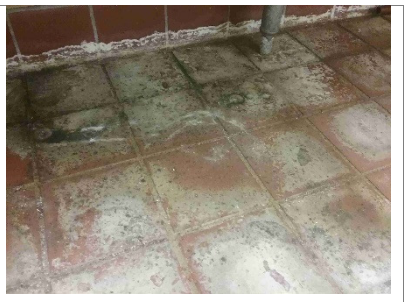
Interior Wall Finishes



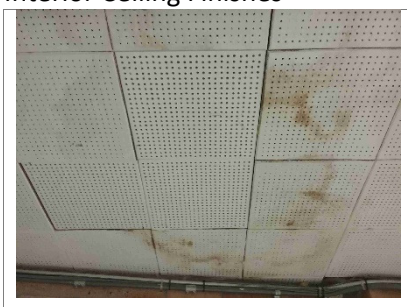




Interior Floor Finishes



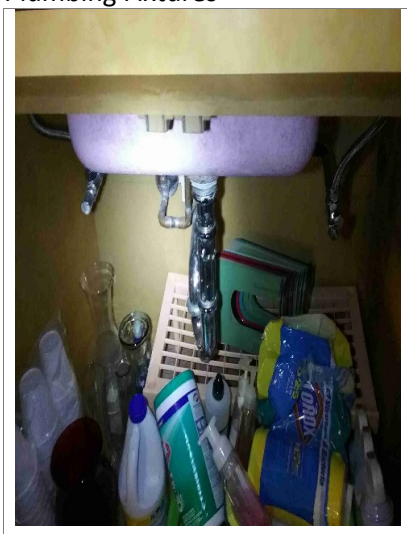
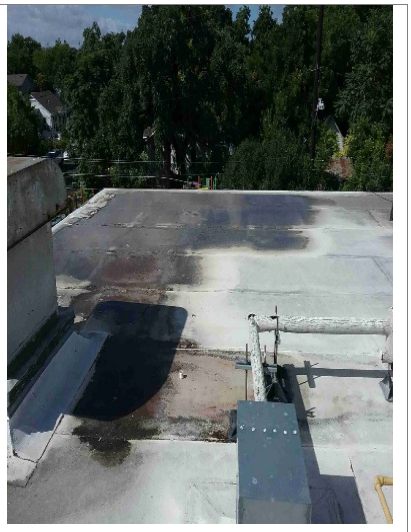


Interior Ceiling Finishes



Plumbing System Deficiency Examples

Plumbing Fixtures

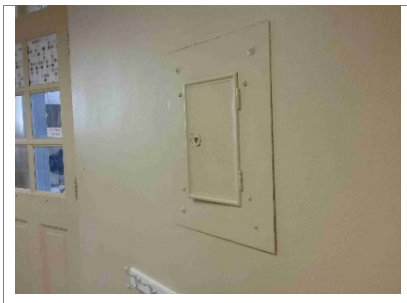
Domestic Water Distribution

Other Plumbing

Mechanical/HVAC System Deficiency Examples

Electrical System Deficiency Examples

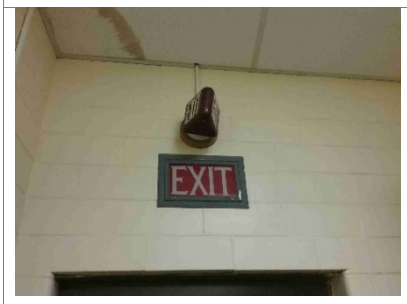
Electrical Distribution



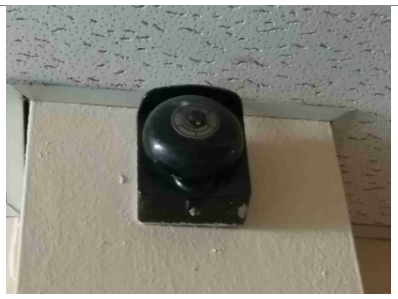


Lighting




Communications & Security



Mechanical Building – BLDG-104B

Building Purpose	Mechanical Building
Building Area	499 SF
Inspection Date	May 13, 2016
Inspection Conditions	101°F - Sunny
Facility Condition Index	

System Deficiency Overview

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

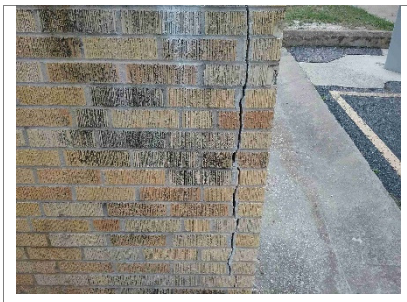
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior of the building consists of a brick façade. The exterior walls were in average condition due to age. A centimeter-wide vertical crack was observed in the brick, and an unsealed piping hole was observed. Streaking from the roof parapet was observed, giving the impression of uncleanliness and disrepair. Splattered concrete was also observed near a patched hole.	Average
	Exterior Windows	There are two sets of exterior windows on opposite sides of the building. One is covered with a metal grate, and the other is exposed. The windows consist of single-pane plastic glazing units with metal frames. The panes are opaque. The windows were observed to be in failing condition. The frames were rusted, and some of the window panes were missing.	Fail
	Exterior Doors	There is one entryway located at the east side of the building; these doors are painted wood with a grille on one leaf. The exterior doors were observed to be in poor condition due to age and difficulty operating. The paint and surface of the wood was peeling and splitting.	Poor
Roofing	The roof was inaccessible, but the walls inside the building were stained with water streaks possibly proceeding from the roof.		Average
Interior Construction	Interior Walls	System not present.	N/A
	Interior Doors	System not present.	N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	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 side of the exterior walls consists of unpainted, exposed brick. The wall finishes were observed to be in poor condition. Streaking was prevalent.	Poor
	Interior Floor Finishes	The floors consisted of unfinished concrete. The floors were observed to be in good condition with no visible damage.	Good
	Interior Ceiling Finishes	There is no ceiling in the building, but the underside of the roof is exposed. It consists of unfinished concrete planks. The ceiling was observed to be in poor condition, due to the excessive amount of cracked and broken concrete planks.	Poor
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	System not present.	N/A
	Domestic Water Distribution	System not present.	N/A
	Other Plumbing	System not present.	N/A
Mechanical/ HVAC	The mechanical system for this building consists of an air dryer, a boiler, and a pump. The mechanical equipment in this area appeared to not be operational. The boiler was under repair at the time of assessment, and the internal components of the air dryer were corroded and aged.		Poor
Fire Protection	Fire Alarm	System not present.	N/A
	Fire Protection/ Suppression	System not present.	N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Electrical	Electrical Distribution	The main 3000A 240/120V, 3P, 4W DELTA switchboard that distributes power to the entire campus is located in this room. The pad-mounted utility transformer bank appears to be from the original 1936 construction. In 1998, a 75KVA interior distribution K-13 transformer and additional branch circuit panels were installed to distribute clean 208/120V power to additional loads. This work was done for both the main building and the annex building. In 2009, some panels were replaced, and additional panels were added to the distribution system of the main building. Most of the distribution equipment consists of older panels and switchgear that are from the original construction and are still active. Some of the original panels are in corridor areas, for example the 200-wing. The main switchboard is dated and worn out and has six disconnecting means. There is no disconnecting means to interrupt incoming power to the entire switchboard (i.e., main breaker), which could be considered a potential maintenance issue.	Poor
	Lighting	Interior lighting consists of one 2x4 lensed fixture. Exterior lighting appears to be from the original construction. Exterior lighting consists of wall mounted HID (high intensity discharge) fixtures and some fixtures that are from the original construction. The wall mounted HID fixtures are in average condition and the original construction fixtures are non-functional (failed condition). The lighting for the building was observed to be in poor condition. Interior lighting was not suited for the application and was not supported properly. Exterior light fixtures appeared to be aged very much past their typical design service life. Observed deficiencies included broken lenses, inconsistent color temperatures, and non-functional fixtures. There are no exit signs and no emergency lighting present in the building.	Poor
	Communications & Security	System is not present.	N/A

Exterior System Deficiency Examples

Exterior Walls




Exterior Windows

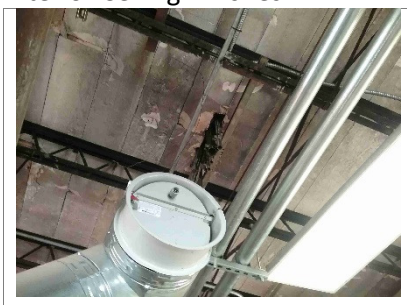

Exterior Doors

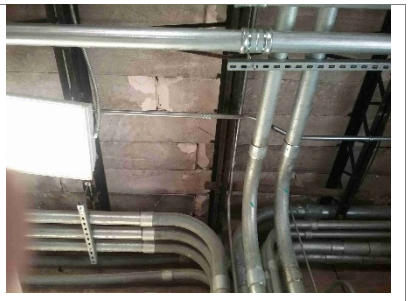
Interior Construction Deficiency Examples

Interior Walls

Interior Finish Deficiency Examples

Interior Ceiling Finishes



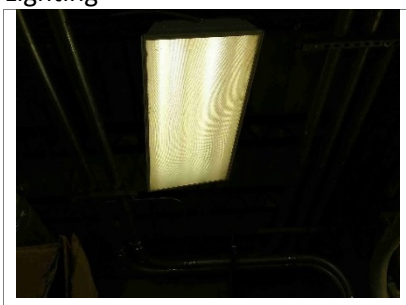


Mechanical/HVAC System Deficiency Examples

Electrical System Deficiency Examples

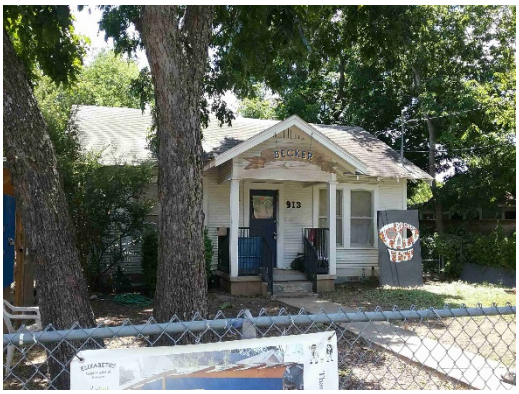
Electrical Distribution

Lighting



House (White) – BLDG-PS035

Building Purpose	Specialty Classes and Administration
Building Area	1,237 SF
Inspection Date	May 13, 2016
Inspection Conditions	101°F - Sunny
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 White House is constructed of wood siding over wood stud framing. The exterior walls appeared to be in average condition due to their age. The base of the wood siding was splitting and deteriorating in areas, and the corners of the building were deteriorating as well. The surface of the walls were dirty and littered with cobwebs.	Average
	Exterior Windows	The exterior windows consist of double-hung windows in wood frames behind insect screens in metal frames. There are windows on every side of the house, totaling approximately 20 units. The windows appeared to be in average condition due to their age. The paint on the frames and sills was peeling at each window, and wasp nests were prevalent between the screens and windows. Some screens were disconnected at the corners, allowing this intrusion. From the inside of the house, cracks were observed at the corners of the window frames, and one window was sealed sloppily after the installation of a window unit.	Average
	Exterior Doors	There is one main public entryway located at the north side of the building; this door is painted wood with half glazing. The back door to the house is also wood with glazing, situated behind a screen door in a wood frame. The side door is solid wood. The exterior doors appeared to be in average to poor condition due to age. The front door and back screen door appeared to not be plumb, and the back screen	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		door did not fully close. The frames were extremely dirty and splitting, but the door leafs themselves were in good condition.	
Roofing	The roof material covering the building is asphalt shingles. The roof surfaces were in average condition, showing signs of discoloration at the edges of the roof.		Average
Interior Construction	Interior Walls	The interior partitions are predominantly constructed of wood stud framing finished with painted drywall. The interior partitions appeared to be in average condition with instances of minor cracking and chipping throughout all wall surfaces. Diagonal hairline cracks were observed at every window and door frame.	Average
	Interior Doors	The interior doors are wood in wood frames. One door has glazing. The interior doors appeared to be in average condition. One door was not plumb in the frame, exhibiting a large gap at the top of the door. Another door had peeling paint and messily painted edges at the glazing. The bases of some doors were deteriorating.	Average
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	There is a short concrete stair and stoop at the front door. There is also a ramp leading to the side door constructed of wood posts and planks. The exterior stairs were in average to poor condition due to age. Portions of the concrete were chipped away, and the paint finish was almost worn completely away. The wood ramp was worn from weather and use. The wood was unsealed, creating a potential for splintering, and the boards were uneven.	Poor
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The majority of interior wall finishes in the White House consist of painted drywall, but there is also fiber-reinforced paneling on the restroom walls. The wall finishes appeared to be in good condition with only minor deficiencies. In the storage closet, the thin wood paneling was splitting and poorly sealed. The paint on the walls was thick and chipping in some areas, especially at the bases of the walls.	Good
	Interior Floor Finishes	The floor of the White House is finished with linoleum floor tile throughout. The flooring appeared to be in poor condition as cracking and buckling were observed throughout the	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		linoleum flooring system. Various stains were also observed on the floor finish.	
	Interior Ceiling Finishes	The interior of the White House ceiling is finished with ACT. The ceiling appeared to be in poor condition as most tiles showed signs of damage. The majority of tiles were bowing up at their four corners, and many tiles were deteriorating at the corners. Water damage was observed on various tiles near the walls.	Poor
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	This building has two small restrooms with vitreous china hand sinks and manual faucets. All plumbing fixtures were functioning and appeared to be in average condition. The fixtures were aged, but still operational. The hot water valve in one of the hand sinks did not function. The cold water valves functioned for both hand sinks.	Average
	Domestic Water Distribution	The water heater was inaccessible at the time of the assessment. The unit was most likely sized at less than 25 GPM (gallons per minute). The system had no reported deficiencies.	Average
	Other Plumbing	System not present.	N/A
Mechanical/ HVAC	The mechanical equipment for this building consists of two window units. Small heaters are located in the wall of each of the restrooms. Some corrosion can be seen on the face of these heaters. All equipment appeared to be in average condition and fully functional. Air gaps between the unit and the window were observed at room C1.		Average
Fire Protection	Fire Alarm	The building has smoke detectors. They appeared to be functioning.	Good
	Fire Protection/ Suppression	The building does not have a fire suppression system. Fire extinguishers were not observed in this building.	N/A
Electrical	Electrical Distribution	The building has an overhead single-phase service via a pole-mounted utility company transformer that is located at Briar St. The service panelboard is unlabeled, has a NEMA 3R enclosure, and is located on the exterior of building. The building does not have a lightning protection system. The service panelboard was severely corroded and appeared to be dated from 1985. It is a 120/240V 200A MCB panel. There was also a power receptacle for the thru-wall AC unit that was not secured to the wall properly.	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Lighting	Interior lighting is mostly 2x4 recessed fluorescent fixtures. No emergency lighting or exit lighting is present. Exterior lighting consists of residential type security lights on the building exterior walls, near the entrance, and on the back side of the building. The interior lighting was observed to be in average condition; however, most of the exterior light fixtures appeared to be aged past their design life and seemed worn out. Some observed deficiencies included broken lenses, inconsistent color temperatures, and non-functional fixtures.	Average
	Communications & Security	There is a Gemini security system present and functioning. There is not a public address system at this building. There is a small closet that is being used as an IDF (intermediate distribution frame) room, and all telecommunications cabling is brought to this location for distribution. The IDF in this building also serves the IDF in the Green House. All cabling and devices appeared to be in good condition. Wi-Fi hubs were present. The security system is in poor condition as there are no interior or exterior security cameras present at this building.	Average

Exterior System Deficiency Examples

Exterior Walls

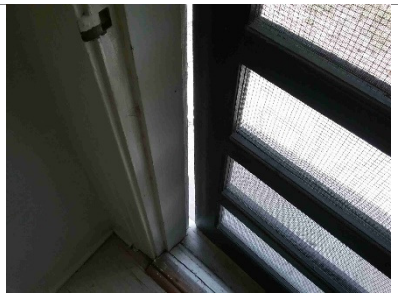


Exterior Windows





Exterior Doors


Roofing Deficiency Examples

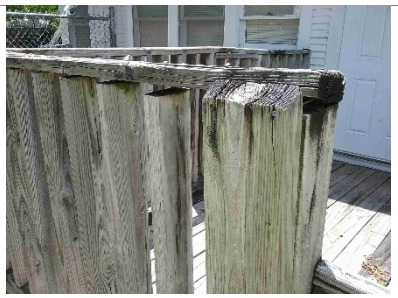
Interior Construction Deficiency Examples

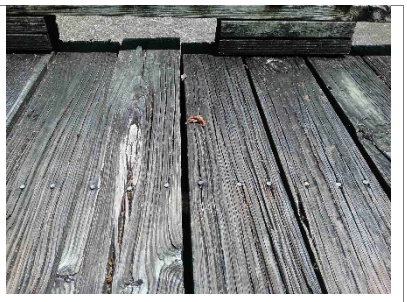
Interior Walls

Interior Doors

Stairs Deficiency Examples

Exterior Stairs

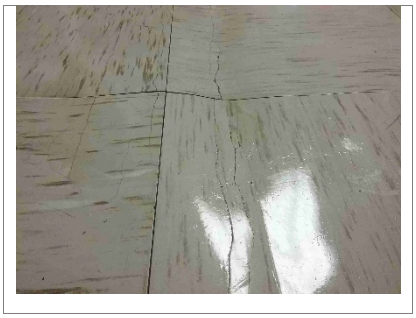




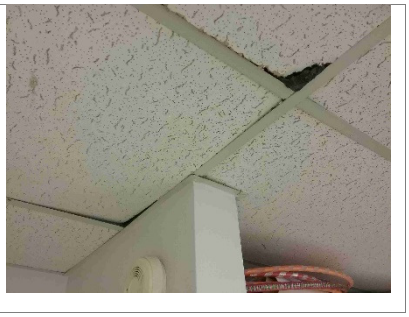
Interior Finish Deficiency Examples

Interior Wall Finishes

Interior Floor Finishes



Interior Ceiling Finishes

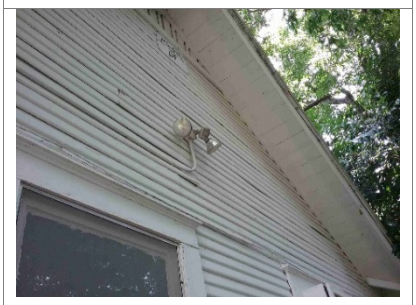


Mechanical/HVAC System Deficiency Examples

Electric System Deficiency Examples

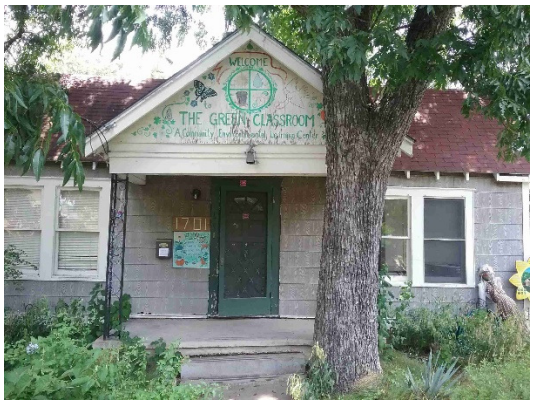
Electrical Distribution

Lighting



House (Green) – BLDG-PS036

Building Purpose	Specialty Classes
Building Area	1,099 SF
Inspection Date	May 13, 2016
Inspection Conditions	101°F - Sunny
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 Green House is constructed of pressed asphalt siding over wood stud framing. The siding is unpainted but finished to resemble wood. The exterior walls appeared to be in poor condition due to their age. The siding was deteriorating in many areas, and some areas were missing pieces of siding. The small wooden door to the crawlspace was missing, possibly providing interior access to pests.	Poor
	Exterior Windows	The exterior windows consist of double-hung windows in wood frames. There are windows on every side of the house, totaling approximately 20 units. The windows appeared to be in poor condition due to their age. The paint on the frames and sills was peeling at each window, and paint was bleeding onto the window panes. The sealant was dried and deteriorated at the windows.	Poor
	Exterior Doors	There is one main public entryway located at the west side of the building; this door is painted wood behind a screen door on a wood frame. The back door to the house is also wood with glazing behind a metal screen. The exterior doors appeared to be in poor condition due to age. The paint on the doors and frames was excessively peeling. The wood thresholds were splitting, and the front door was not plumb.	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Roofing	The roof material covering the building is asphalt shingles with wood eaves. The roof appeared to be in good condition, but the wood eaves were observed to be in poor condition. The paint was peeling excessively.		Average
Interior Construction	Interior Walls	The interior partitions are predominantly constructed of wood stud framing finished with painted drywall. The interior partitions appeared to be in average condition with instances of minor cracking and chipping were observed throughout all wall surfaces. Areas of dented wall board were observed as were hairline cracks near the window and door frames.	Average
	Interior Doors	The interior doors are wood in wood frames. One door has glazing. The interior doors appeared to be in average condition. The paint was peeling on the door frames, and the door handle of one door was slightly detached.	Average
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	There is a metal stair and ramp system leading to the back door. The stairs appeared to be in good condition with no visible signs of wear and damage.	Good
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The majority of interior wall finishes in the Green House consist of painted drywall, but there is also fiber-reinforced paneling on the restroom walls. The wall finishes appeared to be in good condition with minor spots of chipped finish.	Good
	Interior Floor Finishes	The floor of the Green House is finished with linoleum floor tile throughout. The flooring appeared to be in average condition as cracking was observed throughout the linoleum flooring system. Various stains were also observed on the floor finish. The floors appeared dirty and aged.	Average
	Interior Ceiling Finishes	The interior of the Green House ceiling is finished with ACT. The ceiling appeared to be in average condition with various areas of water damage and deteriorated tile corners.	Average
Conveying	System not present.		N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Plumbing	Plumbing Fixtures	This building has two small restrooms located in the corridor. These restrooms have an exhaust fan and toilet with manual flushing mechanisms. The sinks are located on the other side of the corridor. All plumbing fixtures appeared to be in good condition. The fixtures were typically aged, but still operational.	Good
	Domestic Water Distribution	No water heater was observed, as this is a classroom for children. The faucets should not have hot water.	Good
	Other Plumbing	System not present.	N/A
Mechanical/ HVAC	The mechanical equipment for this building consists of two window units and two exhaust fans. All equipment appeared to be in average condition and fully functional. The window units were aged, and air gaps between the units and the windows were observed. Although there were minor deficiencies, the units were functional and provided cool air to the space.		Average
Fire Protection	Fire Alarm	The building has smoke detectors. They appear to be functioning and in good condition.	Good
	Fire Protection/ Suppression	The building does not have a fire suppression system. Fire extinguishers were not observed in this building.	N/A
Electrical	Electrical Distribution	The building has an overhead single-phase service via a pole-mounted utility company transformer that is located on Briar St. The service panelboard is unlabeled, has a NEMA 3R enclosure, and is located at exterior of building. The building does not have a lightning protection system. The service panelboard was very corroded and appeared to be dated circa 1985. It is a 120/240V 150A MCB panel.	Poor
	Lighting	Interior lighting is mostly 2x4 recessed fluorescent fixtures. No emergency lighting or exit lighting is present. Exterior lighting consists of residential type security lights on the building exterior walls, near the entrance, and on back side of building. The interior lighting was observed to be in average condition; however, most of the exterior light fixtures appeared to be aged past their typical design service life and seemed worn. Some observed deficiencies included broken lenses, inconsistent color temperatures, and non-functional fixtures.	Average
	Communications & Security	There is a Gemini security system present and functioning. There is not a public address system present at this building. There is a small closet that is being used as an IDF room, and all telecommunications	Average

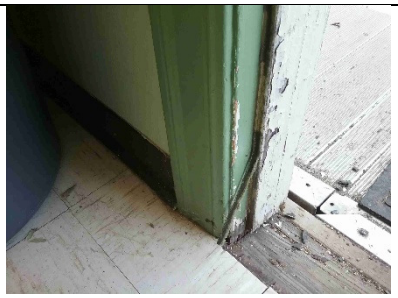
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		cabling is brought to this location for distribution. The IDF in this building is served by the IDF in the White House. The security system is in poor condition as there are no interior or exterior security cameras present at this building. All cabling and devices appear to be in good condition. Wi-Fi hubs were present.	

Exterior System Deficiency Examples

Exterior Walls

Exterior Windows

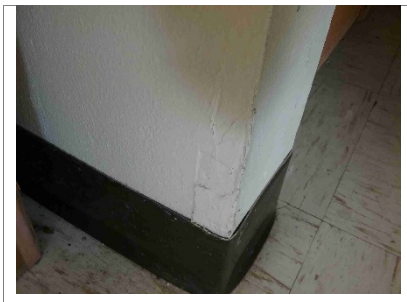
Exterior Doors



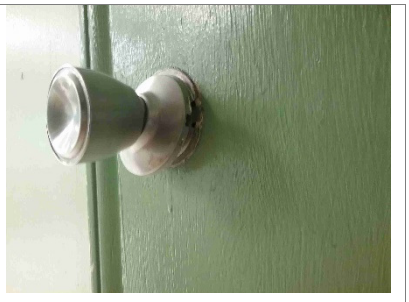
Roofing Deficiency Examples

Interior Construction Deficiency Examples

Interior Walls



Interior Doors

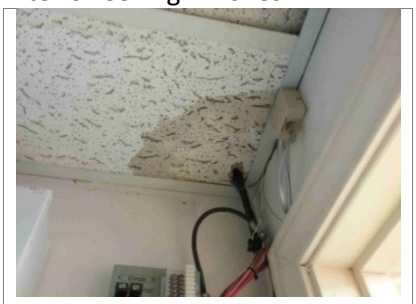


Interior Finishes Deficiency Examples

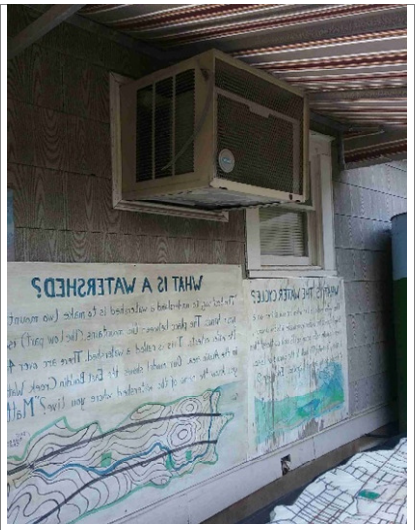
Interior Wall Finishes

Interior Floor Finishes

Interior Ceiling Finishes



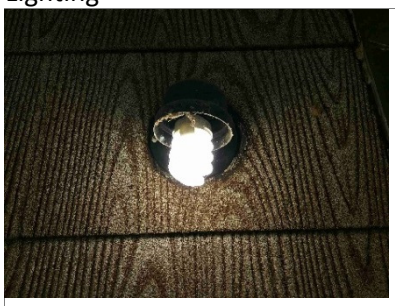
Mechanical/HVAC System Deficiency Examples



Electrical System Deficiency Examples

Electrical Distribution

Lighting



Becker Elementary School Campus Summary of Recommendations

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

Campus Recommendations

Exterior

1. Clean exterior walls and windows.
2. Sand and repaint exterior doors and frames with peeling paint.
3. Patch cracks in the exterior walls and seal any holes.
4. Replace windows in the Green and White Houses with updated double-pane windows in wooden frames.

Interior Finishes

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

Plumbing

1. Continue preventive maintenance on aged plumbing fixtures and plan for replacement in the future as fixtures continue to age in the facilities.
2. Clean all roof drains.
3. Repair or replace any damaged or missing piping insulation as needed at all facilities.
4. Repair pipes connecting to GWH-1 located at the cafeteria kitchen.

Mechanical/HVAC

1. Repair all RTU condensate lines
2. Repair or replace any damaged or missing piping insulation as needed at all facilities.
3. Resolve all corrosion issues that were observed to improve efficiency and prevent equipment malfunction.

Electrical

1. Immediately provide missing breaker cover plates for all electrical equipment that were noted, 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 light fixtures with LED (light-emitting diode) light fixtures with dimming capabilities.
5. Replace all existing exit signs with LED fixtures, and add more exit signs where required for all buildings.
6. Provide additional cameras where required for all buildings, particularly at all building entry access points. Additionally, recommend installing card access readers at these access points.
7. Provide lightning protection systems for all buildings as required.
8. Provide egress lighting where required for all buildings.
9. Replace all Federal Pacific panelboards at the facility.

Main School Building Recommendations

Exterior

1. Repair the remaining leaking exterior windows, and resolve reported water intrusion at stairwell.
2. Investigate and block access points for pests through the crawlspace or the ceilings.
3. Replace exterior stair balustrade with metal balustrade with properly spaced posts. Clean stairs.

Roofing

1. Further investigate all roof areas observed with standing water to reslope to proper drainage points.
2. Repair area of roof with active ponding from dripping pipe.
3. Further investigate odor originating above kitchen.

Interior Construction

1. Repair damaged walls.
2. Replace rusted doorframes.
3. Replace damaged wood doors.

Interior Finishes

1. Further investigate buckled linoleum tile for foundational deficiencies.
2. Further investigate organic growth on kitchen floor and ceiling. Replace tiles and conduct air quality testing.
3. Ensure all door lites are laminated glass, not acrylic.
4. Replace damaged acoustical wall panels.

Plumbing

1. Repair hot water valve handle under library sink.

Mechanical/HVAC

1. Repair leakage from AHUs -9, -10, and -12.
2. Replace HP-12 and HP-16 in storage closets of annex building.
3. Remove debris that is blocking roof drains located at A13.
4. Insulate the condensate line for RTU-1-11.

Fire Protection

1. Continue annual inspections of the portable fire extinguishers.

Electrical

1. Replace all panelboards in the corridors as they appear original to construction and severely aged past typical design life. Install new panelboards in secure locations, out of corridor areas. Intercept and extend existing circuits to new locations as required.
2. Replace all outdated electrical switchgear and panelboards in the building. Ensure that a main circuit breaker is provided in the new main switchboard to interrupt all incoming power to the switchboard.
3. Replace all outdated electrical switchgear and panelboards in the annex building. Ensure that a main circuit breaker is provided in the new main distribution panel to interrupt all incoming power to the panel.
4. Replace combination starter disconnect switch for the disposal in the kitchen.
5. Upsize the clean power transformers (that were added in 1998), and upsize any associated branch circuit panels that these transformers feed.
6. Provide a public address system in the corridors, portables, and various rooms in the main building and annex building as required. Upgrade the public address facilities that serve the gymnasium and cafeteria.
7. Upgrade the school bell and clock system.
8. Verify the condition of telecommunications systems in the building, as it was inaccessible. Add additional data drops in classrooms as requested by the facility staff.

Mechanical Building Recommendations

Exterior

1. Replace windows.
2. Replace exterior doors.

Interior Construction

1. Further investigate concrete roofing for structural stability and replace if necessary.

Interior Finishes

1. Clean interior of walls.

Mechanical/HVAC

1. Replace air dryer and pump.
2. Boiler needs to be repaired.

Electrical

1. Replace all outdated electrical switchgear and panelboards.
2. Provide new public address and security systems.
3. Provide new fire alarm devices and tie back to existing fire alarm system.
4. Provide new interior and exterior lighting.

White House Recommendations

Exterior

1. Repair damaged wall siding.
2. Scrape excess paint from surface and repaint.
3. Plumb exterior doors and reconstruct wooden door frames.
4. Reconstruct the wooden ramp with sealed wood or metal ramp system.
5. Remove remaining paint from front entry stairs.

Interior Construction

1. Patch and paint hairline cracks in walls and partitions.
2. Plumb interior doors.

Interior Finishes

1. Refinish interior of storage closet where wood paneling is present.
2. Scrape excess paint from base of walls and refinish.
3. Clean floors.
4. Further investigate buckling linoleum tile for foundation issues.

Plumbing

1. Repair the hot water valve in the restroom if this is intended to have hot water flow.

Mechanical/HVAC

1. Seal the air gap between the AC unit and the window located at C1.
2. Clean and repair the rusted heaters located in the restrooms.

Fire Protection

1. Continue inspections of the smoke detectors.

Electrical

1. Replace the outdated electrical service entrance panelboard.
2. Provide new public address and security systems.
3. Provide new exterior lighting.

Green House Recommendations

Exterior

1. Repair damaged wall siding.
2. Construct a new access hatch for the crawlspace.

Roofing

1. Refinish wooden roof eave.

Interior Construction

1. Patch and paint hairline cracks in walls and partitions.
2. Plumb interior doors.
3. Repair loose door knob on interior door.

Interior Finishes

1. Investigate flooring underneath linoleum to see if the finish can be used instead of linoleum. If so, remove linoleum flooring. If not, repair damaged tiles.

Mechanical/HVAC

1. Seal the air gap between the AC units and the windows.

Fire Protection

1. Continue inspections of the smoke detectors.

Electrical

1. Replace outdated electrical service entrance panelboard.
2. Provide new public address and security systems.
3. Provide new exterior lighting.

CRAWL SPACE – Becker ES – Main School Building (BLDG No. 104A)

Building Purpose	Administrative, Classrooms, Gym, and Cafeteria
Inspection Date	August 26, 2016, (Morning)
Inspection Conditions	89° - Sunny & Dry

Crawl Space System Deficiency Overview

NOTES CONCERNING CRAWL SPACE OBSERVATIONS: Floor access points per original plans were either never installed or had been covered in the past. Access to crawl space was only possible through three areaways on the north side of the building. One areaway was too shallow to permit entry. The other two areaways were accessible but once below the building, it was clear the underslab void space was not intended to be used as a crawl space: void height between bottom of suspended interior beams and top of soil below was roughly 6". Due to these limitations, the bulk of the underslab areas could not be observed.

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 that was visible in the crawl space was dry and did not show signs of shrinkage/swelling caused by regular water infiltration. No drainage system was visible in the crawl space areas observed. No deficiencies were observed.	Good
	Soil Retainers	N/A - No soil retainers were specified in the construction documents and none were found during site visit.	N/A
	Areaways/Ventilation	Three areaways were found during the site visit. The void space below the original building was accessed via an east-side areaway. The void height between the exterior grade beam and the subgrade was approximately 6" and was thus not accessible. The other two areaways present were accessible but neither areaway contributed to ventilation: one had the remnants of a door covering the areaway and the other had a door blocking the opening into the crawl space. It is unclear when and why the areaways were blocked. No other form of ventilation was observed for the crawl spaces. The two west-most areaways had rusting around the access hatch doors. Areaway/ventilation deficiencies: • Lack of ventilation • Rust on areaway frames and doors inside areaways	Poor

	Access Hatches	Two access hatches were found inside the two west-most areaways. Both access hatches were rusted. The middle access hatch was missing its door. Access hatch deficiencies: • Rust on frame and door of access hatches • Middle areaway access hatch was missing door	Average
Exposed Structure	Exposed Columns & Tops of Foundations	The tops of piers were not visible in the crawl space areas observed. The columns extending from the piers were visible in the west-most areaway. The observed column in this location had a large amount of honeycombing in the top of it. Column/Foundation deficiencies: • Honeycombing in the tops of columns	Average
	Exposed Faces of Perimeter Walls / Beams	The perimeter of the crawl space consisted of masonry wall and exterior suspended and ground-supported beams. Minor cracking was found in the masonry next to the center areaway hatch. Formwork nails had been left in the exterior suspended beams. Perimeter wall/beam deficiencies: • Minor cracking in masonry next to the access hatch • Formwork nails left in place and corroded	Average
	Exposed Portions of Interior Floor Beams Above	Interior floor beams were observed in both accessible crawl space locations. In the middle areaway, the interior floor beam had rusted formwork nails still in place. In the far west areaway, the interior floor beam had severe honeycombing. In some parts of the honeycombing, the beam longitudinal reinforcing is visible. Beam deficiencies: • Formwork nails left in place and rusted • Severe honeycombing • Exposed, corroded reinforcing at honeycomb areas	Average

	Underside of Suspended Floor Slabs Above	The slab in both visible crawls space locations consisted of a CIP slab. In the middle areaway, the slab had a spalled area near the exterior wall with exposed, rusted reinforcing. In the west areaway, the slab had extensive honeycombing with some exposed, rusted reinforcing. Slab deficiencies: • Spalling in the underside of slab • Honeycombing n the underside of slab • Exposed and rusting reinforcing at honeycombs	Average
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	Pipes were visible in both accessible locations of the crawl space. Near the middle areaway a group of pipes (approx. 12 pipes with approx. 3" diameter) were observed penetrating vertically through the slab before turning east to exit the building under the perimeter beam. These pipes appeared to be painted white; material is unknown; they were in contact with the ground but did not show any obvious signs of distress. At the western areaway access point, the pipes were cast iron and rusted. Pipe deficiencies: • Rust on cast iron pipes • Pipes on the ground	Average
	Exposed Ductwork	N/A – No exposed ductwork was present in the crawl space areas observed.	N/A
	MEP Equipment	N/A – No mechanical equipment was present in the crawl space areas observed.	N/A
	Spray Fireproofing/ Insulation	N/A – No fireproofing or insulation was present in the crawl space areas observed.	N/A

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

East Areaway below original construction had approximately 6 inches of clearance (not accessible)

Rust on frame and missing door at wall hatch in middle areaway

Rust on door at west areaway access hatch

Exposed Structure

Honeycombing in interior beams, columns, and the underside of the slab

Formwork nails in suspended beam

Exposed reinforcing in slab where concrete has spalled

Cracking in masonry exterior wall at access hatch

Beam is honeycombing, exposed/corroded reinforcing

Pipes, Ducts, Equipment & Fireproofing

 Rust on cast iron pipes	 Pipes on ground	

Becker ES – Campus Summary of Crawl Space Recommendations

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

Main School Building Recommendations

Soil, Drainage, Ventilation & Access

1. Investigate need for adequate ventilation
2. Provide better access into crawl spaces

Exposed Structure

3. Patch and repair beams and slabs with honeycombing and exposed rebar

Pipes, Ducts, Equipment & Fireproofing

4. Clean rust from cast iron pipes & protect from further corrosion

DRAFT

APPROXIMATE LIMITS OF CRAWL SPACE OBSERVED DURING SITE VISIT

APPROXIMATE LIMITS OF VOID SPACE PER AVAILABLE PLANS AND SITE OBSERVATIONS

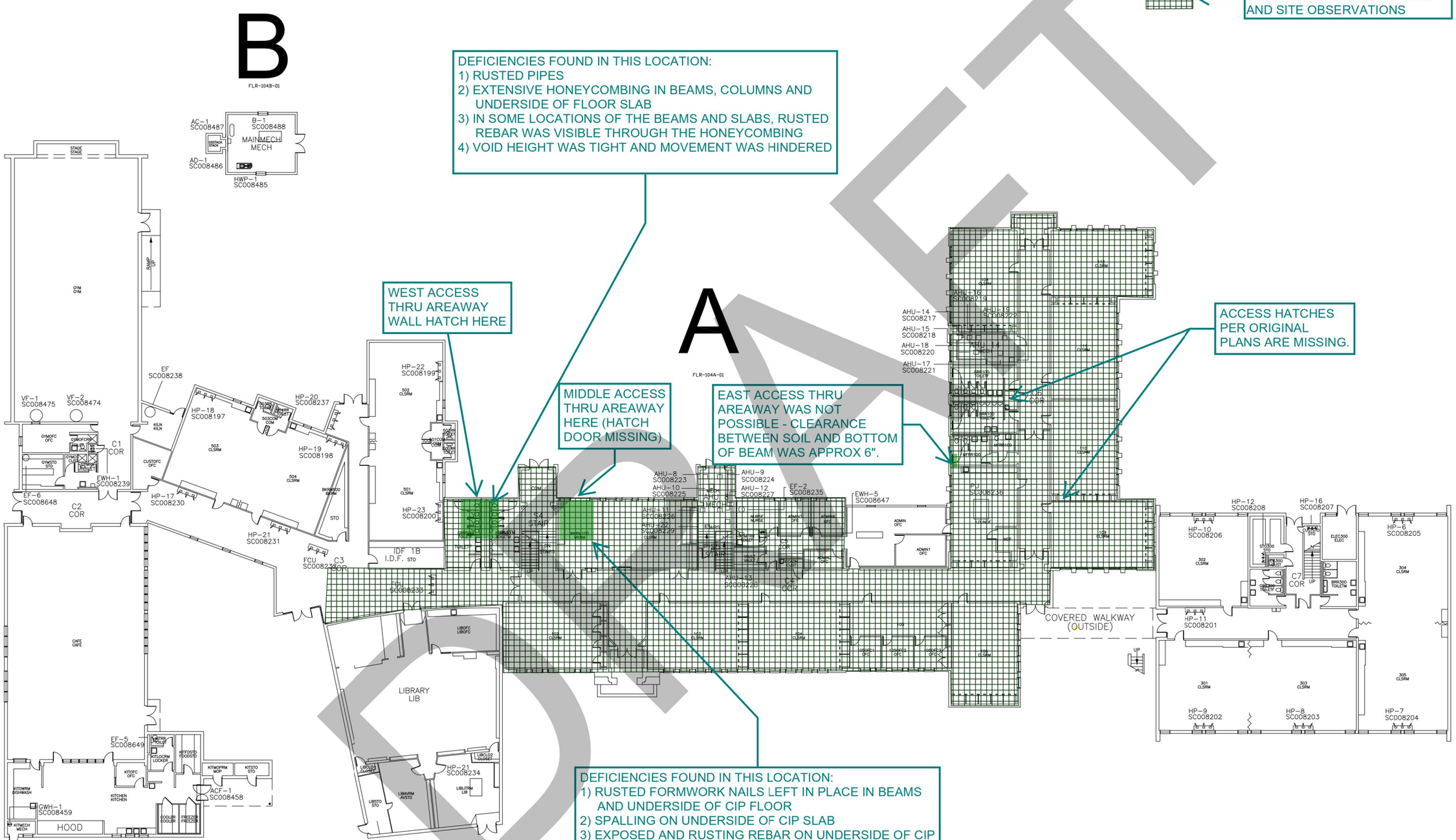
DEFICIENCIES FOUND IN THIS LOCATION:
1) RUSTED PIPES
2) EXTENSIVE HONEYCOMBING IN BEAMS, COLUMNS AND UNDERSIDE OF FLOOR SLAB
3) IN SOME LOCATIONS OF THE BEAMS AND SLABS, RUSTED REBAR WAS VISIBLE THROUGH THE HONEYCOMBING
4) VOID HEIGHT WAS TIGHT AND MOVEMENT WAS HINDERED

WEST ACCESS THRU AREAWAY WALL HATCH HERE

MIDDLE ACCESS THRU AREAWAY HERE (HATCH DOOR MISSING)

EAST ACCESS THRU AREAWAY WAS NOT POSSIBLE - CLEARANCE BETWEEN SOIL AND BOTTOM OF BEAM WAS APPROX 6".

ACCESS HATCHES PER ORIGINAL PLANS ARE MISSING.



DEFICIENCIES FOUND IN THIS LOCATION:
1) RUSTED FORMWORK NAILS LEFT IN PLACE IN BEAMS AND UNDERSIDE OF CIP FLOOR
2) SPALLING ON UNDERSIDE OF CIP SLAB
3) EXPOSED AND RUSTING REBAR ON UNDERSIDE OF CIP SLAB
4) VOID SPACE CLEARANCE WAS TIGHT AND MOVEMENT WAS HINDERED
5) PIPES LYING ON THE GROUND

NORTH

AUSTIN I.S.D.
DEPARTMENT OF CONSTRUCTION MANAGEMENT

BECKER ELEMENTARY SCHOOL
906 West Milton
Austin, Texas

FLOOR PLAN
FIRST FLOOR

APPROVALS		
DRAWN	CHECKED	APPROVED
J.R.		
11/02/09		
DWG:104-FLR-01		SHEET
DRAWING SCALE		
1/16" = 1'-0"		1 OF 2