

Dawson Elementary School Site Summary

Address	3001 S. 1 st Street Austin, TX 78704
Number of Permanent Campus Facilities	3
Original Year of Construction	1954
Total Campus Building Area (combined)	55,301 SF



Introduction

The Dawson Elementary School campus is located at 3001 S. 1st Street in Austin, TX. Dawson Elementary School was established in 1954, and consists of the Main School Building (BLDG-114A) along with two additional campus buildings. These additional permanent campus buildings are the Storage Building (BLDG-114B) and the Stand-Alone Classroom Building (BLDG-114C). The buildings are connected to one another by uncovered sidewalks, but the individual wings of BLDG-114A are connected by covered sidewalks. The classroom are accessed from the exterior. The majority of classrooms were under renovation during the assessment.

Main School Building – BLDG-114A

Building Purpose	Administrative, Classrooms, Cafeteria, Gymnasium
Building Area	45,037 SF
Inspection Date	June 30, 2016
Inspection Conditions	97°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	<p>The exterior walls are composed of double-width brick with pebble inlay. The walls are about 8'-6" high.</p> <p>Renovation construction was occurring on the days of assessment. There were significant holes observed in the exterior walls of the classrooms and construction-related debris scattered around the campus. A penetration in the exterior brick wall in the 400-wing was noted; the penetration may be temporary and related to construction activities. Discoloration was observed on multiple exterior walls of the 400-wing, which could create an environment for organic growth. Spray foam insulation was observed to have been placed in a ventilation opening in the wall and was over-filling the opening.</p>	Good
	Exterior Windows	<p>The exterior window system is comprised of single pane vision glazing in aluminum frames. There is a clerestory band facing the courtyard in most classrooms. The windows seem to be recently installed across the building.</p> <p>The window system appeared to be in good condition, except for the lintels above the 400-wing double-hung windows. The lintel was observed to be rusting. One piece of the exterior soffit was also observed to be damaged. Leaks were reported at windows in the 200-wing, but none were observed.</p>	Good
	Exterior Doors	<p>The exterior doors consist of painted metal double doors set in a metal frame window system. The doors</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>are half glazed with panic hardware.</p> <p>The exterior doors were observed to be in good condition with normal scratches and scuffs observed on the doors and frames. Small dents were seen on some of the hardware release levers.</p>	
Roofing		<p>The roof is composed of many roofing materials including; built-up asphalt with granular topping, modified bitumen and corrugated metal. There are six skylights above the gymnasium which are 4'-0" square. There is also an extensive metal canopy system on the exterior of the 400-wing with metal posts and corrugated metal covering. Neither the walkway covers nor canopy have downspout systems.</p> <p>The roof as a whole was observed to be in average condition with a few deficiencies. It appeared mostly watertight except for the area above the stage. The roof above the stage was inaccessible to observe the relationship to the evidence of leaks below. From a nearby vantage point, deficiencies were observed; at two roof penetrations near the location of the leaks below, the gravel and roofing were sunken in, providing an area for ponding water. Also, there were observed small areas of disturbed granular topping and areas of damp or discolored material. The frames of the skylights were observed to be very rusted and aged. The metal canopy was observed to be in poor condition with extensive dents and leaks. A portion of the roof was being used as a staging area for construction and was not assessed.</p>	Average
Interior Construction	Interior Walls	<p>The interior walls are exposed, unpainted double-width brick construction with ceramic-faced masonry units as a wainscot.</p> <p>The walls were observed to be in good condition with no significant repairs needed. Due to construction activities, the majority of classroom interior walls were not assessed.</p>	Good
	Interior Doors	<p>The majority of doors, including between classrooms, are wood. Most doors are half-glazed, except at restrooms. The majority of wood doors and frames are unpainted with a wax finish.</p> <p>The doors appeared to be worn with nicks and scuffs, especially at the base of the doors. A few doors were excessively damaged. Wear and tear was easily visible on the wooden frames as well.</p>	Average
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	<p>There is one cast-in-place concrete exterior stair between the gymnasium and 300-wing.</p> <p>The stairs appeared to be in good condition with very little wear and tear.</p>	Good
	Interior Stairs	The stairs from the stage area to the cafeteria are constructed of wood with portions covered in carpet.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The stairs and finishes appeared to be in good condition and showed only minimal expected signs of wear.	
Interior Finishes	Interior Wall Finishes	<p>The majority of the walls are exposed, unpainted brick with ceramic-faced masonry units as a wainscot. There are portions of painted CMU (concrete masonry unit). Some wood paneling exists around specialty doors, for example the cafeteria, but it is minimal.</p> <p>Interior wall finishes were dingy. One wall of the stage exhibited streaks in the paint from water coming from the AHU (air handling unit) pipe penetrations. The wood panel wall finish on stage was observed to have large unpatched holes. In the classroom wings, no signs of damage were observed on the wall finishes of the classrooms assessed.. A mildew odor was noticed in two classrooms in the 200-wing, rooms 202 and 204. There was a small tear observed in the wall finish in the librarian's office.</p> <p>One patched wall in a classroom was observed to have been patched with slightly discolored ceramic-faced masonry where the FCU (fan coil unit) had once been.</p>	Average
	Interior Floor Finishes	<p>The interior floor finishes are linoleum tiling, rubber tiles for the gymnasium and sloped areas of the corridor, ceramic tile in the kitchen and carpet in the administration offices. The classrooms are finished with linoleum tile.</p> <p>The floor finishes appeared dingy and aged in the main building corridor. A portion of linoleum tile was observed to be missing in the corridor near the cafeteria. The floor in the kitchen was observed to be in good condition. No cracking nor excessive debris were observed. The ceramic-faced masonry units, acting as the wall base, appeared discolored. In the classroom wing, some of the linoleum floors were observed to be dimpled and bubbling. Room 204 was observed to have very damaged floor tile at the joints, possibly from repeated flooding.</p> <p>The carpet in the administration offices was observed to be worn and aged with small tears. Bubbling of the carpet was observed in a few places.</p> <p>The paint on the concrete exterior walkways was observed to be inconsistent.</p>	Average
	Interior Ceiling Finishes	<i>The majority of the ceiling areas in the administrative offices, library and cafeteria are finished with acoustic ceiling tile (ACT.) The corridor is finished with textured</i>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p><i>plaster and ACT. The kitchen is finished with lay-in water-resistant ceiling tiles. The majority of the building, including all classrooms, is accessed from covered exterior walkways. The walkway canopies are extensions of the roof, and the underside is clad with painted wood wool composite panels. The classroom areas have lay-in ACT ceilings, which follow the slope of the roof. The multiple-person restrooms, entered from the courtyard, have gypsum board ceilings.</i></p> <p><i>The administration ceiling tiles were observed to be out of place.</i></p> <p><i>The library ceiling appeared to be newly installed with no visible deficiencies.</i></p> <p><i>Two significantly water-damaged areas were observed at the AHU piping penetration above the stage. It was reported that leaking over the stage area occurs consistently. In the corridors adjacent to the cafeteria, the textured plaster ceiling was observed to be in average condition, showing damage near piping support connections. The material also looked aged beyond the expected design service life.</i></p> <p><i>Half of the kitchen ceiling area was observed to be aged and discolored. Many of the tees were found to be peeling, which could pose a danger of shedding into the food. The dishwashing area was observed to have intact ceiling tiles, possibly installed more recently.</i></p> <p><i>The ACT ceiling tiles in the corridors were observed to be bowing and mismatched.</i></p> <p><i>Hairline cracks in the walkway canopy material were observed every three to four feet.</i></p> <p><i>Though many classroom ceilings appeared to be newly installed, a few ceiling tiles were observed to be damaged from water, especially in the restrooms adjoining classrooms.</i></p> <p><i>Many of the classroom ceiling panels in the 100-wing and 300-wing had been removed for construction access and were not assessed. Some exterior walkway covering wood wool panels were frayed or extremely damaged. No signs of water damage were observed on the 200-wing ceiling. In the 200-wing exterior walkway, the panel tees showed signs of rust.</i></p>	
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building has public restrooms for men, women, and students, and separate staff restrooms located	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>throughout the facility. These restrooms have vitreous china hand sinks in formica countertops with manual faucets, along with vitreous china, floor-mount and wall toilets with manual flushing mechanisms, and vitreous china wall-hung urinals in the male restrooms with manual flushing mechanisms. There are service sinks found in the janitorial closets and water coolers located throughout the facility, typically near the public restrooms. The restroom plumbing fixtures were observed to be in good condition as the fixtures were typically aged but still operational.</p> <p>It should be noted that the male and female restrooms at the gymnasium (BRRGYM and GRRGYM) were in the process of renovation. The on-site general contractor reported that plumbing fixtures were being upgraded for ADA (Americans with Disabilities Act) compliance and hot water would be added.</p> <p>The building also includes other specialty locations with plumbing fixtures, including a kitchen for the school cafeteria, in-classroom handwashing sinks, and inter-classroom restrooms for staff. These plumbing fixtures were observed to be in good to average condition.</p>	
	Domestic Water Distribution	<p>Plumbing fixtures in the cafeteria kitchen are serviced by a 100-gallon, 200-MBH gas domestic hot water heater unit, which was installed in the last year and observed to be in excellent condition. No other plumbing fixtures in the building at the time of inspection are believed to be serviced with hot water.</p> <p>Domestic water service piping was not observable, as it was buried or located above suspended ceiling, between walls, or in crawl spaces. Staff has reported problems with the water supply shut-off valve(s). Visual assessment only indicated that the apparent primary, 2-inch metered service line from South First Street had dual isolation with readily accessible actuators.</p> <p>Staff interviews identified the concern that domestic water piping is deteriorated and failing.</p> <p>Different wings of the building appeared to be sub-metered. One of these meters, adjacent-south of the Principal's office, had a surface monument with slight damage and positioned directly below a roof leader downspout.</p>	Average
	Other Plumbing	Centralized (piped) roof drainage systems in conjunction with simple sloped roof and	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>gutter/downspout systems were present.</p> <p>Most roof drains appeared to be in place and free of debris. Staff interviews have indicated there are leakage issues with the roof drain(s) located over the kitchen and stage (i.e., roof sections A-20, A-15, and A-02); visual inspection in dry weather did not reveal any apparent deficiencies.</p> <p>Gutters and downspouts appeared to be in good condition; however, the roof leaders on the kitchen exterior exhibited corrosion.</p> <p>It should be noted that two vertical cylindrical polyethylene tanks were staged adjacent to the BLDG 114B; possibly a rainwater harvesting system is planned. Staff interviews have identified the desire to improve building and site drainage.</p> <p>Natural gas piping observed at the exterior of the kitchen area appeared corroded, although valve actuators and other appurtenances appeared in accessible, functional condition.</p> <p>An assumed sanitary sewer 2-way cleanout near the gymnasium male restroom's northern exterior wall was observed without covers.</p> <p>Staff interviews identified the concern that sanitary sewer piping is deteriorated and failing.</p>	
<p>Mechanical/ HVAC</p>		<p>At the time of assessment, full-scale renovation of the building's mechanical/HVAC (heating, ventilating, and air conditioning) systems was in progress; most of the old equipment had been removed, and the new equipment had not yet been installed.</p> <p>The old system consisted mostly of geothermal and water source fan coil console- or ceiling-mounted heat pumps, which provided heating and cooling for classrooms, offices, and restrooms. Each of these units, with the exception of units in the 200-wing and the book room, have been removed. A series of larger RTUs (roof top units) and centralized ducting is planned to provide HVAC for these areas.</p> <p>Major existing mechanical equipment consisted of three 5- to 6--TON air-cooled, gas-heat RTUs (-1, -2, and -3) and were observed to be in average condition with each exhibiting exterior corrosion. The newest unit (RTU-3, installed in 2015) also exhibited condensate leaks and a slightly erratic noise during operation. Staff interviews indicated that RTUs-1 and -2 have approached the end of their expected design service life, although with a generally accepted service life of 20 years and a manufacture date of 2000, about 20 percent of service life remains.</p> <p>A roof top HVAC unit labeled SF-1 on furnished roof plans (roof section A-15) was not in operation, appeared mostly gutted, and overall status and function was unclear. It is possible this unit was abandoned in place.</p>	<p>Good</p>

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>The remainder of the mechanical equipment consisted of smaller packaged split systems, with exterior air-cooled 2- to 10-TON condenser units and nearby 5- to 10-TON indoor modular air handlers or fan coil console units. One 3-TON split system heat pump, which was not identified on furnished roof plans, was located in the southwest quadrant of roof section A-06 and connected to the fan coil console unit in room 404. Most of these units were in good condition, with smooth-sounding operation and a significant portion of service life remaining. A few units exhibited minor deficiencies such as small condensate leaks, slight rattles during operation, or localized corrosion.</p> <p>Staff have expressed concerns with the operation of classroom AC units in the 200-wing. Fan coil console units UV-1 through -4 (located in even-numbered rooms, and supplied by outdoor split system condenser units CU-1 through -4) indicated strong and rapid cold air generation and no major deficiencies. Water source heat pumps in odd numbered 200-wing rooms are to remain.</p> <p>Staff has also reported a condensate leak in the MDF (main distribution frame) room and ductwork issues in the offices, book room, and cafeteria. Due to security constraints, MDF rooms were not accessible, and equipment located above suspended ceilings was not assessed or verified. The ducting visible near the cafeteria (i.e., connected to AHUs-3 and -4) did not present any major deficiencies. No boilers or other heat-generating equipment were observed at the building.</p> <p>One estimated 2.5-TON packaged direct expansion, air-cooled refrigerant system (RU-1) was located above the kitchen, likely providing refrigeration for the kitchen freezer and cooler. It was observed to be in average condition, as it was past its estimated service life of 15 years and exhibited a slight rattle during operation.</p> <p>Roof top EFs (exhaust fans) were from 2006 or 2015 and were observed to be in good condition.</p> <p>On a system level, EFs and venting were found to be in average condition. EF-4 in roof section A-04 exhibited a rattle during operation, and two vents with significant corrosion were observed in roof sections A-14 and A-15, respectively.</p>	
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns/annunciators, strobes, horn/strobe combos, pull stations, and detectors. The fire alarm system is controlled by a 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 suppression system. The building is protected by portable fire extinguishers in rooms marked as such, and most were present and readily accessible. All observed portable fire extinguishers had inspection tags dated within the last year as required.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
<p>Electrical</p>	<p>Electrical Distribution</p>	<p>There are two electrical services to this building. The first service is at the south side of the building. It is overhead via a 175kva overhead utility company transformer and is 120/240-volt 3-phase 4-wire delta 1200-amp, terminating on a service entrance distribution panelboard. The second service is at the north side of the building and is underground via a pad-mounted utility company transformer and is 120/240-volt 3-phase 4-wire delta 1600-amp, terminating on a 1600A 120/240-volt MDP (main distribution panel) located in a mechanical room. The north service feeds a single 150kva distribution transformer located outside the facility, and it steps the voltage down from 240-volt to 120/208-volt. This distribution transformer serves a 400-amp 120/208-volt distribution panelboard that distributes 120/208-volt throughout the building. There is a 50kvar 120/240-volt power factor correction capacitor bank installed at the facility, and it is in good condition. The building does not have a lightning protection system.</p> <p>The electrical distribution equipment is observed to be in poor condition. A majority of the assets were observed with corrosion. Three panelboards were observed as missing breaker covers, and the bussing is exposed behind the breaker board. This condition could be considered a life safety hazard, and breaker covers should be installed immediately.</p> <p>We observed one Federal Pacific panelboard installed in an electrical room. At the time of our visit, there was active construction work occurring on site. The Contractor informed us that part of the scope of the construction work required them to add new breakers and circuits to this Federal Pacific panelboard. Federal Pacific panelboards are known to fail catastrophically, overheat, and cause fires and are a considerable life safety hazard and should be replaced immediately.</p>	<p>Poor</p>
	<p>Lighting</p>	<p>The building's exterior lighting mostly consists of HID (high-intensity discharge) building-mounted luminaires. There is only one two-headed pole-mounted HID fixture in the staff parking lot and only one two-headed pole-mounted HID fixture in the bus/parent drop off area. There are also surface-mounted CFL (compact fluorescent) bowl fixtures mounted to the underside of the exterior canopies.</p> <p>At the time of our visit, there was construction work on-going to upgrade to LED lighting and add occupancy</p>	<p>Average</p>

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>sensor controls in classroom wings 300 and 400. The interior lighting primarily consists of T8 fluorescent luminaires, some of which are direct-indirect.</p> <p>The lighting for the remainder of the building was observed to be in average condition. Many interior and exterior luminaires appeared to be aged past their expected design service life. Observed deficiencies included broken lenses, inconsistent color temperatures, and non-functional fixtures. There are exit signs present in the building, but they appear to be aged past their expected design service life. In general, there appears to be inadequate emergency egress lighting throughout the building. The cafeteria stage lights are simple track lights.</p>	
	<p>Communications & Security</p>	<p>There is a Gemini security system including surveillance cameras in the building. According to facility staff, there are areas of the building that do not have card access. Assessors observed that there are several new exterior cameras installed at the building.</p> <p>There is a Telcor MCC-4 public address/timeclock/bell system in the building, and it was observed to be in poor condition.</p> <p>The building is equipped with telecommunications systems, but the main backbone equipment is located in an inaccessible MDF room and could not be assessed. There is Wi-Fi throughout the facility. However, the facility staff reported that the Wi-Fi connection was very poor in the front office administration areas.</p>	<p>Poor</p>

Exterior System Deficiency Examples

Exterior Walls



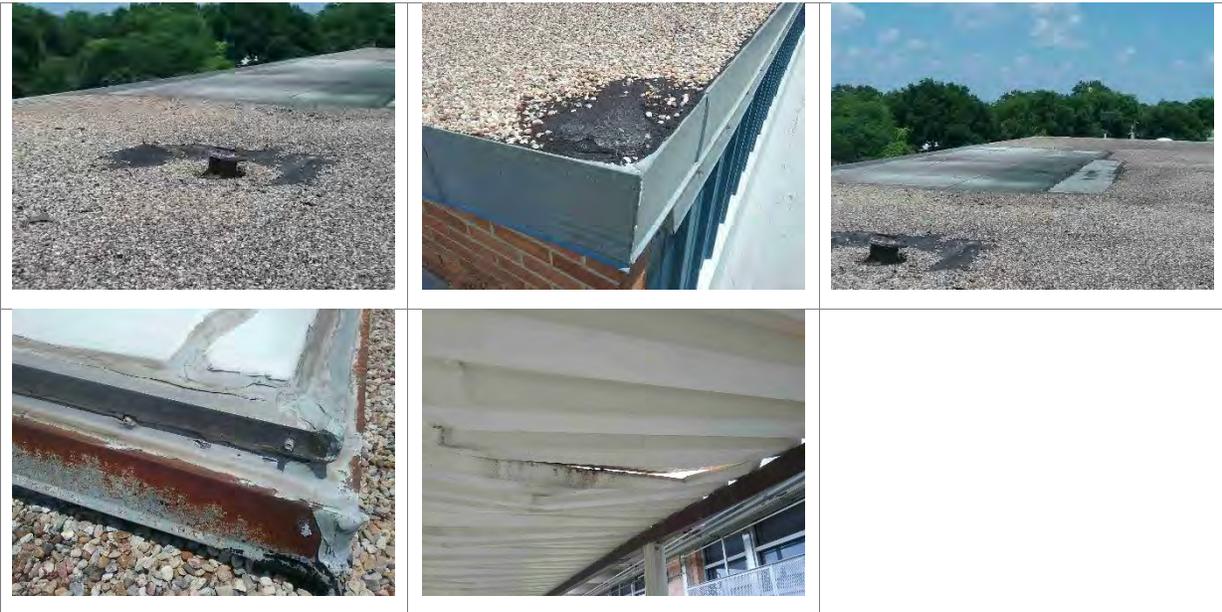
Exterior Windows



Exterior Doors



Roofing Deficiency Examples



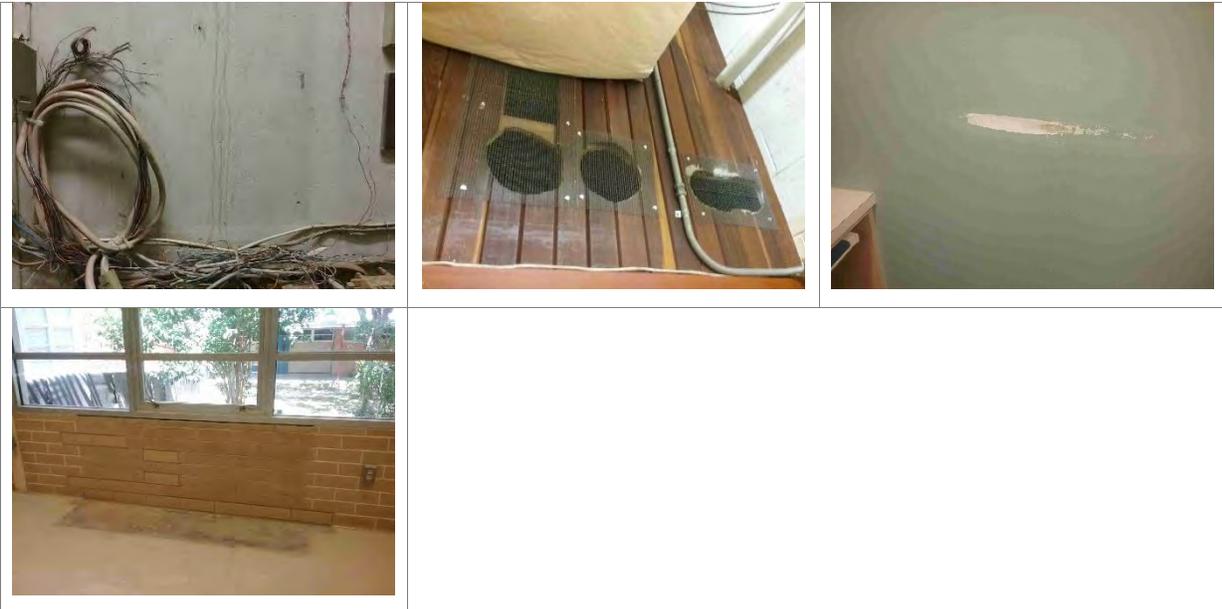
Interior Construction Deficiency Examples

Interior Doors



Interior Finishes Deficiency Examples

Interior Wall Finishes



Interior Floor Finishes





Interior Ceiling Finishes



Plumbing System Deficiency Examples

Domestic Water Distribution

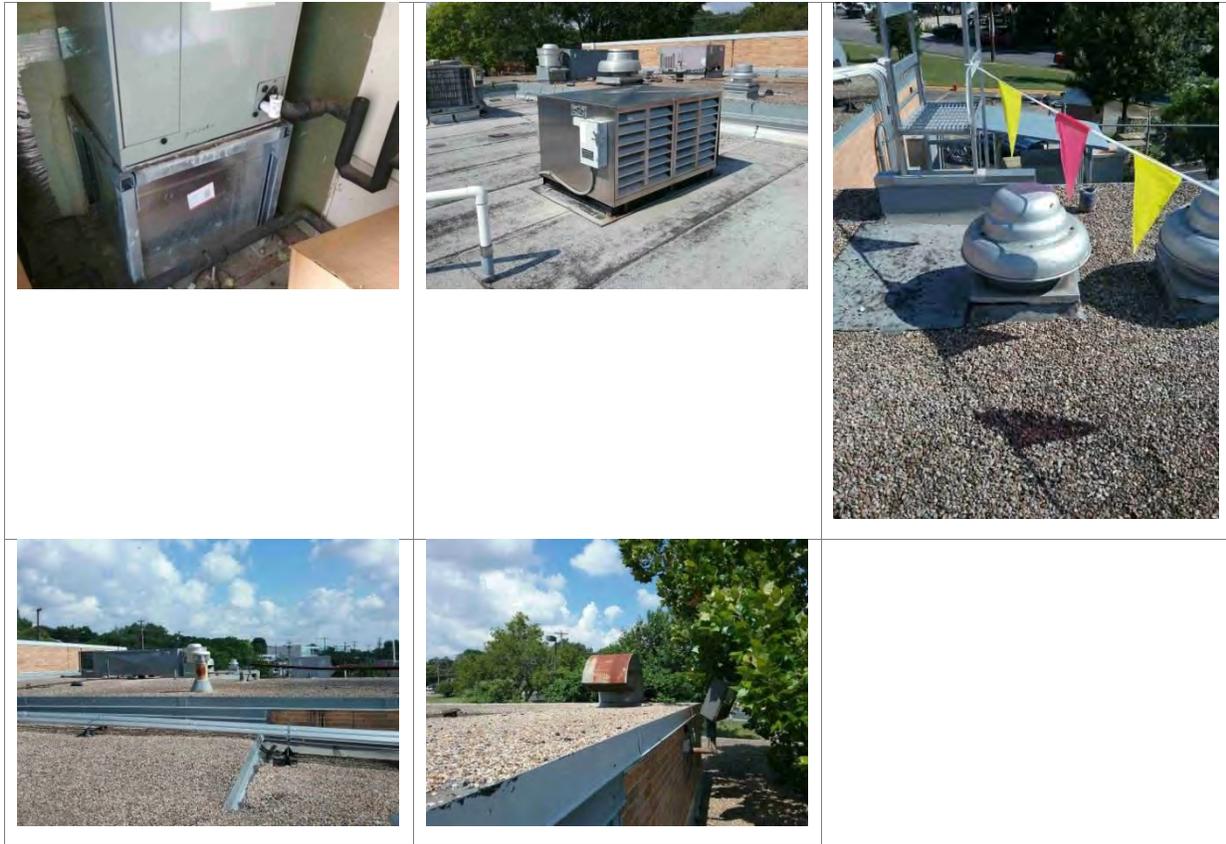


Other Plumbing



Mechanical/HVAC System Deficiency Examples





Electrical System Deficiency Examples

Electrical Distribution





Lighting



Communications & Security



Storage Building – BLDG-114B

Building Purpose	Storage
Building Area	299 SF
Inspection Date	June 30, 2016
Inspection Conditions	94°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 walls of the storage shed are constructed of painted CMU with metal coping around the roof edge. The walls were observed to be in good condition with no visible signs of damage.	Good
	Exterior Windows	System not present.	N/A
	Exterior Doors	The building is accessed by metal double doors in metal frame with a grille in one door leaf. The doors finishes appeared to be in good condition with very minimal signs of exterior exposure, but the doors would not open once unlocked.	Good
Roofing	Roof not accessible.		N/A
Interior Construction	Interior Walls	Interior not accessible as the doors could not be opened.	N/A
	Interior Doors	Interior not accessible as the doors could not be opened.	N/A
	Interior Specialties	Interior not accessible as the doors could not be opened.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	Interior not accessible as the doors could not be opened.	N/A
Interior Finishes	Interior Wall Finishes	Interior not accessible as the doors could not be opened.	N/A
	Interior Floor Finishes	Interior not accessible as the doors could not be opened.	N/A
	Interior Ceiling	Interior not accessible as the doors could not be opened.	N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Finishes	opened.	
Conveying	System not present at building.		N/A
Plumbing	Plumbing Fixtures	The building has one service sink, and it was observed to be in good condition.	Good
	Domestic Water Distribution	Integral piping to the one service sink was observed to be in good condition.	Good
	Other Plumbing	With a single-slope shed roof, this building has no piped roof drainage or gutters. No other exterior piping was visible at the facility.	N/A
Mechanical/ HVAC	System not present.		N/A
Fire Protection	Fire Alarm	System not present.	N/A
	Fire Protection/ Suppression	System not present.	N/A
Electrical	Electrical Distribution	System not present. The building does not have a lightning protection system.	N/A
	Lighting	The building has some exterior lighting, which appeared to be from the original construction. The exterior lighting was observed to be in poor condition. The interior of the building was not accessible.	Poor
	Communications & Security	System not present.	N/A

Stand-Alone Classroom Building– BLDG-114C

Building Purpose	Classrooms
Building Area	9,965 SF
Inspection Date	June 30, 2016
Inspection Conditions	97°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 building was erected in 1991 and is constructed of brick walls. It is connected to the main building by exterior walkways. The walls appeared to be in good condition except for one damaged corner with a broken foundation wall and a large area of discoloration.	Good
	Exterior Windows	The exterior window system is comprised of single-pane, double-hung windows in metal frames with a translucent film. The windows and frames appeared to be in good condition, showing only signs of debris and cobwebs.	Good
	Exterior Doors	There is one main entry into the building, through a set of metal double doors in metal frame. The doors are half-glazed. The doors appeared to be in good condition with no signs of wear or damage.	Good
Roofing	The roof is comprised of built up asphalt with granular topping. The roof appeared to be in good condition, except for one large area of discoloration.		Good
Interior Construction	Interior Walls	The interior walls are constructed of metal studs faced in gypsum board to underside of roof deck. The partitions appeared to be in good condition and showed no signs of wear.	Good
	Interior Doors	The interior doors are wood with narrow lites and are set in a storefront system. The doors appeared like new and were observed to be	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		in good condition.	
	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 gypsum wallboard is painted with a 7'-0" fibrous-reinforced panel wainscot. There is a wooden cap at the top of the wainscot. The wall finishes appeared to be in good condition. A portion of the building was under construction and was not fully assessed. The finishes behind the removed FCUs were observed to be very damaged.	Good
	Interior Floor Finishes	The floor is comprised of linoleum tile with rubber base. Renovation construction was occurring in the building at the time of the assessment, which left the floor covered in construction debris. As such, the floors were not adequately visible for assessment. The floor beneath the removed FCUs was observed to be very damaged.	N/A
	Interior Ceiling Finishes	The ceiling is comprised entirely of lay-in ACT. Renovation construction was occurring in the building at the time of the assessment. Most ceiling panels were removed, but the remaining panels looked to be in good condition.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The building also includes in-classroom handwashing sinks and inter-classroom restrooms for staff. These plumbing fixtures were observed to be in good condition.	Good
	Domestic Water Distribution	Domestic water service piping was not observable, as it was buried or located above suspended ceiling, between walls, or in crawl spaces. Staff reported problems with the water supply shut-off valve(s). Visual assessment indicated that the apparent primary, 2-inch metered service line from South First Street had dual isolation with readily accessible actuators. Staff interviews identified the concern that the domestic water piping is deteriorated and failing. A hose bib located on the west exterior wall of room A6 was observed with an active leak. No hot water is supplied to this building.	Average
	Other Plumbing	Centralized (piped) roof drainage systems in conjunction with simple sloped roof and gutter/downspout systems were present.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>Most roof drains appeared to be in place and free of debris. Gutters and downspouts appeared to be in good condition.</p> <p>Area drainage catch basins were located around the exterior of the building. Three catch basins located around the building were filled with grass and dirt.</p> <p>It should be noted that two vertical cylindrical polyethylene tanks were staged adjacent to BLDG-114B; it is likely that a rainwater harvesting system is planned. Staff interviews have identified the desire to improve building and site drainage.</p> <p>Staff interviews identified the concern that sanitary sewer piping is deteriorated and failing.</p>	
Mechanical/ HVAC		<p>As with the Main School Building (BLDG-114A), at the time of inspection, full-scale renovation of the building's mechanical/HVAC systems was in progress. Most of the old equipment had been removed, and the new equipment had not yet been installed.</p> <p>The old system consisted mostly of geothermal and water source fan coil console- or ceiling-mounted heat pumps, which provided heating and cooling for classrooms, offices, and restrooms. Each of these units has been removed. A series of larger RTUs and centralized ducting is planned to provide HVAC for these areas.</p> <p>No existing mechanical equipment was present at the time of the assessment.</p>	N/A
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns/annunciators, strobes, horn/strobe combos, pull stations, and detectors. These appear to be tied into the main building's fire alarm system. The fire alarm system was observed to be in good condition.	Good
	Fire Protection/ Suppression	System not present.	N/A
Electrical	Electrical Distribution	The electrical service enters the building underground via a pole-mounted utility company transformer and is 120/240-volt 400-amp, terminating on a 400A 120/240-volt distribution panelboard in the electrical room. The distribution panel feeds several other branch circuit panelboards that are located in the same room. The building does not have a lightning protection system. The electrical distribution equipment was observed to be in good condition.	Good
	Lighting	The building's interior lighting primarily consists of T8 fluorescent luminaires. The lighting for the building was observed to be in good condition. There are exit signs	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		present in the building, and they appear to be good condition. Assessors observed occupancy sensors for automatic on/off control.	
	Communications & Security	The communications and security systems of this building are similar to and tied back to the Main School Building. These appear to be in good condition with no observed or reported deficiencies.	Good

Exterior System Deficiency Examples

Exterior Walls



Roofing Deficiency Examples



Interior Construction Deficiency Examples

Interior Walls



Plumbing System Deficiency Examples

Domestic Water Distribution



Other Plumbing



Dawson 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. Repair all elements of buildings affected by construction.
2. Remove patchy paint from exterior concrete walkways.
3. Clean all windows of debris.
4. Remove discoloration from exterior walls.

Roofing

1. Further investigate all roof areas observed with discoloration to monitor leaking.

Interior

1. Refinish damaged interior wall finishes.

Plumbing

1. Continue preventive maintenance on aged plumbing fixtures and plan for replacement in the future as fixtures continue to age at all associated campus facilities.
2. Repair or replace any damaged or missing piping insulation as needed at all facilities.
3. Conduct an expanded evaluation of water distribution and sanitary sewer piping for deterioration, remaining life, and potential replacement. Sanitary piping could be visually inspected through a number of representative access points (i.e., floor cleanouts) with a cable-advanced small diameter "push" camera system. Wall cutouts and pipe couponing may be necessary for further water line investigation.
4. Service or replace the isolation valves for the main water feed from South First Street, as the packings may be leaking or the gate(s) may not be fully closing.
5. Replace rusty and dented roof leaders during the possible rainwater harvesting system installation.
6. Periodically inspect area drainage catch basins for debris, and remove observed debris for proper drainage function.
7. Repair damaged sanitary sewer cleanout covers, as open cleanouts can allow a pathway for debris intrusion and subsequent backups and clogs.

Mechanical/HVAC

1. Adjust HVAC controls or other equipment, such as dehumidifiers, installed to assist the HVAC equipment in mitigating the humidity observed in all facilities. If any HVAC equipment is planned to be replaced, such as the AHUs or package units, it should be replaced with an updated asset that includes an integral dehumidification wheel that will assist with humidity issues.
2. Address any rust or corrosion observed to the equipment, its associated piping, or any other sub-asset in all facilities by cleaning, re-painting, and/or repairing to prevent further deterioration.
3. Repair or replace any damaged or missing piping insulation as needed at all facilities.
4. Address equipment at all of the campus facilities that were noted with excessive noise/vibration by repairing the motor, changing the belt, or other means to promote efficiency.
5. Repair any observed leaks (such as air handlers AHU-1 and AHU-2) to prevent water damage to the asset, its piping, support beams, or any other sub-assets. Once leaks are addressed in all facilities, repair or replace any water damaged components as needed.

6. Repair or replace any fin assemblies of HVAC equipment that show extensive wear and tear. Consider adding a protective fence around any of the units on the exterior ground level that could be vandalized or damaged by students/civilians, particularly at the weight room/shop facility.
7. Plan for and track equipment that uses R-22 refrigerant in all facilities. The refrigerant is being phased out of manufacturing and construction use in the near future, and thus will make all equipment obsolete.
8. Ensure routine preventive maintenance is conducted for cleaning ductwork to promote efficient and clean air flows to all of the facilities' spaces.
9. Install air curtains at the entry doors/vestibules as needed.

Electrical

1. Immediately provide missing break 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. Replace all Federal Pacific panelboards immediately.
4. Remove any floor receptacles as they are being phased out of use district-wide.
5. Replace all remaining outdated interior luminaires with LED (light-emitting diode) luminaires with dimming capabilities.
6. Replace all existing exit signs with LED fixtures, and add more exit signs where required for all buildings.
7. Replace existing CFL luminaires located under the canopies with new LED luminaires.
8. Provide additional cameras and card access where required for all buildings, particularly at all building entry access points, near the teacher's lounge, and the kindergarten wing (BLDG-114C).
9. Provide additional new LED pole-mounted and building lights throughout facility.
10. Provide lightning protection systems for all buildings as required.
11. Provide additional LED battery-powered egress lighting where required for all buildings.
12. Provide occupancy sensor/automatic off lighting controls for all buildings as required.
13. Replace PA/timeclock/bell system with new system.

Main School Building Recommendations

Exterior

1. Repair or replace damaged wood wool panels under exterior walkways as needed.

Roofing

1. Further investigate sunken roof points above the stage area and repair as necessary to prevent further leaks.
2. Replace skylights.
3. Replace the metal canopy covering with new, undamaged material.
4. Reposition granular roof topping to cover exposed asphalt.

Interior Construction

1. Replace damaged wooden door frames and refinish damaged wooden doors.
2. Further investigate leaks above the stage area and mitigate once a cause is determined.
3. Patch all holes in walls covered in metal mesh.

Interior Finishes

1. Replace the area carpet in the administration wing with carpet tiles.
2. Repair all damaged ceiling tiles observed and properly seal ceiling penetrations.
3. Replace bubbling or damaged linoleum tiles.
4. Remove textured plaster ceiling finish.

5. Install gypsum board ceiling in kitchen and restrooms.
6. Replace water damaged ceiling tiles and investigate cause of damage.
7. Ensure that windows between kitchen and cafeteria are laminated glass and not acrylic.

Plumbing

1. Reposition the roof leader downspout adjacent to the exterior of the Principal's office that is discharging onto the water meter monument. Repair and seal the water meter monument.
2. Conduct evaluations of roof drainage shortly following rain events, carefully following active interior leaks and noting areas of pooled water and shingling gaps on the roof top. Consider re-coating corroded natural gas piping (such as outside the kitchen).

Mechanical/HVAC

1. Remove or properly abandon-in-place all out-of-service HVAC units, such as unit SF-1 located on roof section A-15.
2. Perform a comprehensive examination of heating/cooling issues thought to be originating with existing packaged air conditioning systems, heat pumps, and ducting to remain (i.e., RTUs-1 and -2, water source heat pump console units in odd-numbered 200-wing classrooms, and ducting to remain for the offices, book room, and cafeteria), including ducting inspection and evaluation of operating parameters such as discharge air temperature, fan speed, chilled water supply/return temperature differentials, refrigerant pressure (if applicable), and controls for all related equipment, including air handlers.
3. Consider periodic inspection of EFs and vents for noise/vibration, rainwater leakage, and general condition. Two vents were observed with significant rust and are recommended for re-coating or replacement, and EF-4 (roof section A-04) should be evaluated for motor issues, as it exhibited a rattle during operation.

Electrical

1. Replace all panelboards and switchboards from the original construction as they are severely aged past typical design life.
2. Provide additional electrical receptacles where needed, particularly in classrooms.
3. Verify the condition of telecommunications systems/equipment, as it was inaccessible. Add additional data drops in classrooms and additional Wi-Fi access points as requested by the facility staff.

Stand-Alone Classroom Building Recommendations

Exterior

1. Repair broken wall corner.