Reilly Elementary School Site Summary

Address	405 Denson Drive Austin, TX 78752
Number of Permanent Campus Facilities	1
Original Year of Construction	1954
Total Campus Building Area (combined)	41,622 SF

Introduction

The Reilly Elementary School campus is located at 405 Denson Drive in Austin, Texas. Reilly Elementary School was established in 1954, and consists of a single primary school building. This permanent campus building is the Main School Building (BLDG-132A).

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
7/20/16	Interview	00	8/26/16	Draft Issue
7/25/16	Assessment	01	11/15/16	Added comments from PM Roben Taglienti as indicated on email dated 10/8/16.
9/26/16	Cluster Meeting			
9/27/16	Follow-Up			

Main School Building – BLDG-132A

Building Purpose	Administration Offices, Classrooms, Cafeteria, and Gymnasium
Building Area	41,622 SF
Inspection Date	July 25, 2016
Inspection Conditions	Hot and 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 facade is brick with the exposed structural frame (both steel and concrete) painted. The 100- and 200-wings have a glass block clerestory above corridor roofs. The 300-wing has an exposed concrete structural frame with exposed aggregate concrete panels incorporated into the corridor wall. The brick facade was observed to be in good condition, but there are areas of exterior wall with organic growth that has discolored the brick. Paint on metal flashings, gutters, downspouts, and the steel structure has oxidized and is peeling. The glass block grout on 100- and 200-wings is deteriorated and likely leaking.	Average
	Exterior Windows	The exterior windows do not appear to be original to the building and were most likely replaced during a renovation. The exterior windows are single-pane glazed metal frames. Windows are both individual units and a storefront system with glazing and spandrel panels. Most of the exterior windows are fixed with a single operable sash within a group. The upper half of windows in the cafeteria are translucent panels. The windows appeared to be in average condition. Leaks were reported at windows at the southeast end of corridor 7 and along the northern wall of the 200-wing.	Average
	Exterior Doors	The exterior doors are steel with metal frames. Entrances to building and classroom wings have single glazed side-lite and transoms. Classrooms in the 300-wing take access directly from outside. The door to the	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		kitchen is solid core wood. The exterior doors appeared to be in good condition. Doors along the dock at the kitchen are showing some wear. The wood kitchen door is not as secure as steel.	
Roofing	Roof surfaces are comprised of both built-up and modified bitumen. There is a new metal canopy at the school's main entrance. The roof was observed to be in poor condition, depending on age. The roof over the cafeteria has failed. Significant erosion of granular surface, patching and large areas where membrane has detached from deck were observed. Built-up roofs with steeper slopes (over 100- and 200-wings) have areas where fiberglass strands are exposed. Both modified bitumen and built-up roofs systems have aged past their expected life. Evidence of ponding was observed. The roof over the gymnasium was reported to leak. Counter flashings in some areas appeared to have been replaced recently and in good condition.		Poor
Interior Construction	Interior Walls	The interior wall construction is comprised of a number of different materials. CMU (concrete masonry unit), glazed masonry units, exposed brick, and exposed aggregate concrete panels are found throughout the building. In areas with recent renovations, such as the administration areas and library, framed walls with gypsum board are found. Interior windows are wood framed but may also include metal framed operable sashes. There are both wood and steel framed interior windows in the cafeteria. The gymnasium has both glazed masonry units and CMU. Corridors in the 100- and 200-wings are previously enclosed exterior covered walkways and retain their exterior materials. The interior walls were observed to be in average condition. General wear was evident with some scuffing.	Average
	Interior Doors	Most interior spaces have solid core wood doors with wood frames. Many are incorporated into window wall systems. Classroom doors in corridors may have been exterior doors before walkways were enclosed and are steel in metal frames with side-lite and transoms. Doors frames and hardware were observed to be in average condition.	Average
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	There is a concrete ramp with metal railing from the gymnasium exit to outside play areas. There are concrete steps at the kitchen loading dock. The exterior stairs were observed to be in good condition.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Stairs	There are wood stairs at both sides of the stage, and access to the cafeteria from corridor C5. Corridor C5 is a full-width concrete ramp with handrails. The interior ramp and stairs were observed to be in good condition.	Good
Interior Finishes	Interior Wall Finishes	The interior wall finishes are either natural material finish or painted. The natural finishes of brick, glazed masonry units, and exposed aggregate concrete were observed to be in average condition with general wear and scuffing. Painted surfaces of CMU and gypsum board appeared to be in good condition.	Average
	Interior Floor Finishes	Interior floors in administration areas, classrooms, most corridors, and cafeteria/auditorium are vinyl tile and have 4-inch vinyl base on some walls. There is quarry tile in kitchen areas. The library has carpet and vinyl base. The gymnasium has a plastic athletic floor system. Corridors in the 100- and 200-wings have sealed exposed concrete floors. Floors appeared to be in average condition relative to their age. Many classrooms have 9-inch resilient flooring tiles that are most likely original to the 1954 construction. Floors, though visually in fair condition, have been patched extensively. The library carpet is relatively new and appeared to be in good condition. The quarry tile appeared to be in good condition. Vinyl tile in administration areas has been replaced recently.	Average
	Interior Ceiling Finishes	Ceilings throughout much of the building are suspended acoustical tile. Exposed structure and roof deck are found in corridors C1, C2, C3, C4, and C7, classrooms in the 400-wing, and the gymnasium. The kitchen ceiling tiles are vinyl covered. The ceiling in corridor C5 is 12-inch attached acoustical tiles. The tiles in corridor C5 are showing age and stains, likely from roof leaks. The suspended acoustical tiles in the 100- and 200-wing classrooms were bowed, most likely from excessive humidity.	Average
Conveying	System not present.		N/A

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Plumbing	Plumbing Fixtures	The building has public restrooms for male and female students and separate staff restrooms located throughout the facility. These restrooms have wall-hung vitreous china hand sinks with manual faucets, along with vitreous china, floor-mount toilets with manual flushing mechanisms, and vitreous china, wall-hung urinals in the male restrooms with manual flushing mechanisms. There are stainless steel sinks located in the kitchen and employee break areas. There are service sinks located in the janitorial closets, and water fountains located throughout the facility, typically near the public restrooms. The drinking fountains appear to be original to the building, and many did not function. The restroom plumbing fixtures were observed to be in poor condition as the fixtures were typically aged and appeared to be original to the building. The sink serving the male restroom between rooms 101 and 102 did not have water service. The male restroom near the gymnasium had one urinal with a leaking flush valve and another urinal that had separated from the carrier. It was reported that the urinals frequently fall off the wall. The hand sinks in the classrooms were observed to be in poor condition due to age and the deficiencies indicated above. The three-compartment sink in the kitchen was observed to flood the hub drain if all three compartments were drained at the same time. The 300-wing consisted of four classrooms with a male and female student restroom shared by every two classrooms; however, the wing was not accessible at the time of the assessment.	Poor
	Domestic Water Distribution	The sinks located throughout the facility, with the exception of the kitchen, lounge, and nurse's restroom, are not equipped with hot water. The sinks located in the kitchen are serviced with hot water from GWH-1 (gas water heater-1), located in the kitchen mechanical room. Under-counter EWHs (electric water heaters) serve the sinks in the lounge and the nurse's restroom. Both EWHs were identified as EWH-1 on the plans. The GWH appeared to be in poor condition. It was reported that the water heater is over 15 years old. The hot water piping associated with the water heater was	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		not insulated. Corrosion was observed at the hot water piping connections. The EWHs located under the counters in the lounge and the nurse's restroom appeared to be in good condition. The domestic water distribution piping that was visible appeared to be in poor condition.	
	Other Plumbing	The roof drainage system consists primarily of scuppers and gutters with downspouts. See the architectural assessment for condition of gutters and downspouts. The few roof drains present were observed to be in good condition. Condensate drain piping insulation appeared to be damaged or missing in places and in poor condition. The gas piping on the roof had chipped paint, which has led to surface rust on portions of the pipe. A grease trap was present to serve the kitchen. It was reported that the 100/200/300-wings needed new drain lines. It was reported that the water lines have gate valves installed that are getting stuck and are not up to code. It was reported that the drain lines under the kitchen are original cast iron pipe that has cracks causing water back-ups and foul odors.	Poor
Mechanical/ HVAC	The building is served by a combination of package RTUs (roof top units); some with ERVs (energy recovery ventilators), floor-mounted ground-source heat pumps, and roof-mounted EFs (exhaust fans). These serve the HVAC (heating, ventilating, and air conditioning) system. Nine RTUs, with an approximate capacity range of 5,000 to 15,000 CFM (cubic feet per minute), are located on the roof. These RTUs serve non-classroom functions throughout the facility. WSHP (water-source heat pumps) serve each of the classrooms. The classrooms in the 200-wing contain abandoned vertical fan coil units. Classrooms 102, 103 and 104 also contain abandoned vertical fan coil units. There are nine abandoned fan coil units in the corridors, and six abandoned fan coil units in the gymnasium. Roof-mounted EFs serve the kitchen hoods and the restrooms. RTU-KIT, RTU-11, RTU-12, and RTU-LIB appeared to be in poor condition. The units appeared aged, and rust was observed. Condenser coil fin damage was observed on several RTUs. Air-cooled CU (condensing unit) was aged and at the end of its service life. The condenser coils on RTU-1 and RTU-2 are plugged with dust and the condensation drain piping on RTU-3 is cracked and leaking. There appears to be birds nesting on the burner of RTU-4. The WSHPs serving the classrooms appeared to be past their design service and it was reported that WSHPs HP-8 and HP-35 were malfunctioning. It was also reported that numerous WSHPs frequently leak into the classrooms due to		Poor

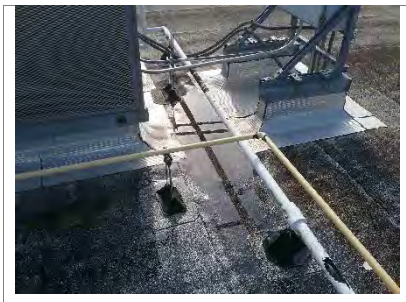
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	clogged condensate drain piping. Roof top EFs appeared to be aged and in poor condition. Several EFs were observed to operate with excessive noise. The HVAC system appeared to be in poor condition, primarily due to the age of the equipment and the deficiencies indicated above.		
Fire Protection	Fire Alarm	The building has a Silent Knight fire alarm control panel and it appears to be in good condition. The system consists of alarm and signaling devices such as, horn and strobe combination devices, pull stations, and detectors. This system appeared to be in poor condition. Approximately 50% of the devices appeared to be in average condition and have aged past their design life.	Average
	Fire Protection/ Suppression	The building is protected by portable fire extinguishers placed throughout the facility; there is no automatic sprinkler system. All observed portable fire extinguishers had inspection tags dated within the last year.	Good
Electrical	Electrical Distribution	The electrical service enters the building at a 120/208-volt, 2000-amp, 3-phase, 4-wire main switchboard located in the Main Electrical room near the Kitchen. The service switchboard feeds various 120/208-volt panelboards located in electrical rooms throughout the building. The electrical distribution equipment appeared to be in poor condition. A majority of the assets appear to be corroded and have aged. The building does not have a lightning protection system.	Poor
	Lighting	The building exterior lighting consists of recessed downlights, surface mounted HID (high-intensity discharge) and LED (light-emitting diode) light fixtures that are located along the entire perimeter and controlled by the buildings time clock. The interior lighting consists of 2x4 recessed and pendant mounted light fixtures along with surface mounted 1x4 fluorescent. The lighting for the corridors and classrooms are controlled by wall-mounted wall switches. The lighting for the building appeared to be in average condition. Many interior and exterior light fixtures appeared to have aged past their design life. Observed deficiencies included broken lenses, inconsistent color	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		temperatures, and non-functional fixtures. Per the interview notes, it was reported that the lighting in the gymnasium office and the adjacent corridor (C2) are on the same circuit, and the lights cannot be turned off in the office without turning off the lights in the corridor. This situation was observed during the assessment. There are exit signs present in the building that appeared to be functioning at the time of assessment and in average condition.	
	Communications & Security	There is a Gemini security system including surveillance cameras in the building. According to facility staff, the system has had no issues. There is a public address system in the building, and it appeared to be in good condition with no reported deficiencies. The building's telephone, data, and Wi-Fi cables are loosely running on top of the roof.The building is equipped with telecommunications systems that appeared to be in average condition	Average

Exterior System Deficiency Examples

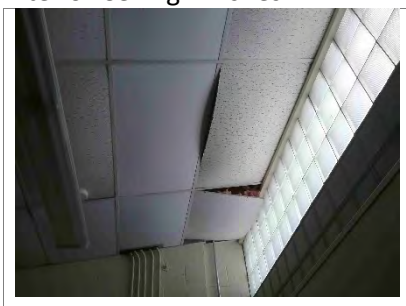
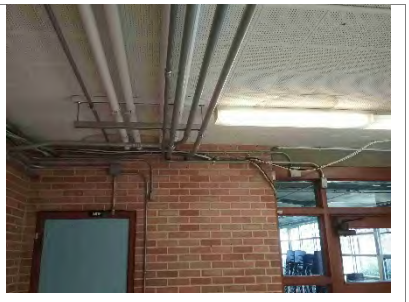
Exterior Walls


Roofing Deficiency Examples





Interior Ceiling Finishes

Plumbing System Deficiency Examples

Plumbing Fixtures



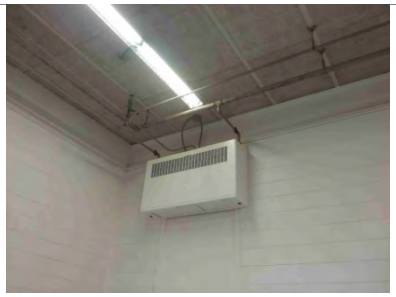


Domestic Water Distribution

Other Plumbing

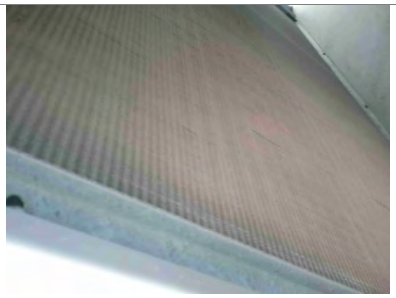


Mechanical/HVAC System Deficiency Examples







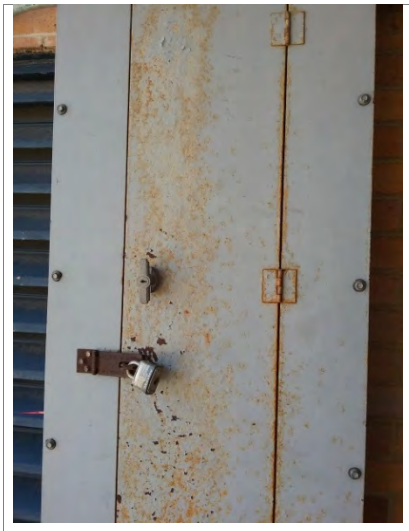


Fire Protection System Deficiency Examples

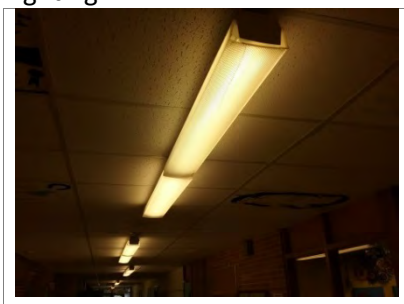
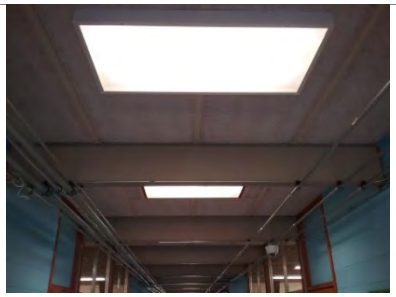
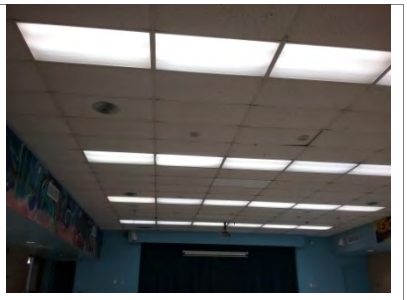
Fire Alarm

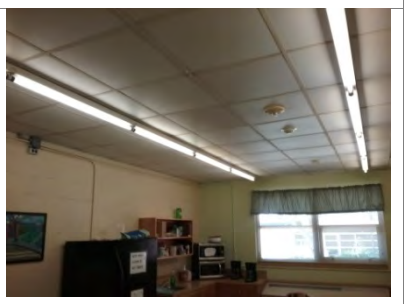
Electrical System Deficiency Examples

Electrical Distribution



Lighting

Reilly Elementary School Campus Summary of Recommendations

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

Main School Building Recommendations

Exterior

1. Clean organic growth from brick façade.
2. Replace deteriorated grout from glass block at 100- and 200-wings.
3. Further investigate reported leaks at windows in corridor 7 and along the northern wall of the 200-wing.
4. Replace existing wood door at kitchen entry with steel exterior door and hollow metal frame.

Roofing

1. Further investigate all roof areas observed with deteriorated membrane surface, standing water, and roof membrane appropriateness for roof slope. Replace roof as needed.

Interior Finishes

1. Conduct further investigation into the suitability of 9”x9” floor tiles from an environmental concern.
2. Repair the damaged ceiling grid in room 204. Monitor and repair roof leaks as needed to prevent further damage.
3. Evaluate potential humidity concerns in 100- and 200-wing classrooms and damage to ceiling tiles.

Plumbing

1. Replace drinking fountains throughout the building.
2. Replace water closets, sinks, and urinals throughout the building.
3. Correct the flow issue at the sink serving the male restroom between rooms 101 and 102.
4. Replace hand sinks in classrooms.
5. Increase the size of the hub drain serving the three-compartment sink in the kitchen to allow draining of all three basins at the same time.
6. Replace the GWH-1.
7. Provide pipe insulation at kitchen water heaters, and remove corrosion on piping connections.
8. Replace all domestic cold and hot water piping throughout the facility.
9. Repair or replace any damaged or missing condensation drain pipe insulation as needed.
10. Remove rust from gas piping on the roof, and paint/protect piping from further rust and corrosion.

Mechanical/HVAC

1. Remove abandoned fan coil units in rooms 201, 202, 203, 204, 102, 103, and 104.
2. Remove nine abandoned fan coil units in the corridors.
3. Remove six abandoned fan coil units in the gymnasium.
4. Replace RTU-KIT, RTU-11, RTU-12, and RTU-LIB.
5. Replace CU.
6. Clean condenser coils on RTU-1 and RTU-2.
7. Repair cracked condensation drain pipe associated with RTU-3.
8. Ensure bird nesting material and bird waste is removed from the burner on RTU-4.
9. Replace WSHPs and associated condensate piping serving the classrooms.
10. Replace aged and noisy EF.
11. Replace collapsed duct at RTU-12.

Fire Protection

1. Continue annual inspections of the portable fire extinguishers.
2. Continue annual inspections of the Fire Alarm System, and replace any aged fire alarm devices throughout the building.

Electrical Distribution

1. Suggest rewiring the gymnasium office and adjacent corridor lighting C2 on separate switches to provide independent control.

Lighting

1. Replace non-functioning exit signs with LED fixtures.
2. Replace aged light fixtures with LED fixtures with dimming capabilities.

Communication/Security

1. Place telephone, Wi-Fi, and data cables in a conduit for organization and to protect the cables from outdoor conditions.

Reilly Elementary School Planned Future Improvements

The following are any known planned and funded improvements scheduled to take place at this campus in the future. Their scope and schedule are subject to change.

2017 Bond Planned Improvements from PM Roben Taglienti on 10/8/16.

- 160033 - June 2017.
  - Replace hand sinks in wings 302, 303, 304, and 400.
  - Remove abandoned fan coil units in rooms 201, 202, 203, 204, 102, 103, and 104.
  - Removed nine abandoned fan coil units in the corridors.
  - Replace WSHPs and associated condensate piping serving the classrooms.
  - Replace non-functioning exit signs with LED fixtures.
  - Replace aged light fixtures with LED fixtures with dimming capabilities.