

Perez Elementary School Site Summary

Address	7500 S. Pleasant Valley Road Austin TX 78753
Number of Permanent Campus Facilities	1
Original Year of Construction	2006
Total Campus Building Area (combined)	82,223.42 SF



Introduction

The Perez Elementary School campus is located at 7500 S. Pleasant Valley Road, Austin, TX 78753. Perez Elementary School was established in 2006 and consists of a single-story structure. This permanent campus building, listed as the Main School Building (BLDG-190A), consists of the administration area, classrooms, cafeteria, and gymnasium. This facility is connected by concrete covered walkways.

Meeting Log		Revision Log		
Date	Meeting	Revision	Date	Summary of Content
8/9/16	Interview	00	9/15/16	Draft Issue
8/9/16	Assessment	01	12/6/16	Added comments from CM Curt Shaw as indicated on email dated 11/4/16. See pages 3-6 and 13.
9/20/16	Cluster Meeting (Attended)			

Main School Building – BLDG-190A

Building Purpose	Administration, Classrooms, Cafeteria, and Gymnasium
Building Area	82,223.42 SF
Inspection Date	Aug 9, 2016
Inspection Conditions	99°F - Clear skies, sunny
Facility Condition Index	



Facility 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 of the building consists of 75% CMU (concrete masonry unit) common brick with 15% split-faced CMU and an elevated segment of 10% cementitious panel's façade.</p> <p>It was reported that the exterior façade was in good condition by facility staff. It was observed that there are no signs of stress damage around this facility.</p>	Good
	Exterior Windows	<p>The exterior windows consist of single-pane glazing units with aluminum metal frames throughout this facility.</p> <p>It was reported that in room 122, windows had been known to leak during heavy rain events. The exterior windows at this facility were observed to be in good condition with no major defects observable during weather condition present during the assessment.</p>	Good
	Exterior Doors	<p>The exterior doors are two pair hollow metal with glazing and metal door frame type used for entrance and egress of this facility.</p> <p>It was reported that exterior doors were in good condition. It was reported that the main mechanical room door closers were not functioning as intended. Overall observation of facility doors were observed in good condition.</p>	Good
Roofing	The roofing material consists of modified bitumen roofing and small sections of single membrane applications where HVAC (heating, ventilating, and air conditioning) equipment is stationed. Walkway canopies were completed with		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>single membrane Thermal Plastic Polyolefin (TPO) material and observed to be in good condition. Standing seam metal segments of roofing are on elevated sloped sections of the structure and observed to be in good condition. Some areas were observed on the modified bitumen sections where water ponding had taken place on this system. It was reported that vandalism had occurred to every aspect of the roof equipment except the roofing surface material itself. Rocks and tennis balls have been removed from gutters and downspouts and also some extended portions of vent pipes have been removed and left lying on the roof surface. It was reported the roof drainage consists of gutters and downspouts. It was reported that the configuration of the gutters themselves caused drainage problems. They have been susceptible to mischievous vandalism. The gutter system had no cleanouts, and at times, became full of leaves or debris and plugged up, causing nuisance work orders to be placed.</p> <p>The standing seam roof system as well as single membrane covered walkways was observed to be in good condition, although modified bitumen sections consists of 60% of entire system and must be rated overall as average. Also due to the original modified bitumen portion of roof materials approaching the industry-suggested life expectancy of 15 years.</p>	
Interior Construction	Interior Walls	<p>The interior walls for much of this facility consist of drywall panel and small portions of painted block completions. The administration offices, library, nurse's offices, and classrooms have these types of finished surfaces. Classrooms consist mostly of drywall with painted finishes. The gymnasium has painted block walls with wall-mounted acoustical panels located on upper portions of the walls. Restrooms consist of ceramic tile on the walls, with the upper three feet of wall being painted drywall, and one side of the restroom wall surface consisted of painted drywall finishes. This was observed as typical for all restrooms in this facility.</p> <p>The interior walls were observed to be in average condition as approximately 20% of wall surfaces showed signs of minor scathing and was observed on some wall surfaces in various classrooms within this facility. It was also observed that significant wall repairs and painting was ongoing and could possibly be expected to alleviate many of the scathing instances present at the time of this assessment.</p>	Average
	Interior Doors	<p>The interior door portions of this facility consist of solid core wood doors with glazing and metal-framed jams.</p> <p>The interior doors and frames were observed to be in good condition throughout this facility. No major issues were reported during the interview stage of this assessment.</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Specialties	There were no metal lockers in this facility. The gymnasium and cafeteria are divided by a folding partition wall. Visual inspection of this folding partition wall specialty showed it to be in good condition.	Good
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	The stage area in the cafeteria contains wood stairs with varnish finish. These stairs were observed to be in good condition.	Good
Interior Finishes	Interior Wall Finishes	This facility's walls consist of various colors of paint on dry wall and small sections of painted block. Painted finishes throughout this facility were observed to be in good condition. Significant wall repairs and finishing were ongoing in the 300-, 400- and 500-wing classrooms as well as associated corridors, with some walls observed to have been recently painted. The interior wall finishes were rated, average condition due to the extensive ongoing repairs and painting operations having not yet been completed at the time of the assessment.	Average
	Interior Floor Finishes	It was reported that with a few exceptions, the vinyl tile was in good condition and predominant in the corridors and classroom environments. The carpet located in the administration offices, library, and computer labs showed signs of minor wear and tear. Ceramic tile floor is present in the kitchen and adult and students restrooms. It was reported that the 5% of vinyl tile surface just outside the gymnasium doors in corridor 6 was showing stress cracking beneath the tile. It was visually evident that this slab movement has not yet affected all the tile surfaces in its path but was observed extending from the gymnasium doors through corridor 6 and into the main corridor. A photograph of this deficiency could not be captured due to the reflective, glossy finish on the floor tiles due to a recent wax application. The floor system of this entire facility was observed, and the flooring finishing is rated as average overall.	Average
	Interior Ceiling Finishes	It was reported that the interior ceiling consists of standard 2x4 acoustical fiberglass suspended ceiling panels throughout the corridors and classrooms. All restroom facilities contain hard drywall ceilings. The library, cafeteria, and gymnasium ceilings consist of	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>exposed painted metal trusses with a metal deck and a floating suspended acoustical ceiling in the library.</p> <p>5% of acoustical panel staining was observed facility wide and some replacement was evident. 95% of existing acoustical panels are original to this facility and will be rated in average condition due to signs of age.</p>	
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	<p>The building has public restrooms for men, women, and students, and separate staff restrooms are located throughout the facility. The adult facilities have standard plumbing fixtures. The student's restrooms in the main corridor have standard fixtures; no sinks are present in restrooms located in conjoining classroom locations. Each classroom does have a hand wash/general purpose sink with a drinking fountain bubbler. Floor-mounted toilets with manual flushing mechanisms are present. This system includes wall-hung urinals in the male corridor restrooms with manual flushing mechanisms. There are service sinks in the janitorial and housekeeping closets, and water fountains located within the facility all observed in average condition.</p> <p>It was reported that the long-neck type faucets at the sinks in the general classroom areas were easily loosened by children tugging and pulling on them. These systems were observed as secure at the time of this assessment. Overall plumbing fixtures were observed to be in average condition.</p>	Average
	Domestic Water Distribution	<p>It was reported that hot and cold water were distributed throughout this facility and working well. It was reported that hot water was supplied to all adult work rooms and break rooms, restrooms, and nurse's office. Hot water was not supplied to student's restrooms. It was reported that a re-occurring condition with the sink supply fittings in the classrooms had caused blowouts and flooded classrooms in the past. This condition could not be depicted without removing insulation to take a photo. The plumbing staff indicated this condition was caused by using hard copper lines instead of flex lines in the system. When this condition occurred, repair entailed shutting down the water supply to over half of the campus which seems extensive.</p> <p>It was reported that copper lines should not be used because corrosion that continues to occur causes leakage. It was reported that no isolation valves exist in</p>	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		the distribution of water throughout this facility. This operating system is downgraded to poor overall when repairs of these conditions could be extensive and costly.	
	Other Plumbing	<p>It was reported that drainage facility-wide was in good condition. It was reported that the 500-wing had continuing issues with sanitary drain lines backing up. At times, a sewer smell had been reported in the kitchen areas of the school. During the walkthrough, the smell was not present.</p> <p>Drains to the air conditioning condensation pans did not have actual drain lines connected to them and were plugged off. Once water filled the pans, it was allowed to overflow, that could cause potential issues with the ceiling's infrastructure, corridors, cafeteria, and gymnasium areas. This system was observed to be in average condition.</p>	Average
Mechanical/ HVAC	<p>This system consists of three boilers that are Lochinvar brand. Facility staff reported constant problems with this brand with the primary issue being pump failure. There are two chillers located behind the dock area that supply cold water through the system that have had no major problems reported. The major mechanical air conditioning equipment consists of four large natural gas-supplied RTUs (roof top units). There are five HRUs (heat recovery units). Supplemental mechanical equipment for the HVAC (heating, ventilating, and air conditioning) system includes exhaust fans, and five fresh air intake powered units that were reported as not functioning at all.</p> <p>It was reported that the HVAC system was working as intended with the exception of non-functioning fresh air intake units depicted in photo deficiencies. It was reported that rocks and debris were recently removed around mechanical equipment and off of roof system from children throwing rocks upon the roof and others that have accessed the roof. No physical damage was caused to this equipment by these influences. It was reported the chill water supply had too many unions in the system, which promoted leakage at fittings and periodic work orders, and it was also suggested it should be a closed-loop application.</p>		Average
Fire Protection	Fire Alarm	<p>The building has a fire alarm system that consists of alarm and signaling devices powered by a 3-kw inverter as a solar power supply, alarm annunciators, horn/strobe combinations, pull stations, and smoke detectors.</p> <p>It was reported that the system was working well at the time of interview with facility staff. The fire alarm system was observed to be in good condition with no evident signs of malfunctioning components.</p>	Good
	Fire Protection/	This building has a fire protection sprinkler system	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Suppression	<p>serving the entire facility. The system was reported as a wet system. It was also reported that a dry suppression system supported the kitchen area over the range hoods, and it was functioning, currently certified and up to date.</p> <p>It was reported that there are fire extinguishers throughout this facility and certification tags were all current. This fire protection system was observed to be in good condition at the time of assessment.</p>	
Electrical	Electrical Distribution	<p>The electrical service enters the building at the 480/277volt 2000-amp service with a GFI (ground fault interrupter) on the main service panelboards supporting main switchboards located in electrical rooms near the outside chiller area. It was reported that there is no room left in the main service for expansion.</p> <p>The service feeds transformers and high-voltage panelboards located in electrical rooms servicing this facility. These assets are rated at 480/277 volt primary that step-down to 120/208-volt secondary 4-wire 3-phase.</p> <p>It was reported that this facility did not have a lightning protection system.</p> <p>It was reported that there were no known electrical issues at this facility. The electrical distribution equipment was observed to be in average condition due to inability for future expansion.</p>	Average
	Lighting	<p>The building's exterior lighting consists of dropdown metal halide luminaires located along the parking lots. It was reported that the electrical department would prefer to replace the exterior wall washer fixtures with standard wall pack LED (light-emitting diode) units. Lenses seemed to burn from the heat generated by bulbs. Some recessed and some mounted can lighting exists in main corridors and some exit door areas.</p> <p>It was reported that the corridor fluorescent lighting was Lithonia synergy products with (smart) ballasts that are now obsolete. It was reported that all can lighting within this facility needed to be replaced due to difficulties with lamp replacement. It was reported that parking lot lighting was inadequate. The interior lighting consisted primarily of 2x4 T8 fluorescent luminaires set in troffers. Library and specific open locations have suspended low-bay fluorescent fixtures with standard T-8 florescent luminaires.</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The lighting for the building was observed to be in average condition overall.	
	Communications & Security	<p>It was reported that the Wi-Fi works well at this facility, and the school has recently obtained new phones. This facility has a security system including alarms, surveillance cameras, and card readers.</p> <p>It was reported that there are not enough cameras supporting this system and the resolution has been found to be inadequate. It was reported that the public address system was working well.</p> <p>Because of vandalism to the roof, staff has requested to install mitigating controls to discourage climbing up drain pipes from the ground to the roof. It was reported that vagrants have been living under the portable structures, and at times, completely surprise staff when they pop out from hiding on the dock areas. This system was observed to be in average condition.</p>	Average

Roofing Deficiency Examples

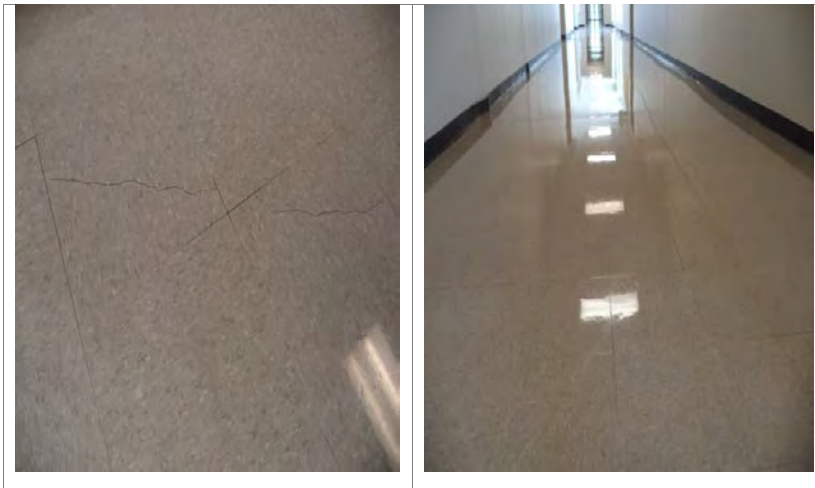


Interior Finishes Deficiency Examples

Interior Wall Finishes



Interior Floor Finishes



Interior Ceiling Finishes

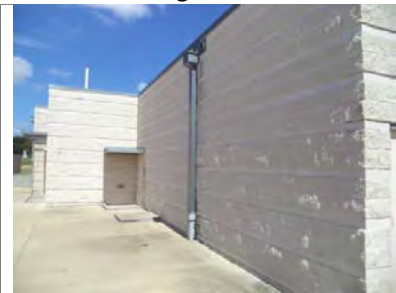


Plumbing System Deficiency Examples

Plumbing Fixtures



Other Plumbing



Mechanical/HVAC System Deficiency Examples



Electrical System Deficiency Examples

Lighting



Communications & Security



Perez Elementary School Campus Summary of Recommendations

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

Main School Building Recommendations

Exterior

1. Replace seals in troublesome windows facility-wide.
2. Repair and maintain closer mechanisms for all exterior doors and the main mechanical room.

Roofing

1. Have modified bitumen roof sections evaluated for remaining life in this system by a professional roofer as well as all flashing-applied areas for current integrity. Plan for repair or replacement.
2. Recommend security cages be installed to wall surfaces where down spouts can potentially be climbed and roof access can be gained by children. Must be addressed
3. Evaluate the need to build up some flat areas of the roof system to enhance drainage capabilities.

Interior Finishes

1. Evaluate flooring condition mentioned in hallway outside of gym further by an engineer to see if this condition observed in above flooring narrative will become worse in time. Photos could not depict this condition completely due to glossy finishes to flooring but was observed to be extensive. Custodial staff can point out the extent of this condition as he did for our team.
2. Repair or replace damaged, stained, or worn acoustic ceiling tiles as necessary.

Plumbing

1. Replace all long-neck plumbing fixtures with **institutional grade units** to avoid damage by children, **yet enable water bottles and other containers to be filled at the sinks**.
2. Evaluate this blowout condition that was reported in the classroom areas as causing flooding because of copper versus flex piping applications.
3. Evaluate the feasibility of having the plumbing system modified with proportional isolation valves for the current distribution system.
4. Evaluate further the Lochinvar boiler system that was reported as a constant problem and the misapplication of the inline transfer pump system.
5. Evaluate the drainage issues reported in the 500-wing, making necessary adjustments. Evaluate or mitigate areas where a sewer gas smell has been encountered.
6. Consult with building plumber or building operator with best case fix regarding too many unions for a closed loop system.
7. Recommend a further evaluation of corrosion problems with copper metal connections. This could be attributed to the use of dissimilar metal transitions and the need for cathodic protective measures being applied.

Mechanical/HVAC

1. Repair or replace all fresh air intake equipment that was reported as non-functional on the roof.
2. Repair or install a secondary drainage line for A/C condensation pans.

Fire Protection

1. Continue and maintain annual inspections of the fire protection systems.

Electrical

1. Have the system evaluated by an electrical engineer. The electrical system has reached its capacity and has no room for expansion for the future.
2. Convert the exterior lighting to a more maintenance-friendly fixture. Dialog must include administration and building staff. Replace all can lighting in the facility due to difficulty changing the bulbs, and when run for extensive periods of time, the socket for the bulb breaking apart. Have the Lithonia synergy lighting system replaced; maintenance of this system has become very difficult for facility staff.
3. Recommend a further evaluation to this electrical system and if lighting protection overall is needed even if GFI protection is implemented in this current system.
4. Recommend further evaluation to this current electrical system in regards to potential upgrades. If solutions can be made to enhance the current capacity issues for future needs.
5. As suggested by facility staff and observations during walk through. Security cameras should be added to this facility and the older units with poor resolution should be replaced facility wide. Vagrant influences to this campus have become a growing concern and not being able to see them raised security questions and the need for enhancement of this system facility wide.
6. Evaluate security enhancements for this facility due to periodic vagrants sleeping or finding shelter around the kitchen dock area and portable structures surprising and scaring facility staff during early morning hours.