Casey Elementary School Site Summary

Address	9400 Texas Oaks Drive Austin, TX 78748
Number of Permanent Campus Facilities	1
Original Year of Construction	1998
Total Campus Building Area (combined)	81,506 SF

Introduction

The Casey Elementary School campus is located at 9400 Texas Oaks Drive, Austin Texas. This is an elementary facility that includes classrooms, library, kitchen, cafeteria, and gymnasium. This is a two-story facility that includes a high bay area that houses the cafeteria and gymnasium.

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
7/25/16	Interview	00	9/15/16	Draft Issue
7/25/16	Assessment	01	11/15/16	Changed all mentions of “black mold” or “mold” to “organic substance that has the appearance of mold” per comments from Drew Johnson’s email dated 11/2/16 (see pages 2, 3, and 11). Added comments from PM Randall Sakai as indicated on email dated 10/28/16.
9/28/16	Cluster Meeting	02	1/19/17	Added comments from CAC Erika Bodoin as indicated on email dated 1/13/17. Added photos to page 11.
10/20/16	Follow-Up			

Main School Building – BLDG-173A

Building Purpose	Administration, Classrooms, Library, Cafeteria, and Gymnasium
Building Area	81,506 SF
Inspection Date	July 25, 2016
Inspection Conditions	90°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 façade of this facility is constructed of split face block and glazed block. A portico at the front entrance is constructed of circular columns, metal framing, and a metal roof. On the south side of the building, there is a canopy, which is constructed of galvanized tube steel and a metal roof. It was reported the building façade was in good condition with no breaks and cracks in the block. It was observed that some areas of organic substance that has the appearance of mold were present on the façade, caused by the gutter system. It was also observed that the portico and canopy, with the exception of the gutter system on the canopy, were in average condition.	Average
	Exterior Windows	The exterior windows consist of single-pane glazing units with aluminum frames. It was reported and observed that the windows were in good condition.	Good
	Exterior Doors	There is one public entryway located at the east side of the building; there are one pair and two single leaf metal doors with a metal frame and half lites in each door. The remaining service doors around the facility are metal. The doors used for egress by students and faculty have various sizes of lites. The doors to mechanical and electrical rooms have no lites. The doors at the main mechanical room did not close	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		properly. The active leaf was hitting on the inactive leaf. It was also reported the pair of doors on the south face of the building did not close properly. It was observed the closer was not working. The exterior doors were observed to be in average condition. It was observed and reported that there was a painting project being performed on the exterior doors.	
Roofing	The roof system used for this facility is modified bitumen. This is common to the building, the portico, and the canopy. The roof was observed and reported to be in poor condition. It was reported that ponding occurred on the main roof. It was also reported that a roof leak existed at the wall transition in room 116. The drywall was damaged, and an organic substance that has the appearance of mold was inside the wall. It was observed that areas of ponding occurred as well as areas with large bubbles under the bituminous material. The roof drainage system was observed to be in average condition. The roof drains are a system of gutters and downspouts that drain into an underground system. In areas with concrete paving or sidewalks, the downspouts are day lighted onto the concrete. It was reported the roof drainage system was in average condition. It was observed that there is an exception where that the gutter and downspout system on the canopy was badly damaged. Some of the downspouts were missing. Instances of an organic substance that has the appearance of mold were observed on the exterior block walls, which may be caused by either leaking or overflow of the gutter system.		Poor
Interior Construction	Interior Walls	The interior partitions are gypsum board and CMU (concrete masonry unit). The corridors are constructed of CMU with the room partitions constructed of drywall and metal studs. The walls were observed to be in average condition. Some holes were reported in the drywall firewalls above the ceilings. An example is a 2x2 hole above the ceiling in the wall between the library and the audio-visual room. It was reported and observed that a leak existed at the roof transition above room B116. The wall was damaged and an organic substance that has the appearance of mold was inside the wall.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Doors	The interior doors in this facility are stained wood with hollow metal frames. These doors contain small lites with wire glass. It was observed that the doors were in average condition. It was observed that the doors from the cafeteria and the main corridor would stick in the open position. It was also observed that the door between the cafeteria and the kitchen did not close	Average
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	The exterior stairs in the facility are poured-in-place concrete with metal hand rails. It was observed that the stairs were in good condition.	Good
	Interior Stairs	This facility has two sets of interior stairs that are poured-in-place concrete and metal pan construction. It was observed that the stairs were in good condition.	Good
Interior Finishes	Interior Wall Finishes	The interior partitions in this facility are either drywall or CMU, both of which have painted surfaces. The restrooms have ceramic tile on some walls. The cafeteria has acoustical sound panels mounted on the walls. It was observed that the walls were in average condition with normal wear and tear.	Average
	Interior Floor Finishes	The interior floor finishes in the building consist of vinyl tile in the classrooms, corridors, and cafeteria. There is carpet in the administration office, the library, the music room, and the steps to the stage in the cafeteria. The stage has a hardwood floor, and the kitchen has a poured flooring material. The restrooms have ceramic tile flooring. The flooring was observed to be in average condition, given the age of the structure and the high traffic volume. It was reported the carpet in the library was new. The carpet in the administration area was at the end of its design life and needs to be replaced. Broken ceramic tile was observed in restroom GHRR 100. The carpet on the stairs leading to the stage was observed to be badly worn. It was reported there were leaks in the second floor caused by holes through the floor that date back to construction of the building.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Ceiling Finishes	The ceilings throughout this building are a 2x4 suspended acoustical system. The ceiling tile was observed to be in poor condition. It was reported that in some places where wires suspend the ceiling, the wires have been cut by people who were working on the mechanical system. Water stained and damaged ceiling tile was observed throughout the building.	Poor
Conveying	The building is equipped with a hydraulic passenger elevator to service two levels. The elevator was noted as having a maximum weight capacity of 2,100-pounds. The elevator was observed to be in good condition and had a recent inspection certificate issued, which will expire in October 2016.		Good
Plumbing	Plumbing Fixtures	The building has one set of public restrooms for males and females located near the cafeteria. There are separate staff restrooms located throughout the facility. These restrooms typically have vitreous china hand sinks with manual faucets, along with vitreous china, floor-mount/wall toilets with manual flushing mechanisms, and vitreous china, wall-hung urinals in the male restrooms with manual flushing mechanisms. There are floor sinks found in the janitorial closets, and water coolers located throughout the facility. Each suite of classrooms has two restrooms with a floor-mounted toilet in each. Each classroom has a stainless steel sink with a goose-neck faucet and a water fountain. The building also includes plumbing fixtures in the kitchen. The plumbing fixtures were observed to be in average condition. It was reported that sewer gas problems caused by vent stacks that are too short and have caused the air conditioner to draw the sewage smell into the building. It was observed that a toilet in GHRR 100 was removed and replaced in a different place, leaving a dirty floor condition.	Average
	Domestic Water Distribution	The kitchen has two tankless water heaters that are six years old. There are numerous small electric water heaters in the janitorial closets and the nurse's office. There is a water softening system in the kitchen. The water distribution system was observed to be in average condition. It was reported that a plumbing pipe was leaking in the kitchen. It was reported that some repairs have been made to	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		the sanitary sewer system in the area of the kitchen due to corrosion.	
	Other Plumbing	System not present.	N/A
Mechanical/ HVAC	The mechanical system has heating and cooling provided by ground source heat pumps, which serve the classrooms, the common areas, and the corridors. There are five package units located on the roof of the gymnasium, kitchen, and cafeteria. The library has a split system. There are also four fresh air units on the roof. It was in poor condition given the age of the equipment. It was reported the package units were original and were at the end of their design life. The MDF (main distribution frame) room is cooled by the split unit. It was reported that the compressor on this unit had been repeatedly replaced. This unit was at the end of its design life. It was observed that the mechanical system was reaching the end of its design life.		Poor
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns, strobes, pull stations, and detectors. The system was observed to be in average condition, considering the age and old technology. It was reported the fire alarm system was working properly but that it should be upgraded with newer technology.	Average
	Fire Protection/ Suppression	The building does not have a sprinkler system. There is a dry fire suppression system in the kitchen vent hoods. It was observed that the available fire protection systems were in average condition. It was reported the vent hood suppression system worked properly. It was observed and reported that fire extinguishers were present throughout the building.	Average
Electrical	Electrical Distribution	The electrical service for this facility is 2500-amp, 3-phase 4-wire120/208 Wye system with a GFI (ground fault interrupter) main breaker. There is no power factor unit and no solar for this facility. There are four available spaces in the main panel. The electrical distribution system was observed to be in average condition for its age. It was reported there is no lightning protection system. It was reported there would be a need for additional capacity in the near future.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		It was reported the Panel 3 BL surge protector had shorted out and needs to be replaced. It was reported that outlets were not properly anchored in the CMU wall and were falling out of the wall. It was reported that refrigeration unit C frequently tripped the breaker following an outage on the city side of the electrical system. It was observed that places in the gymnasium and cafeteria had power provided by surface-run extension cords rather than standard outlets.	
	Lighting	The interior lighting systems consist of 2x4 troffer fixtures in the suspended ceiling system. There is architectural wall-mounted lighting in the main entry. The lighting system was observed to be in poor condition because much of the equipment was out dated and spare parts were unavailable. It was reported that staff cannot turn on wall-mounted lights in the main entrance. It was reported there is insufficient lighting in corridor B. It was reported that some corridor lighting was controlled by remote ballasts. These ballasts were no longer available. The exterior lighting systems consist of a drum-type surface-mounted fixture in the portico; square surface-mounted fixtures are used in the canopy walkways. There is an assortment of wall packs used around the exterior of the building. It was reported the walkway's light fixture lenses were melting due to overheating by the bulbs. It was reported that lighting was insufficient in the parking lots and in the vicinity of the kitchen entrance. It was reported the emergency lighting system was dated and needs to be replaced with newer technology.	Poor
	Communications & Security	This facility has a Wi-Fi system, card readers, a public address system, and CCTV (closed circuit television). The communications and security systems were observed to be in average condition based upon the age of the equipment and the state of current technology. It was reported the Wi-Fi system worked well throughout the school with the exception of the administration office, which had frequent connection problems. It was reported the card readers were working properly. However, there were an insufficient number of card	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		readers in the facility. It was reported there were no issues with the cameras. It was reported that the security system did not prevent visitors from entering the school building before being screened through the administration offices.	

Exterior System Deficiency Examples

Exterior Walls

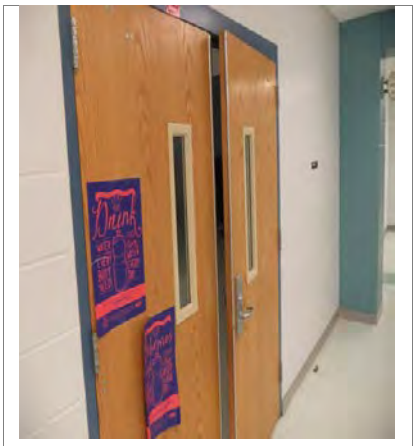
Exterior Doors

Roofing Deficiency Examples

Interior Construction Deficiency Examples

Interior Walls

Interior Doors



Interior Finishes Deficiency Examples

Interior Floor Finishes

Interior Ceiling Finishes

Plumbing System Deficiency Examples

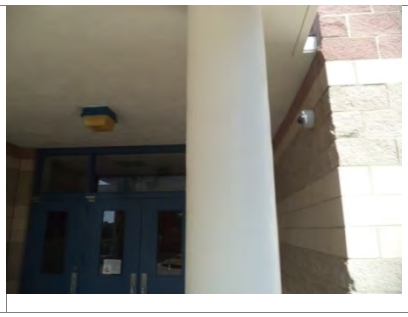
Plumbing Fixtures

Mechanical/HVAC

Electrical System Deficiency Examples

Electrical Distribution

Lighting



Casey Elementary School 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. Identify the source of the gutter leak that is causing the organic substance that has the appearance of mold. Perform repairs to stop leaking, which should include gutter cleaning and a gutter cleaning maintenance plan. Pressure wash the entire exterior of the building to remove the organic substance that has the appearance of mold.
2. Adjust exterior door hardware and evaluate closers. Replace nonfunctioning closers.

Roofing

1. Replace the entire roof. Replacement of the roof must precede all repairs associated with leakage, including exterior walls, ceiling and interior wall damage.
2. Replace the gutters and downspouts at the canopy.

Interior Construction

1. Engage an industrial hygienist to evaluate the organic substance that has the appearance of mold in the wall and recommend the best method to remediate it. Perform remediation as recommended. Determine the source of the leak and perform repairs.
2. Consult with the fire marshal to identify a fire code-compliant method of repairing the holes in the firewall.
3. Patch holes though the concrete floors that were left during original construction.
4. Replace suspension wires above the ceiling system.
5. Adjust door hardware to alleviate misaligned doors. Replace closers that are worn out.

Interior Finishes

1. Replace broken ceramic bases as needed.
2. Remove carpet at steps to the stage. Determine if the floor under the carpet is the same hardwood as the stage and evaluate its condition. If it is hardwood and in acceptable condition; choose between refinishing the hardwood or replacing the carpet.
3. Replace damaged ceiling tile.

Plumbing

1. Remove the toilet in GHRR100. Clean up the area, including all old wax, and then reinstall the toilet.
2. Extend the vent stacks so they are higher than the air conditioning units.
3. Evaluate the gutters for leakage or clogging in the areas where there is an organic substance that has the appearance of mold on the exterior block walls.

Mechanical/HVAC

1. Plan to replace aged HVAC equipment prior to failure.
2. Replace cooling equipment that serves the MDF room.

Electrical

1. Replace the panel surge protector in Panel 3 BL.
2. Anchor and reinstall all receptacle boxes in the CMU wall.

3. Test the refrigeration Unit C breaker. Replace the breaker if it is faulty. If the breaker is viable, investigate replacing the wiring to the unit.
4. Install added receptacles in the gymnasium and cafeteria. If it is not possible to run the power in the walls, run the wiring on the surface using a permanent method such as wire mold.
5. Evaluate the future needs of the facility and consider increasing the size of the service and main panel.
6. Consult a licensed electrical contractor to determine where the switching is located for the foyer lighting. Instruct the staff in the use of the switching.
7. Replace the rusted fixture in the male restroom.
8. Replace outdated corridor lighting that has discontinued ballasts.
9. Replace the exterior walkway lighting fixtures with LED (light-emitting diode) fixtures.
10. Perform a light level survey of the parking lot lighting. Use the survey to identify where to added lighting. Install new lighting as recommended.
11. Replace emergency lighting in a phased method to ensure all areas are well lighted during replacement of the system.
12. Install additional LED lighting at the kitchen entrance.
13. Perform a lighting level analysis in corridor B to determine what amount of light should be added. Add lighting according to the recommendation.
14. Identify locations where added card readers are needed, and install readers.
15. Provide additional Wi-Fi capacity to administration offices. Upgrade the system if necessary to ensure reliable connection for staff.

Casey 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.

2015 Bond Planned Improvements from PM Randall Sakai on 10/28/16.

- To be completed by end of 2016.
  - Remove abandoned unit in room A109 closet.
  - Repair room E143 console unit.
  - Repair rooms D233 and 237 HVAC system.