

Western DuPage County Regional Train

Facility Infrastructure Safety & Repairs

Lakeview Junior
High School

Prairieview
Elementary School

Google

8239

7

Lakeview Jr. High School-1975

- 6-8 grade
- Approximately 360 students currently enrolled.
- Science wing/Gym 2 added in the early 2000's.
- Since the addition, the building systems and envelope are largely unchanged with the exception of the 2018-19 reconfiguration of the main entrance/office & fine arts space.
- Approximately 71,900 square feet.

Prairieview Elementary School- 2000

- 3-5 grade
- Approximately 360 students currently enrolled.
- Opened in 2000, replacing the closed Center Cass School located on the corner of 83rd Street and Lemont Rd.
- Approximately 64,400 square feet.

Elizabeth Ide Elementary School-1970/2019 (additions)

- PK-2 grade
- Approximately 400 students currently enrolled.
- Underwent a remodeling & addition between 2017 and 2019.
- Approximately 52,000 square feet.

Health Life Safety Survey

- Conducted by District #66 Architect of record- WOLD Architects
- Required by the state of Illinois for school districts within each 10 year period.
- Purpose:
 - Identify immediate Health/Life/Safety concerns
 - Comprehensive deep dive into all aspects of student & staff occupied facilities.
 - Divides noted systems or material deficiencies into 3 categories which aide in prioritization and budgeting/planning by the school boards.
 - **Code "A"- URGENT**-complete within 1 year- When building occupants safety is at immediate risk
 - **Code "B"- REQUIRED**-complete within 5 years-Required repairs to systems (HVAC), bleachers, doors, masonry, plumbing, trip hazards, asbestos abatement, etc.
 - **Code "C"- RECOMMENDED**-accessibility, security work, vestibules, energy conservation, paving, etc- *Not required by the state at this time.*
 - **N/I items-CONSIDER**-consider items for replacement before they get worse- *Not required by the state at this time.*

HLS & OTHER IDENTIFIED PRIORITY REPAIRS/REPLACEMENTS

Item	Cost Aug 21	Timeframe	INFL/CONT	HLS Code
Failing Roof Sections 1, 2, and 3 at LV	\$1,923,000	1-3 YRS	\$2,130,000	B
Failing Floor Tile in PV Multi-Purpose Room and Gym	\$261,600	1-3 YRS	\$272,100	B
Failing Intercom Systems at PV and LV	\$149,400	1-3 YRS	\$155,500	B
Aging Fire and Intruder Alarm Systems IDE, PV & LV	\$238,000	1-3 YRS	\$263,000	B
Failing Water Heater and Associated Plumbing LV	\$100,200	SUMMER 22'	\$100,200	B
Trash enclosure/kitchen hood shunt trip device	\$25,200	1-3 YRS	\$30,000	B
Failing HVAC at LV	\$1,580,000	2-5 YRS	\$1,950,000	C
Failing HVAC Controls at PV and LV	\$815,400	2-5 YRS	\$954,000	C
Failing Sidewalks at PV and LV	\$267,000	5-10 YRS	\$384,000	C
Failing Parking Lots at PV and LV	\$592,000	5-10 YRS	\$876,000	C
Structurally Compromised Exterior Metal Wall at LV	\$768,000	5-10 YRS	\$1,094,000	C
Insufficient Camera Coverage for Safety PV & LV	\$59,000	5-10 YRS	\$62,000	C
Lighting -Classrooms & Parking Lot/Exterior	\$960,000	5-10 YRS	\$1,271,000	C
Misc C items total	\$409,000			C
Misc items N/I in HLS report	\$2,023,000			
Totals (Current pricing)	B-\$2,697,400	C-\$5,450,400	N/I-\$2,023,000	

HLS sample year by year budgeting outlay.

DESCRIPTIONS	COST	TIME	HLS CODE	District priority code	2022	2023	2024	2025
Tuckpointing various locations: Provide masonry repair and tuckpointing to prevent moisture damage	\$5,400	3-5 YRS	C	3				
Roof - Area 1: Replace roof system with modified bitumen roof	\$1,134,360	1-3 YRS	B	2				\$ 1,276,001
Roof - Area 2: Replace roof system with modified bitumen roof	\$392,400	1-3 YRS	B	2			\$ 424,420	
Roof - Area 3: Replace roof system with modified bitumen roof	\$396,900	1-3 YRS	B	2			\$ 429,287	
Metal Wall Panel: TBD - replacement or prep and repaint/replace trim components due to rusting	\$768,000	3-5 YRS	C	3				
Masonry Control Joints - Gym Walls: Remove and replace sealant at multiple locations	\$4,800	3-5 YRS	C	3				

Lakeview- Roofing



- Roof on the left side of the photo-approximately 22 years old. Roof Sections 1-3
- Roof on the right side of the photo-newly replaced in the summer 2021. Roof Sections 4 & 5
- Has been on Master facility plan reports since 2014 (LEGAT architects)
- Undergoes semi annual maintenance.

***Beyond useful life & warranty and has repeatedly been repaired. In significant danger of insulation saturation and leaks, leading to structural integrity compromise and mold*-HLS**



On the Left-
see patches that
have been made-
varying shades of
silver/gray.

On the Right-
see the darker
sections where the
silver/gray color is
wearing thin- this
shows the bare
rubber of the roof
membrane.





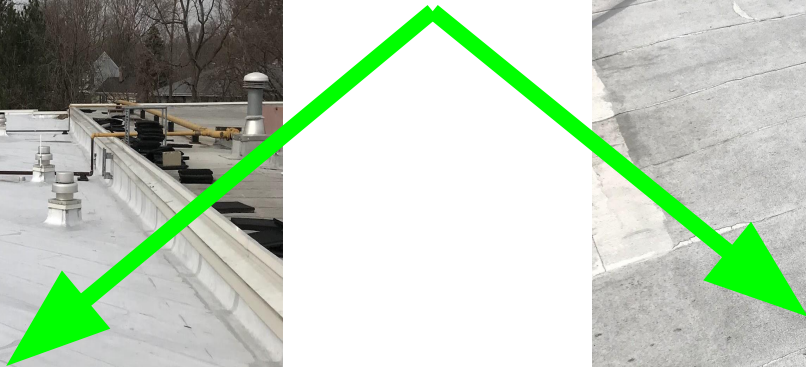
On the Left-
some larger
patch areas and
a roof drain.

On the Right-
heavily degraded
section of surface
coating.





Newly
replaced
section 4 & 5.
Summer 2021



HVAC

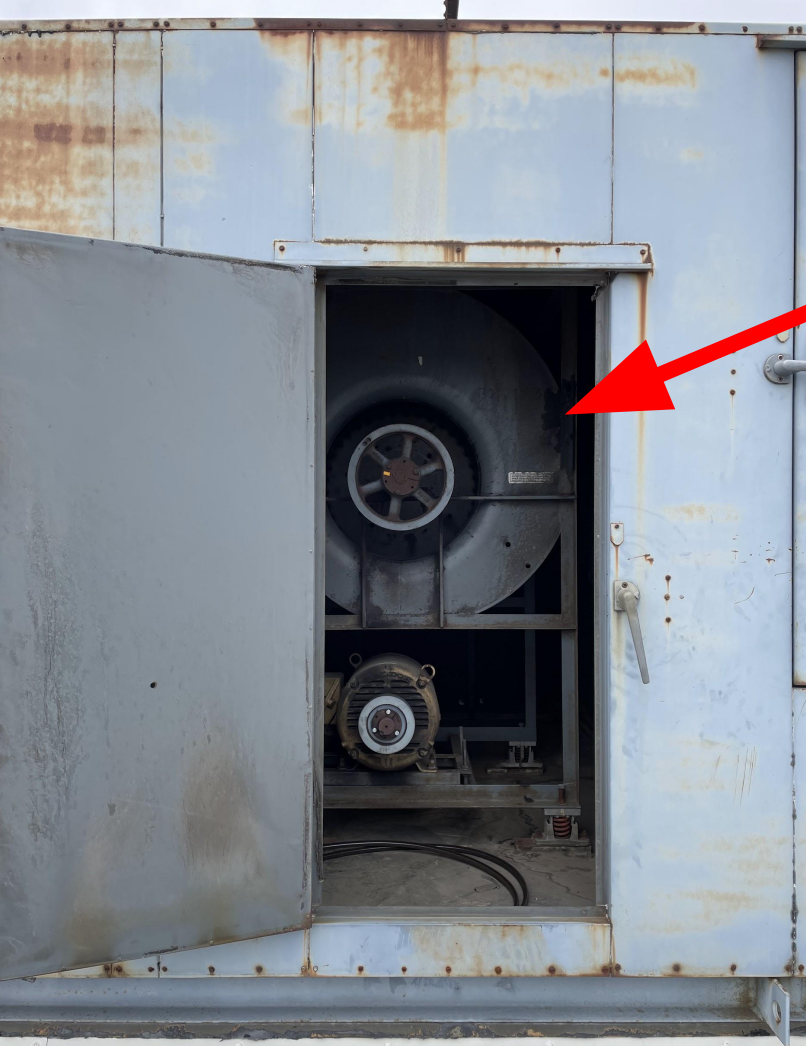


- 7 total RTU's (Roof Top Units)
- Multi Zoned air handler
- Units heat & cool (not simultaneously)
- All 7 units have been on Master facility plan reports since 2014 (LEGAT architects)
- Units undergo quarterly filter changes and semi annual coil cleaning.

***Units have outlived their useful life according to ASHRAE standards.*-HLS**

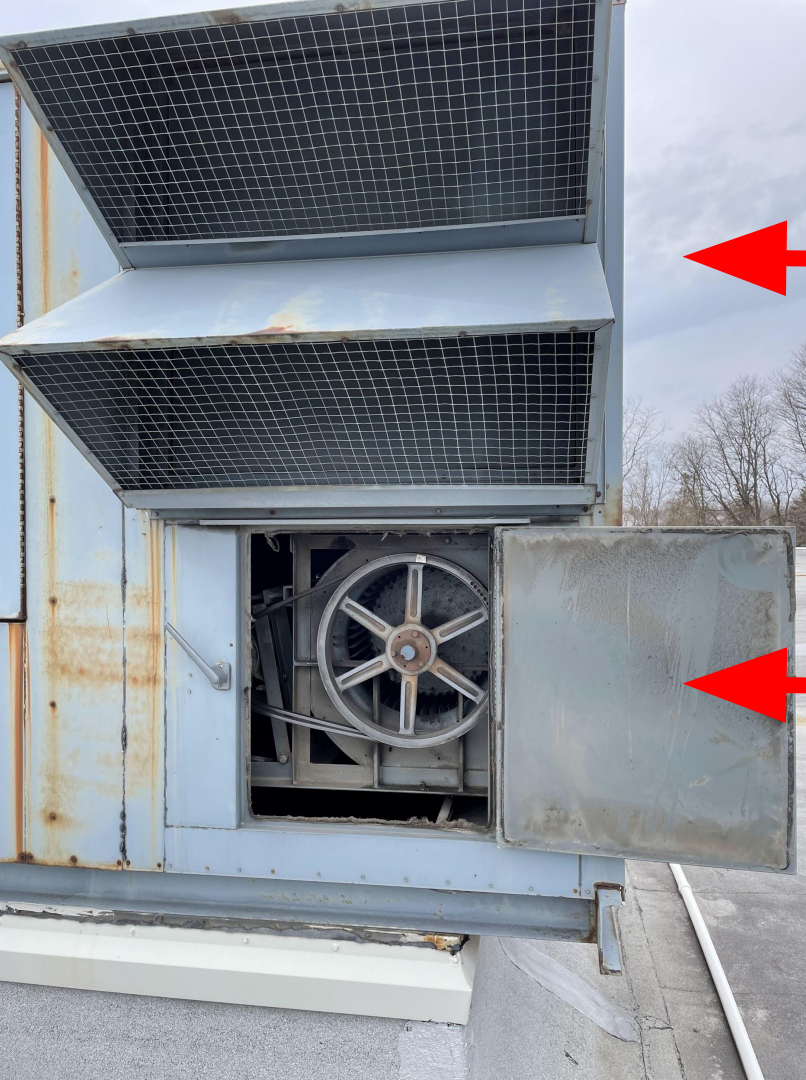






Fan Cage Assembly

- Rusting structures of blower fan cages.
- All repairs of any structural part is no longer available- requiring welding/fabrication.
- Quarterly belt changes

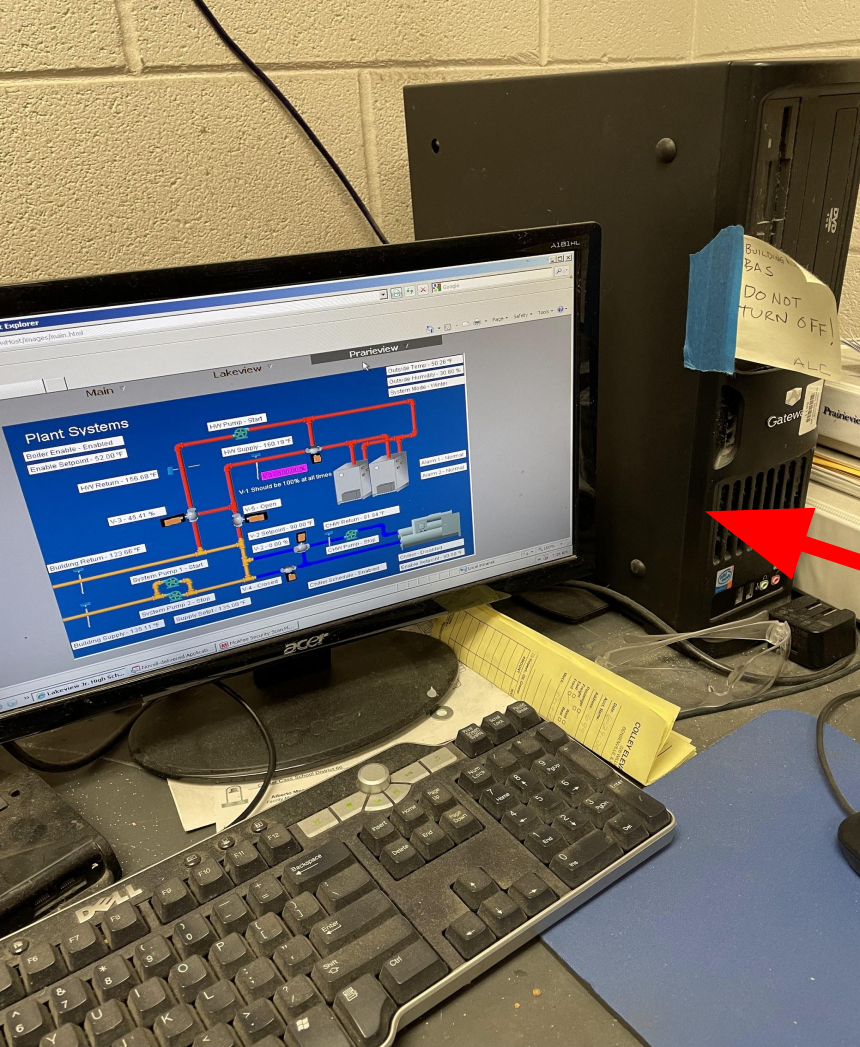


Top Left-

- Heating air intake and damper control section
- Inability to control dampers via BAS system. (manual set by season)

Bottom Left-

- Fan cage assembly parts require fabrication if failure
- Doors/hatches operation affects efficiency of units
- Quarterly belt changes



Prairieview & Lakeview- BAS- Building Automation System

- Controls each RTU (LV) & air handler (PV) from one system, web based Intranet.
- Ability to adjust temperature via outside air damper controls, metered cold/hot air or water.
- Classrooms and older offices do not have controllable thermostat devices- all individual space manipulation is done through the BAS.

***BAS system is obsolete, unable to properly control ventilation, heating or cooling. Impact to indoor air quality*-HLS**

Why do we need a new BAS?

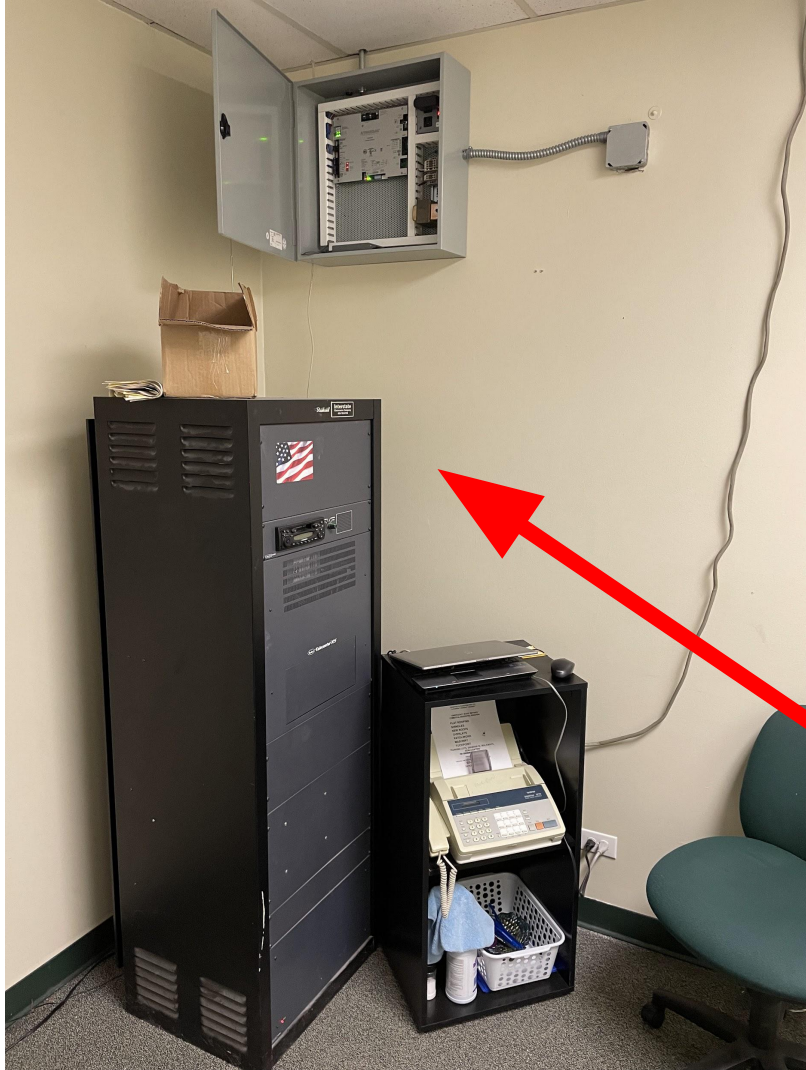
- The system used at both LV & PV is no longer supported from the system designer (Automated Logic Co.) without upgrade.
- Computer based system. Current system runs on Windows XP which was last serviceable in 2014.
 - If the computer system fails- so does the BAS
 - Security threat from a firewall and tech perspective
 - There is no remote access possible for adjustments or check ins.
- Inability to troubleshoot directly with RTU's
- Does not communicate with newly added controls
 - Example- New Fan and damper control unit added to RTU1 supporting Gym1. Upon installation, the new controller was not able to speak with the aged BAS. Money had to be spent to run wires and a thermostat to the Gym1 just to be able to operate the RTU, bypassing the majority of what the BAS is supposed to do.
- Ability to better control unit schedules and energy efficiencies



Lakeview- Hot Water Boiler

- Estimated last replaced in 1995
- Tank & pipe insulation contains the last known asbestos in the building. (current asbestos plan is up to date and monitored by PSI-Intertek.)
- \$50,000 maintenance grant has been awarded for replacement during 2022.

***Water heater & storage tank are showing signs of failure* -HLS**



Lakeview/Praireview-Intercom System

Why is it important?

- Emergency messaging from the office- (Lockdown, Fire drill, bad weather etc.)
- Direct messaging to students from front office
- Controls bell schedule

Why do we need a new system?

- 22 Years old
- Analog System
- Also controls clocks-does not properly update ALL clocks
- Inability to update or receive new support

***Existing system is obsolete with difficult continued maintenance resulting in extended down time*-HLS**

Lakeview, Prairieview & Elizabeth Ide- Fire Alarm System

- IDE system age- approximately 25 yrs
- LV system age- approximately 22 yrs
- PV system age- approximately 22 yrs.

- Replacement components for each panel are no longer supported from manufacturer (Edwards & Simplex) without upgrading panel to current supported models.

***Fire alarm system is aged with frequent failure. Failures are unpredictable and pose safety risk in the event of emergency*-HLS**



Tile Flooring



Prairieview
cracked floor tiles.





Lighting

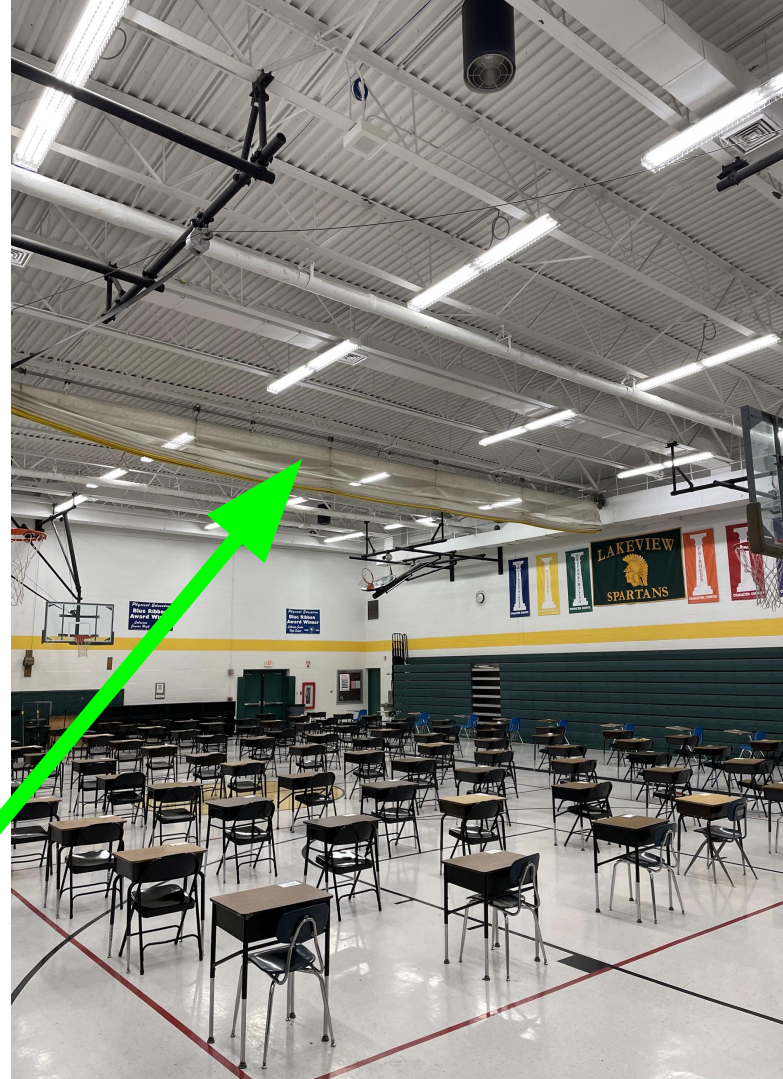
The Majority of the Lakeview & Prairieview interior lighting with exception of Gym1/Gym2/stage & PV Gym/MP room are ballasted T8 halogen tube lights.

- Upgraded lighting to LED will save on repair frequency cost of both parts & labor.
- Upgrading to LED lighting will improve the buildings energy efficiency.
- Upgraded LED lighting would provide consistency in lighting brightness & color temperature throughout.

***incomplete lighting coverage for exterior emergency lighting. Mixture of lighting types resulting in uneven lighting conditions and coverage*-HLS**



On the Left-
Halogen T5
lighting.
(majority of
Lakeview).



**On The
Right-**
LED
upgraded
lighting.(done
in house)



Lakeview- Doors & Windows

The majority of the exterior doors are approximately 22-25 years old with a certain number of original doors remaining.

- Many of the exterior doors are suffering from rusting sections, rotting & broken sills & unlevel/unsealed sections based on exterior concrete settling or cracking
- Door hardware and functionality is inconsistent throughout the building.



On the Left-
an original exterior
door.



On the Right-
signs of rotting of the
door frame.



On the Left-
example of
repurposed older
doors. Removed
glass, welded
steel plate to use
as Gym exit
doors.(Done in
house)

On the Right- many
original windows &
frames are also in
need of attention.



Lakeview & Prairieview Asphalt & Concrete

Only maintenance (sealcoating/crack filling) and failed section replacements (concrete) of both concrete and asphalt have been performed of parking lots and sidewalks since 2001.





On the Left-
example of a self
patched hazard and
raised water service
access trip hazard.

On the Right-
example of the pitting
& popping that
occurs over time and
degrades concrete.





On the Left-
example of potholes
patched. (patched in
house as needed)



On the Right-
example of fatigue
cracking of the
asphalt.



On the Left-
cracking sidewalk
ramp. Also missing
current ADA pad &
current specs.



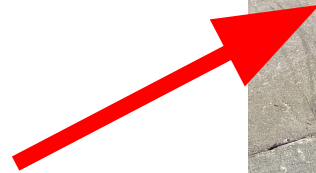
On the Right-
example of an
insufficient sized
access ramp W/out
current ADA pad.



On the Left-
example of height
differences at
Prairieview.



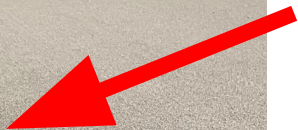
On the Right-
example of height
differences at
Prairieview.



NON-Code Violation/HLS Notables



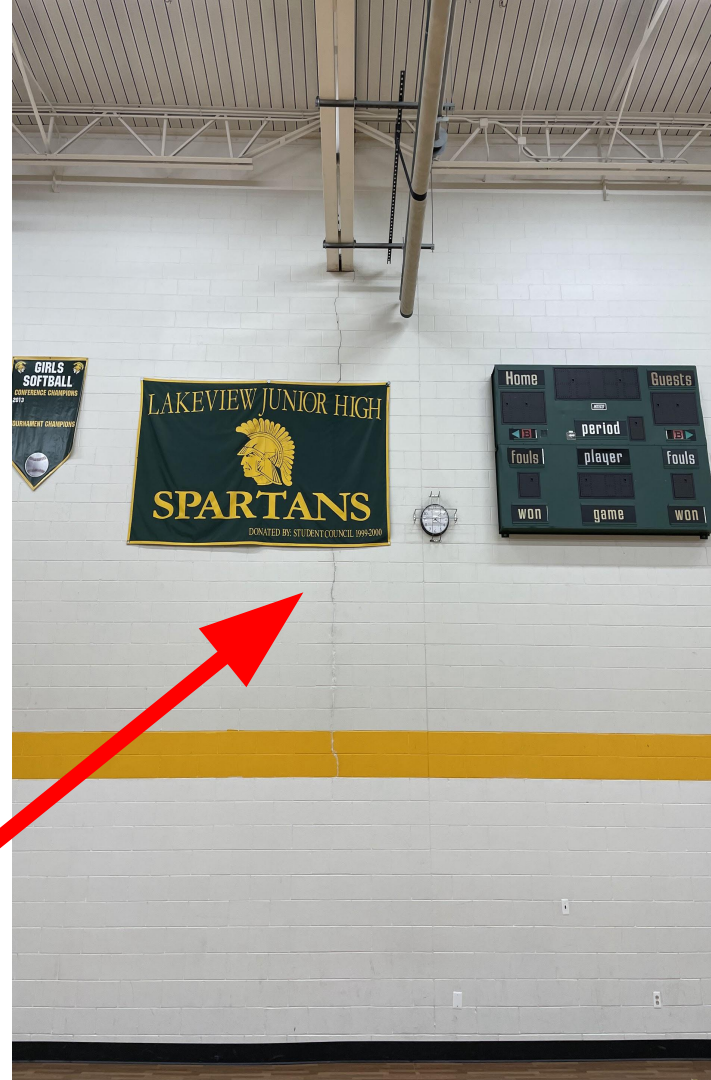
Lakeview Carpeting



Lakeview
Metal
Wall
Paneling



On the Left-
Prairieview example of
replaced tile pieces
(by color brightness).



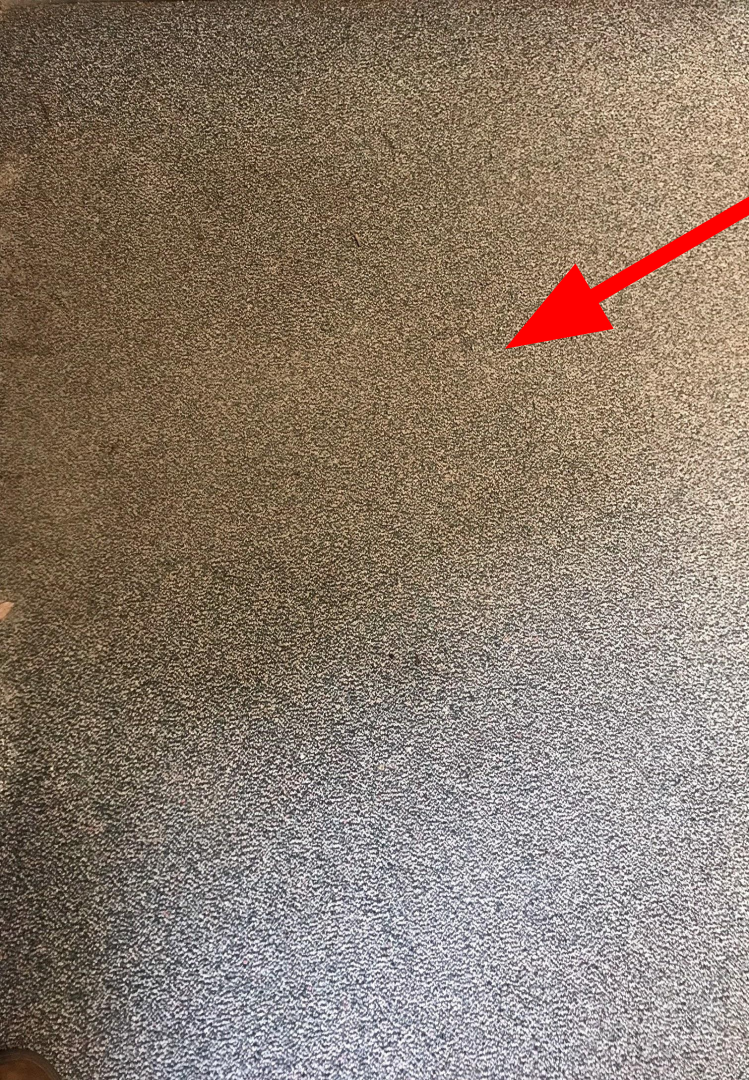
On the Right-
vertical crack in wall
block-Gym 2 at Lakeview.



On the Left-
Prairieview carpeting
example.
Original- 22 years.



On the Right-
Prairieview Carpeting
example.
Original- 22 years.



On the Left-
Prairieview carpeting



On the Right-
Prairieview window
example-failed
thermal window seal.





Rusting base



Parking Lot
lighting
examples



Missing head



Questions?

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