



**Building and Facility Assessment
Panorama Community School District
High School / Middle School
701 W Main St, Panora, IA 50216**

February 27, 2025



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Project: #25003 Panorama CSD Envelope Review

Facility Assessment

Date: January 30, 2025

Purpose: Assessment Review of Elementary & High School / Middle School Envelopes and Systems

Introduction

The design team of SVPA Architects and KED Bluestone Engineering have been contracted by the Panorama Community School District to provide a facility assessment. The goal of the facility assessment is to review the existing building envelopes and mechanical/electrical systems prior to consideration of building improvements. The team was provided with existing drawings as part of the assessment process. Facilities Director Dave Simmons was present during on-site building tours to provide access to areas of interest and insight regarding facility concerns. This report is a high-level audit of building roof systems, exterior envelope and major mechanical/HVAC equipment.

Each design discipline reviewed the building system related to their area of expertise for publishing in this report. More in-depth investigation will be required when future work is directed by the School.

Background

The original High School / Middle School building was built in 1972 and added on to in 1997 and 2009. There were likely some interior remodels that may or may not have drawings included or made available to this team. The original elementary school building was built in 1997, with a small addition in 2009. Both buildings are showing signs of their age with typical issues that occur over time. Some issues are from failing equipment and materials, while others are from deferred maintenance or environmental issues. This study is meant to supplement the recent study conducted by this design team for a potential gym addition to the High School / Middle School.

Objectives

The objective of this report is to identify issues that may need to be addressed either before or in conjunction with the proposed gymnasium addition.

Architectural Report High School / Middle School Building

1. Exterior walls

- a. The majority of the exterior walls are constructed with concrete block structural walls with face brick exterior cladding. Most windowsills are split-faced concrete block material. Areas of Exterior Insulating Fenestration System (EIFS) at some windows and gymnasium walls are applied to structural concrete block walls. Metal wall panels are applied to structural concrete block walls above the roof at the main gymnasium.
- b. The original brick walls were built as "mass walls" that do not have air space or weeps for water removal. This was the typical construction method at the time the original building was constructed. When dealing with this type of wall construction, it is important to not add anything that will trap moisture and not allow water vapor to escape.
- c. The additions built in 1997 and 2009 have brick walls that are constructed as "cavity walls". This type of wall construction has a drainage plane inside the assembly for water to drain down the vapor barrier and weep out of the wall at the base. This type of construction is still used today with better air/vapor barrier materials, and higher insulation requirements.
- d. The areas of walls that use EIFS as the exterior finish have issues. The EIFS at the top of the small gym walls was a bad installation. It appears each of the layers that make up the EIFS system were applied too thin and are failing at a rapid rate. Additionally, EIFS was installed in some locations below windows, and it extends down to grade. EIFS should not be installed in areas where it can encounter mowers and people because it is susceptible to damage.
- e. Most of the aluminum windows are in pretty good shape, but many have operable windows that can be a security issue. Security isn't something that is addressed in this report but should be considered by the School. The aluminum curtainwall windows are performing very well, but the flashing at their base leaves too much of the CMU sill exposed. This condition allows too much water to enter the masonry and is causing liming and efflorescence on the face of the brick and block. Additional flashing should be added to the base of the curtainwall that extends over the horizontal face of the sill.
- f. The aluminum doors are in good shape. Some need some adjustments to keep them in good working order over time.
- g. Most of the doors and windows in the original building have hollow metal frames. The original glazing is not insulated. Consider updating to aluminum or fiberglass doors with insulated glazing. Whichever material is selected the frames should be thermally broken.
- h. In the original building, exposed aggregate precast panels were used at the entries and windows. These panels are only about 1" thick and in at least one location the horizontal panel is sagging. It may be possible to repair the supporting structure and take the bend out of the panel. If this isn't possible the panels above the doors and windows can be replaced with EIFS.

2. Roof

- a. The existing roof is sectioned into several areas that can make creating a reroof schedule much easier. At this time, there are 3 different roofing systems on the building: Ballasted EPDM, Fully adhered EPDM, and Fully adhered PVC. It appears that the school is mostly through an upgrade program that is replacing the EPDM membranes with newer membrane technology. It may have been better to divide the roof into separate sectors and space the replacements out by approximately 5 years, to make budgeting for replacements easier to anticipate and manage.

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- b. When a building is re-roofed code requires that the R-value of the insulation be brought up to the current requirements. Doing this sometimes requires low curbs to be replaced with taller curbs so the membrane terminations occur at a warrantable height.
- c. Several roof areas do not have overflow roof drains or scuppers installed. These supplemental drains are required by code and should be added if possible, when a re-roof project occurs. These drains should be installed at the next re-roof project.
- d. Copings, the metal edge coverings at the perimeter of roofs, are a critical element of any roofing system. The original 3-sided copings are being replaced with a gravel stop coping detail that works much better, and this practice should be continued.

Architectural Report Elementary School Building

1. Exterior walls

- a. The original building walls are masonry cavity walls with large scale field and accent brick with an EIFS band at the top of the walls. All of the control joints in the walls are failing and will need to have the existing sealant removed and new installed. The sealant around the windows is failing at most windows and should be removed with new installed.
- b. The EIFS at the top of the walls has issues with algae growing on it and is a thin application like the High School. At the east end of the building there are several small round holes near the top of the EIFS. These holes appear to have been created by woodpeckers in pursuit of insects. The wall sections do not indicate any plywood behind the EIFS so it's unclear why there would be insects. The only reason insects might be present is if water is entering the wall above. The 3-sided copings at the top of the wall are prone to water leakage which could explain this issue.
- c. Several windowsill areas have failed mortar joints that should be addressed by limited tuck-pointing.
- d. There are several areas in the brick where the faces of the brick are scaling off. If extra brick are available, these failing brick should be replaced with solid ones.
- e. It was discovered that one of the storefront windows to the south of the preschool entry appears to have never been sealed to the brick sill. When the rest of the windows are sealed, it is important to seal this window.

2. Roof

- a. The roof of this building is small enough that it would not need to be separated into areas for scheduling future replacements. There is a built-in separation today because the addition roof was installed approximately 12 years after the original if you would like to take advantage of it.
- b. The entire roof is covered by a ballasted EPDM that is showing signs of shrinkage.
- c. Where copings intersect EIFS walls, better details are required.
- d. Termination of the roof membrane under the EIFS walls needs annual inspections of the sealant.
- e. Some of the skylight curbs are short and would require replacement if additional insulation needs to be added during a re-roof.

Project: #25003 Panorama CSD Envelope Review

Facility Assessment

Conclusions

High School / Middle School

This building, like many school buildings across Iowa, has been added onto and remodeled many times over the years as the school district has grown and needs changed. This process leaves you with a building that has many varying construction types and building systems. Also as building elements and systems age and fail, they are repaired or replaced as needed. Through this process, we have arrived at the current building and system configuration. It's important to understand that your current building wasn't designed as a complete, code compliant system with complimentary elements. It is very likely that the walls in the original building have little to no insulation, and there is really no easy, cost-effective way to add it now. On the contrary, code requires roof insulation to be brought up to code each time the building is re-roofed. We have identified areas of the building envelope that have issues that will require corrective action by the School in the future. The biggest envelope issues found include the remaining EPDM roof areas, the existing hollow metal doors and frame, the EIFS that needs to be resurfaced, and the water infiltration into the masonry below the curtainwall windows along the east side of the commons area. The School will need to develop a plan to prioritize the issues and schedule the needed repairs. This report can help you make those decisions.

Roof areas to be replaced:

1. Immediately replace areas K, H and T
2. Replace within 5 years areas P and Q

Exterior wall work:

1. Replace all sealants at control joints within 3 years
2. Replace all sealants around windows and doors at older building areas within 3 years
3. Replace failed hollow metal doors and frames as needed
4. Resurface EIFS above 7 feet above grade in the next 5 years
5. Replace EIFS below 7 feet above grade with a more durable material in the next 5 years

Elementary School

This building, unlike the High School building, has only one addition. The addition was constructed about 15 years after the original with similar construction systems. As building elements and systems age and fail, they are repaired or replaced as needed. There are some bricks that need repair, but most of the masonry just needs to be cleaned. All sealant joints need to be cleaned out and re-sealed. The EIFS is all very thin and needs to be resurfaced. Additionally, the issue causing woodpeckers to infiltrate the EIFS in the SE corner must be discovered and corrected. The existing roof membrane needs to be replaced. A TPO membrane is recommended instead of the PVC systems that you have been using. The doors and windows all seem to be in good working order that will serve the building well for many years. The School will need to develop a plan to prioritize the issues and schedule the needed repairs. This report can help you make those decisions.

Roof areas to be replaced:

1. All areas to be replaced in the next 3 years

Exterior wall work:

1. Replace all sealants at control joints within 3 years
2. Replace all sealants around windows and doors within 3 years
3. Resurface EIFS above 7 feet above grade in the next 5 years

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Budget Numbers and Schedule

Items identified for replacement in upcoming years with cost opinion:

Replacement numbers for roofs include removal of existing to deck, new R-30 insulation, and 80 mil TPO membrane with 30-year life expectancy.

Roof areas to be replaced 2026:

1. High School/Middle School roof section H,K&T: $18,000\text{sf} \times \$20\text{-}\$25 = \$361,000 - \$450,000$

Roof areas to be replaced 2027:

1. Elementary roof sections C&D: $30,000\text{sf} \times \$20\text{-}\$25/\text{sf} = \$600,000 - \$750,000$

Roof areas to be replaced 2028:

1. Elementary roof sections A&B: $26,000\text{sf} \times \$20\text{-}\$25/\text{sf} = \$520,000 - \$650,000$

Sealant Replacement 2028

1. Elementary: \$15,000
2. High School/Middle School: \$30,000

EIFS Resurfacing 2029

1. Elementary: $\$12/\text{sf} \times 10,000\text{sf} = \$120,000$
2. High School/Middle School: $\$12/\text{sf} \times 3,400\text{sf} = \$40,800$

Door Replacement with FRP 2029

1. Elementary: None
2. High School/Middle School 8 leaves: \$80,000

Roof areas to be replaced 2029:

1. High School/Middle School roof section P&Q: $15,000\text{sf} \times \$20\text{-}\$25 = \$300,000 - \$375,000$

Roof areas to be replaced 2030:

1. Elementary roof sections E: $5,800\text{sf} \times \$20\text{-}\$25/\text{sf} = \$116,000 - \$145,000$

Projected costs by year:

2026 = \$361,000 - \$450,000

2027 = \$600,000 - \$750,000

2028 = \$565,000 – \$695,000

2029 = \$540,800 - \$615,800

2030 = \$116,000 - \$145,000



Project No.: 125-005

February 24, 2025

Project: Panorama CSD
High School/Middle School MEP
Assessment

General

1. This review is based on a walk through of the existing high school and middle school on January 16, 2025. We have also reviewed existing plans from the original construction and subsequent addition as well as reviewed notes from a previous walk-through in 2023.
2. The original building was constructed in 1972 with major additions/renovations in 1997 and 2009.

HVAC

1. Original building (built in 1972, remodeled and added to in 1997) is served primarily by single zone gas fired RTU's. These RTU's are, for the most part, original to the 1972 project. Several RTU's were added in 1997 and it appears that the original ones were also replaced at this time based on the units observed on the roof.
2. An addition was added in 2007. This addition includes an Auditorium. Most of the addition was conditioned using a geothermal heat pump system. The Geothermal wells are located north of the building, under the practice fields. The header pit is located directly to the north of the discus pads. The manhole was partially flooded at the time of our visit. As part of this system, ventilation air is provided by dedicated gas fired make up air units/ventilation air units on the roof.
3. Dave Simmons (the director of facilities) reported that the equipment (especially the single zone RTU's) are beginning to fail. However, he did not report any comfort issues. He did mention that the controls in the original building were not very granular, which is in fact the case since single zone RTU's are used to serve multiple spaces, including multiple classrooms on a single thermostat zone.
4. The boiler system has been abandoned and the boilers decommissioned (although the units are still in the main mechanical room). One of the boilers infringes on the code required clear space in front of the main switchboard.
5. The equipment in the original building is over 27 years old. The equipment in the addition is around 15 years old. According to ASHRAE (American Society of Heating, Refrigeration, and Air conditioning Engineers), geothermal heat pumps have a life expectancy of 20-25 years. The facility manager reported that 3 heat pumps have been replaced just in the last year. The ground loops have a much longer life expectancy, often exceeding 50 years with proper maintenance.

Plumbing/Fire Protection

1. The building is served by a 6" domestic water main. This splits into a 3" domestic water service and a 6" fire service. Both services have backflow preventors. The fire service serves the 1997 and 2009 additions. The original 1972 building is not sprinklered.
2. Domestic hot water is provided by tank style gas fired hot water heaters in the main mechanical room.

Electrical/Fire Alarm

1. Electrical service is 2,500A, 208/120V. The equipment is original to the 1972 building and is fused style switchboard style. Typical lifetimes for electrical gear such as this is ~30 to 50 years. The switchboard is encroached on by one of the abandoned boilers, violating National Electric Code requirements for clearance.
2. In general, power distribution in the original 1972 building is original equipment and should be considered for replacement as remodeling occurs.
3. This switchboard sub feeds an 800A distribution panel in the 1997 addition. This is a circuit breaker style panel and appears in good condition.
4. In general, the power distribution in the 1997 and 2009 additions/remodeled areas are in good condition.
5. The building has a gas fired Onan emergency generator. However, it was reported that this generator is no longer functioning. The generator was used primarily for life safety purposes.
6. The existing lighting is a mix of fluorescent and LED, although it was reported that most of the fluorescent lamps have been replaced with LED lamps.
7. Emergency lighting coverage appears to be inadequate, especially in the original 1972 building.
8. The existing fire alarm system is a Simplex addressable fire alarm system. It does not appear that this system has voice notification capabilities.

Recommendations | Priorities | Budget Costs

1-2 Years **3-5 Years** **6-10 Years**

1. **SCOPE HM1**: Replace RTU's, MAU's
 - a. Replace the existing RTU's (total of 7) for the 1972 and 1997 buildings with new variable air volume RTU's. These units would be specified with energy recovery ventilators (ERV's) and power exhausts for building pressurization control. Single zone units would be provided for large volume spaces like the gym while classrooms and smaller spaces would be served by units serving multiple variable air volume (VAV) boxes providing more granular zoning with individual classrooms each controlled by a dedicated thermostat.
 - b. This work can be split up into multiple summers. This can be split up depending

on capital fund availability, but for the purposes of this report, we assume 2 to 3 units per summer.

- c. Budget Cost: **\$1,116,000**

2. **SCOPE HM2**: Upgrade HP's, MAU's in 2009 Addition

- a. Replace the geothermal heat pumps throughout the original 2009 addition. Existing ductwork can be cleaned and reused.
- b. Replace the roof mounted make up air ventilation unit with a new ventilation unit with an integral ERV as required by the State of Iowa Energy Code. Existing ventilation ductwork can be cleaned and reused.
- c. This work can be done over a single summer.
- d. Budget Cost: **\$1,402,000**

3. **SCOPE HM3**: Electrical Service Upgrade

- a. Replace the main 2,500 A switchboard with a new circuit-breaker-style switchboard.
- b. Remove the abandoned boilers to provide adequate clearance for the new electrical equipment.
- c. Remove the abandoned generator.
- d. Budget Cost: **\$696,000**

4. **SCOPE HM4**: Emergency Lighting Upgrade

- a. Add additional individual battery type emergency lights as required by code, especially at exterior exits. Consider installing a central inverter system in lieu of individual emergency lights.
- b. Budget Cost: **\$250,000**

5. **SCOPE HM5**: Upgrade Fire Alarm System

- a. Upgrade the existing addressable fire alarm system either by adding the voice feature as required by current State of Iowa fire code or replace the system with a new system with voice capabilities.
- b. Budget Cost: **\$318,000**

Capital Spend Projection

Priority	Project	2025 Costs	Escalated Cost (4% annual escalation)	YEAR	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Medium	SCOPE HM1: Replace RTUs from 1997 Work	\$1,116,000	See Below											
Medium	SCOPE HM1 Phase 1 (3 RTUs)	\$478,286	\$538,006	2027			X							
Medium	SCOPE HM1 Phase 2 (2 RTUs)	\$318,657	\$373,018	2028				X						
Medium	SCOPE HM1 Phase 3 (2 RTUs)	\$318,657	\$387,938	2029					X					
Low	SCOPE HM2: Replace HP, ENV's in 2009 Addition	\$1,402,000	\$1,918,734	2032								X		
Medium	SCOPE HM3: Replace Main Electrical Service Switchboard	\$696,000	\$814,222	2028				X						
High	SCOPE HM4: Upgrade Emergency Lighting	\$250,000	\$270,400	2026		X								
High	SCOPE HM5: Replace FA system with Voice System	\$318,000	\$343,949	2026		X								
Annual Cost (Escalated)					\$0	\$614,349	\$538,006	\$1,187,239	\$387,938	\$0	\$0	\$1,918,734	\$0	\$0



Figure 1 – Main Electrical Switchboard showing Boiler Encroachment at right



Figure 2- 2007 Addition Geo Pumps



Figure 3 – Roof Top HVAC Unit on Roof



Figure 4- Domestic Water Heaters



Figure 5- Existing Onan Emergency Generator

BUILDING ENVELOPE REVIEW – EXTERIOR WALLS

Panorama High School – Middle School Exterior walls review of building elements

Exterior wall review is broken into sections identified on the roof plan by number.

General Notes:

1. All control joints need sealant removed and replaced.
2. Sealant around most windows should be removed and replaced.
3. There are no weeps in older brick walls.
4. Remove mud wasp nests.



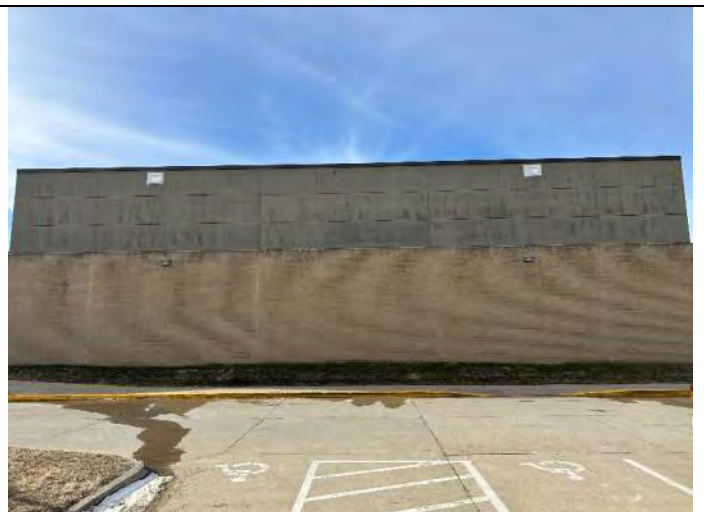
Elevation 1:



Elevation 1: Water/algae damage at FDC.



Elevation 1: Grout between frame and brick.

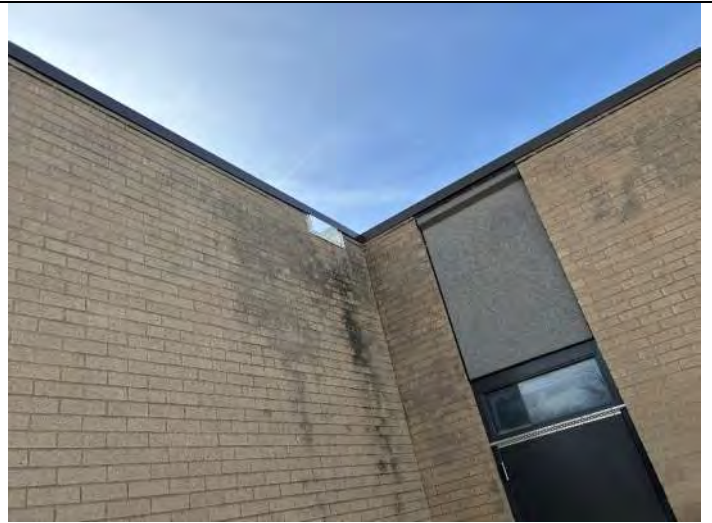


Elevation 2: EIFS above brick has failed.

HS-MS BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 2/3: EIFS failed, brick is algae stained.



Elevation 3: Algae stain below scupper.



Elevation 3: EIFS below windows failing.



Elevation 3: Sealant needed at conduit penetrations.



Elevation 3: New sealant required around windows and EIFS



Elevation 3: EIFS needs repaired.

HS-MS BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 3: Broken brick needs replaced.



Elevation 4: HM door into weight room needs replaced.



Elevation 4: Sill block is algae stained.



Elevation 4: Window sealant failed typically.



Elevation 4: Grout holes in brick.



Elevation 4: Repair mortar at entry opening.

HS-MS BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 4: Clean algae from sills and wall.



Elevation 4: Clean algae from sills.



Elevation 4: HM door needs replaced and resealed.



Elevation 5: May want to flash over shed.



Elevation 5: Replace HM door.



Elevation 5: Replace HM door.

HS-MS BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 5: Replace sealant at stone panel and door.



Elevation 6: Replace sealant at door frame.



Elevation 6: Replace HM doors.



Elevation 6: Seal pipe penetrations.



Elevation 6: New sealant at louver and drain.



Elevation 6: Remove unneeded equipment.

HS-MS BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 6: Finish exposed wood under coping.



Elevation 7: No issue found here.



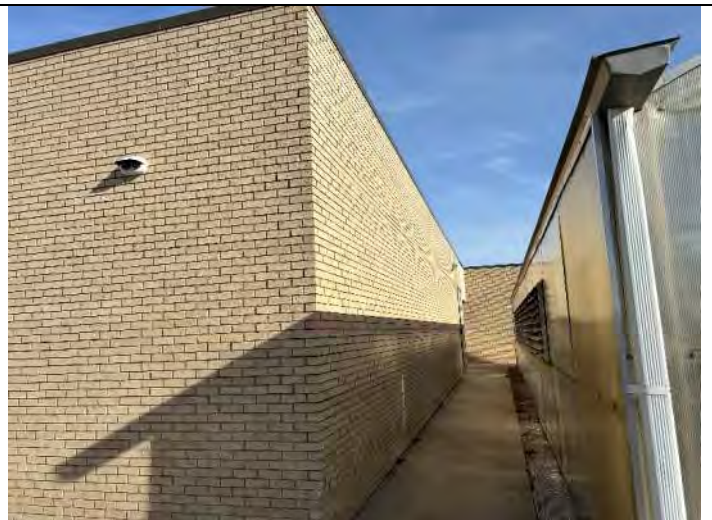
Elevation 7: No weeps in brick wall.



Elevation 7: Reseal stone panel and door frame.



Elevation 7: Reseal stone panel and door frame.



Elevation 7: Seal conduit penetrations at far end.

HS-MS BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 7: Reseal stone panel and door frame. Resupport sagging framing of stone panel.



Elevation 8: Reseal window frame, finish exposed wood.



Elevation 9: Check slope of slab.



Elevation 9: EIFS needs repair, reseal windows & doors.



Elevation 9: EIFS needs repair.



Elevation 9: Sealant at EIFS and window are failed.

HS-MS BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 10: Sealant at control joints is failed.



Elevation 1-0: West door hinges appear misaligned.



Elevation 10: Windows needs new sealant and sills cleaned .



Elevation 10: No issues.

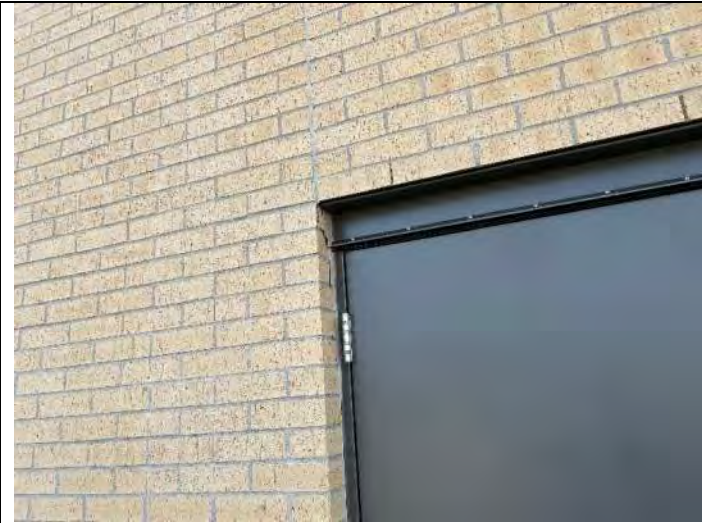


Elevation 11: .



Elevation 11: Repair broken brick above door.

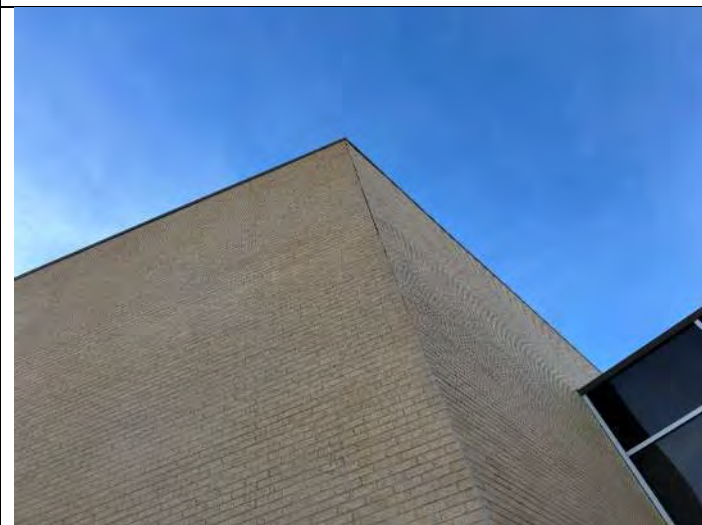
HS-MS BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



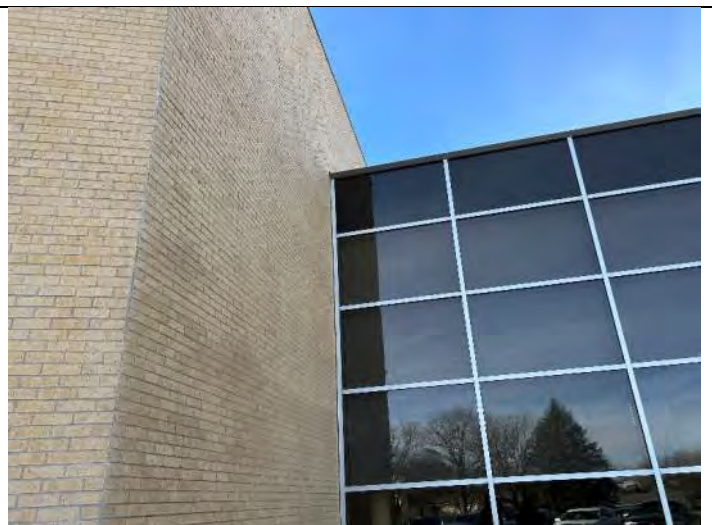
Elevation 11: Cracked brick at door head/jamb.



Elevation 11: Cracked brick at door head/jamb.



Elevation 11: Replace grout at corner with sealant.



Elevation 12: Check sealant at curtainwall/brick.



Elevation 12: Clean and seal brick and sill.



Elevation 12: Clean and seal brick and sill.

HS-MS BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 12: Clean and seal brick and sill.



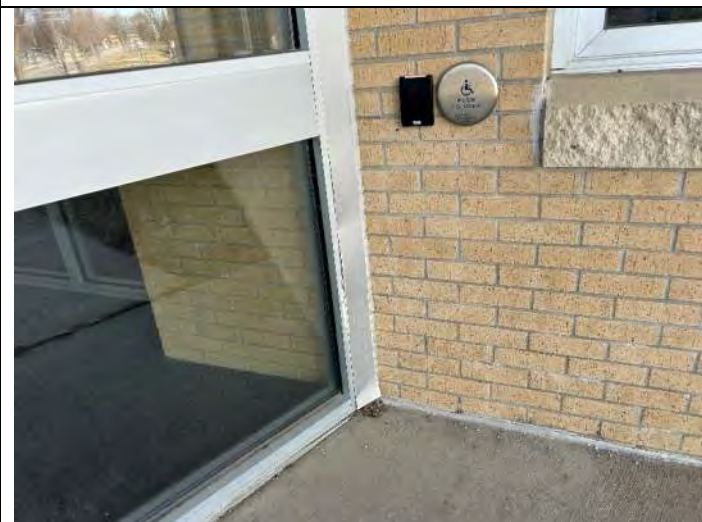
Elevation 12: Clean and seal brick and sill.



Elevation 12: Clean and seal brick and sill.



Elevation 12: Clean and seal brick and sill.



Elevation 12: Replace damaged aluminum metal.



Elevation 12: Brick wall has moisture in it.



Elevation 12: Electrical box needs a cover.

End of Report

Ron Paskach | SVPA Architects

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
 LOCATION A

DATE 1.16.2025
 INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition	X			Fully adhered PVC installed 2019-2020	no
B. Drainage			X	Drain strainer needs cleaned	no
C. Ballast				N/A	
D. Base attachment				Not observed	no
D. Cover board				None observed	no
E. Flashings/counterflashings			X	Membrane welds at curbs should not be on top	no
F. Accessories				N/A	
G. Penetrations	X			Good	no
H. Debris	X			Roof is pretty clean	no
I. Sealants				N/A	
J. Ponding			X	3 small areas holding water	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives			X	Wrinkled membrane at parapet	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay				N/A	
B. RTU's to go				N/A	
C. Curb heights	X			N/A	no
D. Vents and fans	X			Mechanical vents need band clamp and sealant	no
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drain strainer needs cleaned	no
I. Gas lines				N/A	no
J.					
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings			X	Gravel stop detail is good, wrinkled membrane bad	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	no
F. Scuppers		X		No overflow drains observed	no
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
 LOCATION B

DATE 1.16.2025
 INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Fully adhered PVC installed 2019-2020	no
B. Drainage			X	Drain strainer needs cleaned - excessive slope	no
C. Ballast				N/A	
D. Base attachment				Not observed	no
D. Cover board				None observed	no
E. Flashings/counterflashings			X	Membrane welds at curbs should not be on top	no
F. Accessories				N/A	
G. Penetrations			X	Preformed boots need band clamps and sealant	no
H. Debris			X	Roof is pretty clean	no
I. Sealants		X		Sealant at boots looks good	no
J. Ponding			X	3 medium sized ponds observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives	X			Adhesives appear good	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay				N/A	
B. RTU's to go				N/A	
C. Curb heights	X			Fan curb height is low if insulation is added	no
D. Vents and fans	X			Appear in good condition	no
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines				N/A	
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings		X		Gravel stop detail is good, wrinkled membrane bad	no
C. Expansion joints			X	Membrane welds at curbs should not be on top	no
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers		X		No overflow drains observed	
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
 LOCATION C

DATE 1.16.2025
 INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition	X			Fully adhered PVC installed 2022-2023	no
B. Drainage			X	Drain strainer needs cleaned - excessive slope	no
C. Ballast				N/A	
D. Base attachment				Not observed	no
D. Cover board				None observed	no
E. Flashings/counterflashings			X	Membrane welds at curbs should not be on top	no
F. Accessories				N/A	
G. Penetrations			X	Boots need band clamps and sealant	
H. Debris	X			Roof is pretty clean	no
I. Sealants				N/A	
J. Ponding	X			None observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives				N/A	
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU appears to be near replacement	no
B. RTU's to go				N/A	
C. Curb heights	X			RTU curb height is low	no
D. Vents and fans				N/A	
E. Antennae and dishes	X			One dish with CMU ballast on slip sheet	no
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines	X			Wood block supports	no
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings				N/A	
C. Expansion joints			X	Membrane welds at curbs should not be on top	no
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
LOCATION D

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition	X			Fully adhered PVC installed 2022-2023	no
B. Drainage	X			Drains appear operational	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings	X			Membrane welds at curbs should not be on top	no
F. Accessories				N/A	
G. Penetrations				Pocket at mini split needs replaced	no
H. Debris	X			Roof is pretty clean	no
I. Sealants	X			Sealants observed look good	no
J. Ponding			X	One observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives				N/A	
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay				N/A	
B. RTU's to go				N/A	
C. Curb heights				N/A	
D. Vents and fans	X			Vents and fans appear good	no
E. Antennae and dishes	X			Antennae with boot flashing	no
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines				N/A	
J. Condensers			X	Mini-split looks good, lines are long	no
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings				N/A	
C. Expansion joints			X	Membrane welds at curbs should not be on top	no
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
LOCATION E

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition	X			Fully adhered PVC membrane installed 2024	no
B. Drainage	X			Drains and overflows appear operational	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings			X	Membrane welds at curbs should not be on top	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			Roof is pretty clean	no
I. Sealants				N/A	
J. Ponding	X			None observed	no
K. Walk pads				N/A	no
L. Vegetation	X			None observed	no
M. Adhesives				N/A	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU appears to be near replacement	no
B. RTU's to go				N/A	
C. Curb heights			X	RTU curb height is low	no
D. Vents and fans				N/A	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed			X	Old curb has been roofed over	no
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines	X			Wood block supports - need to be 10' or less apart	no
J.					
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings		X		Gravel stop detail at roof edge is good	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers		X		No overflow drains observed	
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
LOCATION F

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition	X			Fully adhered PVC membrane installed 2020	no
B. Drainage	X			Drains appear operational	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings			X	Membrane welds at curbs should not be on top	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			Roof is pretty clean	no
I. Sealants				N/A	
J. Ponding	X			None observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives				N/A	
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay				N/A	no
B. RTU's to go				N/A	
C. Curb heights	X			Fan curb heights appear low	no
D. Vents and fans				Boiler vents should probably be removed	no
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	no
H. Roof drains	X			Drains have unique attachment	no
I. Gas lines	X			Wood block supports - need to be 10' or less apart	no
J.					
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings		X		Gravel stop detail at roof edge is good	no
C. Expansion joints				N/A	
D. Roof hatch			X	Curb is low - should have railing	no
E. Ladders				N/A	
F. Scuppers		X		No overflow drain observed	no
VI. OTHER OBSERVATIONS					
1 vent dome			X	Damaged	no
2 May be several abandoned penetrations			X	Review and remove unused	no

ROOFING MAINTENANCE CHECKLIST



BUILDING	High school - Middle school	DATE	1.16.2025
LOCATION	G	INSPECTOR	Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition	X			Fully adhered PVC installed 2020-2021	no
B. Drainage			X	Drain strainer needs cleaned	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings			X	Membrane welds at curbs should not be on top	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			Roof is pretty clean - One area of debris	no
I. Sealants				N/A	
J. Ponding	X			One pond observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives				N/A	
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU's appears to be near replacement	no
B. RTU's to go				N/A	
C. Curb heights	X			RTU curb height is low	no
D. Vents and fans				N/A	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed			X	Old curb has been roofed over	no
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines	X			Wood block supports - need to be 10' or less apart	no
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings				N/A	
C. Expansion joints				Membrane welds at curbs should not be on top	no
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers		X		No overflow drains observed	no
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
 LOCATION H

DATE 1.16.2025
 INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Fully adhered EPDM with major shrinkage	no
B. Drainage			X	No overflow drainage found	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings			X	Flashing at metal panel needs improvement	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			Roof is pretty clean - One area of debris	no
I. Sealants				N/A	no
J. Ponding	X			None observed	no
K. Walk pads				N/A	no
L. Vegetation	X			Observed at NW corner	no
M. Adhesives		X		Failing as membrane shrinks	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay				N/A	
B. RTU's to go				N/A	
C. Curb heights	X			South curb height is low	no
D. Vents and fans			X	South fan looks very old	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	no
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines	X			Reset wood block support at north end	no
J. Condensers				N/A	no
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings		X		3-sided copings need replaced	no
C. Expansion joints		X		T' joint has bad detail	no
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
LOCATION I (viewed from a distance)

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Fully adhered PVC installed 2020/2021	no
B. Drainage		X		No overflow drainage found	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings	X			OK	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			None observed	no
I. Sealants				N/A	
J. Ponding	X			None observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives			X	Failing at parapet verticals	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay	X			N/A	
B. RTU's to go				N/A	
C. Curb heights	X			Curb heights appear good	no
D. Vents and fans			X	Vents appear good	no
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines				N/A	
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings	X			Gravel stop detail is good	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
 LOCATION J

DATE 1.16.2025
 INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Fully adhered PVC installed 2019/2020	no
B. Drainage			X	No overflow drainage found	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings	X			Check sealant below metal panels annually	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			small collection in NW corner	no
I. Sealants				N/A	
J. Ponding	X			Minor ponding observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives			X	Failing at curbs	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay	X			Small RTU fairly new	no
B. RTU's to go				N/A	
C. Curb heights	X			Curb heights appear good	no
D. Vents and fans			X	Vents appear good	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	no
H. Roof drains	X			Drain strainer needs cleaned - excessive slope	no
I. Gas lines	X			Wood block supports - need to be 10' or less apart	no
J. Condensers				N/A	no
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings	X			Transition to membrane to north is not good	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
LOCATION K

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Ballasted EPDM with major shrinkage	no
B. Drainage			X	Drains and scuppers appear well functioning	no
C. Ballast	X			Appears clean and even, some bare spots	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings			X	Many repairs have been made	no
F. Accessories				N/A	
G. Penetrations			X	Old with repairs	no
H. Debris	X			small collection in SW corner	no
I. Sealants				N/A	
J. Ponding	X			None observed	no
K. Walk pads				N/A	
L. Vegetation			X	Observed in SW corner	no
M. Adhesives		X		Failing at shrinking membrane	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay	X			RTU appears to be near replacement	no
B. RTU's to go				N/A	
C. Curb heights	X			RTU curb height is low	no
D. Vents and fans			X	Fan appears good	no
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drain strainer needs reset	no
I. Gas lines	X			Needs additional support	no
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings	X			3-sided coping seams leak	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers		X		Shrinking membrane issues	
VI. OTHER OBSERVATIONS					
1 Membrane		X		Major shrinkage	no
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING	High school - Middle school	DATE	1.16.2025
LOCATION	L north	INSPECTOR	Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition	X			Fully adhered PVC installed 2020-2021	no
B. Drainage	X			Drains and scuppers appear operational	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings	X			Flashing below EIFS needs annual inspection	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			Roof is pretty clean	no
I. Sealants	X			Sealants observed look good	no
J. Ponding	X			Minor ponding	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives			X	Failing at RTU curb vertical	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay	X			RTU looks new	no
B. RTU's to go				N/A	
C. Curb heights	X			Good	no
D. Vents and fans			X	Fan is too close to gym	no
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines		X		Needs better support	no
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings	X			Gravel stop detail is good	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers	X			Looks good	no
VI. OTHER OBSERVATIONS					
1 EIFS at gym		X		Very thin with holes	no
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING	High school - Middle school	DATE	1.16.2025
LOCATION	L south	INSPECTOR	Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition	X			Fully adhered PVC installed 2020-2021	no
B. Drainage	X			Drains and overflows appear operational	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings	X			Flashing below EIFS needs annual inspection	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			Roof is pretty clean	no
I. Sealants	X			Sealants observed look good	no
J. Ponding	X			Minor ponding	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives			X	Failing at RTU curb verticals	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay	X			New with vent too close to wall	no
B. RTU's to go				N/A	
C. Curb heights	X			Good	no
D. Vents and fans				N/A	no
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines		X		Needs better support	no
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights		X		Cracked and no condensation tray	no
B. Copings				N/A	
C. Expansion joints				Membrane welds at curbs should not be on top	no
D. Roof hatch				N/A	
E. Ladders	X			Solid	no
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1 EIFS		X		Very thin with holes	no
2 Brick wall			X	No weeps above membrane termination	no

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
LOCATION M

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition	X			New fully adhered PVC membrane 2022/2023	no
B. Drainage	X			Drains and overflows appear operational	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings	X			Good	no
F. Accessories				N/A	
G. Penetrations			X	Primer not visible at pocket conduit	no
H. Debris	X			Roof is pretty clean	no
I. Sealants				N/A	
J. Ponding	X			Near drains	no
K. Walk pads				N/A	no
L. Vegetation	X			None observed	no
M. Adhesives			X	Failing at RTU curb verticals	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU appears to be good	no
B. RTU's to go				N/A	
C. Curb heights	X			RTU curb height is appropriate	no
D. Vents and fans				N/A	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed			X	N/A	no
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines	X			Wood block supports - need to be 10' or less apart	no
J.					
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings		X		Gravel stop detail is good, wrinkled membrane bad	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers		X		Detail at outter wall is unacceptable	
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
 LOCATION N (viewed from a distance)

DATE 1.16.2025
 INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Fully adhered PVC installed 2020/2021	no
B. Drainage			X	No overflow drainage found	no
C. Ballast				N/A	
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings	X			OK	no
F. Accessories				N/A	
G. Penetrations				N/A	
H. Debris	X			None observed	no
I. Sealants				N/A	
J. Ponding	X			None observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives			X	Failing at parapet vertical	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay				N/A	
B. RTU's to go				N/A	
C. Curb heights				N/A	
D. Vents and fans			X	Vents appear good	no
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines				N/A	
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings	X			Gravel stop detail is good	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers		X		No overflow drains observed	
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
LOCATION O

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Fully adhered PVC installed 2020/2021	no
B. Drainage			X	Drains and overflows appear operational	no
C. Ballast				N/A	
D. Base attachment				Observed at parapet	
D. Cover board				None observed	
E. Flashings/counterflashings			X	Below windows are questionable	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			some near roof access door	no
I. Sealants			X	Verify selant atcounterflashing at brick	
J. Ponding		X		Large amont of ponding	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives			X	Failing at vertical membranes	no
N. Metal wall panels		x		Exposed batt insulation at penetration	no
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU is old near replacement	no
B. RTU's to go				N/A	
C. Curb heights			X	RTU curb is low	no
D. Vents and fans			X	Vents appear good	
E. Antenae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	no
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines			X	Needs better support	no
J. Condensers				N/A	no
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings				N/A	
C. Expansion joints				Membrane welds at curbs should not be on top	no
D. Roof hatch				N/A	
E. Ladders	X			Solid	no
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1 Brick walls			X	No weeps above membrane	no
2 Metal wall panels		X		Annual review of flashings below membrane	no

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
 LOCATION P

DATE 1.16.2025
 INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Ballasted EPDM installed around 2009	no
B. Drainage			X	Drains and overflows appear well functioning	no
C. Ballast	X			Appears clean and even	no
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings			X	Many repairs have been made	no
F. Accessories				N/A	
G. Penetrations				N/A	
H. Debris	X			None observed	no
I. Sealants				N/A	
J. Ponding	X			None observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives				N/A	
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay				N/A	
B. RTU's to go				N/A	
C. Curb heights				N/A	
D. Vents and fans				N/A	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Good	no
I. Gas lines				N/A	
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings	X			3-sided coping seams leak	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1					
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING	High school - Middle school	DATE	1.16.2025
LOCATION	Q	INSPECTOR	Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Ballasted EPDM installed around 2009	no
B. Drainage			X	Drains appear well functioning	no
C. Ballast	X			Appears clean and even, some bare spots	no
D. Base attachment				Not observed	
D. Cover board				None observed	
E. Flashings/counterflashings	X			Counterflashings at brick wall	no
F. Accessories				N/A	
G. Penetrations				N/A	
H. Debris	X			None observed	no
I. Sealants				N/A	
J. Ponding	X			None observed	
K. Walk pads	X			Concrete pavers	no
L. Vegetation	X			None observed	no
M. Adhesives				N/A	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay				N/A	
B. RTU's to go				N/A	
C. Curb heights				N/A	
D. Vents and fans	X			Old vent in good condition	no
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Good	no
I. Gas lines				N/A	
J. Condensers				N/A	
K. Smoke vents	X			Appear in good condition	no
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings	X			3-sided coping seams leak	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1 Membrane		X		Shrinkage is very evident	no
2 Overflow drains			X	No overflow at lower roof	no

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
LOCATION R

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Fully adhered PVC installed 2020/2021	no
B. Drainage			X	Drains and overflows appear operational	no
C. Ballast				N/A	
D. Base attachment				Observed at perimeter	no
D. Cover board				None observed	no
E. Flashings/counterflashings	X			Counterflashings at brick wall	no
F. Accessories				N/A	
G. Penetrations				Some membrane flashings need clamps/sealant	no
H. Debris	X			None observed	no
I. Sealants			X	Verify selant at counterflashing at brick	no
J. Ponding	X			Large amont of ponding near drains	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives			X	Failing at vertical membranes	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU is old near replacement	no
B. RTU's to go				N/A	
C. Curb heights	X			Good	no
D. Vents and fans			X	Fan appears good	no
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines			X	Needs better support	no
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings	X			Gravel stop detail is good	no
C. Expansion joints				Membrane welds at curbs should not be on top	no
D. Roof hatch				N/A	
E. Ladders	X			Solid	no
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1 Brick walls			X	No weeps above membrane	no
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING	High school - Middle school	DATE	1.16.2025
LOCATION	S	INSPECTOR	Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Fully adhered PVC installed 2022/2023	no
B. Drainage			X	Drains and overflows appear operational	no
C. Ballast				N/A	
D. Base attachment	X			Observed at perimeter	no
D. Cover board				None observed	no
E. Flashings/counterflashings	X			Membrane welds at curbs should not be on top	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			None observed	no
I. Sealants			X	Verify selant at counterflashing at brick	
J. Ponding			X	Ponding near drains	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives			X	Failing at vertical membranes	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU is old near replacement	no
B. RTU's to go				N/A	
C. Curb heights	X			North is low	no
D. Vents and fans			X	Fan appears good	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed			X	Several curbs have been roofed over	no
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines			X	Needs better support	no
J. Condensers	X			Good	no
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings	X			Gravel stop detail is good	no
C. Expansion joints			X	Membrane welds at curbs should not be on top	no
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1 Drains			X	Membrane should be flat between RD & OD	no
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
LOCATION T

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Fully adhered EPDM installed long ago	no
B. Drainage			X	No overflow drainage found	no
C. Ballast				N/A	
D. Base attachment				Not observed	no
D. Cover board				None observed	no
E. Flashings/counterflashings			X	Flashing at metal panel needs improvement	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			Roof is pretty clean	no
I. Sealants				N/A	
J. Ponding	X			None observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives		X		Failing as membrane shrinks	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU is old near replacement	no
B. RTU's to go				N/A	
C. Curb heights	X			Curb height is low	no
D. Vents and fans				N/A	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines	X			Wood block needs more support	no
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings				N/A	
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1 Brick walls			X	No weeps above membrane	no
2					

ROOFING MAINTENANCE CHECKLIST



BUILDING High school - Middle school
 LOCATION U

DATE 1.16.2025
 INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition	X			Fully adhered PVC installed 2022-2023	no
B. Drainage			X	No overflow drainage found	no
C. Ballast				N/A	
D. Base attachment				Not observed	no
D. Cover board				None observed	no
E. Flashings/counterflashings	X			Membrane welds at curbs should not be on top	no
F. Accessories				N/A	
G. Penetrations				N/A	
H. Debris	X			Roof is pretty clean	no
I. Sealants				N/A	
J. Ponding	X			One observed	no
K. Walk pads				N/A	
L. Vegetation	X			None observed	no
M. Adhesives			X	Failing at vertical membranes	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay				N/A	
B. RTU's to go				N/A	
C. Curb heights				N/A	
D. Vents and fans				N/A	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines			X	Needs better support	no
J. Condensers				N/A	no
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings				N/A	
C. Expansion joints			X	Membrane welds at curbs should not be on top	no
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers				N/A	
VI. OTHER OBSERVATIONS					
1 Brick wall			X	No weeps above membrane	no
2					



Project No.: 125-005

February 24, 2025

Project : Panorama CSD
Elementary School MEP/FP Assessment

General

1. This review is based on a walkthrough of the existing elementary school on January 16, 2025. We have also reviewed existing plans from the original construction and subsequent addition.
2. The original building was constructed in 1997 with an addition in 2009.

HVAC

1. The elementary school's HVAC system is a geothermal heat pump system. The well field is located northwest of the school. Gas fired Reznor make-up air units are located on the roof and serve as ventilation air sources to the building. The kitchen has an exhaust fan for the type 1 hood as well as a gas fired make-up air unit dedicated to the kitchen.
2. The well field was originally designed with 6 circuits of 30 wells each. The water circulated to the wells is mixed with a glycol solution to prevent freezing. This glycol-water mix is circulated within the building through loop piping to individual heat pumps. According to the on-site maintenance manager (Charlie), the well field was constructed so that one of the circuits is redundant. However, the maintenance manager reported that one of these circuits is no longer used due to a leak. However, there does not appear to be any heating or cooling capacity issues with the loss of this circuit although we suspect that this diminished field is likely at its maximum capacity.
3. The geothermal piping within the building is galvanized steel. Galvanized steel is susceptible to corrosion over time. Depending on water quality, galvanized steel piping generally has a life of around 20 to 30 years. It is likely that this piping will need to be replaced.
4. The make-up air equipment on the roof is in poor condition. Several units were not functioning at the time of our visit, preventing ventilation air from being circulated to the areas these units served (primarily classrooms).
5. The equipment in the original building is over 27 years old. The equipment in the addition is around 15 years old. According to ASHRAE (American Society of Heating, Refrigeration, and Air conditioning Engineers), geothermal heat pumps have a life expectancy of 20-25 years. The facility manager reported that 3 heat pumps have been replaced just in the last year. The ground loops have a much longer life expectancy, often exceeding 50 years with proper maintenance.

6. Visual inspection of pumps and accessories in the main mechanical room show age related wear, including a significant amount of corrosion on pipes and pumps.

Plumbing/Fire Protection

1. The building is served by a 6" domestic water main. This splits into a 3" domestic water service and a 6" fire service. Both services have backflow preventors. The building is fully sprinklered.
2. The maintenance manager reported that the building has very low domestic water pressure (~30 psi), so a duplex domestic water booster pump has been installed. This maintains pressure around 60 to 70 PSI. Further investigation is needed to determine if the available water pressure for the fire protection system is adequate.
3. Domestic hot water is provided by a tank style gas fired water heater with a recirculation pump but no central master mixing valve. The water heat appears to be original equipment. Note that the life expectancy of a tank style gas fired water heater ranges from 10 to 20 years.
4. A separate tank style gas fired water heater serves the kitchen. This also appears to be original equipment.
5. Noted significant water hammer in domestic cold-water line at the time of visit.

Electrical/Fire Alarm

1. Electrical service is 2,000A, 480/277V. The equipment is original to the building and is fused style Square 'D' switchboard style ('QMB'). Step down transformers are used throughout the building for 208/120V loads. The power distribution equipment appears to be in good condition.
2. Building lighting is original T8 fluorescent fixtures with some HID lighting on the building exterior. Some lighting has been upgraded to LED, but for the most part most lighting is still fluorescent.
3. The existing fire alarm system is a simplex addressable system. It does not appear that this system has voice notification capabilities.

Recommendations | Priorities | Budget Costs

1-2 Years **3-5 Years** **5-10 Years**

1. **SCOPE E1:** HVAC Improvements (Original 1997 Building)
 - a. Replace the geothermal heat pumps throughout the original 1997 building (not the 2009 addition). Existing ductwork can be cleaned and reused. Maintain existing piping.
 - b. Replace the roof mounted make up air ventilation units with new ventilation units with integral ERV's as required by the State of Iowa Energy Code. Existing ventilation ductwork can be cleaned and reused.
 - c. Replace the roof mounted make up air unit for the kitchen.
 - d. Replace geothermal system pumps and accessories, including corroded piping in main mechanical room.

- e. Investigate abandoned well circuit that was recently abandoned due to a leak. Determine if this circuit can be repaired and put back into service.
- f. This work can be split into two phases done over two summers.
- g. Budget Costs
 - i. Phase 1 (E1A): **\$1,651,000**
 - ii. Phase 2 (E1B): **\$1,319,000**
- 2. **SCOPE E2**: HVAC Improvements (2009 Addition)
 - a. Replace the geothermal heat pumps throughout the original 2009 addition. Existing ductwork can be cleaned and reused.
 - b. Replace the roof mounted ke up air ventilation unit with a new ventilation unit with an integral ERV as required by the State of Iowa Energy Code. Existing ventilation ductwork can be cleaned and reused.
 - c. This work can be done over a single summer.
 - d. Budget Cost: **\$285,000**
- 3. **SCOPE E3**: Replace both domestic and kitchen water heaters.
 - a. Budget Cost: **\$49,000**
- 4. **SCOPE E4**: Investigate water hammer issues. Drain system to determine if waterlogging is the issue. If not, install water hammer arrestors.
 - a. Budget Cost: **\$70,000**
- 5. **SCOPE E5**: Upgrade lighting throughout the building to LED sources. This can be done by either replacing fixtures or by relamping.
 - a. Budget Cost: **\$227,000**
- 6. **SCOPE E6**: Replace the existing fire alarm system with a new addressable system with voice notification capabilities.
 - a. Budget Cost: **\$248,000**

Capital Spend Projection

Priority	Project	2025 Costs	Escalated Cost (4% annual escalation)	YEAR	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Medium	SCOPE E1A: HVAC Improvements in '97 building, Phase 1	\$1,651,000	\$1,951,436	2028				X						
Medium	SCOPE E1A: HVAC Improvements in '97 building, Phase 2	\$1,319,000	\$1,604,765	2029					X					
Low	SCOPE E2: HVAC Improvements in '09 building	\$265,000	\$375,041	2031							X			
Medium	SCOPE E3: Replace Water Heaters	\$49,000	\$57,323	2028				X						
High	SCOPE E4: Investigate Water Hammer Issue and Correct	\$70,000	\$72,800	2025	X									
Low	SCOPE E5: Upgrade lighting to LED in 1997 building	\$227,000	\$268,717	2031							X			
High	SCOPE E6: Replace existing fire alarm system with voice system	\$248,000	\$278,966	2027			X							
Annual Cost (Escalated)					\$72,800	\$0	\$278,966	\$1,988,760	\$1,604,765	\$0	\$673,757	\$0	\$0	\$0



Figure 1 – Geothermal Loop Pumps



Figure 2- Close-up of Corrosion on Geo Pump



Figure 3 – Reznor Ventilation Make-Up Air Unit on Roof




Figure 4- Main Electrical Service Gear

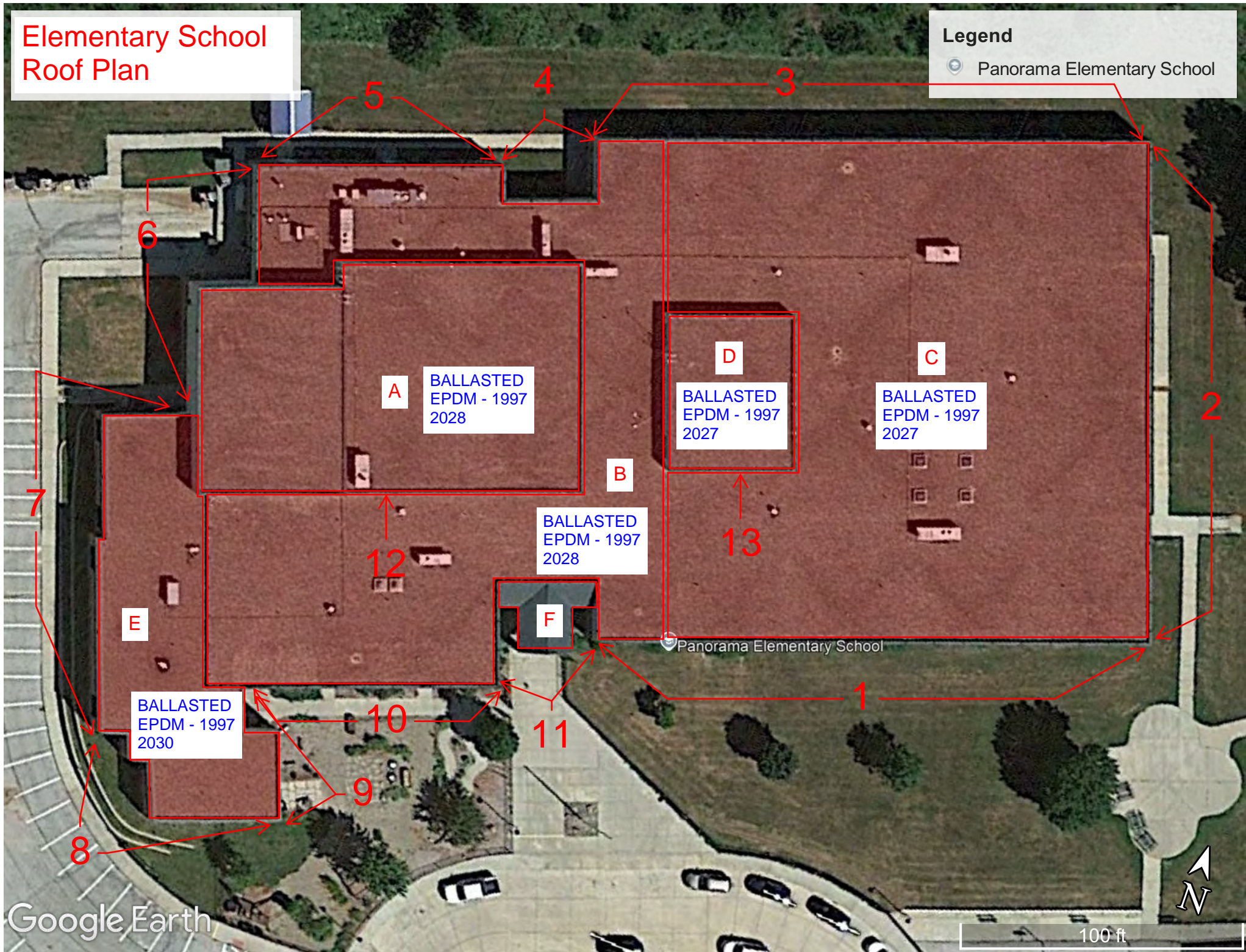


Figure 5- Domestic Water Booster Pumps

Elementary School Roof Plan

Legend

 Panorama Elementary School



BUILDING ENVELOPE REVIEW – EXTERIOR WALLS

Panorama Elementary School Exterior walls review of building elements

Exterior wall review is broken into sections identified on the roof plan by number.

General Notes:

1. All control joints need sealant removed and replaced.
2. Sealant around most windows should be removed and replaced.
3. Remove mud wasp nests.



Elevation 1: EIFS needs repaired.



Elevation 1: Looks like woodpecker damage at east end.



Elevation 1: Reseal control joints.



Elevation 1: Mortar failed between windows.

ELEM. BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 1: Repair failed brick, seal control joint.



Elevation 1: Repair mortar, reseal windows.



Elevation 1: Control joint needs mortar removed and sealant installed.



Elevation 3: Repair mortar, reseal windows.



Elevation 2: Need EIFS repair and cleaning



Elevation 2: EIFS needs repaired.

ELEM. BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 2: Outlet needs cover and grout repair.



Elevation 2: Algae and woodpecker damage.



Elevation 3: Repair thin EIFS, reseal control joints.



Elevation 3: Repair thin EIFS, reseal control joints.



Elevation 3: Repair brick with spalling faces.



Elevation 3: Repair mortar at window head.

ELEM. BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 3: Repair thin EIFS, reseal control joints.



Elevation 3: Replace missing lense and bulb.



Elevation 4: Repair thin EIFS, reseal control joints.



Elevation 4: Repair thin EIFS, reseal control joints.



Elevation 5: Repair thin EIFS seal wall penetrations.

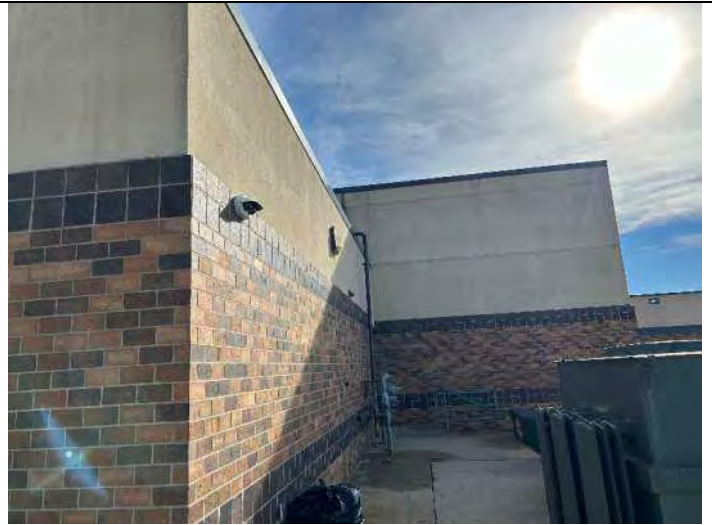


Elevation 5: Repair brick with broken face.

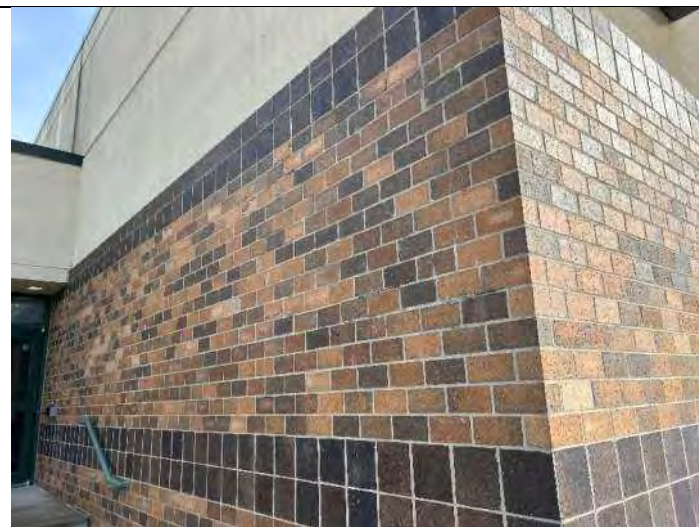
ELEM. BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



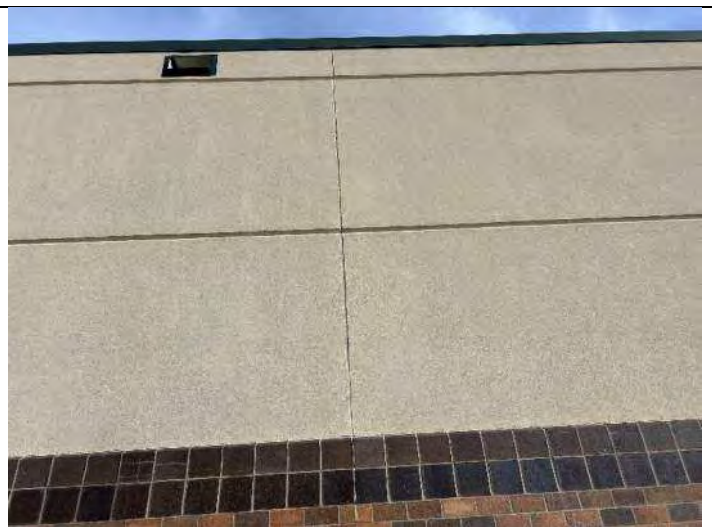
Elevation 5: Repair brick with broken face.



Elevation 6: Repair EIFS, paint gas pipe and railing.



Elevation 6: Repair spalling brick faces.



Elevation 6: Reseal control joints.



Elevation 6: Repair CMU loading dock.



Elevation 6: Repair EIFS, paint gas pipe and railing.

ELEM. BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 7: Reseal control joints.



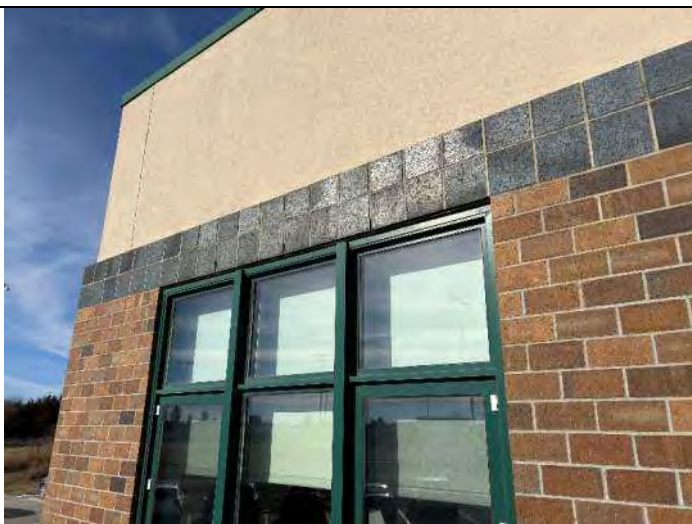
Elevation 7: Reseal control joints.



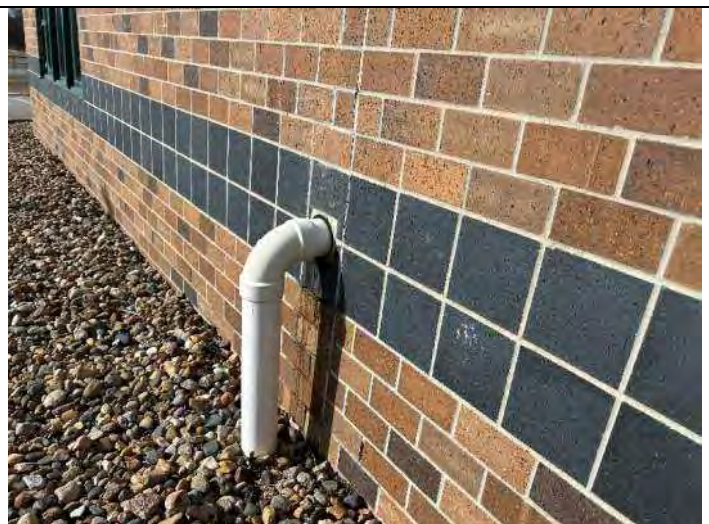
Elevation 7: Vinyl seals coming out of window.



Elevation 8: No issues.



Elevation 8: Reseal around windows.



Elevation 8: Roof drain connection needs fixed.

ELEM. BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 7: EIFS is thin and needs cleaning.



Elevation 8: Reseal windows and doors.



Elevation 9: Reseal control joints.



Elevation 9: Clean lime off brick.



Elevation 9: Reseal windows all around.



Elevation 9: No sealant below storefront window.

ELEM. BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 10: EIFS repair needed below light.



Elevation 10: Windows need resealed.



Elevation 10: Corner control joints need resealed.



Elevation 10: EIFS is thin and needs cleaning.



Elevation 11: EIFS is thin and needs cleaning.



Elevation 11: Leak below roof transition above.

ELEM. BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 11: No issues.



Elevation 11: Leak at ceiling behind panther.



Elevation 12: EIFS is thin and needs cleaning.



Elevation 12: EIFS is thin and needs cleaning.



Elevation 12: EIFS is thin and needs cleaning.



Elevation 12: Control joints need resealed.

ELEM. BUILDING ENVELOPE REVIEW – EXTERIOR WALLS



Elevation 12: EIFS sills are very thin.



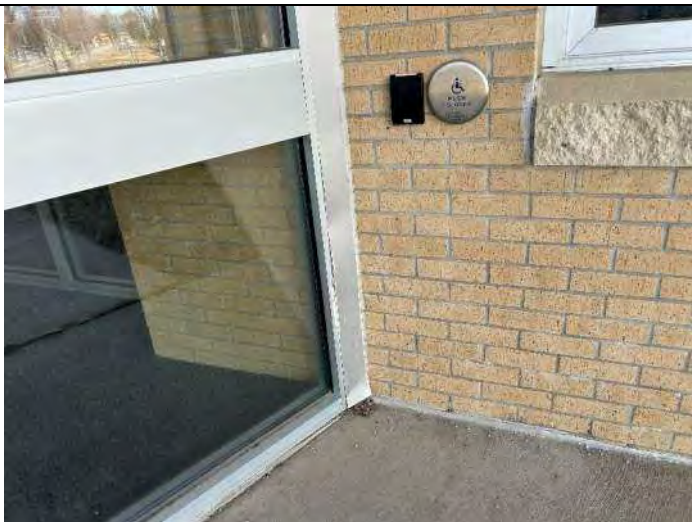
Elevation 13: EIFS is thin and needs cleaning.



Elevation 13: EIFS is thin and needs cleaning.



Elevation 12: EIFS is thin and needs cleaning.



Elevation 12:.



Elevation 12:.

ROOFING MAINTENANCE CHECKLIST



BUILDING Elementary
LOCATION A

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Major shrinkage	no
B. Drainage	X			Drains and scuppers appear operational	no
C. Ballast	X			level and even	no
D. Base attachment				None at ballasted	
D. Cover board				None observed	
E. Flashings/counterflashings			X	Flashings at base of EIFS could be better	no
F. Accessories				N/A	
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			Roof is pretty clean	no
I. Sealants			X	Sealants at shrinking membrane are failing	no
J. Ponding	X			None observed	no
K. Walk pads			X	Concrete pavers at ladders and hatches old	no
L. Vegetation	X			None observed	no
M. Adhesives		X		Adhesives at parapets are failing	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU appears to be near replacement	no
B. RTU's to go				N/A	
C. Curb heights	X			RTU curb height is appropriate	no
D. Vents and fans				N/A	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines	X			Wood block supports	no
J.					
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings		X		3-Sided coping seams failing	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders	X			Solid and in good condition	no
F. Scuppers	X			Good	no
VI. OTHER OBSERVATIONS					
1 EIFS on wall			X	Needs resurfaced and joints resealed	no
2 Insulation		X		R-Value may need to be increased	no

ROOFING MAINTENANCE CHECKLIST



BUILDING	Elementary	DATE	1.16.2025
LOCATION	B	INSPECTOR	Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Major shrinkage	no
B. Drainage	X			Drains and scuppers appear operational	no
C. Ballast	X			level and even	no
D. Base attachment				None at ballasted	
D. Cover board				None observed	
E. Flashings/counterflashings			X	Flashings at base of EIFS could be better	no
F. Accessories				N/A	
G. Penetrations			X	Pocket appears to have been re-selaed	no
H. Debris			X	Some repair debris left on roof	no
I. Sealants		X		Sealant at several patches	no
J. Ponding	X			None observed	no
K. Walk pads				N/A	no
L. Vegetation	X			None observed	no
M. Adhesives		X		Adhesives at parapets are failing	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU's appears to be near replacement	no
B. RTU's to go				N/A	
C. Curb heights	X			Curb height is low if insulation is added	no
D. Vents and fans	X			Good condition	
E. Antennae and dishes			X	Some appear to be non-fuctioning	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines	X			Wood block supports	no
J. Condensers	X			Appear to be fairly new	no
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings		X		Leaks observed at roof area 'F' coping	no
C. Expansion joints				N/A	
D. Roof hatch			X	Good condition	no
E. Ladders	X			Solid and in good condition	no
F. Scuppers	X			Good	no
VI. OTHER OBSERVATIONS					
1 EIFS on walls			X	Needs resurfaced and joints resealed	no
2 Insulation		X		R-Value may need to be increased	no

ROOFING MAINTENANCE CHECKLIST



BUILDING Elementary
LOCATION C

DATE 1.16.2025
INSPECTOR Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Major shrinkage	no
B. Drainage	X			Drains and scuppers appear operational	no
C. Ballast	X			level and even	no
D. Base attachment				None at ballasted	
D. Cover board				None observed	
E. Flashings/counterflashings			X	Flashings at base of EIFS could be better	no
F. Accessories				N/A	
G. Penetrations				N/A	no
H. Debris	X			Roof is pretty clean	no
I. Sealants		X		Sealant at several patches	no
J. Ponding	X			None observed	no
K. Walk pads				N/A	no
L. Vegetation	X			None observed	no
M. Adhesives		X		Adhesives at parapets are failing	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU's appears to be near replacement	no
B. RTU's to go				N/A	
C. Curb heights	X			RTU curb height is appropriate	no
D. Vents and fans	X			Good condition	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines	X			Wood block supports	no
J. Condensers				N/A	no
K.					
III. INSTALLED ELEMENTS					
A. Skylights		X		Old without condensation trays	no
B. Copings		X		3-Sided coping seams failing	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	no
F. Scuppers	X			Good	no
VI. OTHER OBSERVATIONS					
1 EIFS on walls			X	Needs resurfaced and joints resealed	no
2 Insulation		X		R-Value may need to be increased	no

ROOFING MAINTENANCE CHECKLIST



BUILDING	Elementary	DATE	1.16.2025
LOCATION	D	INSPECTOR	Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Major shrinkage	no
B. Drainage	X			Drains and scuppers appear operational	no
C. Ballast	X			level and even	no
D. Base attachment				None at ballasted	no
D. Cover board				None observed	no
E. Flashings/counterflashings	X			Good	no
F. Accessories					
G. Penetrations				N/A	
H. Debris	X			Roof is pretty clean	no
I. Sealants	X			No sealants observed	no
J. Ponding	X			None observed	no
K. Walk pads				Concrete pavers at ladders and hatches old	no
L. Vegetation	X			None observed	no
M. Adhesives		X		Adhesives at parapets are failing	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay				N/A	
B. RTU's to go				N/A	
C. Curb heights				N/A	
D. Vents and fans				N/A	
E. Antennae and dishes			X	Antennae on ladder may be non-functional	no
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines				N/A	
J. Condensers				N/A	
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings		X		3-Sided coping seams failing	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders	X			Solid and in good condition	no
F. Scuppers	X			Good	no
VI. OTHER OBSERVATIONS					
1 EIFS on walls below			X	Needs resurfaced and joints resealed	no
2 Insulation		X		R-Value may need to be increased	no

ROOFING MAINTENANCE CHECKLIST



BUILDING	Elementary	DATE	1.16.2025
LOCATION	E	INSPECTOR	Ron Paskach

	Problem			Observation	Thermal Image
	O.K.	Major	Minor		
I. ROOF CONDITION					
A. Membrane condition		X		Major shrinkage	no
B. Drainage	X			Drains and scuppers appear operational	no
C. Ballast	X			level and even	no
D. Base attachment				None at ballasted	no
D. Cover board				None observed	no
E. Flashings/counterflashings			X	Flashings at base of EIFS could be better	no
F. Accessories					
G. Penetrations			X	Some membrane flashings need clamps/sealant	no
H. Debris	X			Roof is pretty clean	no
I. Sealants			X	Sealants at shrinking membrane are failing	no
J. Ponding	X			None observed	no
K. Walk pads			X	Concrete pavers at ladders and hatches old	no
L. Vegetation	X			None observed	no
M. Adhesives		X		Adhesives at parapets are failing	no
N.					
O.					
II. EQUIPMENT					
A. RTU's to stay			X	RTU appears to be near replacement	no
B. RTU's to go				N/A	
C. Curb heights	X			RTU curb height is appropriate	no
D. Vents and fans				N/A	
E. Antennae and dishes				N/A	
F. Sensors				N/A	
G. Old curbs to be removed				N/A	
H. Roof drains	X			Drains appear in good condition and functional	no
I. Gas lines	X			Wood block supports	no
J.					
K.					
III. INSTALLED ELEMENTS					
A. Skylights				N/A	
B. Copings		X		3-Sided coping seams failing	no
C. Expansion joints				N/A	
D. Roof hatch				N/A	
E. Ladders				N/A	
F. Scuppers	X			Good	no
VI. OTHER OBSERVATIONS					
1 EIFS on wall			X	Needs resurfaced and joints resealed	no
2 Insulation		X		R-Value may need to be increased	no