Hartman Condominium Association, Inc.

February 10, 2026 • Columbus, OH

RESERVE STUDY



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Corporate Office
Reserve Advisors, LLC
735 N. Water Street, Suite 175
Milwaukee, WI 53202

Hartman Condominium Association, Inc.
Columbus, Ohio

Dear Board of Directors of Hartman Condominium Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Hartman Condominium Association, Inc. in Columbus, Ohio and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, February 10, 2026.

This *Reserve Study exceeds* the Association of Professional Reserve Analysts (APRA) standards fulfilling the requirements of a "Level II Reserve Study Update."

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Hartman Condominium Association, Inc. plan for a successful future.

As part of our long-term thinking and everyday commitment to our clients, we are available to answer any questions you may have regarding this study.

Respectfully submitted on May 27, 2026 by

Reserve Advisors, LLC

Visual Inspection and Report by: Justin B. Klein, RS[1], Great Lakes Quality Assurance Engineer
Review by: Alan M. Ebert, RS, PRA[2], Director of Quality Assurance



[1] RS (Reserve Specialist) is the reserve provider professional designation of the Community Associations Institute (CAI) representing America's more than 300,000 condominium, cooperative and homeowners associations.

[2] PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at http://www.apra-usa.com.

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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Hartman Condominium Association, Inc. (Hartman)
Location: Columbus, Ohio
Reference: 080930

Property Basics: Hartman Condominium Association, Inc. is a midrise style development which consists of 62 units in a six-story building. The building was built in 1898 and was converted to condominiums in 2006.

Reserve Components Identified: 48 Reserve Components.

Inspection Date: February 10, 2026. We conducted the original inspection on October 25, 2022.

Funding Goal: The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures. Our recommended Funding Plan recognizes these threshold funding years in 2036 due to the replacement of the passenger and service controls and call buttons, in 2050 due to the replacement of the cooling tower, in 2051 due to replacement of the passenger elevator hoist and motor. We note coordinated domestic water pipe replacement projects in 2050 and 2051.

Methodology: We use the Cash Flow Method to compute the Reserve Funding Plan. This method offsets future variable Reserve Expenditures with existing and future stable levels of reserve funding. Our application of this method also considers:

- Current and future local costs of replacement
- 2.6% anticipated annual rate of return on invested reserves
- 3.2% future Inflation Rate for estimating Future Replacement Costs

Sources for *Local* Costs of Replacement: Our proprietary database, historical costs and published sources, i.e., R.S. Means, Incorporated.

Unaudited Cash Status of Reserve Fund:

- $5,356 as of December 31, 2025
- 2026 budgeted Reserve Contributions of $60,000
- A potential deficit in reserves might occur by 2028 based upon continuation of the most recent annual reserve contribution of $60,000 and the identified Reserve Expenditures.

Project Prioritization: We note anticipated Reserve Expenditures for the next 30 years in the ***Reserve Expenditures*** tables and include a ***Five-Year Outlook*** table following the ***Reserve Funding Plan*** in Section 3. We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

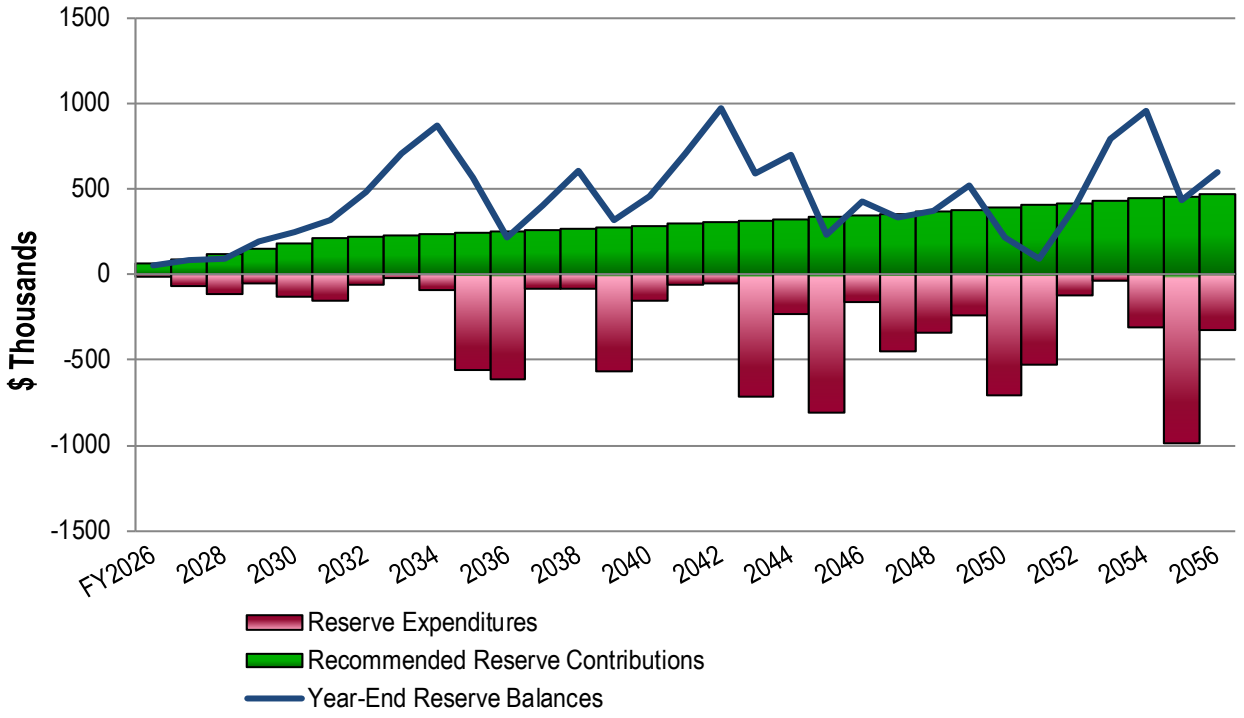
- Repaving of the asphalt pavement parking lot
- Replacement of the gates and operators
- Inspection, capital repairs and paint finishes of the fire escape
- Inspection, capital repairs and partial sealant replacements at the curtain wall system
- Paint finishes and capital repairs at the carports

Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Cash Flow Methodology Funding Plan:

- Phased increases of $30,900 each year, from 2027 through 2031
- Inflationary increases thereafter through 2056, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of $30,900 represents an average monthly increase of $41.53 per owner and about a six percent (5.7%) adjustment in the 2026 Total Budget of $541,511.

Hartman
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2027	90,900	82,312	2037	259,100	404,345	2047	355,000	336,239
2028	121,800	90,412	2038	267,400	602,357	2048	366,400	372,575
2029	152,700	191,405	2039	276,000	320,062	2049	378,100	523,223
2030	183,600	250,317	2040	284,800	458,812	2050	390,200	214,089
2031	214,500	315,669	2041	293,900	704,315	2051	402,700	94,693
2032	221,400	482,684	2042	303,300	974,133	2052	415,600	391,055
2033	228,500	704,983	2043	313,000	592,206	2053	428,900	795,341
2034	235,800	866,385	2044	323,000	698,927	2054	442,600	952,060
2035	243,300	569,735	2045	333,300	232,306	2055	456,800	436,220
2036	251,100	217,758	2046	344,000	424,010	2056	471,400	597,864



2. RESERVE STUDY REPORT

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of

Hartman Condominium Association, Inc.

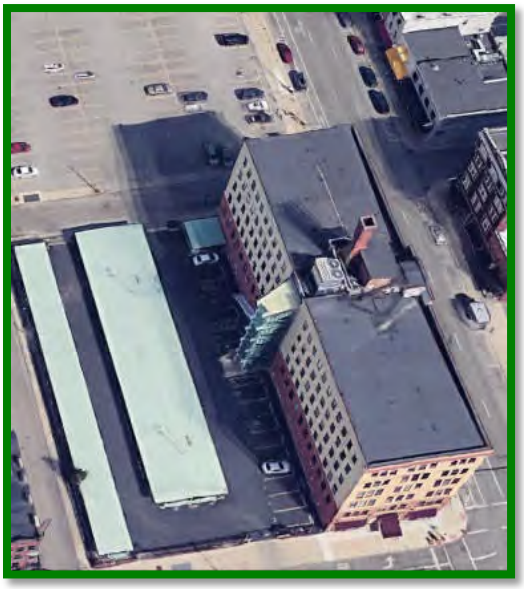
Columbus, Ohio

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, February 10, 2026. We conducted the original inspection on October 25, 2022.

We present our findings and recommendations in the following report sections and spreadsheets:

- **Identification of Property -** Segregates all property into several areas of responsibility for repair or replacement
- **Reserve Expenditures -** Identifies reserve components and related quantities, useful lives, remaining useful lives and future reserve expenditures during the next 30 years
- **Reserve Funding Plan -** Presents the recommended Reserve Contributions and year-end Reserve Balances for the next 30 years
- **Five-Year Outlook -** Identifies reserve components and anticipated reserve expenditures during the first five years
- **Reserve Component Detail -** Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology -** Lists the national standards, methods and procedures used to develop the Reserve Study
- **Definitions -** Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions -** Describes Assumptions and Professional Service Conditions
- **Credentials and Resources**

IDENTIFICATION OF PROPERTY



Our investigation includes Reserve Components or property elements as set forth in your Declaration or which were identified as part of your request for proposed services. The Expenditure tables in Section 3 list the elements contained in this study. Our analysis begins by segregating the property elements into several areas of responsibility for repair and replacement.

Our process of identification helps assure that future boards and the management team understand whether reserves, the operating budget or Owners fund certain replacements and assists in preparation of the annual budget. We derive these segregated classes of property from our review of the information provided by the Association and through conversations with Management and the Board. These classes of property include:

- Reserve Components
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements
- Property Maintained by Owners
- Property Maintained by Others

We advise the Board conduct an annual review of these classes of property to confirm its policy concerning the manner of funding, i.e., from reserves or the operating budget. Reserve Components are defined by CAI as property elements with:

- Hartman responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

The following tables depict the items excluded from the Reserve Expenditure plan:

Excluded Components

for
Hartman
Condominium Association, Inc.
Columbus, Ohio

Operating Budget Components

Repairs normally funded through the Operating Budget and Expenditures less than $6,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)

The operating budget provides money for the repair and replacement of certain Reserve Components. The Association may develop independent criteria for use of operating and reserve funds.

- Air Handling Unit, Mini Split System, Heat Pump Control Room (Installed in 2022)
- Concrete Sidewalks (Including stamped concrete at the front entrance)
- Doors, Interior and Miscellaneous Exterior
- Expansion Tank
- Fire Extinguishers
- Landscape
- Light Fixtures, Exterior Building, Interior Building and Fire Escape
- Light Poles and Fixtures, Abandoned
- Motors
- Paint Finishes, Touch Up
- Pipes, Common, Interim Repairs and Waste Rodding
- Retaining Walls, Concrete, West Entrance
- Signage
- Storage and Service Areas
- Trash Disposal for Sinks
- Valves, Small Diameter (We assume replacement as needed in lieu of an aggregate replacement of all small diameter valves as a single event.)
- Water Heaters, Maintenance Closets

Long-Lived Components

These elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the scope of this study. The operating budget should fund infrequent repairs. Funding untimely or unexpected replacements from reserves will necessitate increases to Reserve Contributions. Periodic updates of this Reserve Study will help determine the merits of adjusting the Reserve Funding Plan.	Useful Life	Estimated Cost
• Electrical Systems, Common (Excluding main 2,000-Amp panel)	Indeterminate	N/A
• Floors, Metal, Stairs	Indeterminate	N/A
• Foundation	Indeterminate	N/A
• Pipes, Subsurface Utilities	to 85+	N/A
• Structural Frame	Indeterminate	N/A
• Valve, Large Diameter, Fire Suppression System (2016)	Indeterminate	N/A

Excluded Components

for
Hartman
Condominium Association, Inc.
Columbus, Ohio

Owners Responsibility Components

Certain items have been designated as the responsibility of the Owners to repair or replace at their cost, including items billed back.

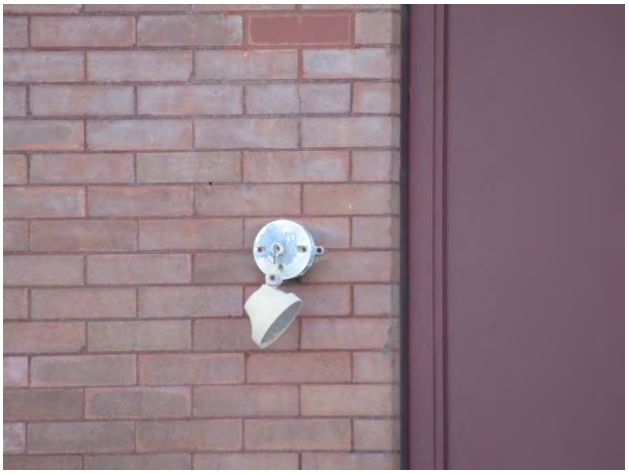
- Electrical Systems (Including Circuit Protection Panels)
- Heating, Ventilating and Air Conditioning (HVAC) Units (heat pumps)
- Interiors
- Pipes (Within Units)
- Water Heaters, In Units
- Windows and Doors

Others Responsibility Components

Certain items have been designated as the responsibility of Others to repair or replace.

- Landscape, Planters (Leased)
- Windows and Doors, Commercial Units (Commercial Units)

Excluded Component Images



Exterior light fixture



Unit electric meters

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
  - useful life
  - remaining useful life
- 2026 local cost of replacement
  - Per unit
  - Per phase
  - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end
- Predicted reserves based on current funding level

Five-Year Outlook

- Line item numbers
- Reserve component inventory of only the expenditures anticipated to occur within the first five years
- Schedule of estimated future costs for each reserve component anticipated to occur within the first five years

The purpose of a Reserve Study is to provide an opinion of reasonable annual Reserve Contributions. Prediction of exact timing and costs of minor Reserve Expenditures typically will not significantly affect the 30-year cash flow analysis. Adjustments to the times and/or costs of expenditures may not always result in an adjustment in the recommended Reserve Contributions.

Financial statements prepared by your association, by you or others might rely in part on information contained in this section. For your convenience, we have provided an electronic data file containing the tables of ***Reserve Expenditures*** and ***Reserve Funding Plan***.

Years 2026 to 2041

RESERVE EXPENDITURES

Hartman
Condominium Association, Inc.
Columbus, Ohio

Explanatory Notes:
1) 3.2% is the estimated Inflation Rate for estimating Future Replacement Costs.
2) FY2026 is Fiscal Year beginning January 1, 2026 and ending December 31, 2026.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2026)	Per Phase (2026)	Total (2026)	Percentage of Future Expenditures	RUL = 0 FY2026	1 2027	2 2028	3 2029	4 2030	5 2031	6 2032	7 2033	8 2034	9 2035	10 2036	11 2037	12 2038	13 2039	14 2040	15 2041
				Exterior Building Elements																							
1.015	460	460	Square Feet	Awnings, Canvas	2039	5 to 10	13	37.00	17,020	17,020	**0.7%**													25,633		
1.020	460	460	Square Feet	Awnings, Canvas and Frame	2032	10 to 15	6	100.00	46,000	46,000	**1.6%**						55,569									
1.180	2	2	Each	Doors, Entrances	2036	to 30	10	8,500.00	17,000	17,000	**0.3%**										23,294					
1.220	6	6	Floors	Fire Escape, Paint Finishes and Capital Repairs (Near Term is Modified)	2028	6 to 8	2	4,500.00	27,000	27,000	**2.6%**			23,963							35,849					
1.380	12,350	12,350	Square Feet	Roofs, EPDM	2039	15 to 20	13	25.50	314,925	314,925	**5.3%**													474,289		
1.540	8,700	4,350	Linear Feet	Sealants, Windows and Doors, Phased	2035	to 20	9 to 19	12.00	52,200	104,400	**3.3%**										69,309					
1.730	1,300	1,300	Square Feet	Walls, Curtain Wall, Inspections, Partial Sealants and Capital Repairs, Fire Escape (Incl. Roof)	2028	to 10	2	21.00	27,300	27,300	**1.4%**			29,075										39,840		
1.820	26,550	26,550	Square Feet	Walls, Masonry, Inspections and Repairs	2035	8 to 12	9	7.70	204,435	204,435	**13.0%**										271,439					
1.825	2,200	2,200	Square Feet	Walls, Siding, Metal, Fire Escape and Roof Mechanical Rooms	2046	to 45	20	18.00	39,600	39,600	**0.8%**															
1.905	1	1	Allowance	Walls, Trim, Cornices, Flashing and Window Frames, Paint Finishes	2035	8 to 10	9	50,000.00	50,000	50,000	**3.2%**										66,388					
1.980	470	470	Square Feet	Windows, Common	2049	to 45	23	90.00	42,300	42,300	**1.0%**															
				Interior Building Elements																							
2.060	2,500	2,500	Square Feet	Ceilings, Acoustical Tiles, Grid and Lighting, Hallways	2045	to 30	19	2.50	6,250	6,250	**0.1%**															
2.100	2	2	Each	Elevator Cab Finishes	2036	to 20	10	18,500.00	37,000	37,000	**1.6%**											50,699				
2.200	490	490	Square Yards	Floor Coverings, Carpet, Hallways	2035	8 to 12	9	57.00	27,930	27,930	**1.8%**										37,084					
2.240	230	230	Square Yards	Floor Coverings, Tile, Elevator Lobbies	2049	to 30	23	175.00	40,250	40,250	**0.9%**															
2.241	40	40	Square Yards	Floor Coverings, Tile, Fire Escape Hallways	2035	to 30	9	150.00	6,000	6,000	**0.1%**										7,967					
2.600	1	1	Allowance	Lobby, Renovation	2030	to 20	4	23,000.00	23,000	23,000	**0.8%**					26,088										
2.700	69	69	Each	Mailboxes	2026	to 35	0	150.00	10,350	10,350	**0.1%**	10,350														
2.800	27,600	27,600	Square Feet	Paint Finishes, Elevator Lobbies and Hallways	2035	8 to 12	9	1.20	33,120	33,120	**2.1%**										43,975					
				Building Services Elements																							
3.105	2	2	Each	Boilers, Building Heat, Replacement	2047	18 to 25	21	42,500.00	85,000	85,000	**1.9%**															
3.260	1	1	Each	Cooling Tower, 204-tons, Capital Repairs	2039	10 to 15	13	17,000.00	17,000	17,000	**0.3%**													25,603		
3.265	1	1	Each	Cooling Tower, 204-tons, Replacement	2050	25 to 35	24	225,000.00	225,000	225,000	**5.4%**															
3.300	1	1	Allowance	Electrical System, Main Panel, 2,000-AMP	2030	to 70+	4	35,000.00	35,000	35,000	**0.4%**					39,700										
3.360	1	1	Each	Elevator, Traction, Controls and Call Buttons, Passenger	2036	to 30	10	178,000.00	178,000	178,000	**2.8%**											243,903					
3.361	1	1	Each	Elevator, Traction, Controls and Call Buttons, Service	2036	to 30	10	186,000.00	186,000	186,000	**2.9%**											254,865					
3.365	1	1	Each	Elevator, Traction, Hoist and Motor, Passenger	2051	to 45	25	104,000.00	104,000	104,000	**2.6%**															
3.366	1	1	Each	Elevator, Traction, Hoist and Motor, Service	2031	to 45	5	104,000.00	104,000	104,000	**1.4%**						121,740									
3.560	1	1	Allowance	Life Safety System, Control Panel and Emergency Devices	2031	to 25	5 to 21	23,500.00	23,500	23,500	**1.9%**						27,508							35,392		
3.600	62	5	Units	Pipes, Building Heating and Cooling, Partial, Phased	2050	to 80+	24 to 46	10,700.00	55,319	663,400	**5.9%**															
3.605	62	10	Units	Pipes, Domestic Water, Waste and Vent, Partial, Phased	2045	to 80+	19 to 34	7,000.00	72,310	434,000	**6.9%**															
3.700	2	2	Each	Pumps, Cooling Tower, 15-HP	2040	to 20	14	18,700.00	37,400	37,400	**0.7%**														58,128	
3.701	2	2	Each	Pumps, Cooling Tower, 25-HP (Incl. Controls)	2040	to 25	14	31,500.00	63,000	63,000	**1.1%**														97,917	
3.702	1	1	Each	Pump, Domestic Cold Water, 7.5-HP (Incl. Controls)	2033	to 15	7	17,200.00	17,200	17,200	**0.6%**								21,443							
3.703	2	2	Each	Pumps, Sump	2027	to 20	1	4,000.00	8,000	8,000	**0.3%**		8,256													
3.770	1	1	Each	Pump, Fire Suppression, 25-HP (Incl. Controller)	2034	to 50	8	73,500.00	73,500	73,500	**1.1%**									94,564						
3.820	2	1	Allowance	Security System, Phased	2029	10 to 15	3 to 10	29,500.00	29,500	59,000	**2.1%**				32,424							40,422				
3.920	5	1	Each	Valves, Large Diameter, Phased	2029	to 50	3 to 15	7,500.00	7,500	37,500	**0.6%**				8,243			9,060			9,958			10,945		12,030

RESERVE EXPENDITURES

Hartman
Condominium Association, Inc.
Columbus, Ohio

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2026)	Per Phase (2026)	Total (2026)	Percentage of Future Expenditures	16 2042	17 2043	18 2044	19 2045	20 2046	21 2047	22 2048	23 2049	24 2050	25 2051	26 2052	27 2053	28 2054	29 2055	30 2056
				Exterior Building Elements																						
1.015	460	460	Square Feet	Awnings, Canvas	2039	5 to 10	13	37.00	17,020	17,020	**0.7%**												39,839			
1.020	460	460	Square Feet	Awnings, Canvas and Frame	2032	10 to 15	6	100.00	46,000	46,000	**1.6%**					86,368										
1.180	2	2	Each	Doors, Entrances	2036	to 30	10	8,500.00	17,000	17,000	**0.3%**															
1.220	6	6	Floors	Fire Escape, Paint Finishes and Capital Repairs (Near Term is Modified)	2028	6 to 8	2	4,500.00	27,000	27,000	**2.6%**	44,693							55,718							69,463
1.380	12,350	12,350	Square Feet	Roofs, EPDM	2039	15 to 20	13	25.50	314,925	314,925	**5.3%**															
1.540	8,700	4,350	Linear Feet	Sealants, Windows and Doors, Phased	2035	to 20	9 to 19	12.00	52,200	104,400	**3.3%**				94,970										130,131	
1.730	1,300	1,300	Square Feet	Walls, Curtain Wall, Inspections, Partial Sealants and Capital Repairs, Fire Escape (Incl. Roof)	2028	to 10	2	21.00	27,300	27,300	**1.4%**							54,590							
1.820	26,550	26,550	Square Feet	Walls, Masonry, Inspections and Repairs	2035	8 to 12	9	7.70	204,435	204,435	**13.0%**				371,937										509,643	
1.825	2,200	2,200	Square Feet	Walls, Siding, Metal, Fire Escape and Roof Mechanical Rooms	2046	to 45	20	18.00	39,600	39,600	**0.8%**					74,351										
1.905	1	1	Allowance	Walls, Trim, Cornices, Flashing and Window Frames, Paint Finishes	2035	8 to 10	9	50,000.00	50,000	50,000	**3.2%**				90,967										124,647	
1.980	470	470	Square Feet	Windows, Common	2049	to 45	23	90.00	42,300	42,300	**1.0%**								87,292							
				Interior Building Elements																						
2.060	2,500	2,500	Square Feet	Ceilings, Acoustical Tiles, Grid and Lighting, Hallways	2045	to 30	19	2.50	6,250	6,250	**0.1%**				11,371											
2.100	2	2	Each	Elevator Cab Finishes	2036	to 20	10	18,500.00	37,000	37,000	**1.6%**															95,190
2.200	490	490	Square Yards	Floor Coverings, Carpet, Hallways	2035	8 to 12	9	57.00	27,930	27,930	**1.8%**				50,814										69,628	
2.240	230	230	Square Yards	Floor Coverings, Tile, Elevator Lobbies	2049	to 30	23	175.00	40,250	40,250	**0.9%**								83,061							
2.241	40	40	Square Yards	Floor Coverings, Tile, Fire Escape Hallways	2035	to 30	9	150.00	6,000	6,000	**0.1%**															
2.600	1	1	Allowance	Lobby, Renovation	2030	to 20	4	23,000.00	23,000	23,000	**0.8%**									48,982						
2.700	69	69	Each	Mailboxes	2026	to 35	0	150.00	10,350	10,350	**0.1%**															
2.800	27,600	27,600	Square Feet	Paint Finishes, Elevator Lobbies and Hallways	2035	8 to 12	9	1.20	33,120	33,120	**2.1%**				60,257										82,566	
				Building Services Elements																						
3.105	2	2	Each	Boilers, Building Heat, Replacement	2047	18 to 25	21	42,500.00	85,000	85,000	**1.9%**					164,700										
3.260	1	1	Each	Cooling Tower, 204-tons, Capital Repairs	2039	10 to 15	13	17,000.00	17,000	17,000	**0.3%**															
3.265	1	1	Each	Cooling Tower, 204-tons, Replacement	2050	25 to 35	24	225,000.00	225,000	225,000	**5.4%**									479,176						
3.300	1	1	Allowance	Electrical System, Main Panel, 2,000-AMP	2030	to 70+	4	35,000.00	35,000	35,000	**0.4%**															
3.360	1	1	Each	Elevator, Traction, Controls and Call Buttons, Passenger	2036	to 30	10	178,000.00	178,000	178,000	**2.8%**															
3.361	1	1	Each	Elevator, Traction, Controls and Call Buttons, Service	2036	to 30	10	186,000.00	186,000	186,000	**2.9%**															
3.365	1	1	Each	Elevator, Traction, Hoist and Motor, Passenger	2051	to 45	25	104,000.00	104,000	104,000	**2.6%**										228,573					
3.366	1	1	Each	Elevator, Traction, Hoist and Motor, Service	2031	to 45	5	104,000.00	104,000	104,000	**1.4%**															
3.560	1	1	Allowance	Life Safety System, Control Panel and Emergency Devices	2031	to 25	5 to 21	23,500.00	23,500	23,500	**1.9%**						45,535								58,584	
3.600	62	5	Units	Pipes, Building Heating and Cooling, Partial, Phased	2050	to 80+	24 to 46	10,700.00	55,319	663,400	**5.9%**								117,811			125,472		133,631		142,320
3.605	62	10	Units	Pipes, Domestic Water, Waste and Vent, Partial, Phased	2045	to 80+	19 to 34	7,000.00	72,310	434,000	**6.9%**				131,557			144,594			158,924			174,675		
3.700	2	2	Each	Pumps, Cooling Tower, 15-HP	2040	to 20	14	18,700.00	37,400	37,400	**0.7%**															
3.701	2	2	Each	Pumps, Cooling Tower, 25-HP (Incl. Controls)	2040	to 25	14	31,500.00	63,000	63,000	**1.1%**															
3.702	1	1	Each	Pump, Domestic Cold Water, 7.5-HP (Incl. Controls)	2033	to 15	7	17,200.00	17,200	17,200	**0.6%**							34,394								
3.703	2	2	Each	Pumps, Sump	2027	to 20	1	4,000.00	8,000	8,000	**0.3%**						15,501									
3.770	1	1	Each	Pump, Fire Suppression, 25-HP (Incl. Controller)	2034	to 50	8	73,500.00	73,500	73,500	**1.1%**															
3.820	2	1	Allowance	Security System, Phased	2029	10 to 15	3 to 10	29,500.00	29,500	59,000	**2.1%**	50,394								62,825						
3.920	5	1	Each	Valves, Large Diameter, Phased	2029	to 50	3 to 15	7,500.00	7,500	37,500	**0.6%**															

Years 2026 to 2041

RESERVE EXPENDITURES

Hartman
Condominium Association, Inc.
Columbus, Ohio

Explanatory Notes:
1) **3.2% is the estimated Inflation Rate for estimating Future Replacement Costs.**
2) **FY2026 is Fiscal Year beginning January 1, 2026 and ending December 31, 2026.**

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2026)	Per Phase (2026)	Total (2026)	Percentage of Future Expenditures	RUL = 0 FY2026	1 2027	2 2028	3 2029	4 2030	5 2031	6 2032	7 2033	8 2034	9 2035	10 2036	11 2037	12 2038	13 2039	14 2040	15 2041
				Property Site Elements																							
4.020	2,550	2,550	Square Yards	Asphalt Pavement, Crack Repair, Patch, Seal Coat, and Striping	2031	3 to 5	5	2.40	6,120	6,120	**0.9%**						7,164				8,126				9,217		
4.040	2,550	2,550	Square Yards	Asphalt Pavement, Mill and Overlay, Parking Lot	2027	15 to 20	1	22.00	56,100	56,100	**0.7%**		57,895														
4.045	2,550	2,550	Square Yards	Asphalt Pavement, Total Replacement, Parking Lot	2047	15 to 20	21	43.50	110,925	110,925	**2.4%**																
4.095	10,350	10,350	Square Feet	Carports, Paint Finishes and Capital Repairs, Partial	2030	6 to 8	4	5.50	56,925	56,925	**3.0%**					64,569						80,497				
4.096	10,350	10,350	Square Feet	Carports, Replacement	2043	25 to 35	17	37.00	382,950	382,950	**7.4%**																
4.240	390	390	Linear Feet	Fences, Steel, Paint Finishes	2028	6 to 8	2	16.00	6,240	6,240	**0.6%**			6,646							8,285						
4.245	390	390	Linear Feet	Fences, Steel, Parking Lot	2041	to 35	15	82.00	31,980	31,980	**0.6%**																51,295
4.320	3	3	Each	Gate Operators	2028	to 10	2	7,200.00	21,600	21,600	**1.1%**			23,005										31,522			
4.330	3	3	Each	Gates	2028	to 20	2	10,400.00	31,200	31,200	**1.1%**			33,229													
4.955	1,270	1,270	Square Feet	Waterproof Membrane, Inspection and Capital Repairs, East Vaulted System	2029	15 to 20	3	10.50	13,335	13,335	**0.2%**				14,657												
4.960	1,270	1,270	Square Feet	Waterproof Membrane, Replacement and Concrete Structure Repairs, East Vaulted System	2044	25 to 35	18	104.00	132,080	132,080	**2.6%**																
				Anticipated Expenditures, By Year ($8,867,095 over 30 years)								10,350	66,151	115,917	55,323	130,357	156,412	64,630	21,443	94,564	558,380	613,183	80,497	82,307	570,133	156,045	63,325

Years 2042 to 2056

RESERVE EXPENDITURES

Hartman
Condominium Association, Inc.
Columbus, Ohio

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2026)	Per Phase (2026)	Total (2026)	Percentage of Future Expenditures	16 2042	17 2043	18 2044	19 2045	20 2046	21 2047	22 2048	23 2049	24 2050	25 2051	26 2052	27 2053	28 2054	29 2055	30 2056
				Property Site Elements																						
4.020	2,550	2,550	Square Yards	Asphalt Pavement, Crack Repair, Patch, Seal Coat, and Striping	2031	3 to 5	5	2.40	6,120	6,120	**0.9%**		10,455				11,858				13,451				15,257	
4.040	2,550	2,550	Square Yards	Asphalt Pavement, Mill and Overlay, Parking Lot	2027	15 to 20	1	22.00	56,100	56,100	**0.7%**															
4.045	2,550	2,550	Square Yards	Asphalt Pavement, Total Replacement, Parking Lot	2047	15 to 20	21	43.50	110,925	110,925	**2.4%**						214,933									
4.095	10,350	10,350	Square Feet	Carports, Paint Finishes and Capital Repairs, Partial	2030	6 to 8	4	5.50	56,925	56,925	**3.0%**										125,111					
4.096	10,350	10,350	Square Feet	Carports, Replacement	2043	25 to 35	17	37.00	382,950	382,950	**7.4%**		654,180													
4.240	390	390	Linear Feet	Fences, Steel, Paint Finishes	2028	6 to 8	2	16.00	6,240	6,240	**0.6%**	10,329							12,877							16,054
4.245	390	390	Linear Feet	Fences, Steel, Parking Lot	2041	to 35	15	82.00	31,980	31,980	**0.6%**															
4.320	3	3	Each	Gate Operators	2028	to 10	2	7,200.00	21,600	21,600	**1.1%**							43,192								
4.330	3	3	Each	Gates	2028	to 20	2	10,400.00	31,200	31,200	**1.1%**							62,389								
4.955	1,270	1,270	Square Feet	Waterproof Membrane, Inspection and Capital Repairs, East Vaulted System	2029	15 to 20	3	10.50	13,335	13,335	**0.2%**															
4.960	1,270	1,270	Square Feet	Waterproof Membrane, Replacement and Concrete Structure Repairs, East Vaulted System	2044	25 to 35	18	104.00	132,080	132,080	**2.6%**			232,848													
				Anticipated Expenditures, By Year ($8,867,095 over 30 years)								55,022	715,028	232,848	811,872	160,719	452,527	339,160	238,948	708,795	526,060	125,472	39,839	308,305	990,456	323,027

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
Hartman
Condominium Association, Inc.
Columbus, Ohio

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Reserves at Beginning of Year	*(Note 1)*	5,356	55,791	82,312	90,412	191,405	250,317	315,669	482,684	704,983	866,385	569,735	217,758	404,345	602,357	320,062	458,812
Recommended Reserve Contributions		60,000	90,900	121,800	152,700	183,600	214,500	221,400	228,500	235,800	243,300	251,100	259,100	267,400	276,000	284,800	293,900
Additional Reserve Contributions																	
Additional Assessment																	
Total Recommended Reserve Contributions	*(Note 2)*	**60,000**	**90,900**	**121,800**	**152,700**	**183,600**	**214,500**	**221,400**	**228,500**	**235,800**	**243,300**	**251,100**	**259,100**	**267,400**	**276,000**	**284,800**	**293,900**
Estimated Interest Earned, During Year	*(Note 3)*	785	1,772	2,217	3,617	5,669	7,263	10,245	15,242	20,166	18,430	10,106	7,984	12,919	11,838	9,995	14,927
Anticipated Expenditures, By Year		(10,350)	(66,151)	(115,917)	(55,323)	(130,357)	(156,412)	(64,630)	(21,443)	(94,564)	(558,380)	(613,183)	(80,497)	(82,307)	(570,133)	(156,045)	(63,325)
Anticipated Reserves at Year End		$55,791	$82,312	$90,412	$191,405	$250,317	$315,669	$482,684	$704,983	$866,385	$569,735	$217,758	$404,345	$602,357	$320,062	$458,812	$704,315
												(NOTE 5)					
Predicted Reserves based on 2026 funding level of:	$60,000	55,791	51,011	(4,307)													

Based on 440 similar communities nationally, our recommendations place the Association in the 23rd percentile, meaning they require less funding adjustments than 23% of similar communities nationwide.

(continued)

Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued

	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
Reserves at Beginning of Year	704,315	974,133	592,206	698,927	232,306	424,010	336,239	372,575	523,223	214,089	94,693	391,055	795,341	952,060	436,220
Total Recommended Reserve Contributions	**303,300**	**313,000**	**323,000**	**333,300**	**344,000**	**355,000**	**366,400**	**378,100**	**390,200**	**402,700**	**415,600**	**428,900**	**442,600**	**456,800**	**471,400**
Estimated Interest Earned, During Year	21,540	20,101	16,569	11,951	8,423	9,756	9,096	11,496	9,462	3,963	6,234	15,225	22,425	17,816	13,271
Anticipated Expenditures, By Year	(55,022)	(715,028)	(232,848)	(811,872)	(160,719)	(452,527)	(339,160)	(238,948)	(708,795)	(526,060)	(125,472)	(39,839)	(308,305)	(990,456)	(323,027)
Anticipated Reserves at Year End	$974,133	$592,206	$698,927	$232,306	$424,010	$336,239	$372,575	$523,223	$214,089	$94,693	$391,055	$795,341	$952,060	$436,220	$597,864
									NOTE 5)	*(NOTE 5)*					*(NOTE 4)*

Explanatory Notes:

1) Year 2026 starting reserves are as of December 31, 2025; FY2026 starts January 1, 2026 and ends December 31, 2026.
2) Reserve Contributions for 2026 are budgeted; 2027 is the first year of recommended contributions.
3) **2.6%** is the estimated annual rate of return on invested reserves.
4) Accumulated year 2056 ending reserves consider the age, size, overall condition and complexity of the property.
5) Threshold Funding Years (reserve balance at critical point).

*Refer to the Reserve Expenditures pages for the full list of reserve elements

FIVE-YEAR OUTLOOK

Hartman
Condominium Association, Inc.
Columbus, Ohio

Line Item	Reserve Component Inventory	RUL = 0 FY2026	1 2027	2 2028	3 2029	4 2030	5 2031
	Exterior Building Elements						
1.220	Fire Escape, Paint Finishes and Capital Repairs (Near Term is Modified)			23,963			
1.730	Walls, Curtain Wall, Inspections, Partial Sealants and Capital Repairs, Fire Escape (Incl. Roof)			29,075			
	Interior Building Elements						
2.600	Lobby, Renovation					26,088	
2.700	Mailboxes	10,350					
	Building Services Elements						
3.300	Electrical System, Main Panel, 2,000-AMP					39,700	
3.366	Elevator, Traction, Hoist and Motor, Service						121,740
3.560	Life Safety System, Control Panel and Emergency Devices						27,508
3.703	Pumps, Sump		8,256				
3.820	Security System, Phased				32,424		
3.920	Valves, Large Diameter, Phased				8,243		
	Property Site Elements						
4.020	Asphalt Pavement, Crack Repair, Patch, Seal Coat, and Striping						7,164
4.040	Asphalt Pavement, Mill and Overlay, Parking Lot		57,895				
4.095	Carports, Paint Finishes and Capital Repairs, Partial					64,569	
4.240	Fences, Steel, Paint Finishes			6,646			
4.320	Gate Operators			23,005			
4.330	Gates			33,229			
4.955	Waterproof Membrane, Inspection and Capital Repairs, East Vaulted System				14,657		
	Anticipated Expenditures, By Year ($534,511 over 5 years)	10,350	66,151	115,917	55,323	130,357	156,412

4. RESERVE COMPONENT DETAIL

The Reserve Component Detail of this *Reserve Study* includes enhanced solutions and procedures for select significant components. This section describes the Reserve Components, documents specific problems and condition assessments, and may include detailed solutions and procedures for necessary capital repairs and replacements for the benefit of current and future board members. We advise the Board use this information to help define the scope and procedures for repair or replacement when soliciting bids or proposals from contractors. *However, the Report in whole or part is not and should not be used as a design specification or design engineering service*.

Exterior Building Elements



East elevation



Eat and north elevations



North and west elevations



Patel west and south elevations

Awnings, Canvas and Frame

Line Items: 1.015 and 1.020

Quantity: 460 square feet across 16 canvas awnings with metal frames

History: The canvas was replaced in 2025. The frames are original to conversion in 2006.

Condition: Good overall condition with no significant deterioration evident.



Awnings overview



Awning metal frame

Useful Life: 5- to 10-years for the canvas and 10- to 15-years for the frame

Priority: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We base our estimate of cost for replacement of the canvas on historical information provided by the Association.

Doors, Replacement

Line Item: 1.180

Quantity: Two metal doors

History: Original to conversion in 2006

Condition: Good to fair overall condition with no significant deterioration.



Entrance door



Entrance door

Useful Life: Up to 30 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect and repair any damage, base corrosion or alignment issues
  - Replace deteriorated hardware and loose weather stripping
  - Periodic touch-up paint finish applications as needed

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

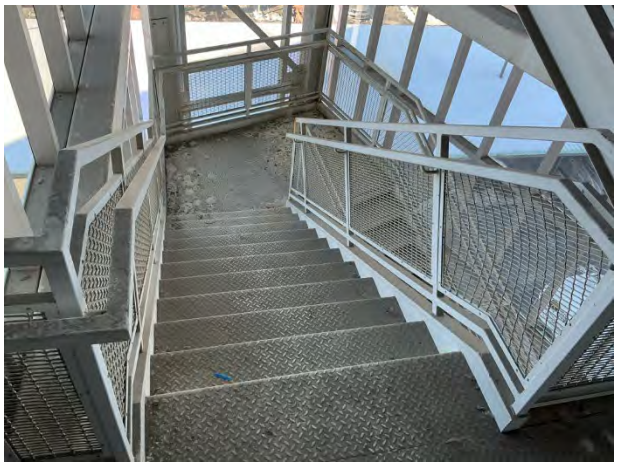
Fire Escape

Line Item: 1.220

Quantity: One fire escape at the west elevation. The top five floors are protected by a curtain wall system with a metal frame and the bottom floor stairs are exposed to the elements. The curtain walls are open to the environment at the intersections.

History: The exposed first floor stairs were painted in 2025. The date of the paint finishes at the remaining five floors of the fire escape was unavailable at the time of the inspection. Based on satellite imagery from Google Earth, the fire escape predates conversion.

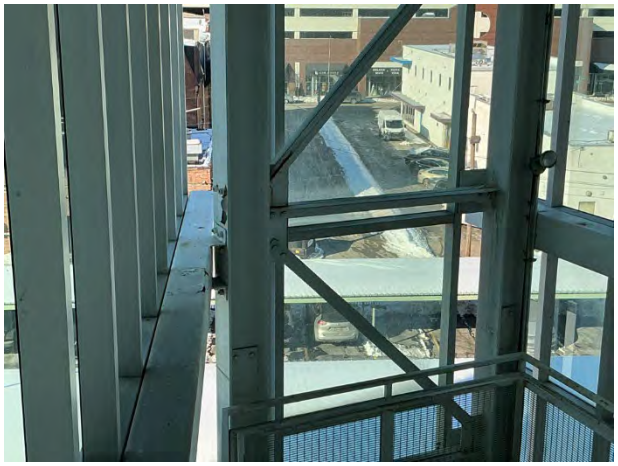
Condition: Fair overall condition with rust and peeling paint evident.



Fire escape overview



Fire escape overview



Peeling paint finish



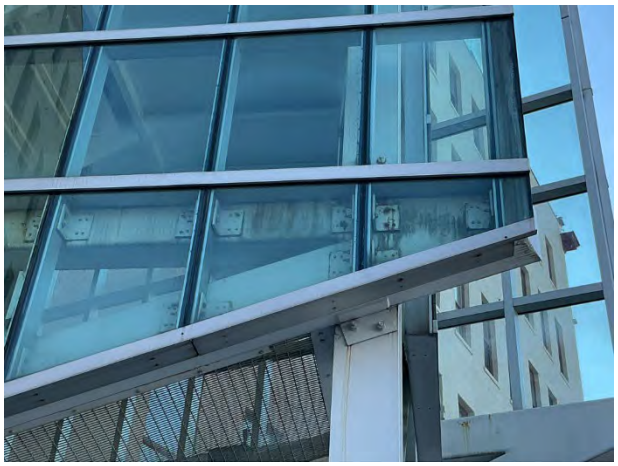
Isolated rust



Significant rust



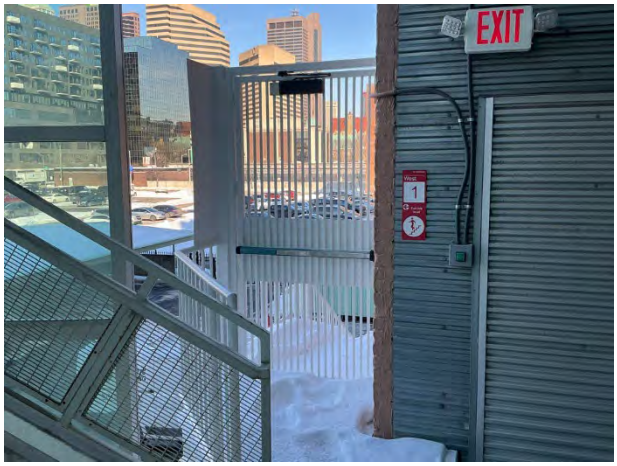
Significant rust



Isolated rust



Fire escape overview



Painted first floor

Useful Life: The useful life of the fire escape is indeterminate with the benefit of periodic repairs and paint applications. We recommend periodic applications of paint, an inspection of all stair anchor attachments to the building and capital repairs to the metal components every six- to eight-years.

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost includes paint finish applications and repairs to the metal frame of the curtain wall system.

Roof, EPDM

Line Item: 1.380

Quantity: Approximately 12,350 square feet of ethylene propylene diene monomer (EPDM) roofing including the roofs on top of the elevator rooms and mechanical room.

History: Replaced in 2019. The Association conducts inspections of the roof semiannually. We concur with this preventive maintenance practice and recommend the Association continue to fund these inspections through the operating budget.

Condition: Good to fair overall condition with isolated patches evident. Management and the Board report no history of leaks.. We were limited in our complete inspection of the roof due to snow cover at the time of the inspection.



EPDM roof overview



EPDM roof overview



EPDM roof overview



EPDM roof overview



EPDM roof overview



EPDM roof overview

Useful Life: 15- to 20-years

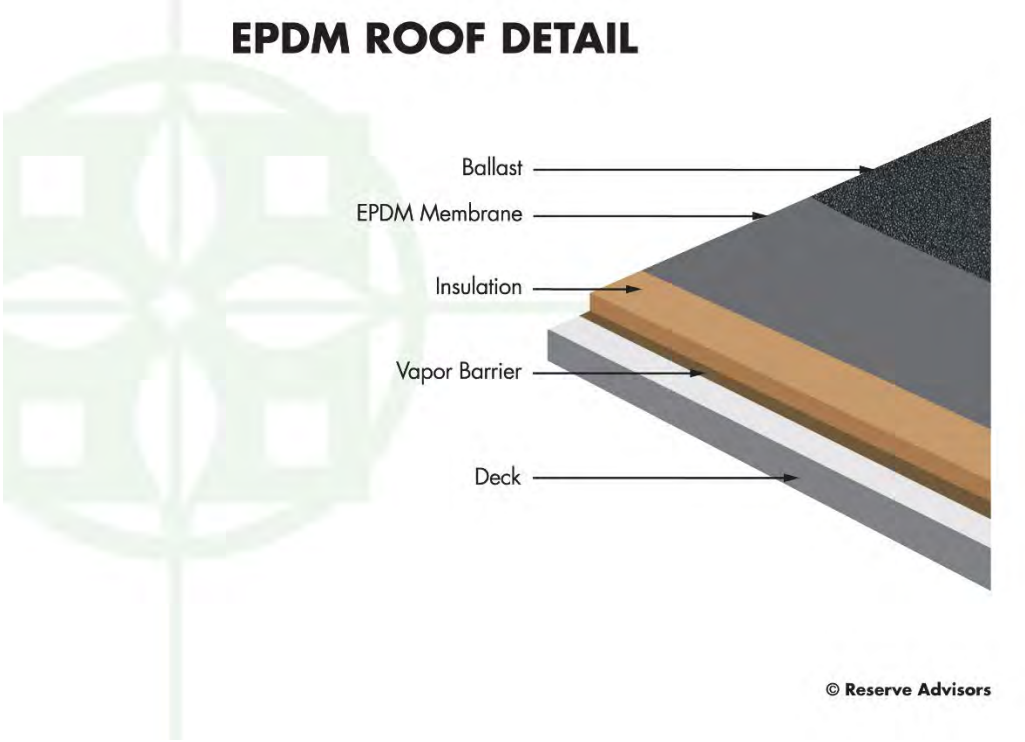
Component Detail Notes: EPDM membrane roofing is a synthetic-rubber compound that provides outstanding physical performance properties and weathering characteristics. EPDM is a single-ply roof membrane which is used on flat and low-pitch roofs. Unlike built-up roofing systems, EPDM roofs require a less labor-intensive installation.

Over time, exposure to ultraviolet light, heat and weather degrade the membrane. This degradation results in membrane damage from thermal expansion and contraction, adverse weather and pedestrian traffic. The aging process makes the membrane less pliable and more difficult to maintain. Ponding water on the roof can increase the effects of ultraviolet light on the membrane and contaminants in ponded water can cause the membrane to deteriorate prematurely.

Contractors can install a new EPDM roof in one of two ways: *tear-off* or an *overlay*. An *overlay* is the application of a new roof membrane over an existing roof. This method, although initially more economical, often covers up problems with the deck, flashing and saturated insulation. The *tear-off* method of replacement includes removal of the existing roofing, flashings and insulation, and installation of a new roofing system.

The contractor should follow the manufacturer's directions and specifications upon installation of the roof. The contractor should remove the original insulation if saturated or compacted and apply a new layer of insulation per the manufacturer's instructions. The insulation should fit loosely with gaps no greater than ¼ inch. Gaps will cause failure of the membrane later. Mechanical fastening of the insulation is the best manner of installation. The contractor should start the installation of a roof membrane from the lowest points of the roof. The exposed top of an EPDM membrane (synthetic rubber) roof system ranges in thickness from 45- to 120-mils but 60 mils is most common. Seams overlap one another with a chemical or thermoset heat weld.

The following detail depicts a typical EPDM roof although it may not reflect the actual configuration at Hartman:



Preventative Maintenance Notes: We recommend the Association maintain a service and inspection contract with a qualified professional and record all documentation of repairs conducted. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
    - Note drainage issues with water ponding after 48 hours of rainfall event. Verify scuppers and drains are free of debris. Replace damaged or missing drain covers.
    - Inspect perimeter flashing for loose fasteners, deflections, and sealant damage
    - Verify membrane surface is free of ruptures or damage, and areas of extensive blistering or bubbling
    - Remove oil spills or contaminants from mechanical equipment
    - In areas of possible foot traffic, remove any sharp debris or trash and note areas of crushed insulation
    - If frequency of leaks increase or location of water infiltration is unknown, we recommend the consideration of a thermal image inspection

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.We base our estimate of cost on historical information provided by the Association.

Sealants, Windows

Line Item: 1.540

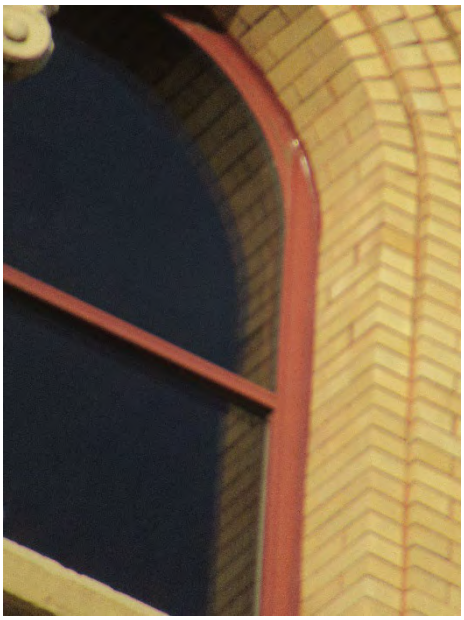
Quantity: Approximately 8,700 linear feet of exterior sealants or *caulk*[1] at the windows and doors

History: In 2025, the Association performed a significant façade restoration project including complete replacement of all the sealants at the windows and doors. Due to the variable rate of deterioration across the sealants we recommend Hartman replace up to fifty percent (50%), or 4,350 linear feet of joint sealant in conjunction with facade repairs every 10 years.

Condition: Good overall condition with no significant deterioration evident.



Sealant in good condition



Sealant in good condition

[1] The terms sealant and caulk are used interchangeably throughout this text and throughout the industry.



Sealant in good condition



Sealant in good condition

Useful Life: Up to 20 years

Component Detail Notes: The rate of deterioration of the sealants is not uniform due to the different exposures to sunlight and weather. The Association should anticipate gradual dispersed deterioration as the sealants age.

Correct preparation of the joint surfaces before re-application of a sealant is important to ensure proper adhesion. The surfaces must be removed of all contaminants, including the previous sealant material, paint, rust and other corrosion, water, grease, etc. The surfaces should also be dry and free from dust and grit, which can be removed using dry compressed air or brushes. The Association should ensure the manufacturer's instructions are followed in determining if the substrate is compatible with the sealant and that the chemical cleaners and solvents used to prepare the surfaces are also compatible with the sealant.

Several types of caulk are available with significantly different weathering and elongation properties. We recommend a silicone-based or polyurethane-based caulk. The major advantage of polyurethane-based caulks is their ability to bond to most construction surfaces without special preparation, such as primer application, as is required for alternate materials like silicone caulk. With proper surface preparation, i.e., removing surface contaminants, silicone-based caulks perform better than most other caulk materials. The weathering and elongation properties of silicone-based caulk give it a much longer useful life than other caulk materials.

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend Hartman replace up to fifty percent (50%), or 4,350 linear feet of joint sealant in conjunction with facade repairs.

Curtain Walls

Line Item: 1.735

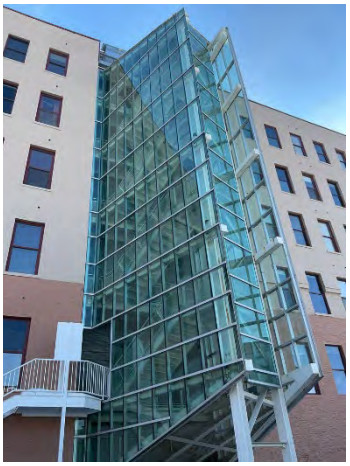
Quantity: Approximately 1,300 square feet of curtain wall system at the fire escape. . The system includes aluminum frames and fixed windows.

History: Unknown at the time of our inspection, predates conversion based on satellite imagery from Google Earth

Condition: Good overall. We note rust at the frame and include paint finish expenses in Line Item **"Fire Escape, Paint Finishes and Capital Repairs"**.



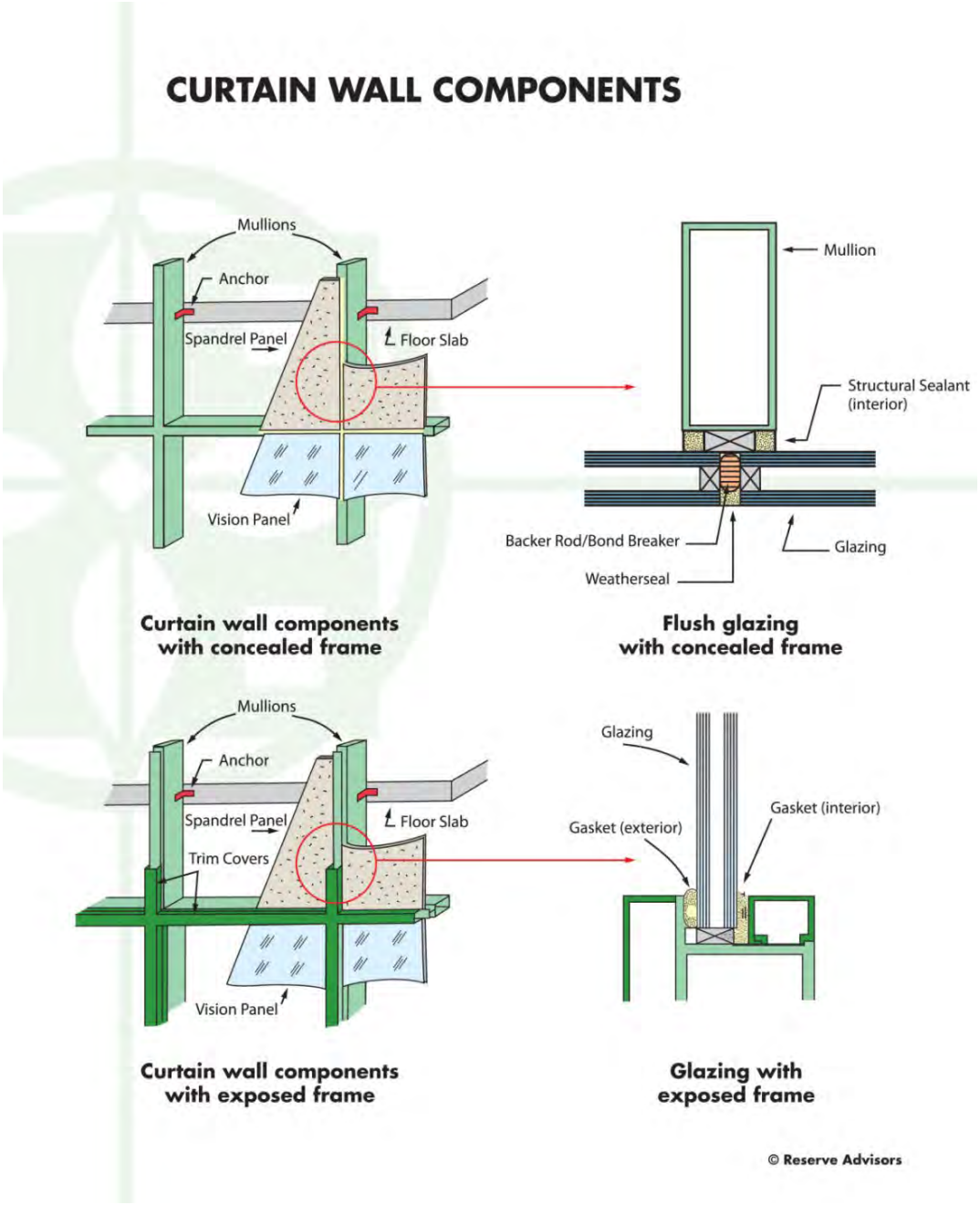
Curtain wall overview



Curtain wall overview

Useful Life: Properly maintained curtain walls have a useful life in excess of 50 years with the benefit of timely maintenance and repairs. We recommend inspections and repairs up to every 10 years.

Component Detail Notes: The following details depict typical components of a curtain wall although it may not reflect the actual configuration at Hartman:



Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair broken glazing, failed sealants, loose components and fasteners
    - Inspect anchors to verify their structural integrity
    - Verify all internal drains are unobstructed

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The exact amount of repairs and thus the exact cost is indeterminate pending the physical inspection of the elevations at the time of the expenditures. Rather than complete replacement, we assume the following activities per event:

- Complete inspection of the curtain wall
- Replacement of up to fifty percent (50%) of the wet seals
- Replacement of up to fifty percent (50%) of the dry seals
- Replacement of a limited amount of glazings
- Invasive inspection of a limited amount of anchors and refastening of aluminum components as needed
- Touch-up finish applications
- Engineering fees
- General conditions
- Mobilization and access
- Scaffolding
- Sidewalk protection

Wall, Masonry

Line Item: 1.820

Quantity: Approximately 26,550 square feet of masonry comprises the exterior walls. This quantity includes the chimney stack as well as approximately 2,850 square feet comprise the south portion of the west wall where a building was previously attached.

History: In 2025, the Association completed a significant façade restoration project at all elevations of the building. At each of the elevations, the masonry was cleaned, veneer was rebuilt, all sealant at the windows was removed and replaced, repairs were performed at the cornice, including scraping and paint applications, repointing of up to fifteen percent (15%). Replacements also included isolated lintel replacement.

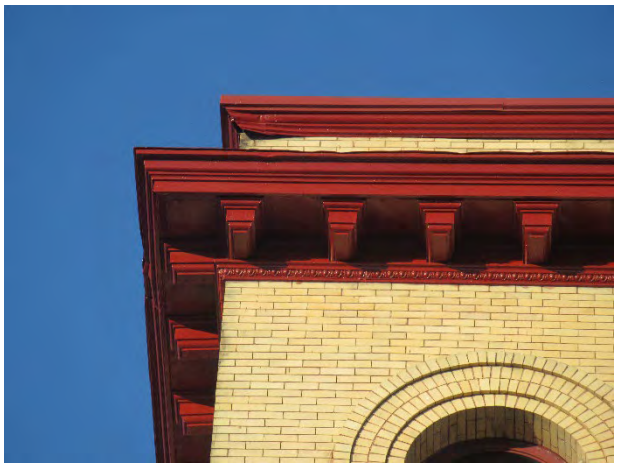
Condition: Good to fair overall condition with the following evident:

- Face brick and terra cotta details on the north, south, east and west elevations
- Common brick at the chimney stack
- Parapet walls protected with roof membrane and flashing
- No previous repairs evident
- No reported history of water infiltration
- Efflorescence is visible
- Lintel paint finish in good condition
- Masonry exhibits cracks
- Masonry exhibits spalls
- Mortar deterioration is evident
- Mortar joints are tooled

- Weeps and flashing at lintels are visible
- Parapet details



Metal cornice at east elevation



Metal cornice in good condition



Lintel weeps visible at east elevation



Concrete sill with repaired spalls at east elevation



Replaced bricks at the east elevation



Step cracks at the east elevation



Masonry replacements with lintel rust jacking at the east elevation



Previous damage at the cornice at the east elevation



Partial spall at north elevation



Mortar loss at west elevation



West elevation masonry



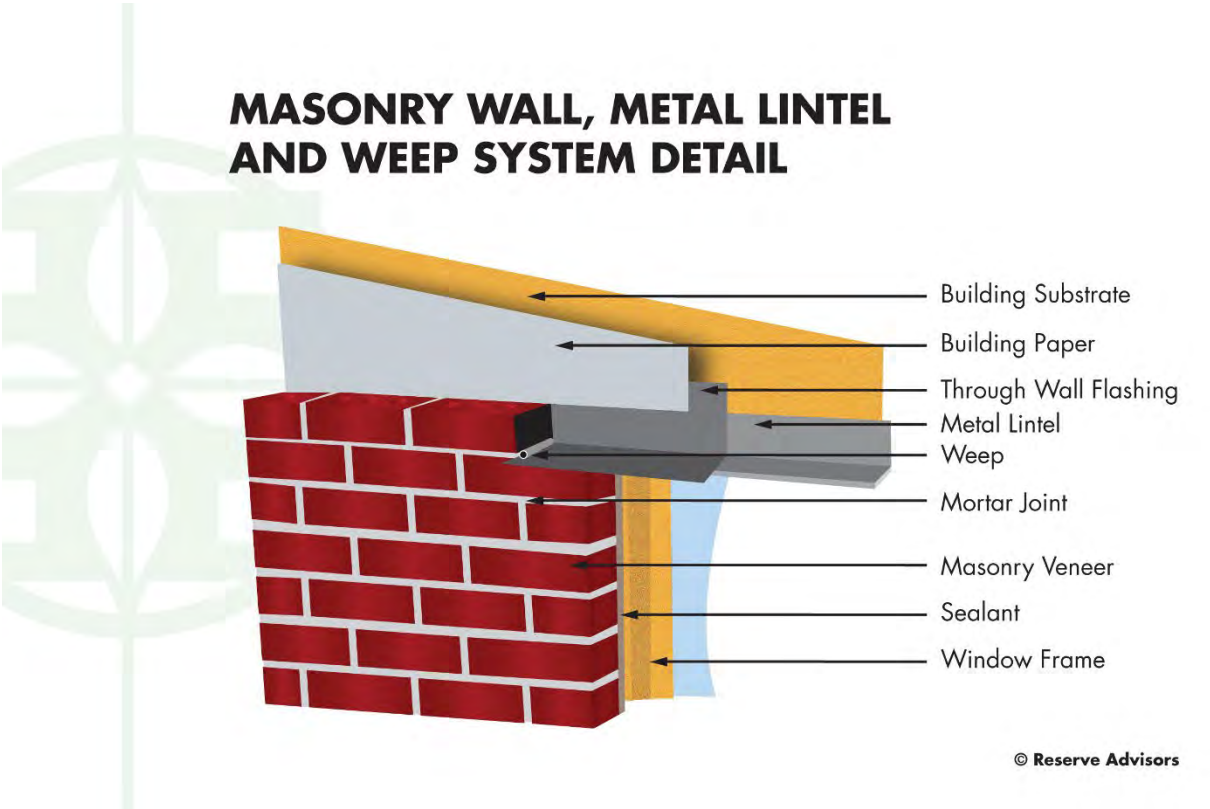
Lintel weeps with partial masonry repairs at south elevation

Useful Life: We advise a complete inspection of the masonry and related masonry repairs 8- to 12-years to forestall deterioration.

Component Detail Notes: Common types of masonry deterioration include efflorescence, spalling, joint deterioration and cracking. The primary cause of efflorescence, cracks and face spall is water infiltration, therefore prevention of water infiltration is the principal concern for the maintenance of masonry applications.

Repointing is a process of raking and cutting out defective mortar to a depth of not less than ½ inch nor more than ¾ inch and replacing it with new mortar. Face grouting is the process of placing mortar over top of the existing mortar. We advise against face grouting because the existing, often deteriorated mortar does not provide a solid base for the new mortar. New mortar spalls at face-grouted areas will likely occur. One purpose of a mortar joint is to protect the masonry by relieving stresses within the wall caused by expansion, contraction, moisture migration and settlement. Repointed mortar joints are more effective if the mortar is softer and more permeable than the masonry units, and no harder or less permeable than the existing mortar. The masonry contractor should address these issues within the proposed scope of work

We recommend an inspection, partial repair and replacement of the steel lintels. Lintels are structural supports or beams above windows and doors. Fatigued lintels also allow the direct penetration of storm water into the wall assembly. These inspections should locate areas of rust on the lintels and cracks or other structural damage to the walls around lintels. The contractor should remove any areas of rust, prime and paint these lintels. Paint protects and maximizes the remaining useful life of the lintels and therefore the exterior wall systems. Structural damage can eventually lead to costly replacements of lintels and surrounding wall systems. The following diagram details a typical metal lintel and weep system and may not reflect the actual configuration at the Association:



Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our estimate of cost includes the following activities:

- Complete inspection of the masonry
- Repointing of up to five percent (5%) of the masonry
- Replacement of less than one-percent of the masonry (The exact amount of area in need of replacement will be discretionary based on the actual future conditions and the desired appearance.)
- Replacement/flashing installation at up to five percent (5%) of the metal lintels
- Paint applications to the metal lintels
- Replacement of up to fifty percent (50%) of sealants
- Engineering fees
- General conditions
- Mobilization and access
- Scaffolding
- Sidewalk protection

Walls, Siding, Metal

Line Item: 1.825

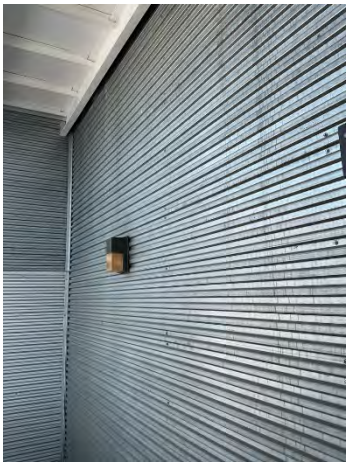
Quantity: Approximately 2,200 square feet at the roof mechanical rooms and fire escape

History: Original to conversion in 2006

Condition: The siding at the roof mechanical rooms is in good to fair condition overall with rust evident. The siding at the fire escape is in good condition overall with no visible deterioration evident.



Metal siding with rust



Metal siding at the fire escape walls



Metal siding with rust

Useful Life: Up to 45 years

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

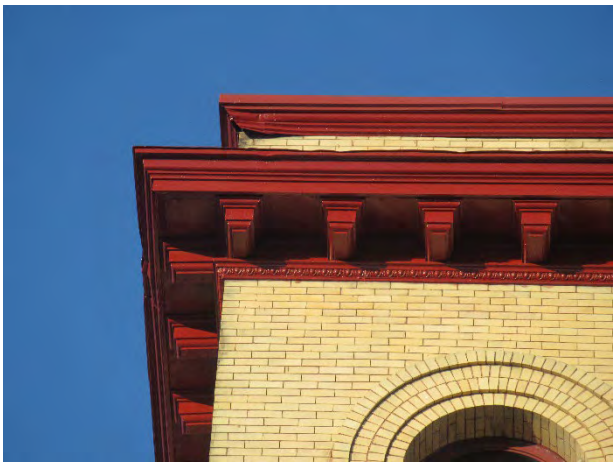
Walls, Trim, Cornices, Flashing and Window Frames, Paint Finishes

Line Item: 1.905

Quantity: We include paint finishes at the various exterior elements including the cornices, flashing, window frames, terra cotta details, and wood trim around the commercial unit windows.

History: In 2025, the Association completed a significant façade restoration project at all elevations of the building. At each of the elevations, the masonry was cleaned, veneer was rebuilt, all sealant at the windows was removed and replaced, repairs were performed at the cornice, including scraping and paint applications, repointing of up to fifteen percent (15%). Replacements also included isolated lintel replacement.

Condition: Good overall condition with no significant deterioration



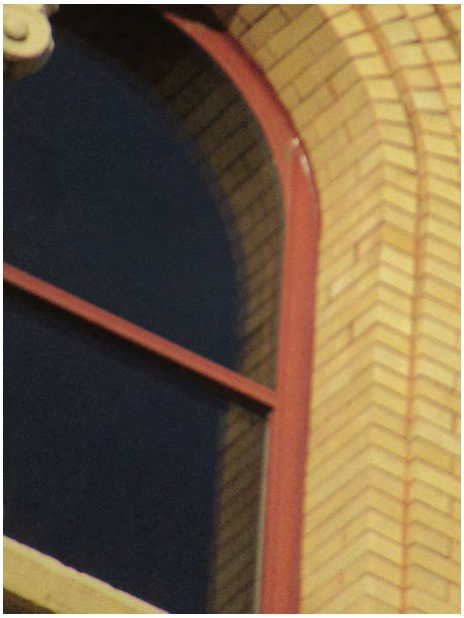
Metal cornices and flashing



Metal cornices and flashing



Window frame



Window frame with minor deterioration

Useful Life: 8- to 10-years

Component Detail Notes: Correct and complete preparation of the surface before application of the paint finish maximizes the useful life of the paint finish and surface. The contractor should remove all loose, peeled or blistered paint before application of the new paint finish. The contractor should then power wash the surface to remove all dirt or chalking of the prior paint finish.

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The Association should fund replacement of the wood trim at the commercial unit windows through the operating budget. We recommend the Association coordinate paint finishes with masonry repairs.

Windows, Common

Line Item: 1.980

Quantity: 470 square feet at the elevator lobbies

History: Original to conversion from 2006 to 2010

Condition: Good overall condition with no significant deterioration evident from our visual inspection from the ground.



Common windows



Common window seal

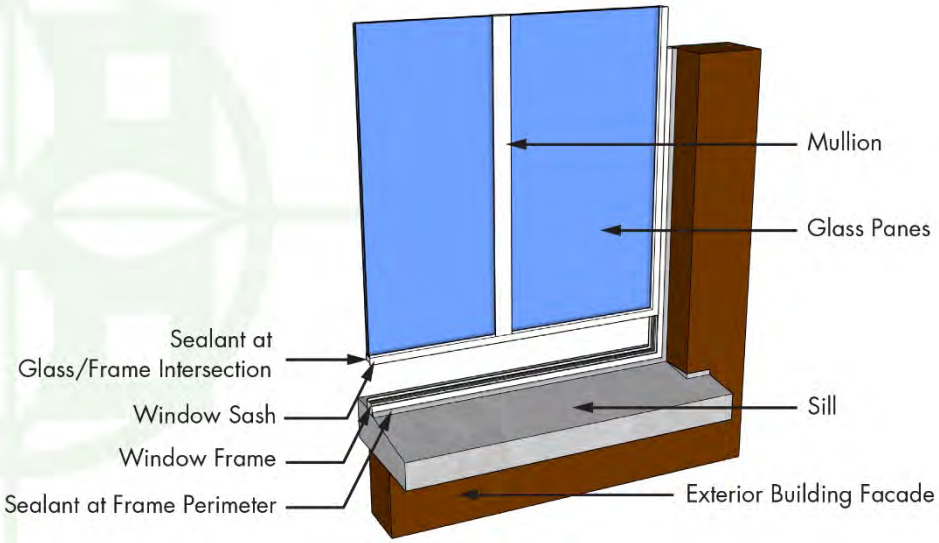
Useful Life: Up to 45 years

Component Detail Notes: Construction includes the following:

- Aluminum frames
- Dual pane glass

The following schematic depicts the typical components of a window system although it may not reflect the actual configuration at Hartman:

WINDOW DETAIL



© Reserve Advisors

Properly designed window assemblies anticipate the penetration of some storm water beyond the gaskets. This infiltrated storm water collects in an internal drainage system and drains, or exits, the frames through weep holes. These weep holes can become clogged with dirt or if a sealant is applied, resulting in trapped storm water. However, as window frames, gaskets and sealants deteriorate, leaks into the interior can result. The windows and doors will eventually need replacement or major capital repairs to prevent water infiltration and damage from wind driven rain.

The thermal efficiencies of the window assemblies are affected by their design and construction components. These components include glazings, thickness of air space between glazings, low-conductivity gas, tinted coatings, low-e coatings and thermal barriers. The Association should thoroughly investigate these component options at the time of replacement. Some manufacturers may include these components as part of the standard product and other manufacturers may consider these components as options for an additional cost. Hartman should review the specifications provided by the manufacturers to understand the thermal design and construction components of the proposed assemblies.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect and repair loose weather stripping and/or lock damage
    - Inspect for broken glass and damaged screens
    - Record instances of water infiltration, trapped moisture or leaks

- As-needed:
    - Verify weep holes are unobstructed and not blocked with dirt or sealant, if applicable
    - Replace damaged or deteriorated sliding glass rollers, if applicable

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Interior Building Elements

Ceilings, Acoustical Ceiling Tiles and Grid

Line Item: 2.060

Quantity: 2,500 square feet at the hallways

History: Replaced in 2025 utilizing in-house labor

Condition: Good overall condition with no significant deterioration.



Acoustical ceiling tiles



Acoustical ceiling tiles

Useful Life: Up to 30 years

Priority: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We base our estimate of cost on historical information provided by the Association.

Elevator Cab Finishes

Line Item: 2.100

Quantity: Two elevators; the cab finishes consist of:

- Tile floor coverings
- Laminate wall coverings (Note: the wall coverings were covered with custom drapery to match the color scheme in the building)
- Eggcrate ceiling finishes in the service elevator
- Metal ceiling coverings in the passenger elevator

History: Original to conversion in 2006. The paint finishes were refinished in 2025.

Condition: Good overall condition with no significant deterioration evident.



Elevator cab finishes



Elevator cab finishes

Useful Life: Up to 20 years

Priority: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

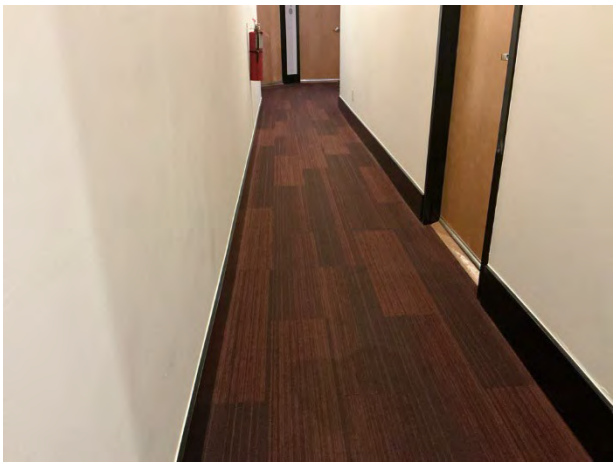
Floor Coverings, Carpet

Line Item: 2.200

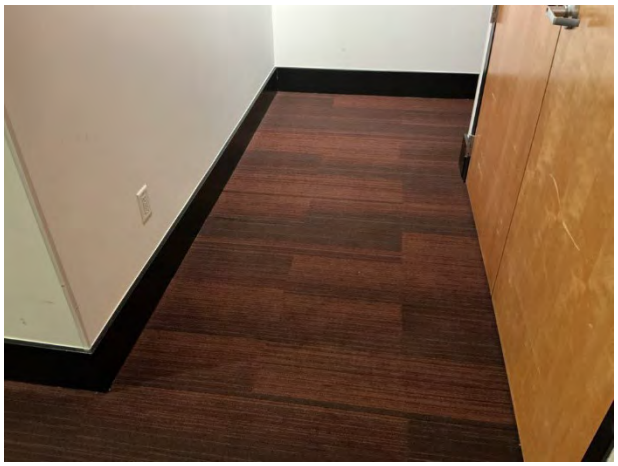
Quantity: Approximately 490 square yards at the hallways (Contractor measurements will vary from the actual floor area due to standard roll lengths, patterns and installation waste.)

History: Original to conversion in 2006 through 2010

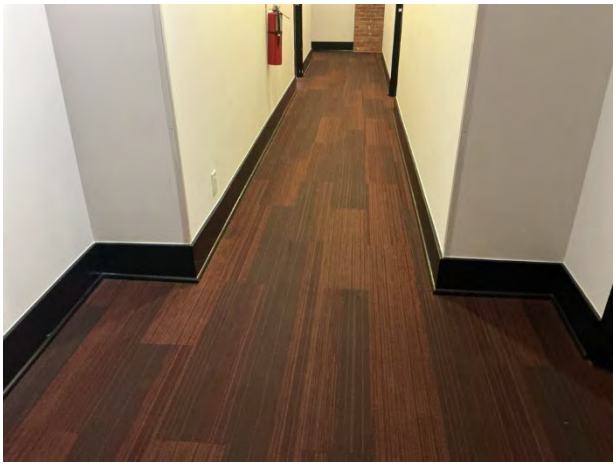
Condition: Good to fair overall condition with wear evident.



Carpet floor coverings



Carpet floor coverings



Carpet floor coverings



Carpet floor coverings

Useful Life: 8- to 12-years

Priority: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We defer the timing of these expenditures based on satisfactory condition.

Floor Coverings, Tile

Line Items: 2.240 and 2.241

Quantity: 230 square yards at the elevator lobbies and 40 square yards at the fire escape hallways

History: The tile at the elevator lobbies was replaced within the last five years and the replaced tile replicates the original tile. The fire escape hallway tile is original to conversion in 2006 through 2010.

Condition: Fair overall condition with cracks and grout deterioration evident.



Tile floor coverings



Tile floor coverings



Tile damage

Useful Life: Up to 30 years although replacement of tile is often based on discretionary redecorating prior to the tile reaching the end of its useful life.

Priority: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The Association should fund regrouting of the tiles through the operating budget if necessary.

Lobby, Renovation

Line Item: 2.600

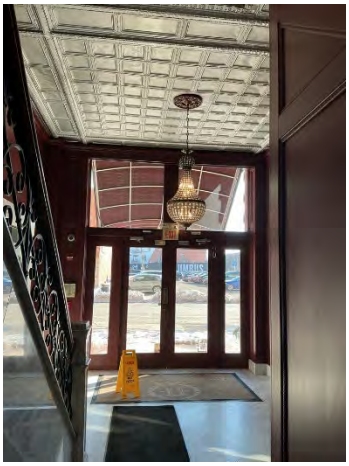
Quantity: The lobby components include:

- Floor coverings: Ceramic and Marble Tile
- Wall finishes: Paint Finishes and Exposed Masonry

- Ceiling finishes: Paint Finishes and Acoustical Ceiling Tiles with Decorative moldings on the front lobby ceiling
- Furnishings
- Light fixtures

History: Original to conversion in 2006. The marble floor tiles were recently cleaned an restored in coordination with replacement of the elevator lobby tiles. The lobby was painted in 2025 coordinated with the hallways and elevator lobbies. We include this cost in Line Item **"Paint Finishes, Hallways and Lobbies".**

Condition: Good overall condition with no significant deterioration.



Lobby overview



Lobby overview



Lobby overview

Useful Life: Renovation up to 20 years, however, the scope and cost of lobby renovations may vary greatly based on the direction of the Board.

Priority: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Mailboxes

Line Item: 2.700

Quantity: 66 unit mailboxes and three package mailboxes

History: Management notes plans for replacement in 2026.

Condition: Reported unsatisfactory



Mailboxes

Useful Life: Up to 35 years

Priority: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

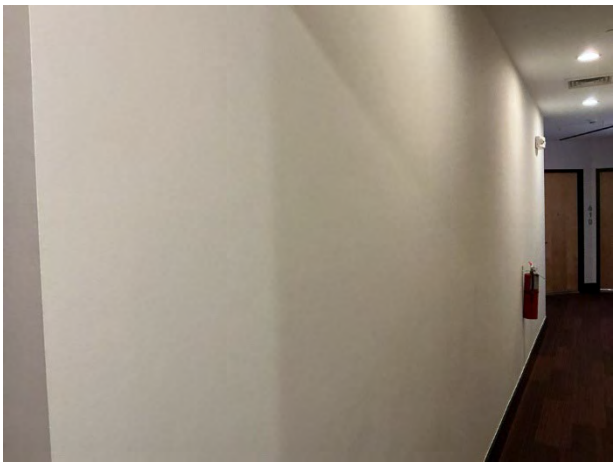
Paint Finishes

Line Item: 2.800

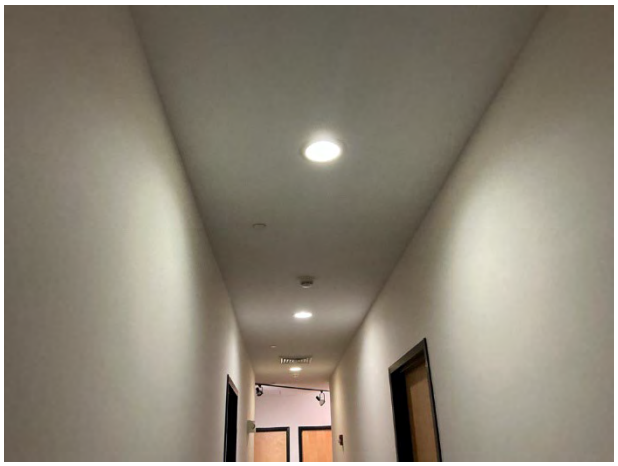
Quantity: Approximately 27,600 square feet at the hallways and foyers

History: Replaced in 2025.

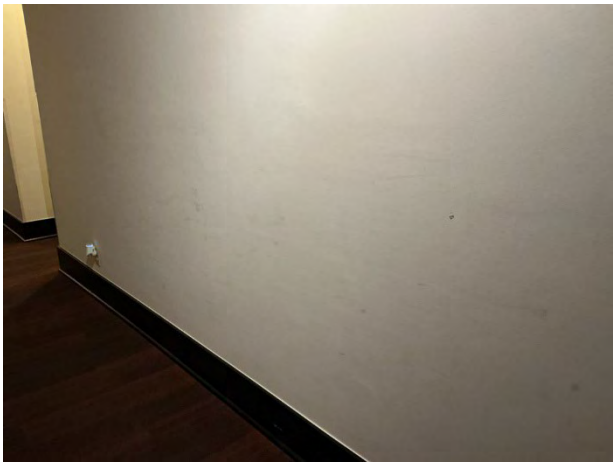
Condition: Good overall condition with isolated scuffs evident.



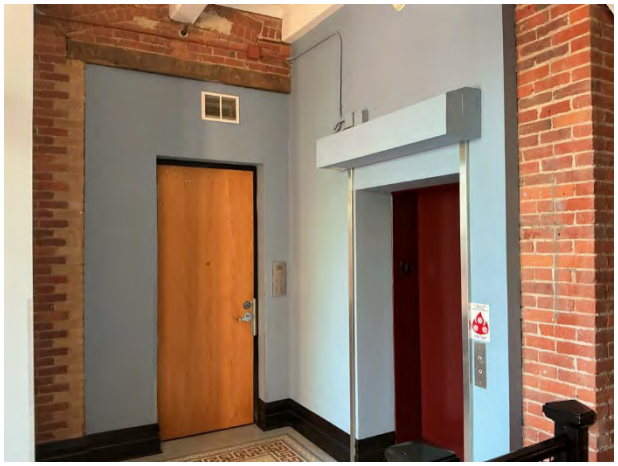
Paint finishes overview



Paint finishes overview



Wall scuffs



Paint finishes overview

Useful Life: 8- to 12-years

Priority: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.We base our estimate of cost on historical information provided by the Association.

Building Services Elements

Boilers, Building Heat

Line Item: 3.105

Quantity: Two *Raypak* gas-fired building heat boilers

History: Replaced in 2025.

Condition: Reported satisfactory without operational deficiencies



Building heat boilers



Building heat boilers

Useful Life: 18- to 25-years

Component Detail Notes: The lack of replacement parts, increased efficiencies of new units, increased maintenance costs and corrosion of components will eventually justify complete replacement.

Preventative Maintenance Notes: The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
  - Inspect for leaking water around boilers
  - Check temperature readings
  - Verify vent is unobstructed
  - Conduct boiler blowdown to minimize corrosion and remove suspended solids in system
  - Clean pilot and burner assemblies
- Monthly:
  - Check water and pressure levels
  - Check controls and switches for proper operating
  - Check and inspect condensate drain
  - Check all gaskets for tight sealing
- Annually:
  - Conduct full inspection of burners and flues
  - Clean and inspect tubes to reduce scaling
  - Inspect any pressure relief valves
  - Clean and recondition feed water pumps
  - Inspect electrical terminals and controls
  - Seal doors/access panels
  - Adjust air/fuel ratios as needed

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We base our estimate of cost on historical information provided by the Association.

Cooling Tower

Line Items: 3.260 and 3.265

Quantity: One *BAC* cooling tower

History: Replaced in 2017. The media booster pump was replaced in 2025.

Condition: Reported satisfactory



Cooling tower



Replaced pump

Useful Life: Replacement every 25- to 35-years with capital repairs every 10- to 15-years

Component Detail Notes: The cooling tower has a capacity of 204-tons. Proper maintenance includes the following:

- Keeping all areas free of debris and build-up
- Effective water treatment program
- Seasonal testing of valves and controls for proper operation
- Inspection, adjustment and repairs of mechanical components as recommended by the manufacturer
- Annual inspection of components for corrosion or decay
- Capital repairs every 10- to 15-years

Capital repairs include a complete inspection of the cooling tower, pumps, motor drives and controls, replacement of the fill media, spray nozzles and any corroded areas, application of an internal protective coating and structural repairs. In addition, capital repairs may include partial or complete replacement of the motors, pumps, controls and valves.

Preventative Maintenance Notes: The Association informs us preventative maintenance is conducted on a regular basis. We recommend the Association obtain

and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Daily:
  - Routine visual and audial assessments to determine if any unusual noises or vibrations are coming from the unit
  - Check basin water and operating oil levels and adjust as needed
  - Check surroundings and ensure paths to the cooling tower are clear of obstructions and trip hazards
- Weekly:
  - Inspect air inlet louvers/shields for blockages
  - Check for water leakage
- Monthly:
  - Inspect for fill media for displacement, damage, dry spots and obstructions. Dry spots may indicate cracks or clogs with the spray nozzles.
  - Check oil seals and oil static levels
  - Check make-up valve, bleed rate and belt condition
  - Conduct water treatment analysis
- Quarterly:
  - Inspect cold water basin and spray nozzles
  - Inspect the fill media for scale buildups. Descaling will increase energy conservations.
  - Flush water distribution system, drain basin and piping
  - Adjust belt tension
  - Lubricate fan shaft bearings and motor base
  - Check motor voltage and current
  - Clean fan motor exterior
  - Check fan drain holes for obstructions
  - Check fan clearance and balance
- Annually:
  - Complete inspection of components for corrosion or decay
  - Check drive alignment
  - Coat steel shafts with corrosion inhibitor as needed
  - Pressure wash components including fill and basin
- Seasonal
  - Drain and sanitize

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We base our estimate of cost for capital repairs on historical information provided by the Association.

Electrical System, Main Panel and Switch Gear

Line Item: 3.300

History: Unknown at the time of our inspection, likely dates to the 1970s. The main 2000-Amp panel located in the basement exhibits rust due to a previous roof leak resulting in water damage. We are informed that the panel was recently inspected and is reported functional. We anticipate the need to replace this panel given the conditions at the time of our inspection. The Association also maintains five 45-kW transformers, one per floor, located in the supply closets on each floor. We recommend the Association moderate the temperature in these rooms using operating funds.

Condition: Reported satisfactory without operational deficiencies



Motor control center



Electrical system main panel with rust

Useful Life: Up to and sometimes beyond 70 years

Component Detail Notes: We give a brief overview of electrical system components in the following sections of this narrative:

Primary Switchgear - The primary switchgear is located where the electric supply comes into the building. Switchgear can include associated controls, regulating, metering and protective devices, and is used for the transmission, distribution and conversion of electric power for use within the building. Switchgear components have a useful life of up to and sometimes beyond 70 years. Replacement is often determined by a desired upgrade of the entire electrical system.

Transformer - A transformer is an electric device with two or more coupled windings used to convert a power supply from one voltage to another voltage. Transformers within a building lower the supplied electrical voltage to a level that can be utilized by the building's equipment and unit owners. Transformers do not utilize mechanical components and therefore have a long useful life. However, the Association should anticipate periodic replacement of a limited quantity of transformers.

Distribution Panel - The distribution panel is an electric switchboard or panel used to control, energize or turn off electricity in total or for individual circuits. The panel also distributes electricity to individual and controllable circuits. One or more distribution panels may exist and further distribute electricity to individual panel boards for each unit. The distribution panel is enclosed in a box and contains circuit breakers, fuses and switches. Distribution panels have a useful life of up to and sometimes beyond 70 years.

Bus Bar - A bus bar is an electric conductor that serves as a common connection for two or more circuits and carries a large current. The metal enclosure contains factory assembled conductors, usually copper or aluminum bars or tubes. Bus bars typically convey electricity in a vertical riser to the multiple stories in the building. This component has an indefinite useful life and would rarely require replacement in total unless an upgrade of the capacity of the electrical system is desired.

Circuit Protection - Once electricity is distributed throughout the building and is at a usable voltage level, the electricity is divided into circuits. Each circuit requires circuit protection. Circuit protection is necessary to prevent injury and fires, and minimize damage to electrical components and disturbances to the electrical system. Abnormalities in the circuit can include overloads, short circuits and surges. Circuit protection devices are commonly referred to as circuit breakers and fuses. For the protection of the circuits in the units and common areas, we recommend the use of only circuit breakers as they are safer than fuses. However, the use of fuses is common for equipment like emergency systems and individual items of equipment. Fuses with a low-capacity rating can easily be replaced with fuses of a higher rating resulting in an unprotected, overloaded and unsafe circuit. The circuit protection panels have a useful life of up to and sometimes beyond 70 years.

Conductors - Conductors are the electrical wires that convey electricity to the units, light fixtures, receptacles and appliances. Conductors in typical high and low-capacity circuits are copper, as is reported by the Association. Copper conductors have an indefinite useful life.

Conductor Insulation and Conduit - Conductor insulation provides protection against the transfer of electricity. Conductor insulation can eventually become brittle and damaged from rodents or heat from many years of service. Conductor conduit is a pipe or tube used to enclose insulated electric wires to protect them from damage. Steel conductor conduit, although galvanized, will eventually rust if used in damp conditions. The useful life of conductor insulation and conduit is indeterminate.

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. We also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the unit's age,

operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect system for signs of electrical overheating, deterioration, and/or panel corrosion
  - Clean and vacuum exterior and interior switchboards
- Five-Year Cycles:
  - Check power meters, lamps, indicators, and transformers for deficiencies
  - Inspect wiring, relays, power supply units, and timers
  - Verify surge protection is intact
- As-needed:
  - Test outlets and ground-fault circuit interrupters (GFCI's) for faulty components
  - Examine the insulation at switchgears for signs of deterioration or cracking
  - Ensure all conductors are clean and dry with no moisture build-up
  - Check and inspect for loose wire connections
  - Clean and clear dust and debris away from system components
  - Check for flickering or dimming light fixtures as these could indicate a short in the wiring, arcing, or an over-extension of the electrical system
  - Conduct thermal image scanning if system experiences numerous or consistent outages
  - Keep an accurate record of all repairs to the electrical system

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association budget to replace the main switchgear, distribution and circuit protection panels. Updates of this Reserve Study will consider possible changes in the scope and times of component replacements based on the conditions, including the need for replacement of the wires.

We recommend the Association conduct thermoscans of the distribution panels and circuit protection panels, and inspections of the transformers for any indications of arcing, burning or overheating on a regular basis, funded through the operating budget. Verification of the integrity of all connection points minimizes the potential for arcing and fires.

Elevator, Traction

Line Items: 3.360 through 3.366

Quantity: One traction service elevator and one traction passenger elevator

History:

- Controls and call buttons: The age was unavailable at the time of our inspection. This likely dates to conversion in 2006
- Hoists and motors: Unknown at the time of our inspection, the service elevator likely predates conversion

Condition: The previous reserve study provided in 2022 noted a history of service interruptions at the service elevator, including reports of the elevator stopping and dropping to the basement level multiple times per year. The building maintenance individual noted the interruptions have ceased by 2026. The passenger elevator is reported satisfactory condition and service interruptions are reportedly infrequent.



Traction passenger elevator hoists and motors



Traction elevator hoists and motors for freight elevator



Traction freight elevator controls



Traction elevator controls

Useful Life: Up to 30 years for the controls and call buttons and up to 45 years for the hoists and motors. However, the scarcity of parts, and the potential frequency and duration of service interruption makes controls replacement more desirable as the components age.

Component Detail Notes: The elevators utilize programmable logic controls

Preventative Maintenance Notes: The Association informs us preventative maintenance is conducted on a regular basis. We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Ongoing:
  - Maintain a maintenance contract with a qualified professional for the elevator(s) and follow the manufacturer's specific recommended maintenance plan adhering to local, state, and/or federal inspection guidelines
- As-needed:
  - Keep an accurate log of all repairs and inspection dates
  - Inspect and adjust misaligned door operators
  - Clear and remove any items located in the elevator machine room(s) not associated with the elevator components (These rooms should never be used for storage)
  - Inspect electrical components for signs of overheating or failure
  - Inspect controls
  - Lubricate the hoist cables
  - Inspect hoist cables and motors for signs of wear or deterioration
  - Ensure air temperature and humidity of machine/pump housing room meets the designated specified range for proper operation
  - Ensure all call buttons are in working condition

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Life Safety System, Emergency Devices

Line Item: 3.560

Quantity: The life safety systems at Hartman include the following components:

- Control panels
- Emergency light fixtures
- Pull stations
- Audio/Visual fixtures
- Exit light fixtures
- Wiring

History: Original to conversion in 2006

Conditions: Reported satisfactory without operational deficiencies.



Emergency devices



Emergency devices



Control panel

Useful Life: Up to 25 years for the devices and for the control panel

Preventative Maintenance Notes: The Association informs us preventative maintenance is conducted on a regular basis. We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. In accordance with *NFPA 72* (National Fire Alarm and Signaling Code) we also recommend the Association maintain a maintenance contract with a qualified professional. The display panel read 'System is Normal' at the time of our inspection The required preventative maintenance may vary in frequency and scope based on the age of the components, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
  - Inspect and test all components and devices, including, but not limited to, control panels, annunciators, detectors, audio/visual fixtures, signal transmitters and magnetic door holders
  - Test backup batteries
- As-needed:
  - Ensure clear line of access to components such as pull stations

- Ensure detectors are properly positioned and clean of debris

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Changes in technology or building codes may make a replacement desirable prior to the end of the functional life. Our estimate of future cost considers only that amount necessary to duplicate the same functionality. Local codes or ordinances at the actual time of replacement may require a betterment as compared to the existing system. A betterment could result in a higher, but at this time unknown, cost of replacement.

Pipes

Line Items: 3.600 and 3.605

Quantity: Based on the layout and configuration of the units, we have estimated the quantity of the interior building plumbing. Future updates of this Reserve Study will incorporate additional information if it becomes available.

History:

- **Building Heating** – Unknown at the time of our inspection, possibly predates conversion. Management does not report a history of issues at the pipes
- **Domestic Water, Supply and Return** – Unknown at the time of our inspection. Hartman previously comprised offices before conversion to condominium units and the domestic water pipes likely required reconfiguration at the time of conversion. We note a portion of these pipes may predate conversion though a large amount was likely installed at conversion. Management does not report a history of issues at the pipes.
- **Sanitary Waste Disposal and Vent** – Unknown at the time of our inspection. Hartman previous comprised offices before conversion to condominium units and the waste and vent pipes likely required reconfiguration at the time of conversion. We note a portion of these pipes may predate conversion though a large amount was likely installed at conversion. Management does not report a history of issues at the pipes.

Condition:

- **Building Heating** – Reported satisfactory without operational deficiencies
- **Domestic Water, Supply and Return** – Reported satisfactory without operational deficiencies
- **Sanitary Waste Disposal and Vent** – Reported satisfactory

Component Detail Notes:

Building Heating and Cooling - The building heating and cooling pipes at Hartman utilizes a two-pipe system. These pipes have useful life of up to sometimes beyond 80 years.

Domestic Water - Copper piping is the predominant type of pipe used in new construction for domestic water piping. With low mineral content in the water, the useful life of copper domestic water pipes is up to and sometimes beyond 80 years. However, there is recent evidence that copper piping prematurely develops pinhole leaks. In the event that numerous pinhole leaks develop or occur throughout the system of pipes, the Association should also consider "in-place" pipe restoration technology. This process includes drying, sandblasting away interior pipe occlusions and applying an epoxy lining to the interior surfaces of the pipes. Future updates of this study will consider the possibility of the pipe restoration process in lieu of pipe replacement at the Association. Restoration technology can extend the useful life of a pipe system thus avoiding a system pipe replacement.

Sanitary Waste Disposal and Vent - The PVC pipes typically deteriorate from the inside out as a result of sewer gases, condensation and rust.

Valves - The piping systems include various valves. Identification of a typical useful life and remaining useful life for individual valves is difficult. Associations typically replace valves on an as needed basis in our experience.

Pipes, Remaining - We anticipate a useful life of up to and sometimes beyond 100 years for the remaining pipes, which may include fire standpipes, gas supply lines, interior sprinkler pipes, among others. Therefore, we do not foresee the need to budget for replacement of these pipes within the 30-year scope of this study. Future updates of this study will revisit the need to include partial replacement of these pipes.

Preventative Maintenance Notes: The Association informs us preventative maintenance is conducted on a regular basis. We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the building's age and demands of the piping systems. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Quarterly:
  - Inspect all visible piping for corrosion and leaks, including common areas or areas immediately surrounding pipes such as insulation, ceiling tiles or the floor for moisture, water accumulation, mold or mildew
- Annually:
  - Verify system pressure is sufficient (pressurized piping systems)
  - Check accessible valves for proper operation
  - Test backflow prevention devices
  - Inspect and obtain certification for pressure relief valves
  - Test drain line flow rates
  - Mechanically or chemically clean waste lines as needed

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost for a single riser section assumes replacement of all pipes located within each wall opening, associated branch piping, fittings and minimal interior finishes. However, the cost does not include temporary housing for affected residents, pipes within the units or significant interior finishes.

We recommend the Association budget the following expenditures:

- ***Building Heating and Cooling*** – Our estimate provides funds to replace approximately five percent (5%) of the riser sections during the next 30 years.
- ***Domestic Water*** – Our estimate provides funds to replace approximately thirty percent (30%) of the riser sections during the next 30 years.

An invasive analysis of the piping systems will provide various replacement options. Replacement of the systems as an aggregate event will likely require the use of special assessments or loans to fund the replacements.

Although it is likely that the times of replacement and extent of repair costs may vary from the budgetary allowance, Hartman could budget sufficient reserves for the beginning of these pipe replacements and have the opportunity to adjust its future reserves up or down to meet any changes to these budgetary estimates. Updates of this Reserve Study would incorporate changes to budgetary costs through a continued historical analysis of the rate of deterioration and actual pipe replacements to budget sufficient reserves.

We recommend the Association budget for replacement of the following items through the operating budget:

- Replacement of valves on an as-needed basis
- Minor pipe repairs and replacements
- Invasive investigation of the condition of the piping system prior to beginning more aggregate replacements
- Rodding of waste pipe systems

Pumps

***Line Item*:** 3.700 through 3.703

Quantity, History and Conditions:

- Cooling Tower - 15-HP, 2 each, rebuilt in 2025, reported satisfactory without operational deficiencies
- Cooling Tower – 25-HP, 2 each, rebuilt in 2025, reported satisfactory without operational deficiencies
- Domestic Cold Water – 7.5-HP, 1 each, the age of the domestic water pump was unavailable at the time of inspection, reported satisfactory



Cooling tower pumps



Domestic water pumps

Useful Lives:

- Cooling Tower, 15-HP – useful life of up to 20 years
- Cooling Tower, 25-HP – useful life of up to 25 years
- Domestic Water Pump – useful life of up to 15 years

Component Detail Notes: Major pumps included in this Reserve Study are those with a motor drive of at least five-HP. The Association should replace or repair all pumps with motor drives less than five-HP as needed and fund this ongoing maintenance activity through the operating budget. The Association may choose to rebuild pumps prior to complete replacement. However, this activity becomes less desirable as pumps age due to the scarcity of parts. We regard interim replacements of motors and component parts as normal maintenance and base our estimates on complete replacements. An exact replacement time for each individual pump is difficult, if not impossible, to estimate.

Preventative Maintenance Notes*:* The Association informs us preventative maintenance is conducted on a regular basis. We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. Valuable motor information to note in a preventative maintenance plan or schedule includes age of unit and last time of repair, horsepower and rpm (revolutions per minute), bearing type and conditions surrounding motor/pump. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
  - Check/adjust controls
  - Check/adjust pressure levels
  - Check for leaks
  - Conduct churn tests
- Quarterly:
  - Inspect/clean motors
  - Inspect mountings and connections for proper alignment, torque and condition

- Inspect/replace pump packing as needed, consider replacement with mechanical seals
- Check for appropriate oil levels

- Semi-annually:
  - Lubricate pumps, motors and motor bearings
- Annually:
  - Clean filters if present
  - Assess proper internal component performance and replace damaged or malfunction components as necessary, and tighten fittings
  - Assess temperature and vibration performance of motors in accordance with the intended design

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Pump, Fire Suppression

Line Item: 3.770

Quantity: One 25-HP fire suppression pump

History: The age was unavailable at the time of our inspection. Jockey pump and controls replaced in 2025. The controller was replaced in 2025.

Condition: Reported satisfactory without operational deficiencies.



Fire suppression pump



Fire suppression pump controls



Jockey pump controls



Fire suppression pump

Useful Life: Up to 50 years

Component Detail Notes: Prior to replacement, the Association should schedule periodic inspections to maintain its correct operation in the event of an emergency. Hartman should also anticipate, as normal maintenance, interim repairs and component replacements to maximize its remaining useful life.

Preventative Maintenance Notes: The Association conducts monthly churn tests. The Association informs us preventative maintenance is conducted on a regular basis. We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. Valuable motor information to note in a preventative maintenance plan or schedule includes age of unit and last time of repair, horsepower and rpm (revolutions per minute), bearing type and conditions surrounding motor/pump. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
  - Check/adjust controls
  - Check/adjust pressure levels
  - Check for leaks
  - Conduct churn tests
- Quarterly:
  - Inspect/clean motors
  - Inspect mountings and connections for proper alignment, torque and condition
  - Inspect/replace pump packing as needed, consider replacement with mechanical seals
  - Check for appropriate oil levels
- Semi-annually:
  - Lubricate pumps, motors and motor bearings
- Annually:
  - Clean filters if present

- Assess proper internal component performance and replace damaged or malfunction components as necessary, and tighten fittings
- Assess temperature and vibration performance of motors in accordance with the intended design

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our estimate of cost includes the pump, jockey pump, motor, and motor controller.

Security System

Line Item: 3.820

Quantity: Hartman utilizes the following security system components:

- Access Card Readers
- Cameras
- Intercom Panel
- Key Fobs
- Intercoms at each floor hallway
- Recorder

History: The Board replaced majority interior cameras in 2017 including the camera near the dumpsters.

Condition: Reported satisfactory without operational deficiencies



Intercom



Floor intercom



Security system camera

Useful Life: 10- to 15-years

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Monthly:
  - Check cameras for proper focus, fields of view are unobstructed and camera and lenses are clean and dust-free
  - Check recording equipment for proper operation
  - Verify monitors are free from distortion with correct brightness and contrast
- Annually:
  - Check exposed wiring and cables for wear, proper connections and signal transmission
  - Check power connections, and if applicable, functionality of battery power supply systems

Priority: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The Association should anticipate replacement of one-hundred percent (100%) of the security system components per event.

Valves

Line Item: 3.920

Quantity: Five valves at the fire suppression and HVAC systems. This quantity excludes the large diameter valve at the first suppression which was replaced in 2016. We classify this valve as long-lived

History: Unknown at the time of our inspection, several likely predate conversion

Condition: Reported satisfactory without operational deficiencies

Useful Life: Up to 50 years

Preventative Maintenance Notes: 0We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Monthly:
  - Inspect the valves (if valve is readily accessible)
    - Confirm tightness of connections/fasteners
    - Confirm lack of leaks
- Semi-annually:
  - Clean the valves (including the valve stem) (if valve is readily accessible)
  - Open/close the valves to ensure operation (if valve is readily accessible)
- Annually:
  - Remove, clean and repair select valves as needed (including replacement of components as needed) (frequency and feasibility of rebuilds will vary greatly) (if valve is readily accessible)

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Property Site Elements

Asphalt Pavement, Repaving

Line Items: 4.020 and 4.045

Quantity: Approximately 2,550 square yards at the parking areas

History:

- Repaving: Repaved in 2006.
- Repairs: Last conducted in 2021

Condition: Fair to poor overall condition with frequent cracks, settlement and alligator cracks evident. We note centerline deterioration at the pavement due to the drainage system. We also note one of the catch basins has a concrete collar elevated above the asphalt preventing water from draining into the catch basin. The condition has accelerated since our previous study in 2022.



Pavement overview



Pavement cracks



Pavement cracks



Pavement overview



Pavement cracks



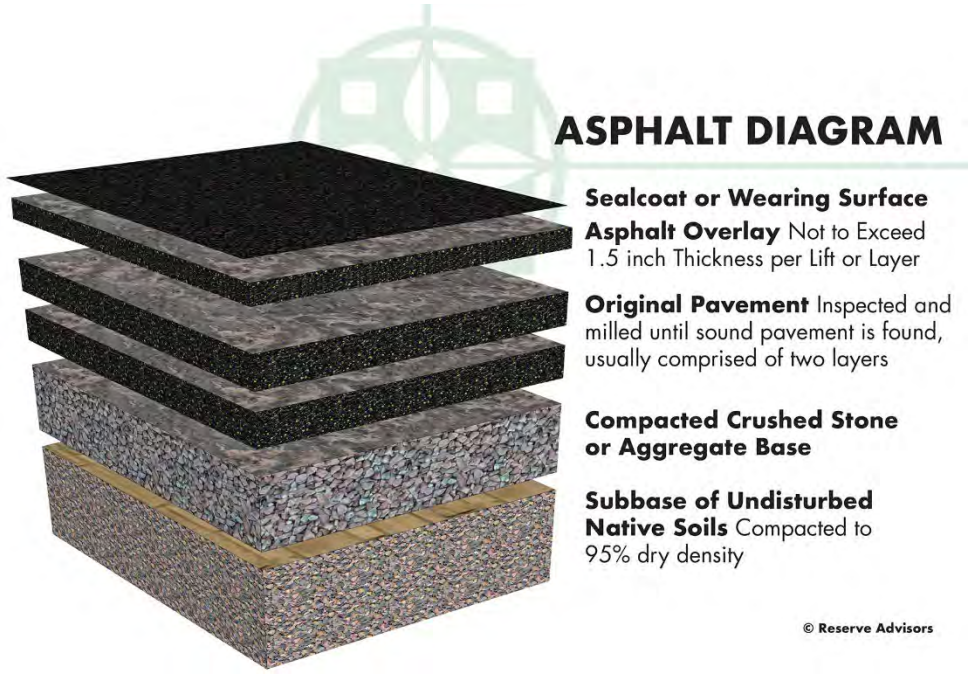
Catch basin with pavement settlement – Note: elevated above asphalt preventing water from draining into catch basin

Useful Life: 15- to 20-years with the benefit of crack repairs every three- to five-years

Component Detail Notes: Proposals should include mechanically routing and filling all cracks with hot emulsion. Repairs should also include patching at areas exhibiting

settlement, potholes, or excessive cracking. The contractor should only apply seal coat applications after repairs are completed. A seal coat does not bridge or close cracks, therefore, unrepaired cracks render the seal coat applications useless. These activities minimize the damaging effects of vehicle fluids, maintain a uniform and positive appearance, and maximize the useful life of the pavement.

The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother, more watertight finish. The following diagram depicts the typical components although it may not reflect the actual configuration at Hartman:



The manner of repaving is either a mill and overlay or total replacement. A mill and overlay is a method of repaving where cracked, worn and failed pavement is mechanically removed or milled until sound pavement is found. A new layer of asphalt is overlaid atop the remaining base course of pavement. Total replacement includes the removal of all existing asphalt down to the base course of aggregate and native soil followed by the application of two or more new lifts of asphalt. We recommend mill and overlayment on asphalt pavement that exhibits normal deterioration and wear. We recommend total replacement of asphalt pavement that exhibits severe deterioration, inadequate drainage, pavement that has been overlaid multiple times in the past or where the configuration makes overlayment not possible. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the mill and overlayment method of repaving followed by the total replacement method of repaving at Hartman.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Inspect for settlement, large cracks and trip hazards, and ensure proper drainage
    - Repair areas which could cause vehicular damage such as potholes
- As needed:
    - Perform crack repairs and patching

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Carports

Line Item: 4.095 and 4.096

Quantity: Three carports comprise approximately 10,350 square feet including the dumpster carport

History: Original to conversion in 2006

Condition: We note frame rust and finish deterioration. We also note roof damage.



Carport rust



Carport



Minor rust



Rust and finish deterioration



Carport underside



Carport damage



Carport rust



Carport at dumpster

Useful Life: Carports of this type have useful lives of 25- to 35-years with the benefit of periodic maintenance. Periodic maintenance should include applications of a protective paint finish and partial replacement of deterioration components every 6- to 8-years.

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Fences, Steel

Line Items: 4.240 and 4.245

Quantity: 390 linear feet of steel fences surrounding the parking lot

History:

- Fence: Original to conversion in 2006
- Paint finishes: Last applied in 2020

Condition: Good to fair overall condition with isolated leaning sections evident. The paint finishes at the fences are in good to fair overall condition.



Steel fence



Steel fence



Steel fence



Fence minor leaning section

Useful Life: Six- to eight-years for paint finishes and up to 35 years for replacement

Component Detail Notes: Steel components at grade and key structural connections are especially prone to failure if not thoroughly maintained. Secure and rust-free fasteners and connections will prevent premature deterioration. Preparation of the steel before application of the paint finish is critical to maximize the useful life of the finish.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
  - Inspect and repair loose fasteners or sections, finish deterioration, and damage
  - Repair leaning sections and clear vegetation from fence areas which could cause damage

Priority: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Gates and Operators

Line Items: 4.320 and 4.330

Quantity: Three metal gates and three lift operators

History:

- Gates: Original to conversion in 2006
- Operators: Reportedly original to conversion in 2006

Condition:

- Gates: Good to fair overall condition
- Operators: Reported in satisfactory condition



Gate



Post rust



Finish deterioration



Open gate



Operator

Useful Life: Up to 10 years for the operators and up to 20 years for the gates

Preventative Maintenance Notes: The status of preventative maintenance was unavailable to us during our inspection. We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. We also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
    - Ensure gates operate freely
    - Inspect for any wear, rust and loose fasteners
    - Inspect and correct tension in belts and chains, and lubricate hinges and chains as necessary
    - Check alignment of pulleys
    - Check for no oil leakage at the gear box
    - Check the control board for water damage. Clean and remove insects and other pests as needed.

- Check all wiring for insulation damage and loose connections. If applicable, check functionality of battery power supply systems

Priority: Not recommended to defer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3.

Waterproof Membrane, East Vaulted System

Line Items: 4.955 and 4.960

Quantity: 1,270 square feet at the elevated east vaulted system

History: The age was unavailable at the time of our inspection. The asphalt street system is the responsibility of the City of Columbus and the responsibility of the vaulted system was unknown at the time of our inspection given that a portion of it is underneath the street. For the purpose of the Reserve Study, we assume the Association will fund one hundred percent (100%) of the cost. Future updates of this Reserve Study will consider the need to alter the cost based on the responsibility information provided at that time.

Condition: We were unable to determine the condition during out visual, noninvasive inspection, however we note rust at the structural steel beams as well as exposed rebar and concrete cracks and deterioration. These conditions have the potential to be serious structural issues and we recommend the Association consult with a structural engineer in the near term to determine the severity and potential solutions. Management notes a limited history of water infiltration issues. These issues have been investigated in the past and no further remediation was required at the time. We do not note significant deterioration at the concrete sidewalk and asphalt surfaces.



Location of vaulted sidewalk



Location of previous repairs



Support bar rust



Rust at support beam and rust at exposed rebar



Exposed rebar and rust

Useful Life: 25- to 35-years for the membrane with interim repairs every 15- to 20-years. The interim repairs will likely include:

- Complete inspection
- Partial replacements of the concrete flatwork
- Replacement of the expansion joints and/or sealants if applicable
- Replacement of a limited amount of membrane (leak remediation)

Component Detail Notes: Due to the non-invasive nature of our inspection, we are unable to determine the exact composition of the east vaulted system. Based on our visual inspection, experience with similar construction and knowledge of replacement/capital repair projects of this type, we surmise the east vaulted system comprises the following elements:

- East Vaulted System components include concrete flatwork
- Perimeter flashing
- Underlying waterproof membrane atop the structure
- Elevated structural concrete

A concrete topping protects the subsurface structure from the infiltration of storm water. We surmise a waterproof membrane separates and protects the structure from the

migration of storm water through surface cracks in the concrete topping. Over time, the development of surface cracks is a normal occurrence in the topping, allowing storm water to come in contact with and wear the waterproof membrane. As the membrane ages and deteriorates, water infiltration through the structure and leaks into the space beneath will become more frequent and widespread. Deterioration of the concrete structure beneath the membrane is also probable due to membrane leaks and normal aging of the concrete.

Preventative Maintenance Notes: We recommend the Association maintain a service and inspection contract with a qualified professional and record all documentation of repairs conducted. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
    - Note drainage issues with water ponding after 48 hours of rainfall event. Verify drains are free of debris and irrigation system is working properly if applicable.
    - Inspect perimeter flashing and/or sealant damage
    - In accessible areas under the elevated membrane, inspect for areas of water infiltration and concrete deterioration. If frequency of leaks increases or location of water infiltration is unknown, we recommend the consideration of a thermal image inspection.

Priority: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost for replacement includes a limited amount for capital repairs to the underlying concrete structure. The exact amount of concrete structure repairs and thus the exact cost will vary based on the engineering analysis at the time of the project.

Reserve Study Update

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. Many variables change after the study is conducted that may result in significant overfunding or underfunding the reserve account. Variables that may affect the Reserve Funding Plan include, but are not limited to:

- Deferred or accelerated capital projects based on Board discretion
- Changes in the interest rates on reserve investments
- Changes in the *local* construction inflation rate
- Additions and deletions to the Reserve Component Inventory
- The presence or absence of maintenance programs
- Unusually mild or extreme weather conditions
- Technological advancements

Periodic updates incorporate these variable changes since the last Reserve Study or Update. We recommend the Board budget for an Update to this Reserve Study every three years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.

5. METHODOLOGY

Reserves for replacement are the amounts of money required for future expenditures to repair or replace Reserve Components that wear out before the entire facility or project wears out. Reserving funds for future repair or replacement of the Reserve Components is also one of the most reliable ways of protecting the value of the property's infrastructure and marketability.

Hartman can fund capital repairs and replacements in any combination of the following:

1. Increases in the operating budget during years when the shortages occur
2. Loans using borrowed capital for major replacement projects
3. Level monthly reserve assessments annually adjusted upward for inflation to increase reserves to fund the expected major future expenditures
4. Special assessments

We do not advocate special assessments or loans unless near term circumstances dictate otherwise. Although loans provide a gradual method of funding a replacement, the costs are higher than if the Association were to accumulate reserves ahead of the actual replacement. Interest earnings on reserves also accumulate in this process of saving or reserving for future replacements, thereby defraying the amount of gradual reserve collections. We advocate the third method of *Level Monthly Reserve Assessments* with relatively minor annual adjustments. The method ensures that Owners pay their "fair share" of the weathering and aging of the commonly owned property each year. Level reserve assessments preserve the property and enhance the resale value of the homes.

This Reserve Study is in compliance with and exceeds the National standards[1] set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level II Reserve Study Update." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- Local[2] costs of material, equipment and labor
- Current and future costs of replacement for the Reserve Components
- Costs of demolition as part of the cost of replacement
- Local economic conditions and a historical perspective to arrive at our estimate of long-term future inflation for construction costs in Columbus, Ohio at an annual inflation rate[3]. Isolated or regional markets of greater

[1] Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".
[2] See Credentials for additional information on our use of published sources of cost data.
[3] Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.

construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

- The past and current maintenance practices of Hartman and their effects on remaining useful lives
- Financial information provided by the Association pertaining to the cash status of the reserve fund and budgeted reserve contribution
- The anticipated effects of appreciation of the reserves over time in accord with a return or yield on investment of your cash equivalent assets. (We did not consider the costs, if any, of Federal and State Taxes on income derived from interest and/or dividend income).
- The Funding Plan excludes necessary operating budget expenditures. It is our understanding that future operating budgets will provide for the ongoing normal maintenance of Reserve Components.

Updates to this Reserve Study will continue to monitor historical facts and trends concerning the external market conditions.

6. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Founded in 1991, Reserve Advisors is the leading provider of reserve studies, insurance appraisals, developer turnover transition studies, expert witness services, and other engineering consulting services. Clients include community associations, resort properties, hotels, clubs, non-profit organizations, apartment building owners, religious and educational institutions, and office/commercial building owners in 48 states, Canada and throughout the world.

The **architectural engineering consulting firm** was formed to take a leadership role in helping fiduciaries, boards, and property managers manage their property like a business with a long-range master plan known as a Reserve Study.

Reserve Advisors employs the **largest staff of Reserve Specialists** with bachelor's degrees in engineering dedicated to Reserve Study services. Our founders are also founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our founders is a Past President of the Association of Professional Reserve Analysts (APRA). Our vast experience with a variety of building types and ages, on-site examination and historical analyses are keys to determining accurate remaining useful life estimates of building components.

No Conflict of Interest - As consulting specialists, our **independent opinion** eliminates any real or perceived conflict of interest because we do not conduct or manage capital projects.

TOTAL STAFF INVOLVEMENT

Several staff members participate in each assignment. The responsible advisor involves the staff through a Team Review, exclusive to Reserve Advisors, and by utilizing the experience of other staff members, each of whom has served hundreds of clients. We conduct Team Reviews, an internal quality assurance review of each assignment, including: the inspection; building component costing; lifing; and technical report phases of the assignment. Due to our extensive experience with building components, we do not have a need to utilize subcontractors.

OUR GOAL

To help our clients fulfill their fiduciary responsibilities to maintain property in good condition.

VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

Reserve Advisors has conducted reserve studies for a multitude of different communities and building types. We've analyzed thousands of buildings, from as small as a 3,500-square foot day care center to a 2,600,000-square foot 98-story highrise. We also routinely inspect buildings with various types of mechanical systems such as simple electric heat, to complex systems with air handlers, chillers, boilers, elevators, and life safety and security systems.

We're familiar with all types of building exteriors as well. Our well-versed staff regularly identifies optimal repair and replacement solutions for such building exterior surfaces such as adobe, brick, stone, concrete, stucco, EIFS, wood products, stained glass and aluminum siding, and window wall systems.

OLD TO NEW

Reserve Advisors' experience includes ornate and vintage buildings as well as modern structures. Our specialists are no strangers to older buildings. We're accustomed to addressing the unique challenges posed by buildings that date to the 1800's. We recognize and consider the methods of construction employed into our analysis. We recommend appropriate replacement programs that apply cost effective technologies while maintaining a building's character and appeal.

JUSTIN B. KLEIN, RS
Indianapolis, Indiana
Responsible Advisor

CURRENT CLIENT SERVICES



Justin B. Klein, a Senior Engineer, is an Advisor for Reserve Advisors, LLC. Mr. Klein is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study and Transition Study Reports for apartments, high rises, condominiums, townhomes, and homeowners associations.

The following is a partial list of clients served by Justin Klein demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

The Packard – Built in 2004, this four story building is located in the heart of Indianapolis, a few blocks from historic Monument Circle. Residents can enjoy open floors plans, a private courtyard and fountain along with convenient underground parking.

Pottawattomie Country Club – This private club, established in 1909, is located in Michigan City, Indiana. The original 9 hole layout was designed by famed architect Tom Bendelow. In 1965, Bob Simmons sculpted a new nine holes, completing the 18-hole layout. Members can enjoy amenities including an outdoor deck, eloquent and casual dining rooms, lounge, golf simulator, pickleball and tennis courts and an in-ground pool.

Norton Commons – Located in Prospect, Kentucky, this mixed-use community association features 1,400 single family homes and counting. The community maintains the neighborhood pools each designed with unique features for recreation and relaxation, including slides, splash pads, pergolas and community rooms. The Association also maintains over 150 acres of parks, trails, and greenspace.

Stoney Meadows Homeowners Association – Tucked between Ronald Reagan Parkway and Interstate 74, in Avon, Indiana, this 55+ community comprises 57 duplex style. The Association maintains the exteriors of the buildings, multiple ponds with fountain aerators, and perimeter fencing. Owners conveniently have direct access to the Bicentennial Trail.

Clearwater Cove on Norris Lake – Located in the picturesque town of Lafollette, Tennessee, just 25 miles north of Knoxville, this spectacular waterfront community stretches across 630 acres and overlooks the crystal clear water of Norris Lake. This gated community is supported by a state-of the art wastewater treatment facility.

The Reserve at Lake Macatawa – A short drive from downtown Holland, Michigan, this waterfront community features 75 villas. Homeowners have access to resort-style amenities including lake access, community clubhouse, lakeside pool, community firepit and private boat slips.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, LLC, Mr. Klein attended Rose-Hulman Institute of Technology in Terre Haute, Indiana where he attained his Bachelor of Science degree in Mechanical Engineering. His rigorous coursework focused on using problem solving to understand mechanical systems and principles. During his undergraduate education, Mr. Klein worked to develop a debris displacement apparatus to be mounted inside a D-155 bulldozer for Komatsu America Corporation.

EDUCATION

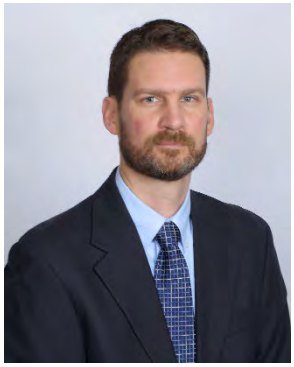
Rose-Hulman Institute of Technology - B.S. Mechanical Engineering

PROFESSIONAL AFFILIATIONS

Reserve Specialist (RS) – Community Association Institute
Engineer in Training (E.I.T) – State of Virginia

ALAN M. EBERT, P.E., PRA, RS
Director of Quality Assurance

CURRENT CLIENT SERVICES:



Alan M. Ebert is the Director of Quality Assurance at Reserve Advisors and a direct, accessible resource to client boards, community managers, and stakeholders. Since entering the reserve study industry in 2007, he has conducted or personally reviewed approximately 20,000 reserve studies across the United States and internationally. He continues to perform hands-on technical reviews while leading the firm's Quality Assurance Engineers and production team to ensure accurate, consistent, and timely delivery of reports. Clients rely on Mr. Ebert for clear explanations, practical recommendations, and ongoing support before, during, and after report delivery.

SCOPE OF EXPERIENCE:

Mr. Ebert's background in geological engineering includes analysis of foundations, retaining walls, and slope stability—critical components that inform his assessment of building systems and site infrastructure. He has directed and reviewed reserve studies for a wide range of properties and building systems, including:

- High-rise and mid-rise condominium buildings with complex façades, balconies, structured parking, elevators, and life-safety systems
- Garden-style condominiums and townhome communities with extensive roofing portfolios, exterior cladding, and common-area infrastructure
- Master-planned and large-scale HOAs with private roadways, stormwater systems, lakes and water features, irrigation networks, and recreational amenities (pools, clubhouses, courts, fitness facilities)
- Historic and legacy properties with specialized envelope, structural and accessibility
- Coastal and cold-climate communities subject to salt exposure, wind-driven rain, and freeze-thaw durability demands
- Properties with on-site utilities and site structures, such as septic and wastewater systems, retaining walls, slope stabilization, bridges, and extensive hardscapes
- Mixed-use and commercial association components, including central HVAC plants and building automation systems

LEADERSHIP, QUALITY ASSURANCE, AND CLIENT SERVICE

- Oversees Quality Assurance Engineers and the Production Team to align standards, workflows, and schedules for on-time, high-quality reserve study reports
- Conducts in-depth technical reviews; standardizes methodologies, cost databases, and component life modeling to drive consistency and accuracy
- Serves as a personal resource to clients—available for planning discussions, board presentations, and Q&A to ensure clarity of findings and funding recommendations
- Tailors analyses to community goals, governing documents, and statutory requirements; collaborates with clients on phasing strategies and budget alignment

EDUCATION

- University of Wisconsin–Madison, B.S., Geological Engineering

LICENSES AND CREDENTIALS

- Licensed Professional Engineer (PE): Illinois, Colorado, North Carolina, Wisconsin (since 2012)
- Reserve Specialist (RS), Community Associations Institute (CAI)
- Professional Reserve Analyst (PRA), Association of Professional Reserve Analysts (APRA)

RESOURCES

Reserve Advisors utilizes numerous resources of national and local data to conduct its Professional Services. A concise list of several of these resources follows:

Association of Construction Inspectors, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at www.iami.org.

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., (ASHRAE) the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., devoted to the arts and sciences of heating, ventilation, air conditioning and refrigeration; recognized as the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines, found on the web at www.ashrae.org. Reserve Advisors actively participates in its local chapter and holds individual memberships.

Community Associations Institute, (CAI) America's leading advocate for responsible communities noted as the only national organization dedicated to fostering vibrant, responsive, competent community associations. Their mission is to assist community associations in promoting harmony, community, and responsible leadership.

Marshall & Swift / Boeckh, (MS/B) the worldwide provider of building cost data, co-sourcing solutions, and estimating technology for the property and casualty insurance industry found on the web at www.marshallswift.com.

R.S. Means CostWorks, North America's leading supplier of construction cost information. As a member of the Construction Market Data Group, Means provides accurate and up-to-date cost information that helps owners, developers, architects, engineers, contractors and others to carefully and precisely project and control the cost of both new building construction and renovation projects found on the web at www.rsmeans.com.

Reserve Advisors' library of numerous periodicals relating to reserve studies, condition analyses, chapter community associations, and historical costs from thousands of capital repair and replacement projects, and product literature from manufacturers of building products and building systems.

7. DEFINITIONS

Definitions are derived from the standards set forth by the Community Associations Institute (CAI) representing America's 305,000 condominium and homeowners associations and cooperatives, and the Association of Professional Reserve Analysts, setting the standards of care for reserve study practitioners.

Cash Flow Method - A method of calculating Reserve Contributions where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different Reserve Funding Plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

Component Method - A method of developing a Reserve Funding Plan with the total contribution is based on the sum of the contributions for individual components.

Current Cost of Replacement - That amount required today derived from the quantity of a *Reserve Component* and its unit cost to replace or repair a Reserve Component using the most current technology and construction materials, duplicating the productive utility of the existing property at current *local* market prices for *materials*, *labor* and manufactured equipment, contractors' overhead, profit and fees, but without provisions for building permits, overtime, bonuses for labor or premiums for material and equipment. We include removal and disposal costs where applicable.

Fully Funded Balance - The Reserve balance that is in direct proportion to the fraction of life "used up" of the current Repair or Replacement cost similar to Total Accrued Depreciation.

Funding Goal (Threshold) - The stated purpose of this Reserve Study is to determine the adequate, not excessive, minimal threshold reserve balances.

Future Cost of Replacement - *Reserve Expenditure* derived from the inflated current cost of replacement or current cost of replacement as defined above, with consideration given to the effects of inflation on local market rates for materials, labor and equipment.

Long-Lived Property Component - Property component of Hartman responsibility not likely to require capital repair or replacement during the next 30 years with an unpredictable remaining Useful Life beyond the next 30 years.

Percent Funded - The ratio, at a particular point of time (typically the beginning of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.

Remaining Useful Life - The estimated remaining functional or useful time in years of a *Reserve Component* based on its age, condition and maintenance.

Reserve Component - Property elements with: 1) Hartman responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

Reserve Component Inventory - Line Items in ***Reserve Expenditures*** that identify a *Reserve Component*.

Reserve Contribution - An amount of money set aside or *Reserve Assessment* contributed to a *Reserve Fund* for future *Reserve Expenditures* to repair or replace *Reserve Components*.

Reserve Expenditure - Future Cost of Replacement of a Reserve Component.

Reserve Fund Status - The accumulated amount of reserves in dollars at a given point in time, i.e., at year end.

Reserve Funding Plan - The portion of the Reserve Study identifying the *Cash Flow Analysis* and containing the recommended Reserve Contributions and projected annual expenditures, interest earned and reserve balances.

Reserve Study - A budget planning tool that identifies the current status of the reserve fund and a stable and equitable Funding Plan to offset the anticipated future major common area expenditures.

Useful Life - The anticipated total time in years that a *Reserve Component* is expected to serve its intended function in its present application or installation.

8. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, LLC ("RA") performs its services as an independent contractor in accordance with our professional practice standards and its compensation is not contingent upon our conclusions. The purpose of our reserve study is to provide a budget planning tool that identifies the current status of the reserve fund, and an opinion recommending an annual funding plan, to create reserves for anticipated future replacement expenditures of the subject property. The purpose of our energy benchmarking services is to track, collect and summarize the subject property's energy consumption over time for your use in comparison with other buildings of similar size and establishing a performance baseline for your planning of long-term energy efficiency goals. The purpose of our Milestone Phase I is to evaluate the structural integrity of the building on the subject property and provide an inspection report summarizing our findings related to structural issues, or lack thereof.

In each case, our inspection and analysis of the subject property is limited to visual observations, is noninvasive and is not meant to nor does it include investigation into statutory, regulatory or code compliance. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. Our energy benchmarking services with respect to the subject property is limited to collecting energy and utility data and summarizing such data in the form of an Energy Star Portfolio Manager Report or any other similar report, and hereby expressly excludes any recommendations with respect to the results of such energy benchmarking services or the accuracy of the energy information obtained from utility companies and other third-party sources with respect to the subject property. Our Milestone Phase I inspections are limited to a visual examination of habitable and uninhabitable areas of the building, including the primary structural members and systems. The inspection aims to determine the presence of substantial structural deterioration, and unsafe or dangerous conditions with the structure. The reserve report, Milestone Phase 1 report, and any energy benchmarking report (i.e., any Energy Star Portfolio Manager Report) (including any subsequent revisions thereto pursuant to the terms hereof, collectively, the "Report") are based upon a "snapshot in time" at the moment of inspection. RA may note visible physical defects in the Report. The inspection is made by employees generally familiar with real estate and building construction. Except to the extent readily apparent to RA, RA cannot and shall not opine on the structural integrity of or other physical defects in the property under any circumstances. Without limitation to the foregoing, RA cannot and shall not opine on, nor is RA responsible for, the property's conformity to specific governmental code requirements for fire, building, earthquake, occupancy or otherwise.

RA is not responsible for conditions that have changed between the time of inspection and the issuance of the Report. RA does not provide invasive testing on any mechanical systems that provide energy to the property, nor can RA opine on any system components that are not easily accessible during the inspection. RA does not investigate, nor assume any responsibility for any existence or impact of any hazardous materials, such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials or structural defects that are latent or hidden defects which may or may not be present on or within the property. RA does not make any soil analysis or geological study as part of its services, nor does RA investigate vapor, water, oil, gas, coal, or other subsurface mineral and use rights or such hidden conditions, and RA assumes no responsibility for any such conditions. The Report contains opinions of estimated replacement costs or deferred maintenance expenses and remaining useful lives, which are neither a guarantee of the actual costs or expenses of replacement or deferred maintenance nor a guarantee of remaining useful lives of any property element.

RA assumes, without independent verification, the accuracy of all data provided to it. Except to the extent resulting from RA's willful misconduct in connection with the performance of its obligations under this agreement, you agree to indemnify, defend, and hold RA and its affiliates, officers, managers, employees, agents, successors and assigns (each, an "RA Party") harmless from and against (and promptly reimburse each RA Party for) any and all losses, claims, actions, demands, judgments, orders, damages, expenses or liabilities, including, without limitation, reasonable attorneys' fees, asserted against or to which any RA Party may become subject in connection with this engagement, including, without limitation, as a result of any false, misleading or incomplete information which RA relied upon that was supplied by you or others under your direction, or which may result from any improper use or reliance on the Report by you or third parties under your control or direction or to whom you provided the Report. NOTWITHSTANDING ANY OTHER PROVISION HEREIN TO THE CONTRARY, THE AGGREGATE LIABILITY (IF ANY) OF RA WITH RESPECT TO THIS AGREEMENT AND RA'S OBLIGATIONS HEREUNDER IS LIMITED TO THE AMOUNT OF THE FEES ACTUALLY RECEIVED BY RA FROM YOU FOR THE SERVICES AND REPORT PERFORMED BY RA UNDER THIS AGREEMENT, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE. YOUR REMEDIES SET FORTH HEREIN ARE EXCLUSIVE AND ARE YOUR SOLE REMEDIES FOR ANY FAILURE OF RA TO COMPLY WITH ITS OBLIGATIONS HEREUNDER OR OTHERWISE. RA SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, ANY LOST PROFITS AND LOST SAVINGS, LOSS OF USE OR INTERRUPTION OF BUSINESS, HOWEVER CAUSED, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), BREACH OF WARRANTY, STRICT LIABILITY OR OTHERWISE, EVEN IF RA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL RA BE LIABLE FOR THE COST OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES. RA DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED OR OF ANY NATURE, WITH REGARD TO THE SERVICES AND THE REPORT, INCLUDING, WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Report - RA will complete the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations with respect to the reserve study or Milestone Phase I, as applicable, and is deemed complete. RA will consider any additional information made available to RA within 6 months of issuing the Report and issue a revised Report based on such additional information if a timely request for a revised Report is made by you. RA retains the right to withhold a revised Report if payment for services was not tendered in a timely manner. All information received by RA and all files, work papers or documents developed by RA during the course of the engagement shall remain the property of RA and may be used for whatever purpose it sees fit. RA reserves the right to, and you acknowledge and agree that RA may, use any data provided by you in connection with the services, or gathered as a result of providing such services, including in connection with creating and issuing any Report, in a de-identified and aggregated form for RA's business purposes.

Your Obligations - You agree to provide us access to the subject property for an inspection. You agree to provide RA all available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete the Report. Additionally, you agree to provide historical replacement schedules, utility bills and historical energy usage files that RA requests and deems necessary to complete the energy benchmarking services, and you agree to provide any utility release(s) reasonably requested by RA permitting RA to obtain any such data and/or information from any utility representative or other third party. You agree to pay actual attorneys' fees and any other costs incurred to collect on any unpaid balance for RA's services.

Use of Our Report and Your Name - Use of the Report is limited to only the purpose stated herein. You acknowledge that RA is the exclusive owner of all intellectual property rights in and relating to the Report. You hereby acknowledge that any use or reliance by you on the Report for any unauthorized purpose is at your own risk and that you will be liable for the consequences of any unauthorized use or distribution of the Report. Use or possession of the Report by any unauthorized third party is prohibited. The Report in whole or in part ***is not and cannot be*** *used as a design specification for design engineering purposes or as an appraisal*. You may show the Report in its entirety to the following third parties: members of your organization (including your directors, officers, tenants and prospective purchasers), your accountants, attorneys, financial institutions and property managers who need to review the information contained herein, and any other third party who has a right to inspect the Report under applicable law including, but not limited, to any government entity or agency, or any utility companies. Without the written consent of RA, you shall not disclose the Report to any other third party. By engaging our services, you agree that the Report contains intellectual property developed (and owned solely) by RA and agree that you will not reproduce or distribute the Report ***to any party that conducts reserve studies without the written consent of RA***.

RA will include (and you hereby agree that RA may include) your name in our client lists. RA reserves the right to use (and you hereby agree that RA may use) property information to obtain estimates of replacement costs, useful life of property elements or otherwise as RA, in its sole discretion, deems appropriate.

Payment Terms, Due Dates and Interest Charges - The retainer payment for any reserve study, Milestone Phase I inspection, and/or combined services is due upon execution of this agreement and prior to the inspection by RA, and any balance is due net 30 days from the Report shipment date. If only energy benchmarking services are performed by RA, then the retainer payment is due upon execution of this agreement and any balance is due net 30 days from the Report shipment date. In any case, any balance remaining 30 days after delivery of the Report shall accrue an interest charge of 1.5% per month. Unless this agreement is earlier terminated by RA in the event you breach or otherwise fail to comply with your obligations under this agreement, RA's obligations under this agreement shall commence on the date you execute and deliver this agreement and terminate on the date that is 6 months from the date of delivery of the Report by RA. Notwithstanding anything herein to the contrary, each provision that by its context and nature should survive the expiration or early termination of this agreement shall so survive, including, without limitation, any provisions with respect to payment, intellectual property rights, limitations of liability and governing law. We reserve the right to limit or decline refunds in our sole discretion. Refunds vary based on the applicable facts and circumstances.

Miscellaneous – Neither party shall be liable for any failures or delays in performance due to fire, flood, strike or other labor difficulty, act of God, act of any governmental authority, riot, embargo, fuel or energy shortage, pandemic, wrecks or delays in transportation, or due to any other cause beyond such party's reasonable control; provided, however, that you shall not be relieved from your obligations to make any payment(s) to RA as and when due hereunder. In the event of a delay in performance due to any such cause, the time for completion or date of delivery will be extended by a period of time reasonably necessary to overcome the effect of such delay. You may not assign or otherwise transfer this agreement, in whole or in part, without the prior written consent of RA. RA may freely assign or otherwise transfer this agreement, in whole or in part, without your prior consent. This agreement shall be governed by the laws of the State of Wisconsin without regard to any principles of conflicts of law that would apply the laws of another jurisdiction. Any dispute with respect to this agreement shall be exclusively venued in Milwaukee County Circuit Court or in the United States District Court for the Eastern District of Wisconsin. Each party hereto agrees and hereby waives the right to a trial by jury in any action, proceeding or claim brought by or on behalf of the parties hereto with respect to any matter related to this agreement.