

ENGINEERING & CONSULTING

888-688-4560 www.superiorreserve.com

Full Reserve Study

Woodbrooke Condominium Owner's Association, Inc.



Maumee, Ohio

June 16, 2017

Reference Number: 160399

Woodbrooke Condominium Owner's Association, Inc.

Table of Contents







FNG	INFER	ING &	CONS	ULTING

Reserve Component List	Limiting Conditions	1.701										
Exterior Building Components	Posoryo Component List							0/			Cost por	
Exterior Building Components	Reserve Component List		•						\$ Included			Flexibility
Balconies - Wood (1)	Exterior Building Components			•	9,	0,						
Doors - Front Entrances 2,281 2047 2015 40 30 \$33,600 100% \$33,600 1 \$33,600 deferrable Gutters and Downspouts 2,361 2031 N/A 25 14 \$9,800 100% \$9,800 1 \$9,800 deferrable Side of the policy	•	2.181	2025	N/A	25	8	\$123,200	100%	\$123,200	2	\$61,600	deferrable
Culters and Downspouts Care Car	Deck - Wood	2.182	2024	N/A	25	7	\$31,100	100%	\$31,100	1	\$31,100	deferrable
Masonry Restoration (1)	Doors - Front Entrances	2.281	2047	2015	40	30	\$33,600	100%	\$33,600	1	\$33,600	deferrable
Painting - Wood Siding and Balconies 2.431 2018 2011 7 1 \$28,000 100% \$28,000 1 \$28,000 firm	Gutters and Downspouts	2.361	2031	N/A	25	14	\$9,800	100%	\$9,800	1	\$9,800	deferrable
Painting - Deck and Gazebo 2.432 2017 2011 7 0 \$2,900 100% \$2,900 1 \$2,900 firm Roofs - Asphalt Shingles (1) 2.441 2031 2006 25 14 \$66,000 100% \$66,000 1 \$19,000 deferrable Siding - Vinyl 2.761 2041 2006 35 24 \$42,300 100% \$34,000 1 \$19,000 deferrable Siding - Vinyl 2.762 2025 original 40 8 \$36,000 100% \$34,000 1 \$34,000 deferrable Siding - Vinyl 2.762 2025 original 40 8 \$36,000 100% \$34,000 1 \$36,000 deferrable Siding - Vinyl 2.762 2025 original 40 8 \$36,000 100% \$36,000 1 \$36,000 deferrable Siding - Vinyl 2.762 2025	Masonry Restoration (1)	2.421	2023	N/A	10	6	\$13,000	100%	\$13,000	1	\$13,000	deferrable
Roofs - Asphalt Shingles (1)	Painting - Wood Siding and Balconies	2.431	2018	2011	7	1	\$28,000	100%	\$28,000	1	\$28,000	firm
Roof - Carport 2.443 2023 original 40 6 \$19,000 100% \$19,000 1 \$19,000 deferrable \$1ding - Vinyl 2.761 2041 2006 35 24 \$42,300 100% \$42,300 1 \$42,300 deferrable \$2ding - Wood (1) 2.762 2025 original 40 8 \$36,000 100% \$36,000 1 \$36,000 deferrable \$3ding - Wood (1) \$2.762 2025 original 40 8 \$36,000 100% \$36,000 1 \$36,000 deferrable \$3ding - Wood (1) \$20,000 \$36,000 1 \$20,000 deferrable \$20,000 \$36,000	Painting - Deck and Gazebo	2.432	2017	2011	7	0	\$2,900	100%	\$2,900	1	\$2,900	firm
Siding - Vinyl 2.761 2041 2006 35 24 \$42,300 100% \$42,300 1 \$42,300 deferable Siding - Wood (1) 2.762 2025 original 40 8 \$36,000 100% \$36,000 1 \$36,000 deferable Soffits and Fascia - Aluminum 2.891 2041 2041 30 30 \$6,000 100% \$20,900 1 \$20,900 deferable Soffits and Fascia - Aluminum 2.982 2047 2015 40 30 \$6,000 100% \$20,900 1 \$20,900 deferable Soffits and Paticio Doors - Common 2.982 2047 2015 40 30 \$6,000 100% \$6,000 1 \$50,000 deferable Soffits (1)	Roofs - Asphalt Shingles (1)	2.441	2031	2006	25	14	\$66,000	100%	\$66,000	1	\$66,000	firm
Siding - Wood (1) 2.762 2025 original 40 8 \$36,000 100% \$36,000 1 \$36,000 deferrable	Roof - Carport	2.443	2023	original	40	6	\$19,000	100%	\$19,000	1	\$19,000	deferrable
Soffits and Fascia - Aluminum 2.891 2041 N/A 35 24 \$20,900 100% \$20,900 1 \$20,900 deferrable	Siding - Vinyl	2.761	2041	2006	35	24	\$42,300	100%	\$42,300	1	\$42,300	deferrable
Number N	Siding - Wood (1)	2.762	2025	original	40	8	\$36,000	100%	\$36,000	1	\$36,000	deferrable
Interior Building Components Sample	Soffits and Fascia - Aluminum	2.891	2041	N/A	35	24	\$20,900	100%	\$20,900	1	\$20,900	deferrable
Carpet - Stairs (1) Lighting - Stairs (1) 3.101 2018 N/A 15 1 \$9,000 100% \$9,000 1 \$9,000 1 \$9,000 deferrable Lighting - Stairs (1) 3.421 2044 2014 30 27 \$7,200 100% \$7,200 1 \$7,200 1 \$7,200 deferrable Nailboxes 3.541 2027 original 40 10 \$4,000 100% \$4,000 1 \$4,000 1 \$4,000 1 \$4,000 1 \$4,000 deferrable Nailting - Stairwells (1) 2023 varies 10 6 \$24,500 100% \$24,500 1 \$24,500 1 \$24,500 discretionary Community Room Renovation (25% every 5 years) 3.661 2020 varies 5 3 \$3,7000 25% \$9,250 1 \$9,250 deferrable Nailding System Components Eurilace - Community Room (1) 4.061 2021 2001 20 4 \$2,700 100% \$17,000 1 \$8,400 1 \$8,400 deferrable Intercom System Panels Laundry Washers and Dryers 4.521 2022 N/A 10 5 \$5,200 100% \$3,200 1 \$8,400 1 \$8,400 1 \$8,400 deferrable Deferrable Garage Components On-Grade Concrete Floor Renovation 5.321 2023 original 30 6 \$7,000 100% \$7,000 1 \$7,000 1 \$7,000 1 \$7,000 deferrable For able For	Windows and Patio Doors - Common	2.982	2047	2015	40	30	\$6,000	100%	\$6,000	1	\$6,000	deferrable
Lighting - Stairs (1) 3.421 2044 2014 30 27 \$7,200 100% \$7,200 1 \$7,200 deferrable Mailboxes 3.541 2027 original 40 10 \$4,000 100% \$4,000 1 \$4,000 1 \$4,000 deferrable Painting - Stairwells (1) Community Room Renovation (25% every 5 years) 3.621 2023 varies 10 6 \$24,500 100% \$24,500 1 \$24,500 discretionary Community Room Renovation (25% every 5 years) 3.661 2020 varies 5 3 \$37,000 25% \$9,250 1 \$9,250 deferrable Tile - Stairs Building System Components Furnace - Community Room (1) 4.061 2021 2001 20 4 \$2,700 100% \$2,700 1 \$1,700 deferrable Intercom System Panels 4.501 2042 2017 25 25 \$8,400 100% \$8,400 1 \$8,400 deferrable Laundry Washers and Dryers 4.521 2022 N/A 10 5 \$5,200 100% \$5,200 1 \$5,200 deferrable Pipes - Domestic Water, Waste and Vent (1) 4.601 2046 original 80 29 \$368,000 100% \$368,000 7 \$52,571 deferrable Garage Components On-Grade Concrete Floor Renovation 5.321 2023 original 30 6 \$7,000 100% \$7,000 1 \$7,000 discretionary Door and Operator - Garage 5.371 2025 varies 15 8 \$4,500 100% \$4,000 1 \$4,000 1 \$4,000 discretionary Painting - Garage (1)	Interior Building Components											
Mailboxes 3.541 2027 original 40 10 \$4,000 10% \$4,000 1 \$4,000 deferrable Painting - Stairwells (1) 3.621 2023 varies 10 6 \$24,500 10% \$24,500 1 \$24,500 discretionary Community Room Renovation (25% every 5 years) 3.661 2020 varies 5 3 \$37,000 25% \$9,250 1 \$9,250 deferrable Building System Components Furnace - Community Room (1) 4.061 2021 2001 20 4 \$2,700 10% \$2,700 1 \$2,700 deferrable Intercom System Panels 4.501 2042 2017 25 25 \$8,400 10% \$8,400 1 \$8,400 deferrable Laundry Washers and Dryers 4.521 2022 N/A 10 5 \$5,200 100% \$5,200 1 \$5,200 deferrable Pipes - Domestic Water, Waste and Vent (1) 4.601 2046 original 30 6 \$7,000 100%	Carpet - Stairs (1)	3.101	2018	N/A	15	1	\$9,000	100%	\$9,000	1	\$9,000	deferrable
Painting - Stairwells (1) 3.621 2023 varies 10 6 \$24,500 100% \$24,500 1 \$24,500 discretionary	Lighting - Stairs (1)	3.421	2044	2014	30	27	\$7,200	100%	\$7,200	1	\$7,200	deferrable
Community Room Renovation (25% every 5 years) 3.661 2020 varies 5 3 \$37,000 25% \$9,250 1 \$9,250 deferrable 3.781 2033 N/A 30 16 \$17,000 100% \$17,000 1 \$17,000 deferrable 3.781 2033 N/A 30 16 \$17,000 100% \$17,000 1 \$17,000 deferrable 3.781 2033 N/A 30 16 \$17,000 100% \$17,000 1 \$17,000 deferrable 3.781 2031 2011 2011 2011 2011 2011 2011 201	Mailboxes	3.541	2027	original	40	10	\$4,000	100%	\$4,000	1	\$4,000	deferrable
Tile - Stairs 3.781 2033 N/A 30 16 \$17,000 100% \$17,000 1 \$17,000 deferrable Building System Components Furnace - Community Room (1) 4.061 2021 2001 20 4 \$2,700 100% \$2,700 1 \$2,700 deferrable Intercom System Panels 4.501 2042 2017 25 25 \$8,400 100% \$8,400 1 \$8,400 deferrable Laundry Washers and Dryers 4.521 2022 N/A 10 5 \$5,200 100% \$5,200 1 \$5,200 deferrable Pipes - Domestic Water, Waste and Vent (1) 4.601 2046 original 80 29 \$368,000 100% \$368,000 7 \$52,571 deferrable Garage Components On-Grade Concrete Floor Renovation 5.321 2023 original 30 6 \$7,000 100% \$7,000 1 \$7,000<	Painting - Stairwells (1)	3.621	2023	varies	10	6	\$24,500	100%	\$24,500	1	\$24,500	discretionary
Building System Components Furnace - Community Room (1) 4.061 2021 2001 20 4 \$2,700 100% \$2,700 1 \$2,700 deferrable Intercom System Panels 4.501 2042 2017 25 25 \$8,400 100% \$8,400 1 \$8,400 deferrable 2001 20 4 \$1,500 2001 20 20 20 20 20 20 20 20 20 20 20 20 20	Community Room Renovation (25% every 5 years)	3.661	2020	varies	5	3	\$37,000	25%	\$9,250	1	\$9,250	deferrable
Furnace - Community Room (1) 4.061 2021 2001 20 4 \$2,700 100% \$2,700 1 \$2,700 deferrable lntercom System Panels 4.501 2042 2017 25 25 \$8,400 100% \$8,400 1 \$8,400 1 \$8,400 deferrable laundry Washers and Dryers 4.521 2022 N/A 10 5 \$5,200 100% \$5,200 1 \$5,200 1 \$5,200 deferrable laundry Washers and Vent (1) 4.601 2046 original 80 29 \$368,000 100% \$368,000 7 \$52,571 deferrable Carage Components On-Grade Concrete Floor Renovation 5.321 2023 original 30 6 \$7,000 100% \$7,000 1 \$7,000 1 \$7,000 discretionary Door and Operator - Garage 5.371 2025 varies 15 8 \$4,500 100% \$4,500 1 \$4,500 1 \$4,500 discretionary Painting - Garage (1) 5.571 2024 N/A 20 7 \$4,000 100% \$4,000 1 \$4,000	Tile - Stairs	3.781	2033	N/A	30	16	\$17,000	100%	\$17,000	1	\$17,000	deferrable
Intercom System Panels	Building System Components											
Laundry Washers and Dryers 4.521 2022 N/A 10 5 \$5,200 100% \$5,200 1 \$5,200 deferrable Pipes - Domestic Water, Waste and Vent (1) 4.601 2046 original 80 29 \$368,000 100% \$368,000 7 \$52,571 deferrable Garage Components On-Grade Concrete Floor Renovation 5.321 2023 original 30 6 \$7,000 100% \$7,000 1 \$7,000 discretionary Door and Operator - Garage 5.371 2025 varies 15 8 \$4,500 100% \$4,500 1 \$4,500 deferrable Painting - Garage (1) 5.571 2024 N/A 20 7 \$4,000 100% \$4,000 1 \$4,000 discretionary	Furnace - Community Room (1)	4.061	2021	2001	20	4	\$2,700	100%	\$2,700	1	\$2,700	deferrable
Garage Components Significant of Contract of Contr	Intercom System Panels	4.501	2042	2017	25	25	\$8,400	100%	\$8,400	1	\$8,400	deferrable
Garage Components On-Grade Concrete Floor Renovation 5.321 2023 original origin	Laundry Washers and Dryers	4.521	2022	N/A	10	5	\$5,200	100%	\$5,200	1	\$5,200	deferrable
On-Grade Concrete Floor Renovation 5.321 2023 original	Pipes - Domestic Water, Waste and Vent (1)	4.601	2046	original	80	29	\$368,000	100%	\$368,000	7	\$52,571	deferrable
Door and Operator - Garage 5.371 2025 varies 15 8 \$4,500 100% \$4,500 1 \$4,500 deferrable Painting - Garage (1) 5.571 2024 N/A 20 7 \$4,000 100% \$4,000 1 \$4,000 discretionary	Garage Components											
Painting - Garage (1) 5.571 2024 N/A 20 7 \$4,000 100% \$4,000 1 \$4,000 discretionary	3 .	5.321	2023	original	30	6	\$7,000	100%	\$7,000	1	\$7,000	discretionary
	Door and Operator - Garage	5.371	2025	varies	15	8		100%	\$4,500	1	\$4,500	deferrable
Poof Corgo	Painting - Garage (1)	5.571	2024	N/A	20	7	\$4,000	100%	\$4,000	1	\$4,000	discretionary
RUUI - Galage 5.577 2024 N/A 25 7 \$21,000 100% \$21,000 1 \$21,000 IIIII	Roof - Garage	5.577	2024	N/A	25	7	\$21,000	100%	\$21,000	1	\$21,000	firm

Reserve Component List	Engineering Data Section	Replacement Year (near term in red)	Age (N/A = not available)	Useful Life (years)	Remaining Useful Life (years)	Replacement Cost without Inflation	% Included	\$ Included	Number of Phases	Cost per Phase	Flexibility
Site Components											
Concrete Patios (1 of 14 every 5 years)	6.161	2022	original	5	5	\$33,600	7%	\$2,400	1	\$2,400	deferrable
Concrete Sidewalks, Drive and Stoops (5% every 5 years)	6.181	2022	original	5	5	\$52,000	5%	\$2,600	1	\$2,600	deferrable
Fences and Railings - Metal (1)	6.281	2037	varies	35	20	\$7,000	100%	\$7,000	1	\$7,000	deferrable
Landscape (5% every 5 years)	6.541	2023	N/A	5	6	\$60,000	5%	\$3,000	1	\$3,000	discretionary
Light Poles and Fixtures - Front Parking	6.601	2037	N/A	40	20	\$11,700	100%	\$11,700	1	\$11,700	deferrable
Light Poles and Fixtures - Pool	6.602	2037	N/A	25	20	\$6,400	100%	\$6,400	1	\$6,400	deferrable
Pavement Crack Repair and Patch	6.641	2020	2016	4	3	\$2,600	100%	\$2,600	1	\$2,600	firm
Pavement Seal Coat and Striping (1)	6.641	2020	2016	4	3	\$4,300	100%	\$4,300	1	\$4,300	discretionary
Pavement Replacement - Parking Areas (1)	6.661	2024	N/A	20	7	\$144,000	100%	\$144,000	1	\$144,000	deferrable
Pavers	6.721	2044	2014	30	27	\$26,600	100%	\$26,600	1	\$26,600	deferrable
Retaining Wall - Tennis Court (1)	6.907	2018	original	N/A	1	\$50,000	100%	\$50,000	1	\$50,000	firm
Sign	6.961	2025	N/A	20	8	\$2,900	100%	\$2,900	1	\$2,900	discretionary
Tennis Court Color Coat	6.981	2026	N/A	7	9	\$6,900	100%	\$6,900	1	\$6,900	discretionary
Tennis Court Fence	6.981	2019	N/A	28	2	\$7,900	100%	\$7,900	1	\$7,900	discretionary
Tennis Court Surface Replacement	6.981	2019	N/A	28	2	\$31,500	100%	\$31,500	1	\$31,500	discretionary
Pool Components											
Pool Cover	-	2023	N/A	12	6	\$2,700	100%	\$2,700	1	\$2,700	deferrable
Pool Finish - Vinyl	8.301	2025	N/A	12	8	\$17,800	100%	\$17,800	1	\$17,800	deferrable
Pool and Deck Furniture	8.401	2024	2014	10	7	\$20,000	100%	\$20,000	1	\$20,000	deferrable
Pool Mechanical Equipment - Heater	8.501	2026	2006	20	9	\$8,300	100%	\$8,300	1	\$8,300	deferrable
Pool Mechanical Equipment - Pump (1)	8.501	2021	N/A	15	4	\$1,900	100%	\$1,900	1	\$1,900	deferrable
Pool Mechanical Equipment - Filter (1)	8.501	2021	N/A	15	4	\$1,600	100%	\$1,600	1	\$1,600	deferrable
Pool Structure	8.601	2037	original	60	20	\$180,000	100%	\$180,000	1	\$180,000	deferrable



Woodbrooke Condominium Owner's Association, Inc.

Property and Service Summary

Location: Maumee, Ohio

Property type: multi story condominium

Number of residential buildings: 1

Number of units: 40

Number of stories: 3

Year of construction: 1969

Date of inspection: June 16, 2017

Type of service: reserve study

Level of service: Full Study

Length of analysis: 30 years

Exterior features: wood balconies, masonry facade, vinyl and wood

siding, asphalt shingle roofs

Interior features: stairs, community room

Site features: detached garage, carport, pool, tennis court,

parking area

Completed projects: doors at front entrances, pavement seal coat

Upcoming projects: rebuilding of retaining wall at tennis court, exterior

painting



east elevation



south elevation



building overview



property overview







Property Engineering Review

During our inspection of your property, we identify the following repairs and improvements that the property should consider:

Actionable recommendations - near term actions on these items will minimize future costs and maintain the comfort and security (See "Pages with Engineering Data" for more information where applicable):

The balconies are weathered, exhibit deterioration and are near the end of their useful lives. Balcony replacement should include the following:

- screws to attach deck boards and railings as nail fasteners have a tendency to pull out as the wood warps
- avoid toe-nailed connections (nails driven at an angle into the weakest part of the wood result in an increased potential for failed connections)
- avoid landscape in contact with wood columns to prevent accelerated deterioration of the column bases
- installation of an intermediate row of wood blocking between the joists for stability
- appropriate railing heights and picket spacing

Differing construction materials expand and contract from outdoor temperature changes at differing rates. Joints between these materials should be caulked. Caulk would flex as these differing materials move but the joint would remain water tight. Caulk is missing at the joints between vinyl siding and masonry veneer throughout the property. The property should caulk these joints in conjunction with masonry restoration.

The interior stairwell railings do not have pickets/balusters. This is a safety hazard as small children could fall through the railings to the floor below. The property should consider the installation of balusters placed at four inches on center for the entire length of the railings.

Sheathing and bracing is missing on the garage wall with the doors. Skewing of the wall is evident. When replacement of the siding occurs, the property should install a metal brace and sheathing on the wall to prevent racking/leaning of the wall.

We observed depressions where the railings near the garage mount in the concrete. These depressions allow for standing water and accelerated deterioration of the paint finish and railings themselves. Fill in depressed areas at railing mounts with caulk to prevent standing water and premature deterioration of the railings.

The single catch basin in the pavement is insufficient to collect storm water resulting in water being shed to the edges of the pavement. This uncontrolled collection and discharge of storm water results in



standing water and accelerated deterioration of the pavement. The property could consider the installation of French drains at the edges of the pavement to allow storm water to quickly percolate into the ground.

The pool equipment room does not have an exhaust fan. This results in damp conditions and chemical smells in the air that cause accelerated deterioration of metal components in the room. The property should consider the installation of an exhaust fan.

Green ideas - Opportunities for energy efficiency and best practices for sustainability. Acting on these recommendations will provide significant cost savings (See "Pages with Engineering Data" for more information where applicable):

The stairwell lights operate continuously. Consider installing occupancy sensors to minimize fixture operation or installing light dimmers to minimize energy use during off peak hours. For safety reasons, maintain a minimum light level all times. Our experience indicates properties typically have one out of three lights operate continuously and the remaining two are on sensors. Check with local code for specific requirements.

The stairwell and front entrance lights operate even when daylight is available. The property should install daylight controls, which automatically shut off lights when enough ambient light exists, to maximize daylight use, minimize electrical use while still maintaining lighting level requirements (potential savings of up to approximately 50% annually). A less costly option is to install light bulbs with daylights sensors: https://www.amazon.com/Photosensor-Detection-Outdoor-Lighting-630Lumens/dp/B01LW4JUW2.

Install motion sensors on the community, storage and mechanical room light switches to minimize fixture operation. Motion sensing light switches are inexpensive:

http://www.homedepot.com/b/Electrical-Dimmers-Switches-Outlets-Motion-Sensors/N-5yc1vZc32r/Ntk-Extended/Ntt-light+switch?Ntx=mode+matchpartialmax&NCNI-5.

We recommend the installation of an occupancy sensing thermostat to minimize operation of the heating system when the community room is unoccupied:

http://www.rciautomation.com/thermostat occupancy.htm.

The property has seal coated the asphalt pavement in the past. It is our professional opinion that seal coating asphalt pavement does not extend the useful life of the pavement. Seal coats do not add structural strength to the pavement. Seal coating is also a source of environmental contamination. Many properties opt to save money by *not* seal coating their pavement. If the property decides to seal coat for aesthetic reasons, avoid the use of coal tar based pavement seal coats as they pollute waterways. Instead, consider a slurry coat of asphaltic emulsion to provide a sacrificial wearing surface to the pavement. Also, if the property chooses to seal coat, we recommend applying the seal coat in the



spring rather than the fall. Snow removal equipment wears the seal coat. Application in the spring will provide the maximum visual enjoyment from a fresh seal coat.

The pool pump operates at a constant speed. When replacement comes due, replace the pool pump with a variable speed drive to minimize operational costs, provide a constant pressure and maximize the useful life of the pump. Preventing too high flow rates will also ensure proper filtration and minimize damage to the filter.

The following address provides links to incentives and rebates for energy conservation in your area: http://www.dsireusa.org/

Engineering solutions - reference this information for proper scope of work and best outcome on upcoming projects (See "Pages with Engineering Data" for more information where applicable):

Aluminum cladding was installed over the window lintels. Cladding should not cover the horizontally exposed leg of the lintels. Any storm water within the wall escaping at the lintel is trapped within the wall by the cladding. This will result in accelerated failure of the lintel and leaks. The property should remove the cladding and paint the exposed lintels.

Proper construction of masonry walls assumes that a certain amount of water will penetrate completely through the masonry. As the water flows down the inside of the masonry, flashing at penetrations, such as the windows and doors, directs storm water over the penetrations. Weep holes/cords at the flashing allow the water to wick to the face of the masonry. Masonry walls missing any of these materials (flashing and weeps) misdirect penetrated storm water resulting in unpredictable water drainage and potential leaks. We did not observe evidence of flashing or weeps at the lintels in masonry openings at the property. Installation of these materials will be necessary if leaks occur.

The ridge vents lack external wind baffles. External wind baffles would direct airflow up and over the vent, creating an area of low pressure over the vent openings, pulling air out of the attic. Ridge vents that lack external wind baffles allow air to blow into the ridge rather than exhaust out of the attic. Replacement ridge vents should include external wind baffles.

The carpet is deteriorated and at the end of its useful life. For carpet replacement: 1) Use a nylon fiber as it is durable, resilient and stain resistant. 2) Berber (loop) or angle cut piles with woven patterns are ideal for high traffic areas. 3) Mid tone colors are ideal to hide traffic patterns and stains.

With the exception of isolated locations, the pipes are not visible. Even if these pipes were visible, the interior condition of the pipes (which is not visible) determines their remaining useful life. Therefore, we determine the condition and anticipated replacement times of the pipes based on interviews with individuals at the property, the age of the building, and our expertise with many other properties of similar age and plumbing systems.



The retaining wall at the tennis court has a significant lean. We observed that the grade behind the wall is sloped towards the wall resulting in storm water being directed to the wall. Although weep holes exist at the base of the wall they are likely not functional. This results in a build-up of hydrostatic pressure behind the wall that cannot be relieved and causes the wall to lean under the pressure. A repair to stabilize the condition could be to install drain tile atop the wall to collect any water on the surface and direct it around the wall; however, it is our professional opinion that the condition of the wall is such that permanent repairs are necessary. Repairs to the wall will require the following:

- removal of the fence, landscape and staircase
- excavation behind the wall to a depth that will allows the wall to be straightened
- straighten and repair the wall
- install drainage system behind the wall
- backfill with non-compressing fill
- reinstall the fence, landscape and staircase

Periodic backwashing of the pool filter is necessary to flush accumulated filtered material. Although necessary, this process is wasteful as it discharges the chemically treated and heated pool water. To ensure only the proper amount of water is flushed, a sight glass is critical at the filter to visually monitor the condition of the water being flushed. Backwashing is stopped once the water is clear. A sight glass is not present at the filter. We assume the filter is backwashed for a timed interval rather than based on the visual condition of the water. This could result in either inadequate or excessive backwashing. We recommend the installation of a sight glass to observe the condition of the water being backwashed.

Implementation of these repairs and improvements could increase the useful life of the components, minimize operating costs and provide guidance at the time of component replacement.



Reserve Study Overview

This reserve study is a *physical and financial analysis* of your property that determines what components of your property will eventually require either major repairs or restoration, or complete replacement. Large, one-time contributions (special assessments) for these projects can be eliminated with development of a *reserve* through relatively smaller annual contributions. The physical analysis determines the existing quantities, conditions, useful lives and costs of the components. The financial analysis determines the existing financial situation of your property and the reserves necessary to offset the future expenses.

Reserve Component

Components in this reserve study meet the following requirements:

- responsibility of the property
- limited useful life expectancy
- predictable remaining useful life expectancy
- above a minimum threshold cost

Components that do not fulfill the above requirements are not included in this study.

30 Year Analysis

The analysis for this reserve study encompasses the next 30 years. The components of the property age each year. Those who enjoy the use of each component are financially responsible for what they enjoyed. This length of an analysis is necessary to analyze the aging of nearly all the major components of the property. The expectation is not that the current Residents, Board of Directors and/or Management will be present at the property in 30 years. Rather, the future analysis aids in determining the most accurate *current* contribution for the aging components.

Funding Method

The funding method of this reserve study utilizes the *cash flow method*. With the cash flow method, contributions to the reserve fund are designed to offset variable annual expenditures. We experiment with different contribution scenarios until an ideal scenario is discovered to offset reserve expenditures. All expenses and contributions are *pooled* together. Our experience indicates that the cash flow method typically results in lower overall contributions than the *component method*, which typically segregates funds.

Funding Goal

The funding goal of this reserve study is to maintain a reserve balance above a minimum *threshold* during the years of major expenditures. We assume a contingency reserve balance of not less than



approximately ten percent (10%) of the expenditures in the **threshold funding year** (The year the reserve balance is at its lowest point. See Funding Plan Page 1.401 for the identification of this year). The property can determine if they prefer a higher or lower contingency.

The ideal situation is when the threshold funding year is in the last year of the analysis. This provides the maximum amount of time that the property can save up for major expenses. A critical situation is when the threshold funding year is in the first few years of the analysis. This situation requires major initial reserve contributions to offset near term expenditures.

Funding

This reserve study assumes an ideal situation where all future costs are offset by annual contributions to the reserve fund. We understand that this is not always possible. Our experience suggests that major projects are funded through multiple means such as partially through the reserve fund and partial through either additional assessments or bank loans. The specific funding of the projects is determined by the property at the time of the event (this is not something we can forecast). The goal of the property should be to follow the recommended funding plan outlined in this reserve study. If the recommended reserve contributions are not feasible as determined by the Board of Director's judgment, this reserve study should then be used, at a minimum, to justify the need for an *increase* over the *current* reserve fund contribution.

Flexibility

The time of replacement for each component involves a varying degree of deduction. To help understand the criticality of each replacement time, we provide the following replacement flexibility guide:

firm - Replacement time has little, if any, flexibility. Deferring the replacement time would have an adverse effect on the property.

deferrable - Replacement time has limited flexibility. Continually deferring the replacement time would eventually have an adverse effect on the property and raise aesthetic concerns.

discretionary - Replacement time has flexibility. Continually deferring the replacement time would either raise aesthetic concerns or the component does not affect the functionality of the property.

Reserve Study Requirements

Property Declarations occasionally define reserve study requirements. The state legislature may also define reserve study requirements. The following is a link to state reserve study requirements (the property should be aware more recent or pending legislation may exist since the date of this report):

http://codes.ohio.gov/orc/5311



It is our intention that this reserve study complies with these requirements. The property should consult with their attorney on discrepancies between reserve study requirements. Contact us for any revision necessary to the reserve study to fulfill these requirements.

Cost estimates

We obtain the cost estimates for replacements from the following sources:

- published sources (RS Means based on standard union labor rate)
- historical costs
- proprietary information

Our estimates are not guarantees of actual replacement costs. We base our estimates on our calculation of expected market rate for your specific location and specific situation. Multiple contractor bids will result in multiple cost estimates. *Multiple* contractor estimates will inevitably vary from our *single* estimate. If the property receives an estimate that is higher than the estimate in this reserve study, the property should use this study as a tool to negotiate a lower cost. If the property receives an estimate that is lower than the estimate in this reserve study - congratulations! You have received an estimate that is below the expected market rate. The property should verify the scope of work in the contractor's estimate is similar to what is noted on the Engineering Data page (Engineering Data pages are all the data pages subsequent to "Limiting Conditions", Page 1.701).

Long Lived Components

There exists components at the property that will not require replacement during the 30 year analysis. Although these long lived components will eventually require replacement, they do not fall within the scope of the analysis. Periodic updates of the study will eventually include their replacement. Frequent updates of the study will ensure the property has up to 30 years to plan for their eventual replacement. The following is a list of *common* long lived components for the property:

- electrical system wiring
- electrical system panels (not original)
- foundations
- structural frames



Operating Budget

The operating budget provides funds necessary for the daily operation of the property. In general, the operating budget includes expenses that repeat from year to year, such as administrative expenses and cleaning. All the property components require maintenance. This reserve study does not include maintenance costs that would traditionally fall under an operating budget. We assume the property will fund normal annual maintenance through the operating budget. We also assume that the property will fund replacement of components below an estimated minimum threshold cost of

\$2,000

through the operating budget. The following is a list of components that we assume the property will fund through the operating budget:

- garage lights
- landscape annual maintenance
- lighting at building exterior and gazebo
- metal roofing at D entrance
- recessed light fixtures
- valves
- vinyl fence
- water heater in community room

The items in the list above have a minimal (if any) impact on our recommended reserve fund contribution. If the property chooses to fund these expenses through reserves, updates of this reserve study would account for these expenses.

Homeowner Responsibility

The property's Declaration assigns the responsibility of certain components to the homeowners. These are typically components where the use is solely enjoyed by the homeowner. The following is a list of components that are the responsibility of the homeowners as described to us during our meeting at the property:

- electrical systems within the individual homes
- heating, ventilating and air conditioning (HVAC) units serving the individual homes
- interiors of the individual homes
- lights at balconies
- pipes that branch off the common pipes to the individual home plumbing fixtures
- water heaters
- windows and doors



We do not provide an opinion on the accuracy of this list. Historical practices for repairs and replacements occasionally conflict with what is stated in the Declaration. The property should consult with their attorney to verify the accuracy of the information in this list provided to us.

Although these components are maintained by the homeowners, Declarations typically allow the Board of Directors to have *architectural control* over replacement. This aids in keeping a uniform appearance throughout the property. Homeowner replacement projects with a high dollar value can be managed by the property but the expenses charged back to the homeowners. This simplifies complex projects by having one contractor and further ensures a uniform appearance.

Additional Assessments

The objective of properly planned operating budgets and reserve contributions is to avoid additional assessments. However, additional assessments are necessary for unplanned costs such as code change requirements, unobservable conditions, property improvements, etc. We *do not* recommend the property fund these expenses through reserves. The property should consult with an attorney to determine if the property Bylaws have a provision for these types of expenses.

Definitions and Supporting Information

Community Associations Institute (CAI) and the Association of Professional Reserve Analysts (APRA) are national organizations that provide requirements for reserve studies. The property should refer to these organizations for reserve study definitions and supporting information. The following are links to these organizations:

http://www.caionline.org

http://www.apra-usa.com/

Reserve Fund Status

If the property were to fund all expenditures identified in this study through reserves, an increase in the reserve contributions is necessary. See Funding Plan Page 1.401 for our recommended reserve funding plan.

Updates

The reserve study is a static snap shot in time based on the date of the inspection. However, costs, inflation rates, interest rates and weather conditions are dynamic in that they are always changing. This necessitates periodic *updates* of the reserve study. An update is less costly than the original reserve study since there is less labor involved in gathering information on your property. We suggest updating the reserve study every three to six years. Factors that can determine when an update should occur are an upcoming major project, completion of a major project, major change to the property, known change



in the interest and/or inflation rates compared to the last reserve study, etc. Please contact us for a reserve study update proposal when necessary.

Sincerely,



Justin J. Maier, RS
Partner
Superior Reserve Engineering & Consulting
justin@superiorreserve.com
888-688-4560
Report submitted on: June 30, 2017



Recommended Reserve Funding Plan Woodbrooke Condominium Owner's Association, Inc.

	Inflated	Recommended		Average \$ per	\$ increase per	
	expenditures	reserve	Ending reserve	home per month	month from	% increase from
Year	(3% annual)	contributions	balance	(40 homes)	previous year	previous year
2017*	(\$2,900)	\$18,210	\$35,929	\$37.94	-	-
2018	(\$89,610)	\$74,700	\$21,361	\$155.63	\$117.69	310.2%
2019	(\$41,799)	\$76,900	\$56,929	\$160.21	\$4.58	2.9%
2020	(\$17,648)	\$79,200	\$119,533	\$165.00	\$4.79	3.0%
2021	(\$6,978)	\$81,600	\$196,037	\$170.00	\$5.00	3.0%
2022	(\$11,825)	\$84,000	\$270,997	\$175.00	\$5.00	2.9%
2023	(\$82,628)	\$86,500	\$278,144	\$180.21	\$5.21	3.0%
2024	(\$274,262)	\$89,100	\$95,209	\$185.63	\$5.42	3.0%
2025	(\$167,277)	\$91,800	\$20,422	\$191.25	\$5.63	3.0%
**2026	(\$100,207)	\$94,600	<u>\$15,026</u>	\$197.08	\$5.83	3.1%
2027	(\$12,095)	\$94,600	\$98,206	\$197.08	\$0.00	0.0%
2028	(\$13,704)	\$94,600	\$180,766	\$197.08	\$0.00	0.0%
2029	\$0	\$94,600	\$278,103	\$197.08	\$0.00	0.0%
2030	(\$13,584)	\$94,600	\$362,942	\$197.08	\$0.00	0.0%
2031	(\$119,041)	\$97,400	\$345,526	\$202.92	\$5.83	3.0%
2032	(\$70,264)	\$100,300	\$379,889	\$208.96	\$6.04	3.0%
2033	(\$117,785)	\$103,300	\$369,876	\$215.21	\$6.25	3.0%
2034	(\$33,057)	\$106,400	\$448,098	\$221.67	\$6.46	3.0%
2035	(\$20,344)	\$109,600	\$543,267	\$228.33	\$6.67	3.0%
2036	(\$18,236)	\$112,900	\$645,017	\$235.21	\$6.88	3.0%
2037	(\$379,464)	\$116,300	\$388,014	\$242.29	\$7.08	3.0%
2038	(\$10,976)	\$119,800	\$502,147	\$249.58	\$7.29	3.0%
2039	(\$53,651)	\$123,400	\$578,341	\$257.08	\$7.50	3.0%
2040	(\$54,372)	\$127,100	\$658,444	\$264.79	\$7.71	3.0%
2041	(\$133,961)	\$130,900	\$663,266	\$272.71	\$7.92	3.0%
2042	(\$38,944)	\$134,800	\$767,656	\$280.83	\$8.13	3.0%
2043	(\$87,342)	\$138,800	\$828,635	\$289.17	\$8.33	3.0%
2044	(\$448,256)	\$143,000	\$531,491	\$297.92	\$8.75	3.0%
2045	(\$34,433)	\$147,300	\$651,412	\$306.88	\$8.96	3.0%
2046	(\$209,431)	\$151,700	\$601,152	\$316.04	\$9.17	3.0%
2047***	(\$318,873)	\$156,300	\$444,817	\$325.63	\$9.58	3.0%

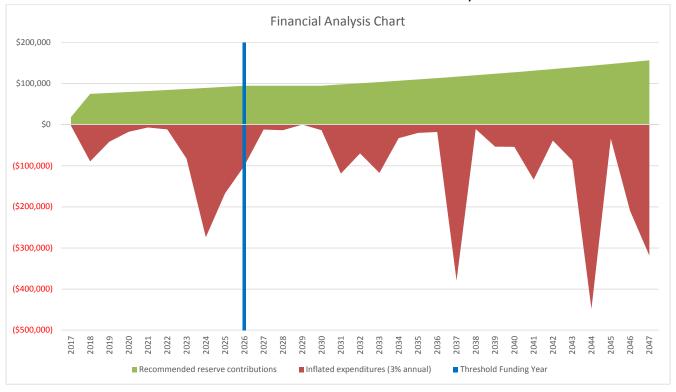
^{*} reserve contributions are budgeted

^{**2026} is the THRESHOLD FUNDING YEAR. To reduce reserve contributions, identify items to defer beyond this year.

^{***}Ending reserve balance considers the need for the continued phased replacement of the piping after 2047.



Woodbrooke Condominium Owner's Association, Inc.







Woodbrooke Condominium Owner's Association, Inc.								
Fiscal year	2017	2018	2019	2020	2021	2022	2023	2024
Construction inflation rate	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Compounded construction inflation	100.0%	103.0%	106.1%	109.3%	112.6%	115.9%	119.4%	123.0%
Beginning balance (May 31, 2017)	\$28,165	\$35,929	\$21,361	\$56,929	\$119,533	\$196,037	\$270,997	\$278,144
Inflated expenditures (3% annual)	(\$2,900)	(\$89,610)	(\$41,799)	(\$17,648)	(\$6,978)	(\$11,825)	(\$82,628)	(\$274,262)
Recommended reserve contributions (remaining 2017 contribution)	\$10,623	\$74,700	\$76,900	\$79,200	\$81,600	\$84,000	\$86,500	\$89,100
Earned interest (1.2% PROJECTED yield rate)	\$41	\$342	\$467	\$1,052	\$1,882	\$2,785	\$3,275	\$2,227
Ending reserve balance	\$35,929	\$21,361	\$56,929	\$119,533	\$196,037	\$270,997	\$278,144	\$95,209

Reserve Component List

Reserve Component List							
Exterior Building Components							
Balconies - Wood (1)							
Deck - Wood							38,249
Doors - Front Entrances							
Gutters and Downspouts							
Masonry Restoration (1)						15,523	
Painting - Wood Siding and Balconies		28,840					
Painting - Deck and Gazebo	2,900						3,567
Roofs - Asphalt Shingles (1)							
Roof - Carport						22,687	
Siding - Vinyl							
Siding - Wood (1)							
Soffits and Fascia - Aluminum							
Windows and Patio Doors - Common							
Interior Building Components							
Carpet - Stairs (1)		9,270					
Lighting - Stairs (1)							
Mailboxes							
Painting - Stairwells (1)						29,254	
Community Room Renovation (25% every 5 years)			10,1	08		,	
Tile - Stairs				1			
The Stalls							
Building System Components							
Furnace - Community Room (1)				3,039			
Intercom System Panels				0,007			
Laundry Washers and Dryers					6,028		
Pipes - Domestic Water, Waste and Vent (1)					0,020		
Garage Components							
On-Grade Concrete Floor Renovation						8,358	
Door and Operator - Garage							4,919
Painting - Garage (1)							
Roof - Garage							25,827
Site Components							
Concrete Patios (1 of 14 every 5 years)					2,782		
Concrete Sidewalks, Drive and Stoops (5% every 5 years)					3,014		
Fences and Railings - Metal (1)					0,011		
Landscape (5% every 5 years)						3,582	
Light Poles and Fixtures - Front Parking						0,002	
Light Poles and Fixtures - Pool							
Pavement Crack Repair and Patch			2,8	41			
Pavement Seal Coat and Striping (1)			4,6				
Pavement Replacement - Parking Areas (1)			4,0	,,			177,102
Pavers							177,102
Retaining Wall - Tennis Court (1)		51,500					
Sign		31,300					
Tennis Court Color Coat							
Tennis Court Fence			8,381				
Tennis Court Fence Tennis Court Surface Replacement			33,418				
Torring goal t Surface Replacement			33,410				
Pool Components							
Pool Cover						3,224	
Pool Finish - Vinyl						-,	
Pool and Deck Furniture							24,597
Pool Mechanical Equipment - Heater							,0,,
Pool Mechanical Equipment - Pump (1)				2,138			
Pool Mechanical Equipment - Filter (1)				1,801			
Pool Structure				1,00			





ENGINEERING & CONSULTING								
Woodbrooke Condominium Owner's Association, Inc.		threshold funding year						
Fiscal year	2025	2026	2027	2028	2029	2030	2031	2032
Construction inflation rate	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Compounded construction inflation	126.7%	130.5%	134.4%	138.4%	142.6%	146.9%	151.3%	155.8%
Beginning balance (May 31, 2017)	\$95,209	\$20,422	\$15,026	\$98,206	\$180,766	\$278,103	\$362,942	\$345,526
Inflated expenditures (3% annual)	(\$167,277)	(\$100,207)	(\$12,095)	(\$13,704)	\$0	(\$13,584)	(\$119,041)	(\$70,264
Recommended reserve contributions (remaining 2017 contribution)	\$91,800	\$94,600	\$94,600	\$94,600	\$94,600	\$94,600	\$97,400	\$100,300
Earned interest (1.2% PROJECTED yield rate)	\$690	\$211	\$675	\$1,664	\$2,737	\$3,823	\$4,225	\$4,327
Ending reserve balance	\$20,422	\$15,026	\$98,206	\$180,766	\$278,103	\$362,942	\$345,526	\$379,889
Reserve Component List								
Exterior Building Components								
Balconies - Wood (1)	78,033	80,374						
Deck - Wood	. 0,000							
Doors - Front Entrances								
Gutters and Downspouts							14,823	
Masonry Restoration (1)							14,023	
Painting - Wood Siding and Balconies								43,623
Painting - Deck and Gazebo							4,387	43,023
Roofs - Asphalt Shingles (1)								
• • • • • • • • • • • • • • • • • • • •							99,831	
Roof - Carport								
Siding - Vinyl	45 (04							
Siding - Wood (1)	45,604							
Soffits and Fascia - Aluminum								
Windows and Patio Doors - Common								
Interior Building Components								
Carpet - Stairs (1)								
Lighting - Stairs (1)								
Mailboxes			5,376					
Painting - Stairwells (1)			3,370					
Community Room Renovation (25% every 5 years)	11,718					13,584		
	11,710					13,364		
Tile - Stairs								
Building System Components								
Building System Components								
Furnace - Community Room (1)								
Intercom System Panels								0.404
Laundry Washers and Dryers								8,101
Pipes - Domestic Water, Waste and Vent (1)								
C C								
Garage Components								
On-Grade Concrete Floor Renovation								
Door and Operator - Garage	5,700							
Painting - Garage (1)								
Roof - Garage								
Site Components								
Concrete Patios (1 of 14 every 5 years)			3,225					3,739
Concrete Sidewalks, Drive and Stoops (5% every 5 years)			3,494					4,051
Fences and Railings - Metal (1)			-,.,,					.,001
Landscape (5% every 5 years)				4,153				
Light Poles and Fixtures - Front Parking				.,100				
Light Poles and Fixtures - Profit Parking Light Poles and Fixtures - Pool								
Pavement Crack Repair and Patch				3,599				4,051
·				5,952				6,699
Payement Seal Coat and Striping (1)				5,752				0,099
Pavement Replacement - Parking Areas (1)								
Pavers								
Retaining Wall - Tennis Court (1)	2 / 7 4							
Sign	3,674	0.000						
Tennis Court Color Coat		9,003						
Tennis Court Fence Tennis Court Surface Replacement								
тольно обыт общостноги								
Pool Components								
Pool Cover	22.540							
Pool Finish - Vinyl	22,549							
Pool and Deck Furniture								
Pool Mechanical Equipment - Heater		10,830						
Pool Mechanical Equipment - Pump (1)								
Pool Mechanical Equipment - Filter (1)								
Pool Structure								





2033	2034	2035	2036	2037	2038	2039	2040
3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
160.5%	165.3%	170.2%	175.4%	180.6%	186.0%	191.6%	197.4%
\$379,889	\$369,876	\$448,098	\$543,267	\$645,017	\$388,014	\$502,147	\$578,341
(\$117,785)	(\$33,057)	(\$20,344)	(\$18,236)	(\$379,464)	(\$10,976)	(\$53,651)	(\$54,372)
\$103,300	\$106,400	\$109,600	\$112,900	\$116,300	\$119,800	\$123,400	\$127,100
\$4,472	\$4,879	\$5,913	\$7,087	\$6,161	\$5,309	\$6,444	\$7,376
\$369,876	\$448,098	\$543,267	\$645,017	\$388,014	\$502,147	\$578,341	\$658,444
	3.0% 160.5% \$379,889 (\$117,785) \$103,300 \$4,472	3.0% 3.0% 160.5% 165.3% \$379,889 \$369,876 (\$117,785) (\$33,057) \$103,300 \$106,400 \$4,472 \$4,879	3.0% 3.0% 3.0% 160.5% 165.3% 170.2% \$379,889 \$369,876 \$448,098 (\$117,785) (\$33,057) (\$20,344) \$103,300 \$106,400 \$109,600 \$4,472 \$4,879 \$5,913	3.0% 3.0% 3.0% 3.0% 3.0% 160.5% 165.3% 170.2% 175.4% \$379,889 \$369,876 \$448,098 \$543,267 (\$117,785) (\$33,057) (\$20,344) (\$18,236) \$103,300 \$106,400 \$109,600 \$112,900 \$4,472 \$4,879 \$5,913 \$7,087	3.0% 3.0% 3.0% 3.0% 3.0% 160.5% 165.3% 170.2% 175.4% 180.6% \$379,889 \$369,876 \$448,098 \$543,267 \$645,017 (\$117,785) (\$33,057) (\$20,344) (\$18,236) (\$379,464) \$103,300 \$106,400 \$109,600 \$112,900 \$116,300 \$4,472 \$4,879 \$5,913 \$7,087 \$6,161	3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 160.5% 165.3% 170.2% 175.4% 180.6% 186.0% \$379,889 \$369,876 \$448,098 \$543,267 \$645,017 \$388,014 (\$117,785) (\$33,057) (\$20,344) (\$18,236) (\$379,464) (\$10,976) \$103,300 \$106,400 \$109,600 \$112,900 \$116,300 \$119,800 \$4,472 \$4,879 \$5,913 \$7,087 \$6,161 \$5,309	3.0% 191.6% 191.6%

Reserve Component List

Reserve Component List						
Exterior Building Components						
Balconies - Wood (1)						
Deck - Wood						
Doors - Front Entrances						
Gutters and Downspouts						
•	20.0/1					
Masonry Restoration (1)	20,861					
Painting - Wood Siding and Balconies					53,651	
Painting - Deck and Gazebo				5,39	5	
Roofs - Asphalt Shingles (1)						
Roof - Carport						
Siding - Vinyl						
Siding - Wood (1)						
Soffits and Fascia - Aluminum						
Windows and Patio Doors - Common						
Interior Building Components						
Carpet - Stairs (1)	14,442					
Lighting - Stairs (1)						
Mailboxes						
Painting - Stairwells (1)	39,315					
Community Room Renovation (25% every 5 years)	,	15,748				18,256
Tile - Stairs	27,280	15,710				10/200
The Stans	21,200					
Duilding System Components						
Building System Components						
Furnace - Community Room (1)						
Intercom System Panels						
Laundry Washers and Dryers Pipes - Domestic Water, Waste and Vent (1)						
On-Grade Concrete Floor Renovation Door and Operator - Garage						8,881
Painting - Garage (1)						
Roof - Garage						
Site Components						
Concrete Patios (1 of 14 every 5 years)				4,335		
Concrete Sidewalks, Drive and Stoops (5% every 5 years)				4,696		
Fences and Railings - Metal (1)				12,643		
Landscape (5% every 5 years)	4,814			5,58	1	
Light Poles and Fixtures - Front Parking	1,011			21,132		
Light Poles and Fixtures - Pool				11,559		
Pavement Crack Repair and Patch			4,559	11,557		5,131
·			7,540			8,486
Pavement Seal Coat and Striping (1)			7,540			0,400
Pavement Replacement - Parking Areas (1)						
Pavers						
Retaining Wall - Tennis Court (1)						
Sign						
Tennis Court Color Coat	11,072					13,618
Tennis Court Fence						
Tennis Court Surface Replacement						
Pool Components						
Pool Cover		4,597				
Pool Cover		4,577				
Pool and Deck Furniture	22	057				
	33,	031				
Pool Mechanical Equipment - Heater			2 222			
Pool Mechanical Equipment - Pump (1)			3,332			
Pool Mechanical Equipment - Filter (1)			2,806	225 100		
Pool Structure				325,100		

30 Year Expenditure Summary



Woodbrooke Condominium	Owner's Association, Inc.

Fiscal year	2041	2042	2043	2044	2045	2046	2047
Construction inflation rate	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Compounded construction inflation	203.3%	209.4%	215.7%	222.1%	228.8%	235.7%	242.7%
Beginning balance (May 31, 2017)	\$658,444	\$663,266	\$767,656	\$828,635	\$531,491	\$651,412	\$601,152
Inflated expenditures (3% annual)	(\$133,961)	(\$38,944)	(\$87,342)	(\$448,256)	(\$34,433)	(\$209,431)	(\$318,873)
Recommended reserve contributions (remaining 2017 contribution)	\$130,900	\$134,800	\$138,800	\$143,000	\$147,300	\$151,700	\$156,300
Earned interest (1.2% PROJECTED yield rate)	\$7,883	\$8,534	\$9,521	\$8,112	\$7,055	\$7,471	\$6,238
Ending reserve balance	\$663,266	\$767,656	\$828,635	\$531,491	\$651,412	\$601,152	\$444,817

Reserve Component List

Reserve Component List						
Exterior Building Components						
Balconies - Wood (1)						
Deck - Wood						
Doors - Front Entrances						81,556
Gutters and Downspouts						61,330
•		20.024				
Masonry Restoration (1)		28,036			45.004	
Painting - Wood Siding and Balconies					65,984	
Painting - Deck and Gazebo				6,635		
Roofs - Asphalt Shingles (1)						
Roof - Carport						
Siding - Vinyl	85,987					
Siding - Wood (1)						
Soffits and Fascia - Aluminum	42,485					
Windows and Patio Doors - Common						14,564
Interior Building Components						
Carpet - Stairs (1)						
Lighting - Stairs (1)			15,993			
Mailboxes						
Painting - Stairwells (1)		52,836				
Community Room Renovation (25% every 5 years)				21,163		
Tile - Stairs						
Building System Components						
Furnace - Community Room (1)	5,489					
Intercom System Panels		17,588				
Laundry Washers and Dryers		10,888				
Pipes - Domestic Water, Waste and Vent (1)		,			123,888	127,605
					,	,
Garage Components						
On-Grade Concrete Floor Renovation						
Door and Operator - Garage						
Painting - Garage (1)			8,885			
Roof - Garage						
Site Components						
Concrete Patios (1 of 14 every 5 years)		5,025				5,825
Concrete Sidewalks, Drive and Stoops (5% every 5 years)		5,444				6,311
		5,444				0,311
Fences and Railings - Metal (1)		6,470				
Landscape (5% every 5 years)		0,470				
Light Poles and Fixtures - Front Parking						
Light Poles and Fixtures - Pool						
Pavement Crack Repair and Patch						
Pavement Seal Coat and Striping (1)						
Pavement Replacement - Parking Areas (1)			319,866			
Pavers			59,086			
Retaining Wall - Tennis Court (1)						
Sign				6,635		
Tennis Court Color Coat						
Tennis Court Fence						
Tennis Court Surface Replacement						76,459
Pool Components						
Pool Cover						6,554
Pool Finish - Vinyl						
Pool and Deck Furniture			44,426			
Pool Mechanical Equipment - Heater					19,559	
Pool Mechanical Equipment - Pump (1)						
Pool Mechanical Equipment - Filter (1)						
Dool Structure						

Pool Structure

\$28,165



2017

Hybrid Reserve Expenditures and Funding Plan

 \bigcirc

January 1, 2017 through December 31, 2017

Year of forecast: 0

Annual CONSTRUCTION inflation rate: 3.0% Compounded CONSTRUCTION inflation in 2017: 100.0%

Budgeted reserve contribution (7 remaining months of \$18,210 contribution): + \$10,623

Estimated interest earned (7 months of remaining interest at 0.2% yield rate): + \$41

Unaudited, provided, beginning reserve balance as of May 31, 2017:

Total remaining contributions: = \$10,664

Woodbrooke Condominium Owner's Association, Inc.

2017 ExpendituresNumber of phases phases phases phasesEngineering Data SectionPainting - Deck and Gazebo1firm2.432(\$2,900)Total expenditures:(\$2,900)

Ending reserve balance: \$35,929



Hybrid Reserve Expenditures and Funding Plan

January 1, 2018 through December 31, 2018

Year of forecast: 1

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2018: 103.0%

Beginning reserve balance: \$35,929

Recommended reserve contribution: + \$74,700

Estimated interest earned (1.2% PROJECTED yield rate): + \$342

Total contributions:= \$75,042

Woodbrooke Condominium Owner's Association, Inc.

Number of Engineering Data 2018 Expenditures (inflated) phases **Flexibility** Section Painting - Wood Siding and Balconies 1 firm 2.431 (\$28,840) Carpet - Stairs (1) 1 3.101 deferrable (\$9,270) Retaining Wall - Tennis Court (1) firm 6.907 (\$51,500)

Total expenditures: (\$89,610)

Ending reserve balance: \$21,361



Hybrid Reserve Expenditures and Funding Plan

January 1, 2019 through December 31, 2019

Year of forecast: 2

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2019: 106.1%

Beginning reserve balance: \$21,361

Recommended reserve contribution: + \$76,900

Estimated interest earned (1.2% PROJECTED yield rate): + \$467

Total contributions:= \$77,367

Woodbrooke Condominium Owner's Association, Inc.

2019 Expenditures (inflated)Number of phases phasesEngineering Data SectionTennis Court Fence1 discretionary6.981(\$8,381)Tennis Court Surface Replacement1 discretionary6.981(\$33,418)

Total expenditures: (\$41,799)

Ending reserve balance: \$56,929



Hybrid Reserve Expenditures and Funding Plan

January 1, 2020 through December 31, 2020

Year of forecast: 3

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2020: 109.3%

Beginning reserve balance: \$56,929

Recommended reserve contribution: + \$79,200

Estimated interest earned (1.2% PROJECTED yield rate): + \$1,052

Total contributions:= \$80,252

Woodbrooke Condominium Owner's Association, Inc.

Number of Engineering Data 2020 Expenditures (inflated) phases **Flexibility** Section Community Room Renovation (25% every 5 years) (\$10,108) 1 deferrable 3.661 firm Pavement Crack Repair and Patch 1 6.641 (\$2,841) Pavement Seal Coat and Striping (1) discretionary 6.641 (\$4,699)

Total expenditures: (\$17,648)

Ending reserve balance: \$119,533



Hybrid Reserve Expenditures and Funding Plan

January 1, 2021 through December 31, 2021

Year of forecast: 4

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2021: 112.6%

Beginning reserve balance: \$119,533

Recommended reserve contribution: + \$81,600

Estimated interest earned (1.2% PROJECTED yield rate): + \$1,882

Total contributions:= \$83,482

Woodbrooke Condominium Owner's Association, Inc.

Number of Engineering Data 2021 Expenditures (inflated) phases **Flexibility** Section (\$3,039) Furnace - Community Room (1) 1 deferrable 4.061 Pool Mechanical Equipment - Pump (1) 1 deferrable 8.501 (\$2,138) Pool Mechanical Equipment - Filter (1) deferrable 8.501 (\$1,801)

Total expenditures: (\$6,978)

Ending reserve balance: \$196,037



Hybrid Reserve Expenditures and Funding Plan

January 1, 2022 through December 31, 2022

Year of forecast: 5

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2022: 115.9%

Beginning reserve balance: \$196,037

Recommended reserve contribution: + \$84,000

Estimated interest earned (1.2% PROJECTED yield rate): + \$2,785

Total contributions:= \$86,785

Woodbrooke Condominium Owner's Association, Inc.

Number of Engineering Data 2022 Expenditures (inflated) phases **Flexibility** Section Laundry Washers and Dryers 4.521 1 deferrable (\$6,028) Concrete Patios (1 of 14 every 5 years) 1 deferrable 6.161 (\$2,782) Concrete Sidewalks, Drive and Stoops (5% every 5 years) deferrable 6.181 (\$3,014)

Total expenditures: (\$11,825)

Ending reserve balance: \$270,997



Hybrid Reserve Expenditures and Funding Plan

January 1, 2023 through December 31, 2023

Year of forecast: 6

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2023: 119.4%

> Beginning reserve balance: \$270,997

Recommended reserve contribution: + \$86,500

Estimated interest earned (1.2% PROJECTED yield rate): + \$3,275

> Total contributions:= \$89,775

Woodbrooke Condominium Owner's Association, Inc.

2023 Expenditures (inflated)	Number of phases	Flexibility	Engineering Data Section	
Masonry Restoration (1)	1	deferrable	2.421	(\$15,523)
Roof - Carport	1	deferrable	2.443	(\$22,687)
Painting - Stairwells (1)	1	discretionary	3.621	(\$29,254)
On-Grade Concrete Floor Renovation	1	discretionary	5.321	(\$8,358)
Landscape (5% every 5 years)	1	discretionary	6.541	(\$3,582)
Pool Cover	1	deferrable	-	(\$3,224)

Total expenditures: (\$82,628)

> Ending reserve balance: \$278,144



Hybrid Reserve Expenditures and Funding Plan

January 1, 2024 through December 31, 2024

Year of forecast: 7

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2024: 123.0%

Beginning reserve balance: \$278,144

Recommended reserve contribution: + \$89,100

Estimated interest earned (1.2% PROJECTED yield rate): + \$2,227

Total contributions: = \$91,327

Woodbrooke Condominium Owner's Association, Inc.

2024 Expenditures (inflated)	Number of phases	Flexibility	Engineering Data Section	
Deck - Wood	1	deferrable	2.182	(\$38,249)
Painting - Deck and Gazebo	1	firm	2.432	(\$3,567)
Painting - Garage (1)	1	discretionary	5.571	(\$4,919)
Roof - Garage	1	firm	5.577	(\$25,827)
Pavement Replacement - Parking Areas (1)	1	deferrable	6.661	(\$177,102)
Pool and Deck Furniture	1	deferrable	8.401	(\$24,597)

Total expenditures: (\$274,262)

Ending reserve balance: \$95,209



Hybrid Reserve Expenditures and Funding Plan

January 1, 2025 through December 31, 2025

Year of forecast: 8

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2025: 126.7%

Beginning reserve balance: \$95,209

Recommended reserve contribution: + \$91,800

Estimated interest earned (1.2% PROJECTED yield rate): + \$690

Total contributions:= \$92,490

Woodbrooke Condominium Owner's Association, Inc.

2025 Expenditures (inflated)	Number of phases	Flexibility	Engineering Data Section	
Balconies - Wood (1)	2	deferrable	2.181	(\$78,033)
Siding - Wood (1)	1	deferrable	2.762	(\$45,604)
Community Room Renovation (25% every 5 years)	1	deferrable	3.661	(\$11,718)
Door and Operator - Garage	1	deferrable	5.371	(\$5,700)
Sign	1	discretionary	6.961	(\$3,674)
Pool Finish - Vinyl	1	deferrable	8.301	(\$22,549)

Total expenditures: (\$167,277)

Ending reserve balance: \$20,422



2026 (Threshold)

Hybrid Reserve Expenditures and Funding Plan

January 1, 2026 through December 31, 2026

9 Year of forecast:

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2026 (Threshold): 130.5%

> Beginning reserve balance: \$20,422

Recommended reserve contribution: + \$94,600

Estimated interest earned (1.2% PROJECTED yield rate): + <u>\$211</u>

> Total contributions:= \$94,811

Woodbrooke Condominium Owner's Association, Inc.

2026 Expenditures (inflated)	Number of		Engineering Data	
	phases	Flexibility	Section	
Balconies - Wood (1)	2	deferrable	2.181	(\$80,374)
Tennis Court Color Coat	1	discretionary	6.981	(\$9,003)
Pool Mechanical Equipment - Heater	1	deferrable	8.501	(\$10,830)

Total expenditures: (\$100,207)

Ending reserve balance: <u>\$15,026</u>



Hybrid Reserve Expenditures and Funding Plan

January 1, 2027 through December 31, 2027

Year of forecast: 10

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2027: 134.4%

Beginning reserve balance: \$15,026

Recommended reserve contribution: + \$94,600

Estimated interest earned (1.2% PROJECTED yield rate): + \$675

Total contributions:= \$95,275

Woodbrooke Condominium Owner's Association, Inc.

Number of Engineering Data 2027 Expenditures (inflated) phases **Flexibility** Section Mailboxes 1 deferrable 3.541 (\$5,376) 1 Concrete Patios (1 of 14 every 5 years) deferrable 6.161 (\$3,225) Concrete Sidewalks, Drive and Stoops (5% every 5 years) deferrable 6.181 (\$3,494)

Total expenditures: (\$12,095)

Ending reserve balance: \$98,206



Hybrid Reserve Expenditures and Funding Plan

January 1, 2028 through December 31, 2028

Year of forecast: 11

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2028: 138.4%

> Beginning reserve balance: \$98,206

Recommended reserve contribution: + \$94,600

Estimated interest earned (1.2% PROJECTED yield rate): + \$1,664

> \$96,264 Total contributions:=

Woodbrooke Condominium Owner's Association, Inc.

Number of Engineering Data 2028 Expenditures (inflated) phases **Flexibility** Section Landscape (5% every 5 years) 1 discretionary 6.541 (\$4,153) 1 Pavement Crack Repair and Patch firm 6.641 (\$3,599) Pavement Seal Coat and Striping (1) discretionary 6.641 (\$5,952)

Total expenditures: (\$13,704)

> \$180,766 Ending reserve balance:



Hybrid Reserve Expenditures and Funding Plan

January 1, 2029 through December 31, 2029

Year of forecast: 12

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2029: 142.6%

Beginning reserve balance: \$180,766

Recommended reserve contribution: + \$94,600

Estimated interest earned (1.2% PROJECTED yield rate): + \$2,737

Total contributions:= \$97,337

Woodbrooke Condominium Owner's Association, Inc.

2029 Expenditures (inflated)

Number of phases

Flexibility

Engineering Data Section

Total expenditures: \$0

Ending reserve balance: \$278,103

(\$13,584)



2030

Hybrid Reserve Expenditures and Funding Plan

January 1, 2030 through December 31, 2030

Year of forecast: 13

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2030: 146.9%

Beginning reserve balance: \$278,103

Recommended reserve contribution: + \$94,600

3.661

Estimated interest earned (1.2% PROJECTED yield rate): + \$3,823

Total contributions:= \$98,423

Woodbrooke Condominium Owner's Association, Inc.

2030 Expenditures (inflated)

Community Room Renovation (25% every 5 years)

Number of Engineering Data phases Flexibility Section

deferrable

Total expenditures: (\$13,584)

1

Ending reserve balance: \$362,942



Hybrid Reserve Expenditures and Funding Plan

January 1, 2031 through December 31, 2031

Year of forecast: 14

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2031: 151.3%

Beginning reserve balance: \$362,942

Recommended reserve contribution: + \$97,400

Estimated interest earned (1.2% PROJECTED yield rate): + \$4,225

Total contributions: = \$101,625

Woodbrooke Condominium Owner's Association, Inc.

2031 Expenditures (inflated)	Number of		Engineering Data	
	phases	Flexibility	Section	
Gutters and Downspouts	1	deferrable	2.361	(\$14,823)
Painting - Deck and Gazebo	1	firm	2.432	(\$4,387)
Roofs - Asphalt Shingles (1)	1	firm	2.441	(\$99,831)

Total expenditures: (\$119,041)

Ending reserve balance: \$345,526



Hybrid Reserve Expenditures and Funding Plan

January 1, 2032 through December 31, 2032

Year of forecast: 15

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2032: 155.8%

Beginning reserve balance: \$345,526

Recommended reserve contribution: + \$100,300

Estimated interest earned (1.2% PROJECTED yield rate): + \$4,327

Total contributions:= \$104,627

Woodbrooke Condominium Owner's Association, Inc.

2032 Expenditures (inflated)	Number of phases	Flexibility	Engineering Data Section	
Painting - Wood Siding and Balconies	1	firm	2.431	(\$43,623)
Laundry Washers and Dryers	1	deferrable	4.521	(\$8,101)
Concrete Patios (1 of 14 every 5 years)	1	deferrable	6.161	(\$3,739)
Concrete Sidewalks, Drive and Stoops (5% every 5 years)	1	deferrable	6.181	(\$4,051)
Pavement Crack Repair and Patch	1	firm	6.641	(\$4,051)
Pavement Seal Coat and Striping (1)	1	discretionary	6.641	(\$6,699)

Total expenditures: (\$70,264)

Ending reserve balance: \$379,889



Hybrid Reserve Expenditures and Funding Plan

January 1, 2033 through December 31, 2033

Year of forecast: 16

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2033: 160.5%

Beginning reserve balance: \$379,889

Recommended reserve contribution: + \$103,300

Estimated interest earned (1.2% PROJECTED yield rate): + \$4,472

Total contributions:= \$107,772

Woodbrooke Condominium Owner's Association, Inc.

2033 Expenditures (inflated)	Number of phases	Flexibility	Engineering Data Section	
Masonry Restoration (1)	1	deferrable	2.421	(\$20,861)
Carpet - Stairs (1)	1	deferrable	3.101	(\$14,442)
Painting - Stairwells (1)	1	discretionary	3.621	(\$39,315)
Tile - Stairs	1	deferrable	3.781	(\$27,280)
Landscape (5% every 5 years)	1	discretionary	6.541	(\$4,814)
Tennis Court Color Coat	1	discretionary	6.981	(\$11,072)

Total expenditures: (\$117,785)

Ending reserve balance: \$369,876



Hybrid Reserve Expenditures and Funding Plan

January 1, 2034 through December 31, 2034

Year of forecast: 17

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2034: 165.3%

> Beginning reserve balance: \$369,876

Recommended reserve contribution: + \$106,400

Estimated interest earned (1.2% PROJECTED yield rate): + <u>\$4,879</u>

> Total contributions:= \$111,279

Woodbrooke Condominium Owner's Association, Inc.

2034 Expenditures (inflated)

Number of Engineering Data phases **Flexibility** Section

Pool and Deck Furniture 1 deferrable 8.401 (\$33,057)

Total expenditures: (\$33,057) \$448,098 Ending reserve balance:



Hybrid Reserve Expenditures and Funding Plan

January 1, 2035 through December 31, 2035

Year of forecast: 18

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2035: 170.2%

Beginning reserve balance: \$448,098

Recommended reserve contribution: + \$109,600

Estimated interest earned (1.2% PROJECTED yield rate): + \$5,913

Total contributions: = \$115,513

Woodbrooke Condominium Owner's Association, Inc.

2035 Expenditures (inflated)

Number of phases Flexibility

Community Room Renovation (25% every 5 years)

1 deferrable

3.661 (\$15,748)

Pool Cover

1 deferrable

- (\$4,597)

Total expenditures: (\$20,344)

Ending reserve balance: \$543,267



Hybrid Reserve Expenditures and Funding Plan

January 1, 2036 through December 31, 2036

Year of forecast: 19

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2036: 175.4%

Beginning reserve balance: \$543,267

Recommended reserve contribution: + \$112,900

Estimated interest earned (1.2% PROJECTED yield rate): + \$7,087

Total contributions:= \$119,987

Woodbrooke Condominium Owner's Association, Inc.

202/ Europalitumos (inflotod)	Number of		Engineering Data	
2036 Expenditures (inflated)	phases	Flexibility	Section	
Pavement Crack Repair and Patch	1	firm	6.641	(\$4,559)
Pavement Seal Coat and Striping (1)	1	discretionary	6.641	(\$7,540)
Pool Mechanical Equipment - Pump (1)	1	deferrable	8.501	(\$3,332)
Pool Mechanical Equipment - Filter (1)	1	deferrable	8.501	(\$2,806)

Total expenditures: (\$18,236)

Ending reserve balance: \$645,017



Hybrid Reserve Expenditures and Funding Plan

January 1, 2037 through December 31, 2037

Year of forecast: 20

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2037: 180.6%

Beginning reserve balance: \$645,017

Recommended reserve contribution: + \$116,300

Estimated interest earned (1.2% PROJECTED yield rate): + \$6,161

Total contributions:= \$122,461

Woodbrooke Condominium Owner's Association, Inc.

2037 Expenditures (inflated)	Number of phases	Flexibility	Engineering Data Section	
Concrete Patios (1 of 14 every 5 years)	1	deferrable	6.161	(\$4,335)
Concrete Sidewalks, Drive and Stoops (5% every 5 years)	1	deferrable	6.181	(\$4,696)
Fences and Railings - Metal (1)	1	deferrable	6.281	(\$12,643)
Light Poles and Fixtures - Front Parking	1	deferrable	6.601	(\$21,132)
Light Poles and Fixtures - Pool	1	deferrable	6.602	(\$11,559)
Pool Structure	1	deferrable	8.601	(\$325,100)

Total expenditures: (\$379,464)

Ending reserve balance: \$388,014



Hybrid Reserve Expenditures and Funding Plan

January 1, 2038 through December 31, 2038

Year of forecast: 21

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2038: 186.0%

Beginning reserve balance: \$388,014

Recommended reserve contribution: + \$119,800

Estimated interest earned (1.2% PROJECTED yield rate): + \$5,309

Total contributions: = \$125,109

Woodbrooke Condominium Owner's Association, Inc.

2038 Expenditures (inflated)Number of phases phasesEngineering Data SectionPainting - Deck and Gazebo1firm2.432(\$5,395)Landscape (5% every 5 years)1discretionary6.541(\$5,581)

Total expenditures: (\$10,976)

Ending reserve balance: \$502,147



Hybrid Reserve Expenditures and Funding Plan

January 1, 2039 through December 31, 2039

22 Year of forecast:

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2039: 191.6%

> Beginning reserve balance: \$502,147

Recommended reserve contribution: + \$123,400

Estimated interest earned (1.2% PROJECTED yield rate): + <u>\$6,444</u>

> Total contributions:= \$129,844

Woodbrooke Condominium Owner's Association, Inc.

2039 Expenditures (inflated)

Number of Engineering Data phases **Flexibility** Section

Painting - Wood Siding and Balconies firm 2.431 1 (\$53,651)

Total expenditures: (\$53,651) Ending reserve balance: \$578,341



Hybrid Reserve Expenditures and Funding Plan

January 1, 2040 through December 31, 2040

23 Year of forecast:

Annual CONSTRUCTION inflation rate: 3.0% Compounded CONSTRUCTION inflation in 2040: 197.4%

Beginning reserve balance: \$578,341

Recommended reserve contribution: + \$127,100

Estimated interest earned (1.2% PROJECTED yield rate): + \$7,376

> Total contributions:= \$134,476

Woodbrooke Condominium Owner's Association, Inc.

2040 Expenditures (inflated)	Number of phases	Flexibility	Engineering Data Section	
Community Room Renovation (25% every 5 years)	1	deferrable	3.661	(\$18,256)
Door and Operator - Garage	1	deferrable	5.371	(\$8,881)
Pavement Crack Repair and Patch	1	firm	6.641	(\$5,131)
Pavement Seal Coat and Striping (1)	1	discretionary	6.641	(\$8,486)
Tennis Court Color Coat	1	discretionary	6.981	(\$13,618)

Total expenditures: (\$54,372)

> Ending reserve balance: \$658,444



Hybrid Reserve Expenditures and Funding Plan

January 1, 2041 through December 31, 2041

Year of forecast: 24

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2041: 203.3%

> Beginning reserve balance: \$658,444

Recommended reserve contribution: + \$130,900

Estimated interest earned (1.2% PROJECTED yield rate): + \$7,883

> Total contributions:= \$138,783

Woodbrooke Condominium Owner's Association, Inc.

2011 Francis (inflated)	Number of		Engineering Data	
2041 Expenditures (inflated)	phases	Flexibility	Section	
Siding - Vinyl	1	deferrable	2.761	(\$85,987)
Soffits and Fascia - Aluminum	1	deferrable	2.891	(\$42,485)
Furnace - Community Room (1)	1	deferrable	4.061	(\$5,489)

Total expenditures: (\$133,961)

> Ending reserve balance: \$663,266



Hybrid Reserve Expenditures and Funding Plan

January 1, 2042 through December 31, 2042

25 Year of forecast:

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2042: 209.4%

> Beginning reserve balance: \$663,266

Recommended reserve contribution: + \$134,800

Estimated interest earned (1.2% PROJECTED yield rate): + \$8,534

> Total contributions:= \$143,334

Woodbrooke Condominium Owner's Association, Inc.

2042 Expenditures (inflated)	Number of phases	Flexibility	Engineering Data Section	
Intercom System Panels	1	deferrable	4.501	(\$17,588)
Laundry Washers and Dryers	1	deferrable	4.521	(\$10,888)
Concrete Patios (1 of 14 every 5 years)	1	deferrable	6.161	(\$5,025)
Concrete Sidewalks, Drive and Stoops (5% every 5 years)	1	deferrable	6.181	(\$5,444)

Total expenditures: (\$38,944)

> Ending reserve balance: \$767,656



Hybrid Reserve Expenditures and Funding Plan

January 1, 2043 through December 31, 2043

Year of forecast: 26

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2043: 215.7%

Beginning reserve balance: \$767,656

Recommended reserve contribution: + \$138,800

Estimated interest earned (1.2% PROJECTED yield rate): + \$9,521

Total contributions:= \$148,321

Woodbrooke Condominium Owner's Association, Inc.

	Number of		Engineering Data	
2043 Expenditures (inflated)	phases	Flexibility	Section	
Masonry Restoration (1)	1	deferrable	2.421	(\$28,036)
Painting - Stairwells (1)	1	discretionary	3.621	(\$52,836)
Landscape (5% every 5 years)	1	discretionary	6.541	(\$6,470)

Total expenditures: (\$87,342)

Ending reserve balance: \$828,635



Hybrid Reserve Expenditures and Funding Plan

January 1, 2044 through December 31, 2044

Year of forecast: 27

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2044: 222.1%

Beginning reserve balance: \$828,635

Recommended reserve contribution: + \$143,000

Estimated interest earned (1.2% PROJECTED yield rate): + \$8,112

Total contributions:= \$151,112

Woodbrooke Condominium Owner's Association, Inc.

2044 Expenditures (inflated)	Number of phases	Flexibility	Engineering Data Section	
Lighting - Stairs (1)	1	deferrable	3.421	(\$15,993)
Painting - Garage (1)	1	discretionary	5.571	(\$8,885)
Pavement Replacement - Parking Areas (1)	1	deferrable	6.661	(\$319,866)
Pavers	1	deferrable	6.721	(\$59,086)
Pool and Deck Furniture	1	deferrable	8.401	(\$44,426)

Total expenditures: (\$448,256)

Ending reserve balance: \$531,491



Hybrid Reserve Expenditures and Funding Plan

January 1, 2045 through December 31, 2045

Year of forecast: 28

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2045: 228.8%

Beginning reserve balance: \$531,491

Recommended reserve contribution: + \$147,300

Estimated interest earned (1.2% PROJECTED yield rate): + \$7,055

Total contributions: = \$154,355

Woodbrooke Condominium Owner's Association, Inc.

Number of Engineering Data 2045 Expenditures (inflated) phases **Flexibility** Section Painting - Deck and Gazebo 2.432 (\$6,635)1 firm 3.661 1 deferrable Community Room Renovation (25% every 5 years) (\$21,163) Sign discretionary 6.961 (\$6,635)

Total expenditures: (\$34,433)

Ending reserve balance: \$651,412



Hybrid Reserve Expenditures and Funding Plan

January 1, 2046 through December 31, 2046

Year of forecast: 29

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2046: 235.7%

Beginning reserve balance: \$651,412

Recommended reserve contribution: + \$151,700

Estimated interest earned (1.2% PROJECTED yield rate): + \$7,471

Total contributions:= \$159,171

Woodbrooke Condominium Owner's Association, Inc.

2016 Expanditures (inflated)	Number of		Engineering Data	
2046 Expenditures (inflated)	phases	Flexibility	Section	
Painting - Wood Siding and Balconies	1	firm	2.431	(\$65,984)
Pipes - Domestic Water, Waste and Vent (1)	7	deferrable	4.601	(\$123,888)
Pool Mechanical Equipment - Heater	1	deferrable	8.501	(\$19,559)

Total expenditures: (\$209,431)

Ending reserve balance: \$601,152



Hybrid Reserve Expenditures and Funding Plan

January 1, 2047 through December 31, 2047

Year of forecast: 30

Annual CONSTRUCTION inflation rate: 3.0%

Compounded CONSTRUCTION inflation in 2047: 242.7%

> Beginning reserve balance: \$601,152

Recommended reserve contribution: + \$156,300

Estimated interest earned (1.2% PROJECTED yield rate): + \$6,238

> Total contributions:= \$162,538

Woodbrooke Condominium Owner's Association, Inc.

2047 Expenditures (inflated)	Number of phases	Flexibility	Engineering Data Section	
Doors - Front Entrances	1	deferrable	2.281	(\$81,556)
Windows and Patio Doors - Common	1	deferrable	2.982	(\$14,564)
Pipes - Domestic Water, Waste and Vent (1)	7	deferrable	4.601	(\$127,605)
Concrete Patios (1 of 14 every 5 years)	1	deferrable	6.161	(\$5,825)
Concrete Sidewalks, Drive and Stoops (5% every 5 years)	1	deferrable	6.181	(\$6,311)
Tennis Court Surface Replacement	1	discretionary	6.981	(\$76,459)
Pool Cover	1	deferrable	-	(\$6,554)

Total expenditures: (\$318,873)

> Ending reserve balance: \$444,817



WOODBROOKE CONDO OWNERS ASSN., INC. CASH FLOW STATEMENT 5th month - MAY 2017

	CURRENT	YEAR TO	2017
INCOME.	MONTH	DATE	BUDGET
INCOME: Condo Fees	\$7,495.00	\$37,106.01	\$86,820.00
	\$316.00	\$1,576.25	\$2,700.00
Laundry Income Condo Late Fees	\$145.00	\$530.00	\$500.00
	\$0.00	\$192.00	\$140.00
Bike Parking Rent	되는 그리 아이들은 그 집에 그런 그리 해를 만하게 됐으면 어떻게 되었다.	\$4.50	\$5.00
Interest - Savings	\$1.08		\$100.00
Other Income	\$0.00	\$25.00	
Violation Fines	\$50.00	\$50.00	\$0.00
TOTAL INCOME	\$8,007.08	\$39,483.76	\$90,265.00
EXPENSES:			
#1 Gas	\$96.06	\$639.25	\$3,000.00
#2 Electricity	\$170.69	\$873.99	\$2,700.00
#3 Water	\$1,064.15	\$4,849.38	\$9,500.00
#4 Maintenance	\$1,875.63	\$4,688.69	\$8,000.00
#7 Landscaping	\$193.52	\$193.52	\$4,000.00
#8 Lawn Mowing	\$485.00	\$485.00	\$2,400.00
#9 Pool Expenses	\$0.00	\$440.50	\$7,000.00
#10 Exterminating	\$0.00	\$0.00	\$0.00
#11 Hallway/Yard Cleaning	\$210.00	\$1,166.79	\$2,730.00
#12 Snow Removal	\$0.00	\$672.89	\$2,500.00
#15 Refuse Collection	\$207.00	\$1,012.00	\$2,400.00
#16 Office Expense	\$77.95	\$656.30	\$715.00
#17 Insurance	\$1,068.25	\$5,997.55	\$13,500.00
#18 Business Management	\$250.00	\$1,250.00	\$3,000.00
#18-A Property Management	\$523.75	\$2,443.75	\$5,760.00
#19 Taxes	\$0.00	\$0.00	\$0.00
#20 Misc.	\$57.94	\$64.89	\$500.00
#21 Telephone	\$0.00	\$0.00	\$350.00
#24 Legal fees	\$0.00	\$990.00	\$4,000.00
TOTAL EXPENSES	\$6,279.94	\$26,424.50	\$72,055.00
#22 Reserve/Cap.ImprvBuilding	\$1,343.00	\$11,715.00	\$16,110.00
#23 Reserve-Garage/Carports	<u>\$175.00</u>	<u>\$875.00</u>	<u>\$2,100.00</u>
TOTAL EXPENSES & RESERVE	\$7,797.94	\$39,014.50	\$90,265.00

WOODBROOKE CONDOMINIUM OWNERS', INC. FINANCIAL STATEMENT

MAY 31, 2017

CREDITORS:

- None -

CASH ON HAND:

Checking Account:

\$21,321.83

Reserve Account:

#22 Building Reserve #23 Carport/Garage Reserve

\$24,494.83 \$ 3,670.63

TOTAL

\$28,165.46

Petty Cash Fund

\$75.00

ACCOUNTS RECEIVABLE:

#106

(March bal, April & May)

\$515.00 **

#311

(Feb, Mar, Apr, May)

\$939.00 **

TOTAL

\$1,454.00

VIOLATION FINES:

1 unit (2 violations)

\$650.00

PAID IN ADVANCE:

DINADVANCE			
#109	(10 mo)		\$1460.00
#110	(1 mo)		\$136.00
#112	(8 mo)		\$1440.00
#212			\$142.00
#312	(1 mo)		\$186.00
(7 units)	(1mo)		\$ <u>1267.00</u>
		TOTAL	\$4631.00

CHECKS ISSUED FROM RESERVE FUND - MAY 2017

-None-

^{**} Includes late fees . Both units have privileges suspended.



Summary of Qualifications

Justin J. Maier, P.E., RS
Partner

Services

Justin J. Maier is a partner and co-founder of Superior Reserve Engineering and Consulting. Justin J. Maier provides *expert* reserve and transition studies, and critical property reviews. Properties that have benefited from his experience include townhome associations, condominium associations, planned unit developments, marinas, resorts, hotels, churches and country clubs. These properties vary from complex high rise buildings to vintage buildings of historical significance. He has provided these services to *more than* 1,600 properties throughout the United States and worldwide.



Prior Experience

Prior to co-founding Superior Reserve with Nik J. Clark, Mr. Maier had conducted reserve and transitions studies with Reserve Advisors for 14 years. During this time, he was the Director of Product Development where he oversaw the development, improvement and production efficiency of reserve and transition studies for the firm. He was the leading producer of reserve and transition studies. Mr. Maier was instrumental in improving the quality of reports both in content, clarity and appearance. Reserve Advisors experienced tremendous success based on the standard of reserve and transition study quality that he implemented.

Mr. Maier was a structural engineer for Wausau Window and Wall Systems. There he analyzed stresses in horizontal and vertical components of aluminum frame curtain wall window systems in projects throughout the United States for both wind pressure and suction loads. He was involved in field work to correct improperly installed system components.

Mr. Maier was an Assistant Engineer for Crest Consulting Engineers. His services required on-site field investigation of architectural and structural failures, analysis of the preexisting design and conditions, and determination of the design shortfalls or owner modifications that caused the failures. He designed remedial repairs, produced cost estimates for the repairs, prepared the specifications and oversaw the implementation of the repairs.

Expert Witness

Through the expert witness of Mr. Maier, the Villages at Cumberland Trail in Columbus, Ohio and The Retreat Homeowners Association in Indianapolis, Indiana were able to successfully negotiate a settlement for their construction defects.

Education

Milwaukee School of Engineering (MSOE)

Professional Affiliations

Professional Engineer (P.E.) - licenses held in WI, IL, OH, NY, TX, DC, VA, MD, MI, MN, PA Reserve Specialist (RS) - credential awarded by Community Association's Institute (CAI) Certified Pool / Spa Operator - issued by the National Swimming Pool Foundation



Terms, Conditions and Limitations

- 1) Superior Reserve Engineering & Consulting (SREC) will perform a visual inspection of the property. While due diligence will be exercised during the onsite inspection, we make no representations regarding latent or hidden defects not observable from a visual inspection. We do not conduct invasive or destructive testing nor provide an exhaustive review of building code compliance. Material testing, core sampling, performance testing of building or site elements and equipment is not part of the scope of work.
- 2) Our opinions of estimated costs and remaining useful lives are not a guarantee of the actual costs of replacement, a warranty of the common elements or other property elements, or a guarantee of remaining useful lives.
- 3) SREC may rely on information provided to us, by the client named in this contract, in our report. We assume information provided to us by the client to be correct and assume no liability for the accuracy of information provided to us by the client. You agree to indemnify and hold us harmless against and from any and all losses, claims, actions, damages, expenses or liabilities, including reasonable attorneys' fees, to which we may become subject in connection with this engagement, because of any false, misleading or incomplete information which we have relied upon as 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.
- 4) Our Reserve Study Report in whole or part is not and cannot be used as a design specification, design engineering services or an appraisal.
- 5) Substances such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials could, if present, adversely affect the validity of this study. Unless otherwise stated in this report, the existence of hazardous substance, that may or may not be present on or in the property, was not considered. Our opinions are predicated on the assumption that there are no hazardous materials on or in the property. We assume no responsibility for any such conditions. We are not qualified to detect such substances, quantify the impact, or develop the remedial cost.
- 6) In the event of errors in our report, SREC's liability is limited to the cost of this study.



Balconies - Wood

Materials: wood frames, wood deck boards, wood

railings

Overall condition: fair

Specific condition: weathered wood and wood deterioration

Quantity (square feet): 2,500

Quantity (each): 28

Construction: wood column supported frames

exposed concrete footings (ideal)
missing blocking to stabilize joists
nailed deck boards (high maintenance)
railings utilize vertical pickets (ideal)
toe-nailed connections (high maintenance)

Railing height: 42 inches (proper height)

Railing picket spacing: 5.5 inches edge to edge - 4 inches is

recommended. Replacement will likely require tighter spacing of pickets. Check with local code at the time of replacement.

Cost (\$/square foot): \$49

Cost (\$/each): \$4,400

Current total cost: \$123,200

Cost per home: \$3,080

Operating expenses: annual inspections to repair unsafe

conditions, securing of loose connections, replacement of deteriorated components,

washing with an algaecide

Anticipated expenses: wood deck boards

wood frames wood railings wall flashing wood trellis

Painting: see Page 2.431

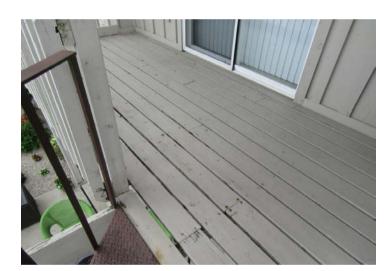
Actionable recommendations: See the Property Engineering Review (Section 1.201) for our observations on the condition of the balconies.



balconies with wood frames, wood deck boards and wood railings



balcony underside



wood deck boards



underside



Deck - Wood

Materials: wood frames, wood deck boards, wood

railings

Overall condition: fair

Specific condition: weathered wood and replaced boards

Quantity (square feet): 1,000

Quantity (each): 1

Construction: wood frame

deck boards fastened with screws (ideal) railings utilize vertical pickets (ideal)

Railing height: 39 inches (proper height)

Railing picket spacing: 3.75 inches edge to edge (proper spacing)

Cost (\$/square foot): \$32

Current total cost: \$31,100

Cost per home: \$778

Operating expenses: annual inspections to repair unsafe

conditions, securing of loose connections, replacement of deteriorated components,

washing with an algaecide

Anticipated expenses: wood deck boards

wood frames wood railings wall flashing wood steps

Coordinate with: replacement of flat roof over garage

Painting: see Page 2.432



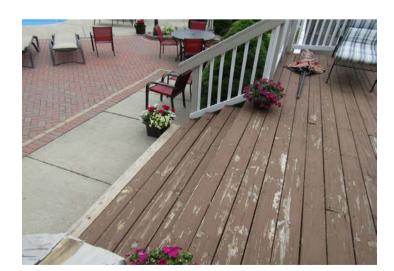
deck with wood frames, wood deck boards and wood railings



replaced deck boards



wood railing



wood steps



Doors - Front Entrances

Locations: front entrances

Door composition: wood

Glass type: dual pane

Overall condition: good

Specific condition: no visible deterioration

Entrances (each): 7

Cost (\$/entrance): \$4,800

Current total cost: \$33,600

Cost per home: \$840

Operating expenses: hardware replacement

Cost includes: doors, frames, hardware, sidelights, transom

windows and address signs

Painting: see Page 2.431



wood common entrance door with sidelights



entrance door



sidelight



upper transom window



Gutters and Downspouts

Material: aluminum

Gutter profile: six-inch seamless K-style

Gutter fasteners: nails

Downspout size: three-inch by four-inch (adequate)

Overall condition: good to fair

Specific condition: leaks and loose brackets

Quantity (linear feet): 1,400

Per home (linear feet): 40

Cost (\$/linear foot): \$7

Current total cost: \$9,800

Cost per home: \$245

Coordinate with: main roof

Assumptions: replace with .027-inch thick aluminum

Operating expenses: semiannual inspections, repairs at seams and

fastening points, cleaning and verification that the downspouts discharge away from

foundations



aluminum gutters and downspouts



repaired gutter leak



gutter interior



loose connections



Masonry Restoration

Construction: 3 by 10 inch masonry units

running bond pattern

mortar joints are tooled concave (ideal)

brick sills (higher maintenance cost)

lintel (note 1) weeps and flashing not visible

Overall condition: good to fair

Specific condition: efflorescence (note 2) is not evident

masonry cracks are not evident mortar deterioration is evident spalled masonry is not evident

lintels exhibit rust

missing caulk at dissimilar materials previous repairs are not evident

Quantity (square feet): 11,000

Per home (square feet): 280

Cost (\$/square foot): \$1.20

Current total cost: \$13,000

Cost per home: \$325

Anticipated work: mobilization

replace lintels (5%)

paint lintels

repoint (note 3) masonry (5%)

caulk windows, doors, control joints (50%)

Actionable recommendations: Differing construction materials expand and contract from outdoor temperature changes at differing rates. Joints between these materials should be caulked. Caulk would flex as these differing materials move but the joint would remain water tight. Caulk is missing at the joints between vinyl siding and masonry veneer throughout the property. The property should caulk these joints in conjunction with masonry restoration.

Engineering solutions: Aluminum cladding was installed over the window lintels. Cladding should not cover the horizontally exposed leg of the lintels. Any storm water within the wall escaping at the lintel is trapped within the wall by the cladding. This will result in accelerated failure of the lintel and leaks. The property should remove the cladding and paint the exposed lintels.

(note 1) Structural supports above openings in masonry that transfer the above weight onto the main structural system.

(note 2) White, powdery deposit of soluble salts carried to the surface of masonry by moisture. The moisture evaporates, leaving the residue.

(note 3) 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. Compact the new mortar in two lifts/layers.



masonry facade with 3 by 10 inch masonry units and running bond pattern



worn mortar joints



rust at lintel



cladding and caulk inappropriately installed over lintel



Painting - Wood Siding and Balconies

Materials to paint: wood siding, wood balconies, metal

staircases and metal carport framing

Overall condition: fair to poor

Specific condition: weathered and peeling paint, and rust at

metal staircases

Current total cost: \$28,000

Cost per home: \$700

Assumptions: two coats (primer for bare areas and paint)

Operating expenses: touch up painting

Components to paint: wood siding

metal carport framing wood balcony railings wood balcony deck boards metal spiral staircases

entrance doors

Components to replace: wood siding (5%)

caulk at windows and doors (50%)



wood siding



paint deterioration



paint deterioration



rust at staircase



Painting - Deck and Gazebo

Material to paint: wood

Overall condition: poor

Specific condition: peeling paint

Current total cost: \$2,900

Cost per home: \$73

Assumptions: two coats (primer for bare areas and paint)

Operating expenses: touch up painting

Components to paint: deck boards

deck railings gazebo

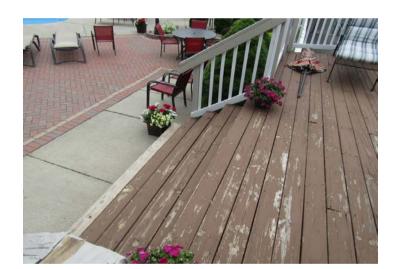
Components to replace: deck boards (5%)



peeling paint at railing



worn paint at deck



worn paint at deck and steps



underside of gazebo



Roof - Asphalt Shingles

Material: asphalt shingles

Roof composition: laminated architectural shingles

Boston style ridge shingles enclosed half weaved valleys metal drip edge (note 1) ridge vents (adequate)

rubber and metal flashing at vent pipes

sealed nail heads (proper)

self adhering underlayment at gutter edge

Overall condition: fair

Specific condition: sheathing undulations, damaged shingles

and fiberglass exposure

Roof pitch (average): 4:12

Quantity in squares(note 2): 200

Quantity also includes: gazebo

Cost (\$/square): \$330

Current total cost: \$66,000

Cost per home: \$1,650

Coordinate with: gutters and downspouts

Operating expenses: semi annual inspections and repairs

Anticipated expenses: total removal of existing roofing (note 3)

sheathing replacement contingency (5%) metal drip edge at roof perimeters lead boot flashing at waste pipes

#15 felt underlayment

self adhering underlayment at roof edges Class A 240-260 pounds/square shingles

rooftop ventilation

bathroom vents discharge through roofs

Engineering solutions: See the Property Engineering Review (Section 1.201) for our observations on the condition of the roofs.

(note 1) Metal flashing at the perimeter of the roof that directs water away from the structure. The absence of this roofing component increases the likelihood of water infiltration.

(note 2) One square equals 100 square feet.

(note 3) Benefits of total replacement (rather than overlay/shingle over) include: 1) replacement of deteriorated sheathing, and proper flashing at penetrations and roof perimeters 2) ensuring the new shingles will lay properly 3) ensuring the useful life of the new shingles will not be diminished due to continued deterioration of underlying shingles 4) cost of removal will not be deferred to future budgets



roof with asphalt shingles



self adhering underlayment at gutter edge



shingle overview



fiberglass exposure



damaged shingles and fiberglass exposure



ridge vent without wind baffles



unsecured flashing - semiannual inspections to address these conditions



damaged shingles and fiberglass exposure



damaged shingles and fiberglass exposure



damaged shingles and fiberglass exposure



scuffed shingles



gazebo roof



Roof - Carport

Material: metal panels

Overall condition: fair

Specific condition: rust and damaged panels

Quantity in squares(note 2): 20

Cost (\$/square): \$970

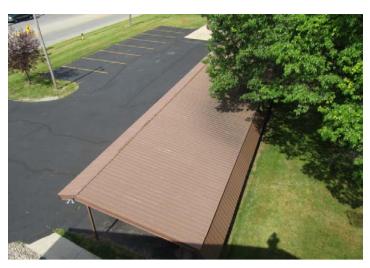
Current total cost: \$19,000

Cost per home: \$475

Anticipated expenses: total removal of existing roofing

metal drip edge at roof perimeters

1-3/4" standing seams, 10" wide, 24 gauge



roof with metal panels



rust at metal



damaged panels



damaged panels



Siding - Vinyl

Material: vinyl

Profile: ribbed

J channel (note 1): exists at windows, doors and other

penetrations (proper)

Gap between siding & roof: does not exist (note 2)

Overall condition: good to fair

Specific condition: weathering and minor damage

Quantity (square feet): 9,000

Quantity also includes: garage

Per home (square feet): 230

Cost (\$/square foot): \$4.70

Current total cost: \$42,300

Cost per home: \$1,058

Coordinate with: soffits and fascia

Operating expenses: cleaning, securing/replacement of loose

pieces

Anticipated costs: remove siding

install building paper

replacement with .042-inch thick vinyl siding



vinyl siding with ribbed profile



vinyl siding



siding at entrance



minor damage

(note 1) Trim that conceals the thermal expansion and contraction of siding at end joints. Caulk would typically fail at these locations due to the excessive movement of the siding.

(note 2) The siding at the entrances is in direct contact with the roof. This condition impedes drainage and makes replacement of the shingles more difficult. The Vinyl Siding Institute recommends a 1/2" gap at these locations. It is our opinion that repairs to these conditions are not necessary at this time. Future repairs and replacement should following the guidelines set by the Vinyl Siding Institute: http://www.vinylsiding.org



Siding - Wood

Material: wood

Profile: board and batten

Flashing at openings: does not exist

Overall condition: fair

Specific condition: wood rot and weathering

Quantity (square feet): 4,000

Per home (square feet): 100

Cost (\$/square foot): \$9.00

Current total cost: \$36,000

Cost per home: \$900

Painting: see Page 2.431

Anticipated costs: remove siding

install building paper

replace w/ cedar lap, 6" painted wood siding

initial painting

Engineering solutions: Flashing is missing above the wood trim above the balcony doors. Flashing would collect any water that gets behind the siding, trim or windows and direct it back to the exterior. The lack of flashing results in accelerated wood and window deterioration, and increases the potential for water infiltration. Flashing should be installed at the time of replacement.



wood siding with board and batten profile



wood siding at garage



missing flashing



wood siding



Soffits and Fascia - Aluminum

Material: aluminum

Ventilation type: vented soffits (100%)

Ventilation status: adequate

Overall condition: good

Specific condition: no visible deterioration

Quantity (square feet): 1,900

Per home (square feet): 50

Cost (\$/square foot): \$11.00

Current total cost: \$20,900

Cost per home: \$523

Coordinate with: vinyl siding

Operating expenses: securing/replacement of loose pieces,

clearing vents

Anticipated costs: remove soffits and fascia

install vented .020" thick aluminum soffit

intall .032 inch fascia cladding remove and reinstall gutters



aluminum soffits and fascia



vented soffits (100%)



soffit and fascia



soffit and fascia



Windows and Patio Doors - Common

Characteristics: vinyl window and door frames

dual pane glass

sweep-type weatherstripping

sliding windows

screens

sliding doors

decorative muntins

Overall condition: good

Specific condition: no visible deterioration

Quantity (square feet): 100

Quantity (each): 7

Locations of common

windows and doors: community and storage rooms

Cost (\$/square foot): \$55

Average cost (\$/each): \$800

Current total cost: \$6,000

Cost per home: \$150

Operating expenses: replacement of hardware



vinyl frame, dual pane glass, sliding window



window frame



sliding door with decorative muntins



door frame



Carpet - Stairs

Locations: stairs and exterior of D entrance

Description: broadloom loop pile carpet

Patterned layout: no

Carpet pad: no

Overall condition: fair to poor

Specific condition: frays, wear, stains and unraveling

Quantity (square yards): 200

Per home (square yards): 5

Cost (\$/square yard): \$45

Current total cost: \$9,000

Cost per home: \$225

Assumptions: medium traffic weight nylon carpet of 36

ounces of fiber per square yard

Operating expenses: vacuuming, spot removal and periodic

cleanings

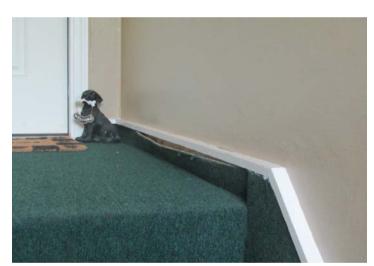
Engineering solutions: The carpet is deteriorated and at the end of its useful life. For carpet replacement: 1) Use a nylon fiber as it is durable, resilient and stain resistant. 2) Berber (loop) or angle cut piles with woven patterns are ideal for high traffic areas. 3) Mid tone colors are ideal to hide traffic patterns and stains.



broadloom loop pile carpet typical of the stairs



stains



loose carpet



wear



Lighting - Stairs

Location: stairs

Mounted on: wall

Bulb type: fluorescent

Overall condition: satisfactory

Average light level (lux): 180 (200 is ideal)

Quantity (each): 40

Cost (\$ each): \$180

Current total cost: \$7,200

Cost per home: \$180

Assumptions: reuse of existing wiring

Operating expenses: bulb replacement, recessed light fixtures

Green ideas: The stairwell lights operate continuously. Consider installing occupancy sensors to minimize fixture operation or installing light dimmers to minimize energy use during off peak hours. For safety reasons, maintain a minimum light level all times. Our experience indicates properties typically have one out of three lights operate continuously and the remaining two are on sensors. Check with local code for specific requirements.

Green ideas: The stairwell lights operate even when daylight is available. The property should install daylight controls, which automatically shut off lights when enough ambient light exists, to maximize daylight use, minimize electrical use while still maintaining lighting level requirements (potential savings of up to approximately 50% annually). A less costly option is to install light bulbs with daylights sensors: https://www.amazon.com/Photosensor-Detection-Outdoor-Lighting-630Lumens/dp/B01LW4JUW2.



lighting typical of the stairs



fluorescent bulb



light operating during daylight



Mailboxes

Locations: lobbies

Manufacturer: **Bommer**

Size: 16 inches x 5 inches

Overall condition: good to fair

Specific condition: minor wear

Quantity (each): 40

Cost (\$/box): \$100

Current total cost: \$4,000

Operating expenses: lock replacement, refinishing



mailboxes



Painting - Stairwells

Number of stairwells: 7

Overall condition: good

Specific condition: no visible deterioration

Average cost per stairwell: \$3,500

Current total cost: \$24,500

Cost per home: \$613

Cost also includes: removing wallpaper

Operating expenses: interim paint touch ups and wall repairs

Surfaces to paint: walls

> ceilings floors railings doors

Actionable recommendations: The interior stairwell railings do not have pickets/balusters. This is a safety hazard as small children could fall through the railings to the floor below. The property should consider the installation of balusters placed at four inches on center for the entire length of the railings.



stairwell paint



missing balusters at railing



missing balusters at railing



Community Room Renovation

Area (square feet): 1,200

Overall condition: good to fair

Specific condition: carpet wear and ceiling tile stains

Average light level (lux): 110 (200 is ideal)

Cost per square foot: \$31

Current total cost (note 1): \$37,000

Cost per home: \$925

Operating expenses: interim replacements, painting

Anticipated expenses: carpet (110 square yards)

paint (2,500 square feet)

ceiling tiles and grid (170 square feet)

vinyl flooring (20 square yards)

lighting rest room stools

exercise equipment

kitchenette

pictures/decorations

sofas tables

Green ideas: Install motion sensors on the community, storage and mechanical room light switches to minimize fixture operation. Motion sensing light switches are inexpensive: http://www.homedepot.com/b/Electrical-Dimmers-Switches-Outlets-Motion-Sensors/N-5yc1vZc32r/Ntk-Extended/Ntt-light+switch?Ntx=mode+matchpartialmax&NCNI-5.



community room



community room



laundry room



rest room

(note 1) Total renovation of the room during a single event is unlikely. Instead, we assume periodic partial renovations.



Tile - Stairs

Location: stairs

Material: ceramic tile

Tile size: 8 inch by 8 inch

Floor to wall transition: tile

Overall condition: good

Specific condition: no visible deterioration

Quantity (square yards): 50

Cost (\$/square yard): \$340

Current total cost: \$17,000

Cost per home: \$425

Operating expenses: regrouting

Assumptions: glazed, thin set ceramic tile



8 inch by 8 inch tile typical of the stairs with tile transition at floor to wall



tile in stairs



Furnace - Community Room

Manufacturer: Trane

Furnaces: 1

Locations served: community room

Heating source: gas-fired

Heating capacity in MBH

(note 1): 80

Efficiency: 90%

Operational condition: satisfactory

Physical condition: no visible deterioration

Current total cost: \$2,700

Cost per home: \$68

Operating expenses: interim repairs and component replacements

Green ideas: We recommend the installation of an occupancy sensing thermostat to minimize operation of the heating system when the community room is unoccupied:

http://www.rciautomation.com/thermostat_occupancy.htm.



Trane furnace



thermostat



Intercom System Panels

Manufacturer: *Aiphone*

Quantity (each): 7

Locations: front entrances

Operational condition: satisfactory

Physical condition: no visible deterioration

Cost each: \$1,200

Current total cost: \$8,400

Cost per home: \$210



Aiphone intercom system panel



Laundry Washers and Dryers

Speed Queen Manufacturer:

Number of washers (each): 2

Number of dryers (each): 2

Dryer heat source: natural gas

Dryer exhaust source: exterior wall

Equipment grade: commercial

Location of equipment: community room

Operational condition: satisfactory

Physical condition: minor aging

Cost each: \$1,300

Current total cost: \$5,200

Cost per home: \$130

Operating expenses: interim replacement of belts and other

components



laundry equipment



Pipes - Domestic Water, Waste and Vent

Pipe purpose: supply domestic cold water, convey waste

water, vent plumbing fixtures

Locations: in plumbing chase behind wall finishes

Pipe materials: copper for domestic, and steel/cast iron for

waste and vent

Insulation: uninsulated

Functional condition: satisfactory

Reported condition: no known deficiencies

Current total cost: \$368,000

Cost per home: \$9,200

Cost also includes: basic wall finishes, pipe insulation, valves

Operating expenses: interim replacements

Engineering solutions: With the exception of isolated locations, the pipes are not visible. Even if these pipes were visible, the interior condition of the pipes (which is not visible) determines their remaining useful life. Therefore, we determine the condition and anticipated replacement times of the pipes based on interviews with individuals at the property, the age of the building, and our expertise with many other properties of similar age and plumbing systems.



copper piping



waste pipe



cold water supply pipe



copper piping



On-Grade Concrete Floor Renovation

Floor type: on-grade concrete

Overall condition: fair

Specific condition: cracks, worn concrete and wall leaks

Floor area (square feet): 3,000

Current total cost (note 1): \$7,000

Cost per home: \$175

Operating expenses: sealer application (only if desired), interim

repairs, cleaning

Anticipated expenses: concrete crack repairs

replace on-grade concrete (2%) epoxy injection of wall leaks floor drain replacement

drain pipe replacement (20%)

stripe parking areas



on-grade concrete



cracked concrete



cracked concrete



wall leak

(note 1) On-grade garage concrete has a useful life of up to 100 years. Replacement of all the concrete during a single event is unlikely. Instead, we assume periodic replacements of limited quantities.



Door and Operator - Garage

Doors (each):

Door material: metal

Operator manufacturer: LiftMaster

Operational condition: satisfactory

Physical condition: no visible deterioration

Current total cost: \$4,500

Cost per home: \$113

Operating expenses: interim operator and panel replacements



metal garage door



LiftMaster door operator



Painting - Garage

Painted surfaces walls and ceiling

Surface area (square feet): 5,000

Overall condition: good to fair

Specific condition: skewed wall at door

Cost (\$/square foot): \$0.80

Current total cost: \$4,000

Cost per home: \$100

Operating expenses: cleaning, touch up painting

Actionable recommendations: Sheathing and bracing is missing on the garage wall with the doors. Skewing of the wall is evident. When replacement of the siding occurs, the property should install a metal brace and sheathing on the wall to prevent racking/leaning of the wall.



painted surfaces in garage



painted surfaces



painted surfaces



missing bracing and leaning wall evident



Roof - Garage

Material: EPDM

Scheduled inspections: recommended semiannually

Overall condition: fair

Specific condition: standing water and missing drain screen

Leaks: a history of leaks but none are active

Quantity in squares (note 1): 30

Cost (\$/square): \$700

Current total cost: \$21,000

Operating expenses: semiannual inspections and any necessary

repairs

Anticipated expenses: remove existing roofing (note 2)

replace roof deck insulation (1.5")

replace flashing

45 mils sheet EPDM roofing

replace gutters and downspouts (70 I.f.)

Coordinate with: deck



EPDM roof overview



standing water



missing drain screen



roof edge

(note 1) One square equals 100 square feet.

(note 2) Benefits of total replacement (rather than overlay) include: 1) repairs to any damage to the underlying substrate, correction of standing water, and proper flashing at penetrations and roof perimeters 2) ensuring the new roofing material will lay properly 3) ensuring the useful life of the new roofing will not be diminished due to continued deterioration of underlying roofing 4) cost of removal will not be deferred to future budgets



Patios

Material: concrete

Overall condition: good to fair

Specific condition: replaced concrete and minor cracks

Locations: rear of building

Quantity (each): 14

Area each (square feet): 210

Cost (\$/each): \$2,400

Current total cost (note 1): \$33,600

Assumptions: 4-inch thick, 3,000 psi replacement concrete

with 6x6 - W1.4xW1.4 steel reinforcing mesh

Operating expenses: interim replacements of deteriorated slabs,

slab jacking

Coordinate with: concrete sidewalks, drive and stoops



concrete patio



minor crack - no action necessary



minor crack - no action necessary



Sidewalks, Drive and Stoops

Material: concrete

Overall condition: good

Specific condition: no visible deterioration

Locations: throughout property

Length (linear feet): 1,000

Quantity (square feet): 6,000

Per home (square feet): 140

Cost (\$/square foot): \$8.70

Current total cost (note 1): \$52,000

Assumptions: 4-inch thick, 3,000 psi replacement concrete

with 6x6 - W1.4xW1.4 steel reinforcing mesh

Operating expenses: marking of trip hazards, interim

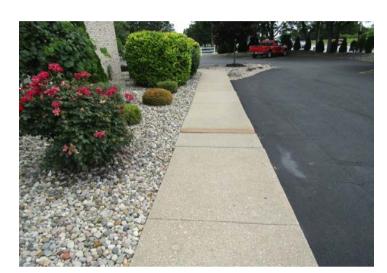
replacements of deteriorated sections, slab jacking (pumping grout under sections to lift

them)

Coordinate with: concrete patios



concrete sidewalks



concrete sidewalks



concrete driveway



concrete stoop

(note 1) Concrete has a useful life of up to 60 years. Replacement of all the concrete during a single event is unlikely. Instead, we assume periodic replacements of limited quantities.



Fences and Railings - Metal

Material: metal

Locations: atop tennis court and garage wall

Fence profile: vertical picket

Manufacturer: Ultra

Overall condition: good to fair

Specific condition: minor weathering

Quantity (linear feet): 200

Cost (\$/linear foot): \$34

Current total cost: \$7,000

Cost per home: \$175

Actionable recommendations: We observed depressions where the railings mount in the concrete. These depressions allow for standing water and accelerated deterioration of the paint finish and railings themselves. Fill in depressed areas at railing mounts with caulk to prevent standing water and premature deterioration of the railings.



vertical picket metal fence atop tennis court



metal fence



metal fence/railing



void at railing mount



Landscape

Location served: entire site

Landscaped acreage: 1.1

Estimated cost (note 1): \$60,000

Cost per home: \$1,500

Operating expenses: mowing, trimming, flowers, sod, stones, etc.

Assumptions: We base our tree replacement cost on

removal of the existing tree and replacement with a balled and burlapped tree, 8'-10' in

height, 1" caliper.

Components: trees

bushes

repairs to catch basins in landscape areas

putting green

retaining walls (excluding tennis court)



landscape



landscape and retaining wall



putting green



landscape

(note 1) Replacement of all the landscape in a single event is unlikely. Instead, we include an allowance for periodic partial replacements.



Light Poles and Fixtures - Front Parking

Pole material: wood

Quantity of poles (each): 3

Pole height (feet): 20

Fixture material: metal

Quantity of fixtures (each): 5

Overall condition: satisfactory

Specific condition: weathering

Location: front parking

Current total cost: \$11,700

Cost per home: \$293

Assumptions: reuse of existing subterranean electrical

supply wiring and footings

Operating expenses: bulb replacement



wood light pole with metal light fixture



light fixture



Light Poles and Fixtures - Pool

Pole material: metal

Quantity of poles (each): 4

Pole height (feet): 8

Fixture material: metal

Quantity of fixtures (each): 12

Overall condition: good

Specific condition: no visible deterioration

Location: pool

Cost (\$/each): \$1,600

Current total cost: \$6,400

Cost per home: \$160

Assumptions: reuse of existing subterranean electrical

supply wiring and footings

Operating expenses: painting, bulb replacement



metal light pole with metal light fixture



metal light pole with metal light fixture



light fixtures



Pavement - Crack Repair, Patch, Seal Coat and Stripe

Seal coat condition: fair

Specific condition: cracks and settlement

Location: parking areas

Quantity (square yards): 3,600

Per/home (square yards): 90

Total cost (\$/square yard): \$1.90

Crack repair & patch cost: \$2,600

Seal coat and stripe cost: \$4,300

Total cost per home: \$173

Assumptions: asphaltic emulsions type seal coat, repair all

open cracks and patch deteriorated

pavement

Anticipated costs: crack repair

patch (1%) seal coat

stripe parking areas

repairs to catch basins (1 each)

Green ideas: The property has seal coated the asphalt pavement in the past. It is our professional opinion that seal coating asphalt pavement does not extend the useful life of the pavement. Seal coats do not add structural strength to the pavement. Seal coating is also a source of environmental contamination. Many properties opt to save money by *not* seal coating their pavement. If the property decides to seal coat for aesthetic reasons, avoid the use of coal tar based pavement seal coats as they pollute waterways. Instead, consider a slurry coat of asphaltic emulsion to provide a sacrificial wearing surface to the pavement. Also, if the property chooses to seal coat, we recommend applying the seal coat in the spring rather than the fall. Snow removal equipment wears the seal coat. Application in the spring will provide the maximum visual enjoyment from a fresh seal coat.



pavement overview



cracks throughout



repaired and unrepaired cracks



cracked pavement



Pavement Replacement - Parking Areas

Material: asphalt

Overall condition: fair

Specific condition: cracks, settlement and poor drainage

Location: parking areas

Quantity (square yards): 3,600

Per home (square yards): 90

Quantity of catch basins: 1

Square yards of pavement

per catch basin:

3,600 (excessive amount of pavement per drain will result in poor drainage, standing

water and premature pavement

deterioration)

Repaving method: replacement

Cost (\$/square yard): \$40

Current total cost: \$144,000

Cost per home: \$3,600

Anticipated costs: remove pavement, regrade & augment base

install 4 inches of new pavement repairs to catch basin (1 each)

stripe parking areas

Actionable recommendations: The single catch basin in the pavement is insufficient to collect storm water resulting in water being shed to the edges of the pavement. This uncontrolled collection and discharge of storm water results in standing water and accelerated deterioration of the pavement. The property could consider the installation of French drains at the edges of the pavement to allow storm water to quickly percolate into the ground.



asphalt pavement at parking areas



pavement overview



evidence of standing water - consider a French drain at this location



pavement overview



Pavers

Material: masonry

Installation method: dry set

Pattern: herringbone

D entrance, garage driveway and pool deck Locations:

Quantity (square feet): 1,400

Overall condition: good

Specific condition: no visible deterioration

Cost (\$/square foot): \$19

\$26,600 **Current total cost:**

Cost per home: \$665

Operating expenses: interim resetting, partial replacements



herringbone pattern dry set masonry pavers



pavers at pool deck



pavers at driveway



pavers at D entrance



Retaining Wall - Tennis Court

Material: concrete

Overall condition: poor

Specific condition: leaning wall and cracks in concrete

Quantity (linear feet): 150

Cost (\$/linear foot): \$336

Current total cost: \$50,000

Cost per home: \$1,250

Engineering solutions: The retaining wall at the tennis court has a significant lean. We observed that the grade behind the wall is sloped towards the wall resulting in storm water being directed to the wall. Although weep holes exist at the base of the wall they are likely not functional. This results in a build-up of hydrostatic pressure behind the wall that cannot be relieved and causes the wall to lean under the pressure. A repair to stabilize the condition could be to install drain tile atop the wall to collect any water on the surface and direct it around the wall; however, it is our professional opinion that the condition of the wall is such that permanent repairs are necessary. Repairs to the wall will require the following:

- removal of the fence, landscape and staircase
- excavation behind the wall to a depth that will allows the wall to be straightened
- straighten and repair the wall
- install drainage system behind the wall
- backfill with non-compressing fill
- reinstall the fence, landscape and staircase



leaning wall



crack in concrete



grade pitched towards wall



grade pitched towards wall



Sign

Material: wood and composite

good to fair Overall condition:

Specific condition: weathered wood

Current total cost: \$2,900

Cost per home: \$73

Operating expenses: painting



sign



weathered wood



Tennis Court

Number of courts (each): 1

Surface material: asphalt

Play area (square yards): 800

Fence material: chain link

Fence length (linear feet): 180

Overall condition: poor

Specific condition: cracks and poor drainage

Color coat cost: \$6,900

Fence cost: \$7,900

Surface cost: \$31,500

Combined cost: \$46,300

Combined cost per home: \$1,158

Operating expenses: nets



asphalt court



cracks in pavement



asphalt atop concrete slab



chain link fence



Pool Finish - Vinyl

Finish type: vinyl

Horizontal surface area

(square feet): 1,200

Pool capacity (gallons): 48,000

Minimum pool depth (feet): 3 feet 0 inches

(complies with industry standard)

Surface water removal type: skimmers

Overall condition: good to fair

Specific condition: peeling paint, warped vinyl, cracks in deck

concrete and leak repairs in process

Cost (\$/square foot): \$15

Current total cost: \$17,800

Cost per home: \$445

Operating expenses: interim painting if desired

Anticipated expenses: removal of the existing finish

install new vinyl light replacement skimmer repairs deck repairs



pool overview



minor crack in deck concrete



peeling paint



warped vinyl



Pool and Deck Furniture

Overall condition: good

Specific condition: no visible deterioration

Current total cost: \$20,000

Cost per home: \$500

Furniture includes: metal frame lounges

metal frame tables metal frame chairs

umbrellas

grills

trash receptacles

fire pit



pool furniture



pool furniture and fire pit



lounges



deck furniture



Pool Mechanical Equipment

Filter pressure (psi): 10-20 (ideal)

Overall condition: satisfactory

Specific condition: no known deficiencies

Current total cost (note 1): \$11,800

Cost per home: \$295

Operating expenses: interim pump rebuilding, filter media

replacement, water treatment equipment,

electrical panel and valves

Equipment: heater (1)

pump less than 5 HP (1)

filter (1)

Actionable recommendations: The pool equipment room does not have an exhaust fan. This results in damp conditions and chemical smells in the air that cause accelerated deterioration of metal components in the room. The property should consider the installation of an exhaust fan.

Green ideas: The pool pump operates at a constant speed. When replacement comes due, replace the pool pump with a variable speed drive to minimize operational costs, provide a constant pressure and maximize the useful life of the pump. Preventing too high flow rates will also ensure proper filtration and minimize damage to the filter.

Engineering solutions: Periodic backwashing of the pool filter is necessary to flush accumulated filtered material. Although necessary, this process is wasteful as it discharges the chemically treated and heated pool water. To ensure only the proper amount of water is flushed, a sight glass is critical at the filter to visually monitor the condition of the water being flushed. Backwashing is stopped once the water is clear. A sight glass is not present at the filter. We assume the filter is backwashed for a timed interval rather than based on the visual condition of the water. This could result in either inadequate or excessive backwashing. We recommend the installation of a sight glass to observe the condition of the water being backwashed.



filter and heater



pool pump



Pool Structure

Structure type: concrete

Horizontal surface area

1,200 (square feet):

Pool capacity (gallons): 48,000

Overall condition: good

Specific condition: leak repairs in process

Current total cost: \$180,000

Cost per home: \$4,500

Anticipated expenses: concrete deck

pool structure

piping



pool and deck overview



pool and deck overview