SUPERIOR RESERVE
ENGINEERING & CONSULTING
888-688-4560
www.superiorreserve.com

Full Reserve Study

University Woods Condominium Owners' Association, Inc.

Fairborn, Ohio

March 30, 2015

April 9, 2015

University Woods Condominium Owners' Association, Inc.

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Reserve Component List

	Pages With Engineering Data	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
Exterior Building Components											
Gutters and Downspouts	2.361	2020	N/A	25	5	$29,600	100%	$29,600	3	$9,867	deferrable
Roof - 2085-2091 Chapel	2.441	2022	N/A	25	7	$7,480	100%	$7,480	1	$7,480	firm
Roof - 2095-2101 Chapel	2.441	2018	2002	25	3	$7,480	100%	$7,480	1	$7,480	firm
Roof - 2105-2109 Chapel	2.441	2016	N/A	25	1	$5,780	100%	$5,780	1	$5,780	firm
Roof - 2113-2117 Chapel	2.441	2016	N/A	25	1	$5,780	100%	$5,780	1	$5,780	firm
Roof - 2123-2127 Chapel	2.441	2039	2014	25	24	$5,780	100%	$5,780	1	$5,780	firm
Roof - 2131-2135 Chapel	2.441	2017	1999	25	2	$5,780	100%	$5,780	1	$5,780	firm
Roof - 2141-2145 Chapel	2.441	2019	2003	25	4	$5,780	100%	$5,780	1	$5,780	firm
Roof - 2149-2153 Chapel	2.441	2021	2003	25	6	$5,780	100%	$5,780	1	$5,780	firm
Roof - 2161-2167 Chapel	2.441	2020	2003	25	5	$7,480	100%	$7,480	1	$7,480	firm
Roof - 2173-2181 Chapel	2.441	2020	2003	25	5	$9,180	100%	$9,180	1	$9,180	firm
Roof - 2130-2132 Chapel	2.441	2039	2014	25	24	$5,900	100%	$5,900	1	$5,900	firm
Roof - 2148-2150 Chapel	2.441	2019	2001	25	4	$7,820	100%	$7,820	1	$7,820	firm
Roof - 2160-2162 Chapel	2.441	2023	2003	25	8	$7,820	100%	$7,820	1	$7,820	firm
Roof - 2172-2174 Chapel	2.441	2023	2003	25	8	$7,820	100%	$7,820	1	$7,820	firm
Roof - 410-412 White Ash	2.441	2019	2003	25	4	$7,820	100%	$7,820	1	$7,820	firm
Roof - 411-413 White Ash	2.441	2023	2003	25	8	$6,460	100%	$6,460	1	$6,460	firm
Roof - 419-421 White Ash	2.441	2039	2014	25	24	$6,460	100%	$6,460	1	$6,460	firm
Roof - 427-429 White Ash	2.441	2022	N/A	25	7	$6,460	100%	$6,460	1	$6,460	firm
Siding - Wood (replace with vinyl)	2.761	2018	original	35	3	$46,400	100%	$46,400	2	$23,200	firm
Siding - Aluminum (replace with vinyl)	2.762	2020	original	35	5	$144,300	100%	$144,300	4	$36,075	deferrable
Siding - Vinyl	2.763	2043	2008	35	28	$72,400	100%	$72,400	3	$24,133	deferrable
Site Components											
Concrete Sidewalks, Driveways, Aprons (5% every 5 years)	6.181	2016	N/A	5	1	$95,800	5%	$4,790	1	$4,790	deferrable
Fences - Wood (initial painting only)	6.281	2015	N/A	30	0	$9,000	100%	$9,000	1	$9,000	firm
Fences - Wood (replacement)	6.281	2044	2014	30	29	$24,000	100%	$24,000	1	$24,000	deferrable
Fences - Vinyl	6.282	2025	2005	20	10	$12,000	100%	$12,000	1	$12,000	deferrable
Foundation Grading and Repairs (see Property Engineering Review)	6.287	2015	original	5	0	$5,000	100%	$5,000	1	$5,000	deferrable
Pavement Crack Repair and Patch	6.641	2019	2015	4	4	$2,900	100%	$2,900	1	$2,900	firm
Pavement Seal Coat (2015)	6.641	2015	original	N/A	0	$2,640	100%	$2,640	1	$2,640	discretionary
Pavement Seal Coat and Striping (2019 and beyond)	6.641	2019	2015	4	4	$5,300	100%	$5,300	1	$5,300	discretionary
Pavement Total Replacement (good)	6.661	2034	2014	20	19	$60,000	100%	$60,000	1	$60,000	deferrable
Pavement Total Replacement (fair)	6.662	2026	2006	20	11	$18,100	100%	$18,100	1	$18,100	deferrable
Pavement Total Replacement (poor)	6.663	2015	original	20	0	$17,440	100%	$17,440	1	$17,440	deferrable
Retaining Walls - Masonry (recently replaced)	6.901	2045	2015	30	30	$7,400	100%	$7,400	1	$7,400	deferrable
Retaining Walls - Dated Sections	6.902	2016	original	30	1	$4,900	100%	$4,900	1	$4,900	deferrable

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University Woods Condominium Owners' Association, Inc.

Property and Service Summary

Location:	Fairborn, Ohio
Property type:	townhome condominium
Number of buildings:	18
Number of units:	51
Number of stories:	3
Year of construction:	1983
Date of inspection:	March 30, 2015
Reference number:	140579
Type of service:	reserve study
Level of service:	Full Study
Length of analysis:	30 years
Exterior features:	vinyl siding, aluminum siding, wood siding, brick veneer, asphalt shingle roofs
Site features:	asphalt driveways and parking areas, retaining walls, fences
Completed projects:	roof replacements, vinyl siding replacement at five buildings, repaving of a portion of the asphalt driveways and parking areas, wood fence replacement, replacement of a portion of the retaining walls
Upcoming projects:	continued roof replacements, replacement of the remaining aluminum and wood siding with vinyl siding, repaving the remaining asphalt driveways and parking areas, replacement of remaining retaining walls

front elevation

front elevation

rear elevation

rear elevation

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 metal lintels that support the brick over window and door openings are rusted. Rust causes expansion of the metal and damage to the brick. Association should remove the rust, apply a primer and paint the metal lintels in the near term, and fund this expense through the operating budget.

Rust at metal lintel

A portion of the shutters have four fasteners per panel while others have six. We recommend six fasteners at all shutter panels.

We observed undermining of stoops and sidewalks throughout the property. Remediation of this condition requires pumping grout under the concrete to provide support to the stoops and sidewalks.

Undermined stoop at 2153 Chapel

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):

We note light fixtures that operate during the daylight. Homeowners should replace the fixtures with daylight sensors for automated shut off during the day to minimize unnecessary energy usage.

For increased energy efficiency, consider installing insulated siding at the time of siding replacement.

A portion of the fixtures at the site poles use inefficient incandescent bulbs. Replace incandescent bulbs with fluorescent bulbs to save approximately $39 in electrical usage annually per fixture (based on 10 hours of operation per day for 3 bulbs and an electrical rate of $0.08 per kilowatt hour).

Light operating during daylight

It is our professional opinion that seal coating asphalt pavement is primarily for aesthetics and does not extend the useful life of the pavement. *Seal coats do not add structural strength to the pavement.* Also, seal coating is a source of environmental contamination. If the Association 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.

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):

The downspouts discharge too high off the ground. This condition results in excessive splashing, soil compaction and erosion. In addition, the downspouts discharging at the foundations increase the potential for water infiltration into the unit basements. We recommend the installation of subterranean downspout extensions that discharge 10 feet away from the buildings through pop-up drainage emitters in the landscape areas. The Association should consider this improvement at the time of gutter and downspout replacement, but earlier in problematic areas.

Proper construction of masonry walls assumes that a certain amount of water will penetrate completely through the masonry. Building paper behind the masonry stops the water from accessing the building substrate. As the water flows down the building paper, 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 three of these materials (building paper, flashing, 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 the masonry deteriorates prematurely or if there are reports of leaks at windows and doors in masonry surrounds.

Each unit is side to side with an adjacent unit. Our experience suggests a fire wall separates the units to prevent a fire from jumping from one unit to the next. This fire wall should continue through the attic and up to the roof. Fire rated plywood should then be used on both sides of the fire wall. We note locations where the ridge vent is properly not continuous across the ridge. This ensures the fire wall is not breached. However, we also note locations where the ridge vent is continuous across the units. Roof replacements should repair this breach in the plywood and the ridge vent should be installed approximately two feet away on either side of the fire walls.

For roof replacement: 1) Use self-adhering underlayment at roof gutter edges and valleys. 2) Use metal W valley flashing (rather than weaved shingles) to maximize the useful life of shingles in valleys. 3) Use lead flashing at waste pipes to minimize future maintenance costs. 4) Install metal drip edge around the entire perimeter of roofs. The drip edge discharges storm water away from the buildings and helps secure the fascia.

The siding throughout the property 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. Vinyl siding installation should following the guidelines set by the Vinyl Siding Institute: http://www.vinylsiding.org

Siding is an exterior cladding that is not watertight. Water-vapor permeable building paper is necessary to prevent water from contacting sheathing and interior finishes. The lack of building paper increases the potential for water infiltration, and damage to the underlying sheathing and framing. Vinyl siding installation should include installation of building paper.

The recently replaced fence appears well built with steel posts and ideally without toe-nailed connections.

The grade behind 2109 Chapel has settled and eroded towards the stream to the west. This is noted by increased foundation and electrical conduit exposure, and slight erosion of the sod. The minor crack in the basement wall may be attributed to this condition as well. Remediation will require stabilization of the grade adjacent to the stream and backfilling the lost soil. The Association should contact the government agency responsible for the stream (likely the Army Corps of Engineers) for possible remediation of this condition.

Units 2161-2167 Chapel report water seepage into their units. We note inadequate grading away from the building perimeter to promote drainage. We also note grading that is too high up on the building, resulting in blocked vents and siding in contact with landscape. We recommend a slight swale approximately 10 feet around the perimeter of the building to promote drainage. We recommend a slope of approximately two percent towards the swale. Drain tile connected to French drains in the swale would allow water to percolate into the ground.

Crack repair all joints and patch potholes in the pavement to prevent water infiltration. This will minimize deterioration to the pavement and underlying base.

The catch basin at 410-412 White Ash is inadequate for drainage of the pavement resulting in flooding of the adjacent garage. The exit drain pipe in the catch basin is atypically high in the basin resulting in minimal, if any, storage of water in the basin as it accumulates to exit. The Association should consider installation of a larger drain pipe to be done in conjunction with the replacement of the utility pipes in the adjacent berm by the utility company. The Association should also consider installation of a French drain in the pavement adjacent to the garage that floods and additional French drains in the landscape area. Regrading of the pavement and installation of slight asphalt curbs at the time of repaving should direct storm water to the proposed drains in the landscape area.

The recently replaced masonry retaining walls do not include drainage systems to relieve hydrostatic pressure from behind the walls. Since these walls are relatively short and are not retaining much soil, we suspect that this will not be an issue. However, the Association should monitor the walls for

movement and water stains. Renovating the walls to include a drainage system will be necessary if these conditions appear.

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 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/5311.081

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 systems
- foundations
- pipes within the building walls and subsurface
- 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:

- brick veneer facades
- catch basins in landscape areas
- chain link fence
- chimney chase caps
- interim replacement of northern fence section
- landscape
- light poles and fixtures (north end of Chapel)
- painting (excluding initial painting to new wood fences)
- valves

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
- garage doors
- heating, ventilating and air conditioning (HVAC) units serving the individual homes
- interiors of the individual homes
- light fixtures at building exteriors
- patios
- pipes that branch off the common pipes to the individual home plumbing fixtures

- stoops
- 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.

Responsibility of Others

We were informed that there are components within the property that are the responsibility of others. The following components are neither the responsibility of the property nor the homeowners:

- streets
- street lighting (including 2085-2091 Chapel parking lot)

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

The current reserve contributions are appropriate for a few additional years. 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 suggests 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: April 9, 2015

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Recommended Funding Plan

University Woods Condominium Owners' Association, Inc.

Year	Inflated expenditures (3.2% annual)	Recommended contributions	Ending reserve balance	Average $ per home per month	$ increase per month from previous year	% increase from previous year
2015*	($34,080)	$41,424	$135,693	$67.69	-	-
2016	($21,930)	$41,424	$156,932	$67.69	$0.00	0.0%
2017	($6,156)	$41,424	$194,295	$67.69	$0.00	0.0%
2018	($33,721)	$41,424	$204,377	$67.69	$0.00	0.0%
2019	($59,912)	$41,424	$188,230	$67.69	$0.00	0.0%
2020	($79,133)	$41,424	$152,554	$67.69	$0.00	0.0%
2021	($68,268)	$41,424	$127,381	$67.69	$0.00	0.0%
2022	($74,654)	$41,424	$95,480	$67.69	$0.00	0.0%
**2023	($85,397)	$41,424	**$52,389**	$67.69	$0.00	0.0%
2024	$0	$30,000	$83,198	$49.02	-$18.67	-27.6%
2025	($23,294)	$31,000	$91,949	$50.65	$1.63	3.3%
2026	($32,368)	$32,000	$92,681	$52.29	$1.63	3.2%
2027	($11,967)	$33,000	$114,953	$53.92	$1.63	3.1%
2028	$0	$34,100	$150,637	$55.72	$1.80	3.3%
2029	$0	$35,200	$187,856	$57.52	$1.80	3.2%
2030	($8,020)	$36,300	$218,560	$59.31	$1.80	3.1%
2031	($21,502)	$37,500	$237,277	$61.27	$1.96	3.3%
2032	$0	$38,700	$279,057	$63.24	$1.96	3.2%
2033	$0	$39,900	$322,545	$65.20	$1.96	3.1%
2034	($109,160)	$41,200	$258,047	$67.32	$2.12	3.3%
2035	($57,528)	$42,500	$246,025	$69.44	$2.12	3.2%
2036	($9,281)	$43,900	$283,803	$71.73	$2.29	3.3%
2037	$0	$45,300	$332,780	$74.02	$2.29	3.2%
2038	$0	$46,700	$383,754	$76.31	$2.29	3.1%
2039	($56,096)	$48,200	$380,417	$78.76	$2.45	3.2%
2040	($10,989)	$49,700	$423,925	$81.21	$2.45	3.1%
2041	($37,084)	$51,300	$443,312	$83.82	$2.61	3.2%
2042	($13,529)	$52,900	$488,239	$86.44	$2.61	3.1%
2043	($96,175)	$54,600	$452,273	$89.22	$2.78	3.2%
2044	($173,392)	$56,300	$339,906	$91.99	$2.78	3.1%
2045	($216,262)	$58,100	$184,874	$94.93	$2.94	3.2%

* reserve contributions are budgeted

**2023 is the THRESHOLD FUNDING YEAR. To reduce reserve contributions, identify items to defer beyond this year.

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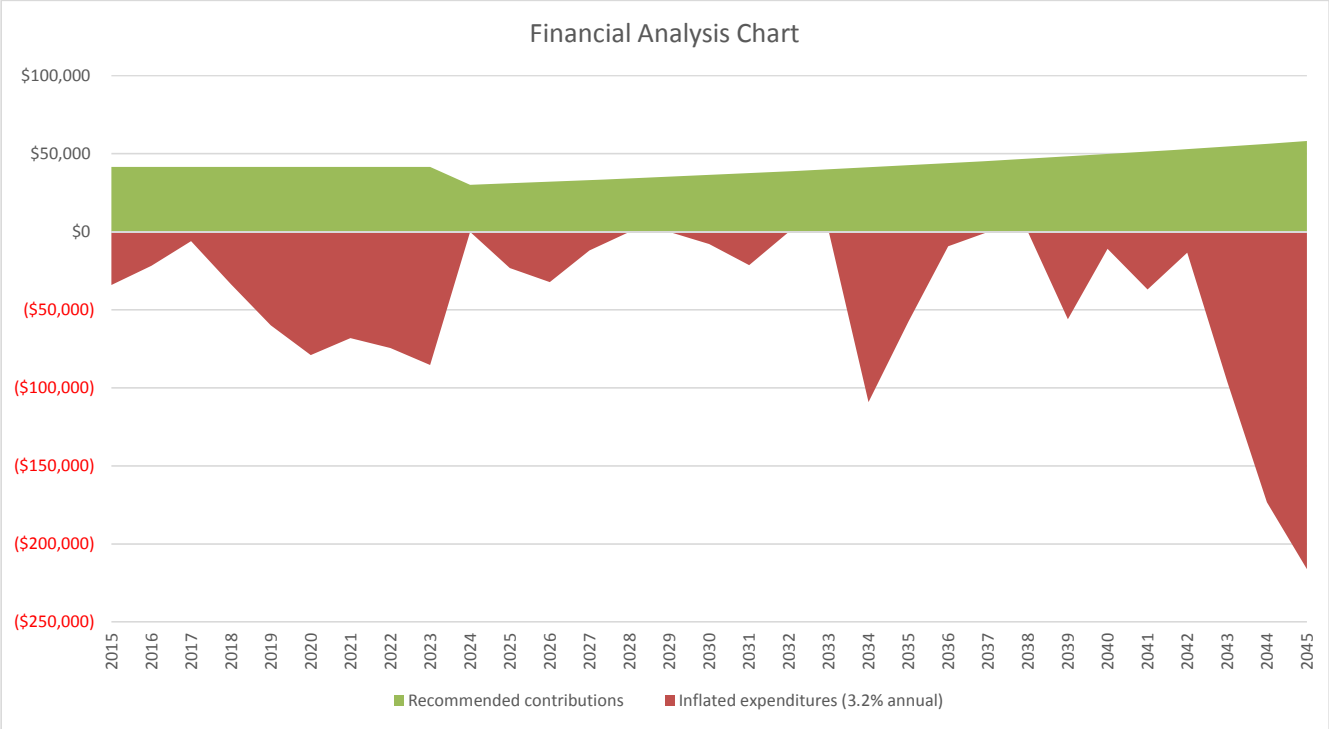
University Woods Condominium Owners' Association, Inc.



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1.4.2015

2015

Hybrid Reserve Expenditures and Funding Plan

January 1, 2015 through December 31, 2015

Year of forecast:	0
Annual inflation rate:	3.2%
Compounded inflation in 2015:	100.0%
Unaudited, provided, beginning reserve balance as of January 1, 2015:	$128,217
Budgeted reserve contribution: +	$41,424
Estimated interest earned (0.1% yield rate): +	$132
Total contributions: =	$41,556

University Woods Condominium Owners' Association, Inc.

2015 Expenditures

	Number of phases	Flexibility	Pages With Engineering Data	
Fences - Wood (initial painting only)	1	firm	6.281	($9,000)
Foundation Grading and Repairs (see Property Engineering Review)	1	deferrable	6.287	($5,000)
Pavement Seal Coat (2015)	1	discretionary	6.641	($2,640)
Pavement Total Replacement (poor)	1	deferrable	6.663	($17,440)
Total expenditures:				($34,080)
			Ending reserve balance:	$135,693

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2016

Hybrid Reserve Expenditures and Funding Plan

January 1, 2016 through December 31, 2016

Year of forecast:	1
Annual inflation rate:	3.2%
Compounded inflation in 2016:	103.2%
Beginning reserve balance:	$135,693
Recommended reserve contribution: +	$41,424
Estimated interest earned (1.2% yield rate): +	$1,745
Total contributions: =	$43,169

University Woods Condominium Owners' Association, Inc.

2016 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Roof - 2105-2109 Chapel	1	firm	2.441	($5,965)
Roof - 2113-2117 Chapel	1	firm	2.441	($5,965)
Concrete Sidewalks, Driveways, Aprons (5% every 5 years)	1	deferrable	6.181	($4,943)
Retaining Walls - Dated Sections	1	deferrable	6.902	($5,057)
Total expenditures:				($21,930)
			Ending reserve balance:	$156,932

SUPERIOR RESERVE
ENGINEERING & CONSULTING

1.4.2017

2017

Hybrid Reserve Expenditures and Funding Plan

January 1, 2017 through December 31, 2017

Year of forecast:	2
Annual inflation rate:	3.2%
Compounded inflation in 2017:	106.5%
Beginning reserve balance:	$156,932
Recommended reserve contribution: +	$41,424
Estimated interest earned (1.2% yield rate): +	$2,095
Total contributions: =	$43,519

University Woods Condominium Owners' Association, Inc.

2017 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Roof - 2131-2135 Chapel	1	firm	2.441	($6,156)
Total expenditures:				($6,156)
			Ending reserve balance:	$194,295

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2018

Hybrid Reserve Expenditures and Funding Plan

January 1, 2018 through December 31, 2018

Year of forecast:	3
Annual inflation rate:	3.2%
Compounded inflation in 2018:	109.9%
Beginning reserve balance:	$194,295
Recommended reserve contribution: +	$41,424
Estimated interest earned (1.2% yield rate): +	$2,378
Total contributions: =	$43,802

University Woods Condominium Owners' Association, Inc.

2018 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Roof - 2095-2101 Chapel	1	firm	2.441	($8,221)
Siding - Wood (replace with vinyl)	2	firm	2.761	($25,499)
Total expenditures:				($33,721)
			Ending reserve balance:	$204,377

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2019

Hybrid Reserve Expenditures and Funding Plan

January 1, 2019 through December 31, 2019

Year of forecast:	4
Annual inflation rate:	3.2%
Compounded inflation in 2019:	113.4%
Beginning reserve balance:	$204,377
Recommended reserve contribution: +	$41,424
Estimated interest earned (1.2% yield rate): +	$2,342
Total contributions: =	$43,766

University Woods Condominium Owners' Association, Inc.

2019 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Roof - 2141-2145 Chapel	1	firm	2.441	($6,556)
Roof - 2148-2150 Chapel	1	firm	2.441	($8,870)
Roof - 410-412 White Ash	1	firm	2.441	($8,870)
Siding - Wood (replace with vinyl)	2	firm	2.761	($26,315)
Pavement Crack Repair and Patch	1	firm	6.641	($3,289)
Pavement Seal Coat and Striping (2019 and beyond)	1	discretionary	6.641	($6,012)
Total expenditures:				($59,912)
			Ending reserve balance:	$188,230

SUPERIOR RESERVE
ENGINEERING & CONSULTING

1.4.2020

2020

Hybrid Reserve Expenditures and Funding Plan

January 1, 2020 through December 31, 2020

Year of forecast:	5
Annual inflation rate:	3.2%
Compounded inflation in 2020:	117.1%
Beginning reserve balance:	$188,230
Recommended reserve contribution: +	$41,424
Estimated interest earned (1.2% yield rate): +	$2,033
Total contributions: =	$43,457

University Woods Condominium Owners' Association, Inc.

2020 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Gutters and Downspouts	3	deferrable	2.361	($11,550)
Roof - 2161-2167 Chapel	1	firm	2.441	($8,756)
Roof - 2173-2181 Chapel	1	firm	2.441	($10,746)
Siding - Aluminum (replace with vinyl)	4	deferrable	2.762	($42,228)
Foundation Grading and Repairs (see Property Engineering Review)	1	deferrable	6.287	($5,853)
Total expenditures:				($79,133)
			Ending reserve balance:	$152,554

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2021

Hybrid Reserve Expenditures and Funding Plan

January 1, 2021 through December 31, 2021

Year of forecast:	6
Annual inflation rate:	3.2%
Compounded inflation in 2021:	120.8%
Beginning reserve balance:	$152,554
Recommended reserve contribution: +	$41,424
Estimated interest earned (1.2% yield rate): +	$1,670
Total contributions: =	$43,094

University Woods Condominium Owners' Association, Inc.

2021 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Gutters and Downspouts	3	deferrable	2.361	($11,919)
Roof - 2149-2153 Chapel	1	firm	2.441	($6,982)
Siding - Aluminum (replace with vinyl)	4	deferrable	2.762	($43,580)
Concrete Sidewalks, Driveways, Aprons (5% every 5 years)	1	deferrable	6.181	($5,786)
Total expenditures:				($68,268)
			Ending reserve balance:	$127,381

SUPERIOR RESERVE
ENGINEERING & CONSULTING

1.4.2022

2022

Hybrid Reserve Expenditures and Funding Plan

January 1, 2022 through December 31, 2022

Year of forecast:	7
Annual inflation rate:	3.2%
Compounded inflation in 2022:	124.7%
Beginning reserve balance:	$127,381
Recommended reserve contribution: +	$41,424
Estimated interest earned (1.2% yield rate): +	$1,329
Total contributions: =	$42,753

University Woods Condominium Owners' Association, Inc.

2022 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Gutters and Downspouts	3	deferrable	2.361	($12,301)
Roof - 2085-2091 Chapel	1	firm	2.441	($9,325)
Roof - 427-429 White Ash	1	firm	2.441	($8,054)
Siding - Aluminum (replace with vinyl)	4	deferrable	2.762	($44,974)
Total expenditures:				($74,654)
			Ending reserve balance:	$95,480

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2023 (Threshold)

Hybrid Reserve Expenditures and Funding Plan

January 1, 2023 through December 31, 2023

Year of forecast:	8
Annual inflation rate:	3.2%
Compounded inflation in 2023 (Threshold):	128.7%
Beginning reserve balance:	$95,480
Recommended reserve contribution: +	$41,424
Estimated interest earned (1.2% yield rate): +	$882
Total contributions: =	$42,306

University Woods Condominium Owners' Association, Inc.

2023 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Roof - 2160-2162 Chapel	1	firm	2.441	($10,061)
Roof - 2172-2174 Chapel	1	firm	2.441	($10,061)
Roof - 411-413 White Ash	1	firm	2.441	($8,311)
Siding - Aluminum (replace with vinyl)	4	deferrable	2.762	($46,413)
Pavement Crack Repair and Patch	1	firm	6.641	($3,731)
Pavement Seal Coat and Striping (2019 and beyond)	1	discretionary	6.641	($6,819)
Total expenditures:				($85,397)
			Ending reserve balance:	$52,389

SUPERIOR RESERVE
ENGINEERING & CONSULTING

1.4.2024

2024

Hybrid Reserve Expenditures and Funding Plan

January 1, 2024 through December 31, 2024

Year of forecast:	9
Annual inflation rate:	3.2%
Compounded inflation in 2024:	132.8%
Beginning reserve balance:	$52,389
Recommended reserve contribution: +	$30,000
Estimated interest earned (1.2% yield rate): +	$809
Total contributions: =	$30,809

University Woods Condominium Owners' Association, Inc.

2024 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Total expenditures:				$0
			Ending reserve balance:	$83,198

SUPERIOR RESERVE
ENGINEERING & CONSULTING

1.4.2025

2025

Hybrid Reserve Expenditures and Funding Plan

January 1, 2025 through December 31, 2025

Year of forecast:	10
Annual inflation rate:	3.2%
Compounded inflation in 2025:	137.0%
Beginning reserve balance:	$83,198
Recommended reserve contribution: +	$31,000
Estimated interest earned (1.2% yield rate): +	$1,045
Total contributions: =	$32,045

University Woods Condominium Owners' Association, Inc.

2025 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Fences - Vinyl	1	deferrable	6.282	($16,443)
Foundation Grading and Repairs (see Property Engineering Review)	1	deferrable	6.287	($6,851)
Total expenditures:				($23,294)
			Ending reserve balance:	$91,949

SUPERIOR RESERVE
ENGINEERING & CONSULTING

1.4.2026

2026

Hybrid Reserve Expenditures and Funding Plan

January 1, 2026 through December 31, 2026

Year of forecast:	11
Annual inflation rate:	3.2%
Compounded inflation in 2026:	141.4%
Beginning reserve balance:	$91,949
Recommended reserve contribution: +	$32,000
Estimated interest earned (1.2% yield rate): +	$1,101
Total contributions: =	$33,101

University Woods Condominium Owners' Association, Inc.

2026 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Concrete Sidewalks, Driveways, Aprons (5% every 5 years)	1	deferrable	6.181	($6,773)
Pavement Total Replacement (fair)	1	deferrable	6.662	($25,595)
Total expenditures:				($32,368)
			Ending reserve balance:	$92,681

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2027

Hybrid Reserve Expenditures and Funding Plan

January 1, 2027 through December 31, 2027

Year of forecast:	12
Annual inflation rate:	3.2%
Compounded inflation in 2027:	145.9%
Beginning reserve balance:	$92,681
Recommended reserve contribution: +	$33,000
Estimated interest earned (1.2% yield rate): +	$1,238
Total contributions: =	$34,238

University Woods Condominium Owners' Association, Inc.

2027 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Pavement Crack Repair and Patch	1	firm	6.641	($4,232)
Pavement Seal Coat and Striping (2019 and beyond)	1	discretionary	6.641	($7,734)
Total expenditures:				($11,967)
			Ending reserve balance:	$114,953

SUPERIOR RESERVE
ENGINEERING & CONSULTING

1.4.2028

2028

Hybrid Reserve Expenditures and Funding Plan

January 1, 2028 through December 31, 2028

Year of forecast:	13
Annual inflation rate:	3.2%
Compounded inflation in 2028:	150.6%
Beginning reserve balance:	$114,953
Recommended reserve contribution: +	$34,100
Estimated interest earned (1.2% yield rate): +	$1,584
Total contributions: =	$35,684

University Woods Condominium Owners' Association, Inc.

2028 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Total expenditures:				$0
			Ending reserve balance:	$150,637

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2029

Hybrid Reserve Expenditures and Funding Plan

January 1, 2029 through December 31, 2029

Year of forecast:	14
Annual inflation rate:	3.2%
Compounded inflation in 2029:	155.4%
Beginning reserve balance:	$150,637
Recommended reserve contribution: +	$35,200
Estimated interest earned (1.2% yield rate): +	$2,019
Total contributions: =	$37,219

University Woods Condominium Owners' Association, Inc.

2029 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Total expenditures:				$0
			Ending reserve balance:	$187,856

SUPERIOR RESERVE
ENGINEERING & CONSULTING

1.4.2030

2030

Hybrid Reserve Expenditures and Funding Plan

January 1, 2030 through December 31, 2030

Year of forecast:	15
Annual inflation rate:	3.2%
Compounded inflation in 2030:	160.4%
Beginning reserve balance:	$187,856
Recommended reserve contribution: +	$36,300
Estimated interest earned (1.2% yield rate): +	$2,424
Total contributions: =	$38,724

University Woods Condominium Owners' Association, Inc.

2030 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Foundation Grading and Repairs (see Property Engineering Review)	1	deferrable	6.287	($8,020)
Total expenditures:				($8,020)
			Ending reserve balance:	$218,560

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2031

Hybrid Reserve Expenditures and Funding Plan

January 1, 2031 through December 31, 2031

Year of forecast:	16
Annual inflation rate:	3.2%
Compounded inflation in 2031:	165.5%
Beginning reserve balance:	$218,560
Recommended reserve contribution: +	$37,500
Estimated interest earned (1.2% yield rate): +	$2,719
Total contributions: =	$40,219

University Woods Condominium Owners' Association, Inc.

2031 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Concrete Sidewalks, Driveways, Aprons (5% every 5 years)	1	deferrable	6.181	($7,929)
Pavement Crack Repair and Patch	1	firm	6.641	($4,800)
Pavement Seal Coat and Striping (2019 and beyond)	1	discretionary	6.641	($8,773)
Total expenditures:				($21,502)
			Ending reserve balance:	$237,277

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2032

Hybrid Reserve Expenditures and Funding Plan

January 1, 2032 through December 31, 2032

Year of forecast:	17
Annual inflation rate:	3.2%
Compounded inflation in 2032:	170.8%
Beginning reserve balance:	$237,277
Recommended reserve contribution: +	$38,700
Estimated interest earned (1.2% yield rate): +	$3,080
Total contributions: =	$41,780

University Woods Condominium Owners' Association, Inc.

2032 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Total expenditures:				$0
			Ending reserve balance:	$279,057

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2033

Hybrid Reserve Expenditures and Funding Plan

January 1, 2033 through December 31, 2033

Year of forecast:	18
Annual inflation rate:	3.2%
Compounded inflation in 2033:	176.3%
Beginning reserve balance:	$279,057
Recommended reserve contribution: +	$39,900
Estimated interest earned (1.2% yield rate): +	$3,588
Total contributions: =	$43,488

University Woods Condominium Owners' Association, Inc.

2033 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Total expenditures:				$0
			Ending reserve balance:	$322,545

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2034

Hybrid Reserve Expenditures and Funding Plan

January 1, 2034 through December 31, 2034

Year of forecast:	19
Annual inflation rate:	3.2%
Compounded inflation in 2034:	181.9%
Beginning reserve balance:	$322,545
Recommended reserve contribution: +	$41,200
Estimated interest earned (1.2% yield rate): +	$3,463
Total contributions: =	$44,663

University Woods Condominium Owners' Association, Inc.

2034 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Pavement Total Replacement (good)	1	deferrable	6.661	($109,160)
Total expenditures:				($109,160)
			Ending reserve balance:	$258,047

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2035

Hybrid Reserve Expenditures and Funding Plan

January 1, 2035 through December 31, 2035

Year of forecast:	20
Annual inflation rate:	3.2%
Compounded inflation in 2035:	187.8%
Beginning reserve balance:	$258,047
Recommended reserve contribution: +	$42,500
Estimated interest earned (1.2% yield rate): +	$3,006
Total contributions: =	$45,506

University Woods Condominium Owners' Association, Inc.

2035 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Foundation Grading and Repairs (see Property Engineering Review)	1	deferrable	6.287	($9,388)
Pavement Crack Repair and Patch	1	firm	6.641	($5,445)
Pavement Seal Coat and Striping (2019 and beyond)	1	discretionary	6.641	($9,951)
Pavement Total Replacement (poor)	1	deferrable	6.663	($32,745)
Total expenditures:				($57,528)
			Ending reserve balance:	$246,025

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2036

Hybrid Reserve Expenditures and Funding Plan

January 1, 2036 through December 31, 2036

Year of forecast:	21
Annual inflation rate:	3.2%
Compounded inflation in 2036:	193.8%
Beginning reserve balance:	$246,025
Recommended reserve contribution: +	$43,900
Estimated interest earned (1.2% yield rate): +	$3,160
Total contributions: =	$47,060

University Woods Condominium Owners' Association, Inc.

2036 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Concrete Sidewalks, Driveways, Aprons (5% every 5 years)	1	deferrable	6.181	($9,281)
Total expenditures:				($9,281)
			Ending reserve balance:	$283,803

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2037

Hybrid Reserve Expenditures and Funding Plan

January 1, 2037 through December 31, 2037

Year of forecast:	22
Annual inflation rate:	3.2%
Compounded inflation in 2037:	200.0%
Beginning reserve balance:	$283,803
Recommended reserve contribution: +	$45,300
Estimated interest earned (1.2% yield rate): +	$3,677
Total contributions: =	$48,977

University Woods Condominium Owners' Association, Inc.

2037 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Total expenditures:				$0
			Ending reserve balance:	$332,780

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2038

Hybrid Reserve Expenditures and Funding Plan

January 1, 2038 through December 31, 2038

Year of forecast:	23
Annual inflation rate:	3.2%
Compounded inflation in 2038:	206.4%
Beginning reserve balance:	$332,780
Recommended reserve contribution: +	$46,700
Estimated interest earned (1.2% yield rate): +	$4,274
Total contributions: =	$50,974

University Woods Condominium Owners' Association, Inc.

2038 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Total expenditures:				$0
			Ending reserve balance:	$383,754

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2039

Hybrid Reserve Expenditures and Funding Plan

January 1, 2039 through December 31, 2039

Year of forecast:	24
Annual inflation rate:	3.2%
Compounded inflation in 2039:	213.0%
Beginning reserve balance:	$383,754
Recommended reserve contribution: +	$48,200
Estimated interest earned (1.2% yield rate): +	$4,558
Total contributions: =	$52,758

University Woods Condominium Owners' Association, Inc.

2039 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Roof - 2123-2127 Chapel	1	firm	2.441	($12,310)
Roof - 2130-2132 Chapel	1	firm	2.441	($12,565)
Roof - 419-421 White Ash	1	firm	2.441	($13,758)
Pavement Crack Repair and Patch	1	firm	6.641	($6,176)
Pavement Seal Coat and Striping (2019 and beyond)	1	discretionary	6.641	($11,287)
Total expenditures:				($56,096)
			Ending reserve balance:	$380,417

SUPERIOR RESERVE
ENGINEERING & CONSULTING

1.4.2040

2040

Hybrid Reserve Expenditures and Funding Plan

January 1, 2040 through December 31, 2040

Year of forecast:	25
Annual inflation rate:	3.2%
Compounded inflation in 2040:	219.8%
Beginning reserve balance:	$380,417
Recommended reserve contribution: +	$49,700
Estimated interest earned (1.2% yield rate): +	$4,797
Total contributions: =	$54,497

University Woods Condominium Owners' Association, Inc.

2040 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Foundation Grading and Repairs (see Property Engineering Review)	1	deferrable	6.287	($10,989)
Total expenditures:				($10,989)
			Ending reserve balance:	$423,925

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2041

Hybrid Reserve Expenditures and Funding Plan

January 1, 2041 through December 31, 2041

Year of forecast:	26
Annual inflation rate:	3.2%
Compounded inflation in 2041:	226.8%
Beginning reserve balance:	$423,925
Recommended reserve contribution: +	$51,300
Estimated interest earned (1.2% yield rate): +	$5,172
Total contributions: =	$56,472

University Woods Condominium Owners' Association, Inc.

2041 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Roof - 2105-2109 Chapel	1	firm	2.441	($13,110)
Roof - 2113-2117 Chapel	1	firm	2.441	($13,110)
Concrete Sidewalks, Driveways, Aprons (5% every 5 years)	1	deferrable	6.181	($10,864)
Total expenditures:				($37,084)
			Ending reserve balance:	$443,312

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2042

Hybrid Reserve Expenditures and Funding Plan

January 1, 2042 through December 31, 2042

Year of forecast:	27
Annual inflation rate:	3.2%
Compounded inflation in 2042:	234.1%
Beginning reserve balance:	$443,312
Recommended reserve contribution: +	$52,900
Estimated interest earned (1.2% yield rate): +	$5,556
Total contributions: =	$58,456

University Woods Condominium Owners' Association, Inc.

2042 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Roof - 2131-2135 Chapel	1	firm	2.441	($13,529)
Total expenditures:				($13,529)
			Ending reserve balance:	$488,239

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2043

Hybrid Reserve Expenditures and Funding Plan

January 1, 2043 through December 31, 2043

Year of forecast:	28
Annual inflation rate:	3.2%
Compounded inflation in 2043:	241.6%
Beginning reserve balance:	$488,239
Recommended reserve contribution: +	$54,600
Estimated interest earned (1.2% yield rate): +	$5,609
Total contributions: =	$60,209

University Woods Condominium Owners' Association, Inc.

2043 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Roof - 2095-2101 Chapel	1	firm	2.441	($18,069)
Siding - Vinyl	3	deferrable	2.763	($58,297)
Pavement Crack Repair and Patch	1	firm	6.641	($7,005)
Pavement Seal Coat and Striping (2019 and beyond)	1	discretionary	6.641	($12,803)
Total expenditures:				($96,175)
			Ending reserve balance:	$452,273

SUPERIOR RESERVE
ENGINEERING & CONSULTING

2044

Hybrid Reserve Expenditures and Funding Plan

January 1, 2044 through December 31, 2044

Year of forecast:	29
Annual inflation rate:	3.2%
Compounded inflation in 2044:	249.3%
Beginning reserve balance:	$452,273
Recommended reserve contribution: +	$56,300
Estimated interest earned (1.2% yield rate): +	$4,725
Total contributions: =	$61,025

University Woods Condominium Owners' Association, Inc.

2044 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Roof - 2141-2145 Chapel	1	firm	2.441	($14,409)
Roof - 2148-2150 Chapel	1	firm	2.441	($19,495)
Roof - 410-412 White Ash	1	firm	2.441	($19,495)
Siding - Vinyl	3	deferrable	2.763	($60,163)
Fences - Wood (replacement)	1	deferrable	6.281	($59,830)
Total expenditures:				($173,392)
			Ending reserve balance:	$339,906

SUPERIOR RESERVE
ENGINEERING & CONSULTING

1.4.2045

2045

Hybrid Reserve Expenditures and Funding Plan

January 1, 2045 through December 31, 2045

Year of forecast:	30
Annual inflation rate:	3.2%
Compounded inflation in 2045:	257.3%
Beginning reserve balance:	$339,906
Recommended reserve contribution: +	$58,100
Estimated interest earned (1.2% yield rate): +	$3,130
Total contributions: =	$61,230

University Woods Condominium Owners' Association, Inc.

2045 Expenditures (inflated)

	Number of phases	Flexibility	Pages With Engineering Data	
Gutters and Downspouts	3	deferrable	2.361	($25,384)
Roof - 2161-2167 Chapel	1	firm	2.441	($19,244)
Roof - 2173-2181 Chapel	1	firm	2.441	($23,617)
Siding - Vinyl	3	deferrable	2.763	($62,088)
Fences - Wood (initial painting only)	1	firm	6.281	($23,154)
Fences - Vinyl	1	deferrable	6.282	($30,873)
Foundation Grading and Repairs (see Property Engineering Review)	1	deferrable	6.287	($12,864)
Retaining Walls - Masonry (recently replaced)	1	deferrable	6.901	($19,038)
Total expenditures:				($216,262)
			Ending reserve balance:	$184,874

University Woods Condominium Owners Association.
Budget 2015

Income	Dues	105,816	
	Water Assessment	36,000	
Total			141,816

Expenses

Legal	3,000	
Audit	540	
Office Supply	1,512	
Water Sewer & Trash	36,000	
Electric & Phone	565	
Maintenance	10,992	
Grounds Maintenance	17,393	
Snow Removal	6500	
Taxes	120	
Insurance	11,770	
Management	12,000	
Replacement Reserve	41,424	
Total		141,816

Reserve expenditures to be decided after the new Reserve Study.

UNIVERSITY WOODS CONDOMINIUM HOMEOWNER'S ASSOCIATION, INC.

STATEMENT OF ASSETS, LIABILITIES AND FUND BALANCES - CASH BASIS

YEAR ENDED DECEMBER 31, 2014

ASSETS	
CURRENT ASSETS	
Cash - Operating	$8,243.83
Reserve - Cash	$101,386.81
Reserve - Investment CD	$26,830.45
Receivable from Other Community	$0.00
	$136,461.09
LIABILITIES	
CURRENT LIABILITIES	**$0.00**
FUND BALANCE	**$136,461.09**

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* 1,200 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)

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.

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Gutters and Downspouts

Engineering solutions: The downspouts discharge too high off the ground. This condition results in excessive splashing, soil compaction and erosion. In addition, the downspouts discharging at the foundations increase the potential for water infiltration into the unit basements. We recommend the installation of subterranean downspout extensions that discharge 10 feet away from the buildings through pop-up drainage emitters in the landscape areas. The Association should consider this improvement at the time of gutter and downspout replacement, but earlier in problematic areas.

Material:	aluminum
Gutter profile:	five-inch seamless K-style
Downspout size:	two-inch by three-inch (adequate)
Overall condition:	fair
Specific condition:	dented sections, finish deterioration and rust at fasteners
Quantity (linear feet):	3,700
Per home (linear feet):	70
Cost ($/linear foot):	$8
Current total cost:	**$29,600**
Cost per home:	$580
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 gutter and downspout

aluminum gutter and downspout

gutter interior

downspout too high off ground causing excessive splashing and erosion

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Roofs - Asphalt Shingles

Engineering solutions: Each unit is side to side with an adjacent unit. Our experience suggests a fire wall separates the units to prevent a fire from jumping from one unit to the next. This fire wall should continue through the attic and up to the roof. Fire rated plywood should then be used on both sides of the fire wall. We note locations where the ridge vent is properly not continuous across the ridge. This ensures the fire wall is not breached. However, we also note locations where the ridge vent is continuous across the units. Roof replacements should repair this breach in the plywood and the ridge vent should be installed approximately two feet away on either side of the fire walls.

Engineering solutions: For shingle replacement: 1) Use self adhering underlayment at roof gutter edges and valleys. 2) Use metal W valley flashing (rather than weaved shingles) to maximize the useful life of shingles in valleys. 3) Use lead flashing at waste pipes to minimize future maintenance costs. 4) Install metal drip edge around the entire perimeter of roofs. The drip edge discharges storm water away from the buildings and helps secure the fascia.

Material:	asphalt shingles
Recommended materials:	laminated architectural shingles Boston style ridge shingles open valleys with metal W flashing metal drip edge (note 1) ridge vents lead boot flashing at waste pipes gap between siding and roof
Overall condition:	**good to poor (various ages)**
Specific condition:	weathered, cupped and loose shingles
Quantity in squares(note 2):	360
Per home (squares):	7
Cost ($/square):	$340
Current total cost:	**$122,400**
Cost per home:	$2,400
Anticipated expenses:	total removal of existing roofing (note 3) limited sheathing replacement contingency metal drip edge at roof perimeter lead boot flashing at waste pipes self adhering underlayment at roof edges #15 felt underlayment Class A 240-260 pounds/ square shingles

roof with asphalt shingles

shingle overview

example of ridge vents properly not continuous between units

example of ridge vents improperly continuous between units

(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) Total replacement benefits (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

repairs necessary at 2113 Chapel

cupped shingles at 2089 Chapel

curled and weathered shingles at 2113-2117 Chapel

weathered shingles at 2131-2135 Chapel

three tab shingles

laminated architectural shingles

half weaved valley

three tab shingles

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Siding - Wood (replace with vinyl)

Green ideas: For increased energy efficiency, consider installing insulated siding at the time of replacement.

Engineering solutions: The siding throughout the property 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. Vinyl siding installation should following the guidelines set by the Vinyl Siding Institute: http://www.vinylsiding.org

Engineering solutions: Siding is an exterior cladding that is not watertight. Water-vapor permeable building paper is necessary to prevent water from contacting sheathing and interior finishes. The lack of building paper increases the potential for water infiltration, and damage to the underlying sheathing and framing. Vinyl siding installation should include installation of building paper.

Material:	wood
Profile:	shiplap and plywood
Overall condition:	**poor**
Specific condition:	wood rot and curled siding
Locations:	410-412 White Ash 419-421 White Ash 427-429 White Ash
Quantity (square feet):	9,100
Cost ($/square foot):	$5.10
Current total cost:	**$46,400**
Operating expenses:	cleaning, securing/replacement of loose pieces
Anticipated costs:	remove existing siding install building paper replacement with .042-inch thick vinyl siding replace soffit and fascia replace gable vents replace shutters

wood siding deterioration

wood siding deterioration

plywood siding deterioration

siding in contact with the roof (properly installed step flashing with the shingles and siding does not require caulk at this location)

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Siding - Aluminum (replace with vinyl)

Material: aluminum

Profile: double clapboard

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

Overall condition: **poor**

Specific condition: damaged, loose and mismatched pieces

Locations:
2123-2127 Chapel
2131-2135 Chapel
2141-2145 Chapel
2149-2153 Chapel
2161-2167 Chapel
2173-2181 Chapel
2130-2132 Chapel
2148-2150 Chapel
2160-2162 Chapel
2172-2174 Chapel

Quantity (square feet): 28,300

Cost ($/square foot): $5.10

Current total cost: **$144,300**

Operating expenses: cleaning, securing/replacement of loose pieces

Anticipated costs: remove existing siding
install building paper
replacement with .042-inch thick vinyl siding
replace soffit and fascia
replace gable vents
replace shutters


aluminum siding with double clapboard profile


loose aluminum siding


mismatched aluminum siding


soffit deterioration at 2127 Chapel

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

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Siding - Vinyl

Actionable recommendations: A portion of the shutters have four fasteners per panel while others have six. We recommend six fasteners at all shutter panels.

Material:	vinyl
Manufacturer:	*Norandex*
Profile:	Dutch lap
J channel (note 1):	exists at windows, doors and other penetrations
Building paper (note 2):	does not exist
Overall condition:	good to fair
Specific condition:	limited siding pieces are loose and easily removed (condition of siding should be reviewed after each storm)
Locations:	2085-2091 Chapel 2095-2101 Chapel 2105-2109 Chapel 2113-2117 Chapel 411-413 White Ash
Quantity (square feet):	14,200
Cost ($/square foot):	$5.10
Current total cost:	**$72,400**
Operating expenses:	cleaning, securing/replacement of loose pieces
Anticipated costs:	remove existing siding install building paper replacement with .042-inch thick vinyl siding replace soffit and fascia replace gable vents replace shutters

vinyl siding with Dutch lap profile

insulation board

vinyl shutters with 6 fasteners per panel

shutters with 4 fasteners per panel at 2101

(note 1) Trim that conceals the thermal expansion and contraction of siding at end joints. Sealant would typically fail at these locations due to the excessive movement of the siding.
(note 2) Siding is an exterior cladding that is not watertight. Water-vapor permeable building paper is necessary to prevent water from contacting sheathing and interior finishes.

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Sidewalks, Driveways, Aprons

Actionable recommendations: We observed undermining of stoops and sidewalks throughout the property. Remediation of this condition requires pumping grout under the concrete to provide support to the stoops and sidewalks.

Material:	concrete
Overall condition:	**good to poor**
Specific condition:	cracks and settled sections
Locations:	unit entrances, parallel with streets, aprons to each driveway and driveway at 2130-2132 Chapel
Quantity (square feet):	11,800
Per home (square feet):	230
Cost ($/square foot):	$8
Current total cost (note 1):	**$95,800**
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, mudjacking (pumping grout under sections to lift them)

sidewalk deterioration at 2897 Chapel

cracked sidewalk section at 2127 Chapel

settled sidewalk section at 2105 Chapel

sidewalk deterioration at 2172 Chapel

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

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Fences - Wood

Engineering solutions: The recently replaced fence appears well built with steel posts and ideally without toe-nailed connections.

Material:	wood (pine)
Locations:	west property line
Fence profile:	board on board
Fastener type:	nails
Post type:	galvanized steel
Overall condition:	good
Specific condition:	no visible deterioration
Quantity (linear feet):	960
Quantity includes:	dated northern length of fence
Paint cost ($/linear foot):	$9
Current paint cost:	$9,000
Replace cost ($/linear foot):	$25
Current replace cost:	**$24,000**
Operating expenses:	subsequent painting

wood (pine) fence

steel posts

dated northern length of fence

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Fences - Vinyl

Material:	vinyl
Locations:	rear patios
Fence profile:	board on board with upper lattice
Post type:	hollow vinyl frame
Overall condition:	fair
Specific condition:	skewed frames, warped sections and loose sections
Quantity (linear feet):	400
Per home (linear feet):	10
Cost ($/linear foot):	$30
Current total cost:	**$12,000**
Cost per home:	$235

vinyl fence

skewed frame

loose horizontal rail at 2141-2145 Chapel

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Foundation Grading and Repairs

Engineering solutions: The grade behind 2109 Chapel has settled and eroded towards the stream to the west. This is noted by increased foundation and electrical conduit exposure, and slight erosion of the sod. The minor crack in the basement wall may be attributed to this condition as well. Remediation will require stabilization of the grade adjacent to the stream and backfilling the lost soil. The Association should contact the government agency responsible for the stream (likely the Army Corps of Engineers) for possible remediation of this condition.

Engineering solutions: Units 2161-2167 Chapel report water seepage into their units. We note inadequate grading away from the building perimeter to promote drainage. We also note grading that is too high up on the building, resulting in blocked vents and siding in contact with landscape. We recommend a slight swale approximately 10 feet around the perimeter of the building to promote drainage. We recommend a slope of approximately two percent towards the swale. Drain tile connected to French drains in the swale would allow water to percolate into the ground.

Periodic allowances for:	grading to promote drainage soil stabilization
Allowance for repairs:	**$5,000**
Cost per home:	$98

grade settlement and erosion towards stream at 2109 Chapel

minor crack in wall at 2109 Chapel - stabilize grade and monitior for continued movement

landscape graded around vent at 2161-2167 Chapel

lack of grading away from building at 2161-2167 Chapel

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Pavement - Crack Repair, Patch, Seal Coat, Striping

Green ideas: It is our professional opinion that seal coating asphalt pavement is primarily for aesthetics and does not extend the useful life of the pavement. Seal coats do not add structural strength to the pavement. Also, seal coating is a source of environmental contamination. If the Association 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.

Engineering solutions: Crack repair all joints and patch potholes in the pavement to prevent water infiltration. This will minimize deterioration to the pavement and underlying base.

Locations:	driveways and parking areas
Quantity (square yards):	4,750
Per/home (square yards):	93
Total cost ($/square yard):	$1.70
Crack repair & patch cost:	**$2,900**
Seal coat and stripe cost:	**$5,300**
Total cost per home:	$161
Assumptions:	asphaltic emulsions type seal coat, repair all open cracks, patch deteriorated pavement
Anticipated costs:	crack repair (2%) patch (1%) seal coat striping

pavement requiring repairs

newer pavement without seal coat

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Pavement Total Replacement (good)

Material:	asphalt
Overall condition:	good
Specific condition:	no visible deterioration
Locations:	2085-2095 Chapel 2105-2117 Chapel 2141-2149 Chapel 2161-2181 Chapel
Quantity (square yards):	3,000
Repaving method:	total replacement
Cost ($/square yard):	$20
Current total cost:	**$60,000**
Anticipated costs:	remove pavement, regrade & augment base install 3" of new pavement repairs to catch basins (1 each)

asphalt pavement in good condition

asphalt pavement in good condition

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Pavement Total Replacement (fair)

Engineering solutions: The catch basin at 410-412 White Ash is inadequate for drainage of the pavement resulting in flooding of the adjacent garage. The exit drain pipe in the catch basin is atypically high in the basin resulting in minimal, if any, storage of water in the basin as it accumulates to exit. The Association should consider installation of a larger drain pipe to be done in conjunction with the replacement of the utility pipes in the adjacent berm by the utility company. The Association should also consider installation of a French drain in the pavement adjacent to the garage that floods and additional French drains in the landscape area. Regrading of the pavement and installation of slight asphalt curbs at the time of repaving should direct storm water to the proposed drains in the landscape area.

Material:	asphalt
Overall condition:	fair
Specific condition:	cracks and poor drainage
Locations:	2123-2135 Chapel 410-412 White Ash 2148-2150 Chapel
Quantity (square yards):	860
Repaving method:	total replacement
Cost ($/square yard):	$21
Current total cost:	**$18,100**
Anticipated costs:	remove pavement, regrade & augment base install 3" of new pavement repairs to catch basins (1 each)

pavement in fair condition at 2123-2135 Chapel

pavement in fair condition at 410-412 White Ash and 2148-2150 Chapel

catch basin at 410-412 White Ash is inadequate for drainage of pavement resulting in flooding of the adjacent garage - regrade pavement and install French drains

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Pavement Total Replacement (poor)

Material:	asphalt
Overall condition:	**poor**
Specific condition:	cracks and settlement
Locations:	2160-2174 Chapel 411-429 White Ash
Quantity (square yards):	890
Repaving method:	total replacement
Cost ($/square yard):	$20
Current total cost:	**$17,440**
Anticipated costs:	remove pavement, regrade & augment base install 3" of new pavement

pavement in poor condition

pavement in poor condition

pavement in poor condition

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Retaining Walls - Masonry (recently replaced)

Engineering solutions: The recently replaced masonry retaining walls do not include drainage systems to relieve hydrostatic pressure from behind the walls. Since these walls are relatively short and are not retaining much soil, we suspect that this will not be an issue. However, the Association should monitor the walls for movement and water stains. Renovating the walls to include a drainage system will be necessary if these conditions appear.

Material:	masonry
Size of blocks (inches):	8 x 16
Drainage system:	does not exist to relieve hydrostatic pressure
Overall condition:	good
Specific condition:	no visible deterioration
Locations:	throughout property
Number of walls (each):	5
Quantity (square feet):	400
Cost ($/square foot):	$19
Current total cost:	**$7,400**
Cost per home:	$145
Operating expenses:	resetting of top course if they become loose

recently replaced masonry retaining wall

recently replaced masonry retaining wall

SUPERIOR RESERVE
ENGINEERING & CONSULTING

Retaining Walls - Dated Sections

Material:	masonry and wood
Drainage system:	does not exist to relieve hydrostatic pressure
Overall condition:	**fair to poor**
Specific condition:	wall failure
Locations:	throughout property
Number of walls (each):	7
Quantity (square feet):	300
Per home (square feet):	10
Cost ($/square foot):	$16
Current total cost:	**$4,900**
Cost per home:	$96
Operating expenses:	resetting of top course if they become loose

wood retaining wall

dated and failing retaining wall

dated and failing retaining wall