



Prepared for:
Spring Creek Condominiums
Florissant, Missouri
Project No. 5555-44.5

February 3, 2017
By Kipcon Great Lakes, LLC

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Executive Summary

The following report contains a ***paper update*** of the prior ***Detailed Reserve Study*** prepared by Kipcon, Great Lakes LLC. for the **Spring Creek Condominiums** located in Florissant, Missouri. The Spring Creek Condominiums is a community association comprised of 155 attached single family homes (commonly described as Townhomes). It also contains recreational amenities including a clubhouse with outdoor swimming pool, tennis and basketball courts. The Association is responsible for various site improvements including interior roads, parking and driveway areas, sidewalks, the recreational facilities, a retention pond, site monument, the exterior of the residential unit townhomes as well as landscaped areas in the interior of the subdivision. The report is based on visual observations that were made during a site visit conducted on May 17th, 2012 and information provided by the association Board of Directors and ***updated during the summer and fall of 2013, the end of 2014, 2015 and 2016, so that inventories and expenditures in this update are reflective of the 2016 expenditures and 2017 anticipated expenditures.*** This update reflects the expenditures actually made in 2016. Useful life estimates and costs have been changed to reflect the work performed at the Association. The goal of a ***Reserve Study*** is to make recommendations to the Association regarding the amount required to be contributed to the reserve fund on an annual basis to perform future replacements of the reserve components, when they become necessary. The reserve components and their quantities contained in this report were developed by Kipcon Great Lakes during the site visit and based upon information provided by the Association manager. The method of collecting the data included hand measurements of certain components, visual observations, reviews of documents including, the Condominium Declaration, By-laws, and Amendments thereto, as well as various site maps and questionnaire prepared by the manager of the property. The quantities measured have been verified by Kipcon Great Lakes as part of this study, except as delineated in this report. The basis for this study is an analysis of the condition, as well as the replacement costs, of those reserve components.

As required by the National Reserve Study Standards of the Community Associations Institute, a ***Reserve Study*** is comprised of two parts, a *Physical Analysis* and a *Financial Analysis*. The *Physical Analysis* involves field observations of the common element components that are included within the ***Reserve Study***. Unless indicated otherwise in this report, we have found that the condition of the components is representative of their ages. Information provided by the Association and Community Manager regarding the dates during which the construction of the building took place, has been used as one of our sources for the component listing and quantities. The *Estimated Remaining Useful Lives* were determined based on our field observations. The replacement costs were estimated using a combination of cost estimating guides published by R.S. Means Company, Inc. (2015 Editions) and our experience with replacement projects of this type.

The *Financial Analysis* was prepared based on the information shown in the *Component Inventory*, representing the estimated replacement costs the Association will incur in the future. Our analysis shows that the Association's reserves are currently underfunded due to a combination of factors. The community is 30-40 years of age and has a variety of common elements including a significant amount of roads and driveways to maintain. The buildings had the benefit of an insurance settlement in 2001-2002 resulting in new roofs and siding being installed and therefore, the lack of adequate reserves was the benefit of this windfall. However as the community ages the Association will need long range budget planning for the replacement of the building exteriors as well. Also

common areas at the clubhouse including the pool fences are in need of being upgraded for reasons including safety and liability, and may be required to be replaced sooner than their full remaining useful lives. Based upon these conditions it is our assessment that the Association has not been collecting sufficient annual assessments for which to fund a reserve account and at that time of this report was found to have collected 12% of full funding required for full replacement costs. However, the current financial condition is sufficient to maintain the property for the next 2 years and by making adjustments to the current contribution plan allows time to collect for anticipated shortfall as projected in the financial section of this report.

The Association has made various improvements and has planned several others between the time of the prior study and the subsequent updates until this report these include the following:

2016 Expenditures

1. Tractor Annual Payment:	\$ 3,504.00
2. Asphalt Drive Overlay and Parking Lot Repairs 3608-14:	\$24,635.00
3. Tennis Court Resurface	\$ 9,985.00
4. Concrete Dumpster Pads (3606 & 3610)	<u>\$ 4,654.00</u>
	\$42,778.00

2017 Planned Projects

1. Road and Lot Overlay @ 3608	\$40,000.00
2. Tractor Payment	\$ 2,631.00
3. Walk and Wall Repairs 3608-14	<u>\$ 8,000.00</u>
	\$50,631.00

The total amount of the 2016 repairs were \$42,778.00, the current reserve fund balance as of 12/31/2016 was \$226,935 and the total of the 2016 reserve contribution was \$41,850 and the 2017 planned contribution is \$41,850. The 2017 expenses if deducted from the reserve fund balance and the planned upcoming contribution and expenses would leave a net loss of \$8,781.00, (less the walk repairs) without any other expenditures from reserves. These figures were provided by the Association. The following inventory spreadsheets will reflect these updates and then assume no other 2017 repairs will be made, thereby adding a year additional life to any inventory item previously scheduled for 2017. (This includes the annual street repairs as the asphalt work will be adjusted in the site work at year end)

Carefully review the individual components on the *Component Inventory* to determine if several smaller, individual components can be consolidated into one line item that can be continuously funded. For example: If there are five or six components with a total replacement cost of \$1,000 each, the Association may want to consider funding all six components under one line item for a total of \$1,000 rather than reserving the full \$5,000 or \$6,000 dollars for all of these items. Should one of these six items ever have to be replaced, that \$1,000 line item would have to be brought current within a year or so after its expenditure. By doing this, rather than funding the full \$6,000, only a portion of the total would be funded. This approach would allow the Association to reduce their *Annual Contribution* to the reserve fund.

In conclusion, we feel that the existing conditions at the **Spring Creek Condominiums** are accurately represented within this report. It should be recognized that costs and useful lives fluctuate due to variables such as overall economic conditions, conditions within the construction industry, unanticipated severe weather, and the amount of ongoing maintenance performed. To ensure that proper funding levels are maintained, implement an updating policy such as the one outlined within this report.

It also should be kept in mind that this report is prepared for budgetary purposes only. In most cases, bids solicited for replacement of any of the components will not match the costs shown in the *Component Inventory*. The costs contained within this report are obtained from the sources listed and are based on the replacement of the existing components with components of similar quality. Specific notes in this regard may be contained within this report.

Executive Summary: Key Figures

Level of Service Provided

Full Component Inventory
Condition Assessment (based upon on-site visual observations)
Life and Valuation Estimates
Fund Status
Funding Plan

Physical Description

Number and Type of Units: 155 Attached Single Family Homes (Townhomes)

Age of Community: 31 Years

Financial Description

Beginning Reserve Balance: \$226,935 as of 12/31/2016

Source of Beginning Reserve Balance and Annual Contribution: Marilyn Oliver, Board of Directors

Funding Goal: Threshold Funding at 80% of Full Funding

Reserve Fund Status

Current Percent Funded (Beginning Reserve Balance/Full Funding Balance): 12%

Current Annual Contribution: \$41,850

Recommended Annual Contribution: \$125,234 Full Funding
\$100,813 Threshold Funding
Threshold at \$17,500 reached in 2018
at \$75,000 reached in 2033

Averaging Interval 30 years

Physical Analysis

The following pages represent the **UPDATED** *Physical Analysis* portion of the **Detailed Reserve Study**. This analysis is based on the *Component Inventory* which incorporates a *Condition Assessment* of each specific component. The *Condition Assessment* is presented as the *Estimated Remaining Life* of each *Component* with the accompanying *Notes*. Also included is a valuation of the replacement cost for each *Component*. These costs are derived as outlined within this study. **The updates are based upon primarily the additional age of the component plus whatever replacement information that was conveyed to Kipcon.**

Construction costs and useful life estimates in this report represent the Engineer's best judgment as a professional familiar with the construction industry. It is recognized, however, that neither the Engineer nor the Association has control over the cost of labor, energy, materials, or equipment; over the contractors' methods of determining bid prices; or over competitive bidding, marketing, or negotiating conditions.

Further, the Engineer cannot accurately determine the ongoing rate of deterioration, or the amount of preventive maintenance employed on an ongoing basis for determination of estimated useful lives. In all cases, unless stated otherwise, the useful life estimates are based upon visual inspections with no destructive testing employed. Accordingly, the Engineer cannot and does not warrant or represent those bids or negotiated prices and useful lives will not vary from that presented within the evaluation prepared or agreed to by the Engineer.

Spring Creek Condominiums Component Schedule Summary of Replacement Reserve Needs

Effective Date: January 1, 2017

CATEGORY	RESERVE REQUIREMENT PRESENT DOLLARS	BEGINNING BALANCE	BALANCE REQUIRING FUNDING	ANNUAL RESERVE FUNDING REQUIRED	FULL FUNDING BALANCE	PERCENT FUNDED
Sitework Totals	\$734,151	\$33,424	\$700,726	\$54,026	\$290,105	
Waterproofing Totals	\$1,509,578	\$141,304	\$1,368,274	\$379,161	\$1,223,126	The Percent Funded and Funding Goal are based on fully funding each component within the schedule. Please review the report for various funding strategies.
Interior Finishes Totals	\$96,977	\$5,437	\$91,541	\$10,291	\$47,062	
Exterior Finishes Totals	\$958,364	\$37,106	\$921,258	\$47,696	\$321,188	
Electrical Totals	\$19,015	\$1,233	\$17,782	\$1,829	\$10,671	
Special Construction	\$155,418	\$7,346	\$148,073	\$50,287	\$63,583	
Mechanical Totals	\$15,519	\$995	\$14,524	\$2,748	\$8,615	
Grand Totals	\$3,489,022	\$226,844	\$3,262,178	\$546,037	\$1,964,352	12%

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June 18, 2012
Updated February 3, 2017

Sitework

Component Inventory
Category: Sitework

				RESERVE REQUIREMENT				ANNUAL		
COMPONENT	QUANTITY	UNIT	COST	PRESENT DOLLARS	BEGINNING BALANCE	ESTIMATED USEFUL LIFE	ESTIMATED REMAINING USEFUL LIFE	RESERVE FUNDING REQUIRED	FULL FUNDING BALANCE	NOTES
Road Pavement Overlay	49,486	SF	\$1.54	\$76,347	\$3,087	20	13	\$5,635.38	\$26,721	1
Asphalt Parking and Driveway I Seal Coating	19,503	SF	\$0.10	\$1,923	\$133	5	2	\$894.85	\$1,154	2
Asphalt Parking and Driveway II Seal Coating	22,461	SF	\$0.10	\$2,215	\$154	5	2	\$1,030.57	\$1,329	2
Asphalt Parking and Driveway III Seal Coating	29,106	SF	\$0.10	\$2,870	\$199	5	2	\$1,335.46	\$1,722	2
Asphalt Parking and Driveway IV Seal Coating	11,970	SF	\$0.10	\$1,180	\$82	5	2	\$549.22	\$708	2
Asphalt Parking and Driveway V Seal Coating	28,820	SF	\$0.10	\$2,842	\$197	5	2	\$1,322.34	\$1,705	2
Asphalt Parking and Driveway VI Seal Coating	10,320	SF	\$0.10	\$1,018	\$71	5	2	\$473.51	\$611	2
Asphalt Parking and Driveway VII Seal Coating (some roads)	45,350	SF	\$0.10	\$4,472	\$310	5	2	\$2,080.78	\$2,683	2
Replace Driveway I	19,503	SF	\$1.25	\$24,433	\$423	20	17	\$1,412.35	\$3,665	2
Replace Rd & Driveway 3608-14 1	LS		\$30,044.00	\$30,044	\$174	20	19	\$1,572.13	\$1,502	2
Replace Driveway III	29,106	SF	\$1.25	\$36,464	\$1,896	20	11	\$3,142.58	\$16,409	2
Replace Driveway IV	11,970	SF	\$1.25	\$14,996	\$693	20	12	\$1,191.92	\$5,998	2
Replace Driveway V	28,820	SF	\$1.25	\$36,106	\$1,460	20	13	\$2,665.06	\$12,637	2
Replace Driveway VI	10,320	SF	\$1.25	\$12,929	\$448	20	14	\$891.49	\$3,879	2
Replace Driveway VII	45,350	SF	\$1.25	\$56,814	\$1,641	20	15	\$3,678.24	\$14,204	2
Concrete Sidewalks	4,709	SF	\$11.02	\$51,893	\$2,198	30	19	\$2,615.53	\$19,027	3
Concrete Entrywalks and Stoops	18,052	SF	\$11.60	\$209,403	\$10,483	30	17	\$11,701.19	\$90,741	4
Storm Sewer Replacement	1	LS	\$40,600.00	\$40,600	\$2,085	45	25	\$1,540.62	\$18,044	5
Wheel Stops	14	EA	\$87.00	\$1,218	\$6	25	24	\$50.52	\$49	6
Unit Retaining Walls	356	LF	\$131.08	\$46,664	\$2,336	30	17	\$2,607.55	\$20,221	7
Dumpster Pads and Fencing Clubhouse Yard and Rear	7	EA	\$2,320.00	\$16,240	\$1,051	25	11	\$1,380.85	\$9,094	8
Concrete	1,658	SF	\$11.02	\$18,271	\$633	30	21	\$839.90	\$5,481	9
Clubhouse Front Entry and Side Concrete	424	SF	\$11.02	\$4,672	\$162	30	21	\$214.79	\$1,402	10
Clubhouse and Tennis Court Walls	245	LF	\$131.08	\$32,115	\$2,844	30	7	\$4,181.46	\$24,621	11
Yard Chain Link Fence	30	LF	\$48.72	\$1,462	\$81	<u>25</u>	<u>13</u>	\$106.20	\$702	12
Concrete Wall Chain Link Fence	200	LF	\$34.80	\$6,960	\$579	25	<u>7</u>	\$911.58	\$5,011	13
Entry Monument	1	LS	\$1,740.00	\$1,740	\$67	<u>30</u>	<u>20</u>	\$83.65	\$580	14
Dumpster Pads 3606 and 3610 2	EA		\$2,552.00	\$5,104	\$24	<u>25</u>	<u>24</u>	\$211.68	\$204	8A
Totals				\$734,151	\$33,424			\$54,026	\$290,105	

Notes:

1. Interior Roads: The Association is responsible for the interior roads throughout the community, except for a stretch of road that the local municipality maintains. The roads were in adequate condition with moderate surface cracking. Repairing these cracks and seal coating will prolong the useful life of the roads. The roads are designed for storm water to flow into storm sewers. Periodically the pitch of the roads should be checked to ensure that any depressions in the center of the road are corrected to keep water from pooling and flowing to the sewers. Pooling water accelerates the deterioration of the road surface. **\$20,000 in street repairs were performed in 2015 and the asphalt drive between 3608-14 were resurfaced in 2016. Based upon these expenditures this may allow the replacement of the roads to be delayed. The road repairs taking place annually have been added to the inventory in the special construction section to reflect this typical annual expenditure. However, due to the specific road work being done the driveway replacement section has been amended and the annual "repair" has been delayed by 1 year. This has allowed an extension of the total useful life of the system by 5 years in our scheduling. In 2017 a 2" overlay is planned for the connecting road at 3608. This has been categorized at the annual street repair line item at \$40,000.00, all other road work has been stayed along with the useful life estimates. See special construction for the line entry. Budgeting such work on 5 year cycles in the plan allow to extend the useful life of the remaining road work each year.**



Crack in Center of section of Road



Storm Sewer crack at expansion joint



Road cracks and Auxiliary parking raveling at junction

2. Driveway and Parking Areas: Each building is equipped with asphalt drives and parking areas. In addition there are several auxiliary parking areas adjacent to the interior roads. The driveways are broken down into a schedule of phases and are set up by the Association for periodic seal coating and replacement. The driveways vary in condition since their maintenance and replacement schedules are staggered. **In 2014 Parking lots were removed and replaced at: 3707 Candlewyck Club Drive. Parking Lots were sealed and striped at 3721, 3716, and 3606 and repaired at the swale in drive lane at 3721. Phase numbers reflect this work. 2016 the area**

between the units 3608-14 will be resurfaced as per note 1 above. The replace driveway II line item was replaced by this expenditure.



Example of Driveway Alligator Cracking



Here water is pooling in the center area causing small and accelerating deterioration



This driveways pitch has caused a depression
When repaired the water needs to be directed out.



This section of entry drive is cracking

3. Concrete Sidewalks: The Association maintains sidewalk around the community. The sidewalks were observed to be in varying condition. Repair or replacement can be done per section as needed. The determination should be made based upon safety of the walks where cracks or non-level squares create a trip hazard. **Some sidewalk repair was done in 2014 between 3614 C & D.**



Significant Cracking



Expansion Joint failed walk seriously deflected

Detailed Reserve Study Update

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June 18, 2012
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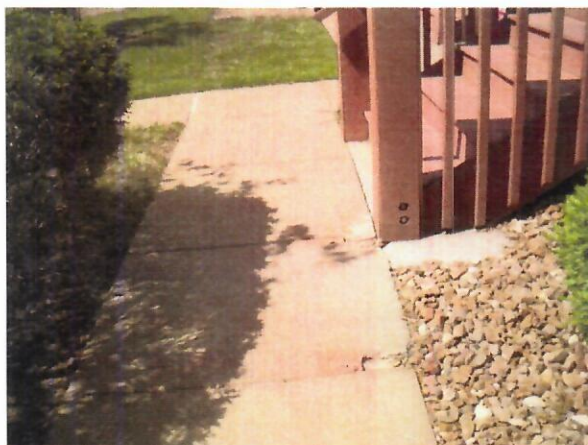


Concrete Driveway cracking

4. Concrete Entry Walks and Stoops: The Association is responsible to maintain the concrete entry walks and stoops leading from the common area walks and driveways to the individual units. These walks are in various conditions and vary with the age of the buildings. By maintain and repairing the concrete as needed full replacement can be delayed significantly. When this study is updated phasing replacement as with the driveways and exteriors can be done. **Entry walks and stoops were replaced in 2014 at 3608D, 3709E, 3709G, 3711C, 3722A, 3722D, and 3742F. A reduction in the inventory quantity was made to reflect this work.**



Typical Concrete cracks found in walks and stoops



Walkway deterioration

5. Storm Sewer Replacement: The roads of the development are equipped with open storm sewers for storm water drainage. For the Reserve Schedule a lump sum replacement/repair fund has been implemented and can be used to maintain the sewers as needed at the time of street repairs. The sewers themselves were observed to be in good condition. The sewers located on asphalt areas may require more attention to ensure water flow is properly maintained.



Storm sewer on asphalt road



Storm sewer on pavement

6. Wheel Stops: Some of the driveway parking area and auxiliary parking are equipped with wheel stops. Wheel stops generally are installed to prevent damage to curbs, landscaping or other features. Replacement may be required if they are damaged during other repair work, otherwise they have a long useful life.



Wheel Stops installed in driveway parking area

7. Unit Retaining Walls: There are several block retaining walls built in the community. Some protect driveways that are pitched down toward the street. Others protect the building walks. The walls were in most areas in satisfactory condition. There were some instances where shifting was observed and these areas should be monitored, and repaired if the condition worsens. **Work at the 3608-3614 area is planned at the expected cost of \$8,000 in 2017. This entry can also be found in "Special Construction", and will allow the extension of the useful life estimates for the other walks and walls for budgeting purposes.**

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Sagging Wall should be repaired.



Monitor shifting blocks such as these.

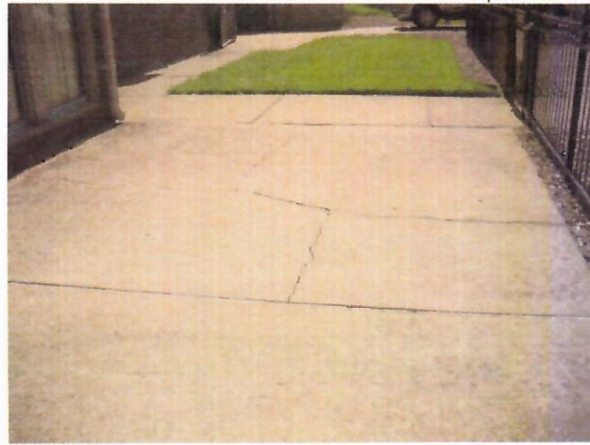
8. Dumpster Areas: There are nine (9) dumpster areas throughout the community, built with concrete pads and stockade type fencing. These areas are primarily maintained by the Association personnel and unless the pads deteriorate significantly should have extended useful lives. **In 2016 the pads at 3606 and 3610 were replaced. Based upon this 2 dumpster areas were separated in the inventory and their useful life restarted (8A) and the entry that listed 9 areas was reduced to the 7 remaining areas.**



9. Clubhouse Yard and Rear Concrete: The Clubhouse maintenance yard area is constructed with concrete and there are concrete walks in the rear of the building leading to the recreation areas. These areas of concrete had significant cracks and are in need of some repairs. If not repaired the need to replace will be accelerated. **Work in this area was completed in 2015 both in the maintenance area and the walks behind the clubhouse. The inventory has been adjusted extending the useful life for these areas of concrete for this allowance.**



Maintenance Yard



Rear Walkway

10. Clubhouse Front Entry and Side Concrete: The clubhouse is equipped with front entry walkways, that has been upgraded to be ADA accessible and is in very good condition. The side concrete and stairs up from the rear of the building to the front were also in better than average condition.



Newer Ramp for clubhouse front entry



Side concrete and stairs

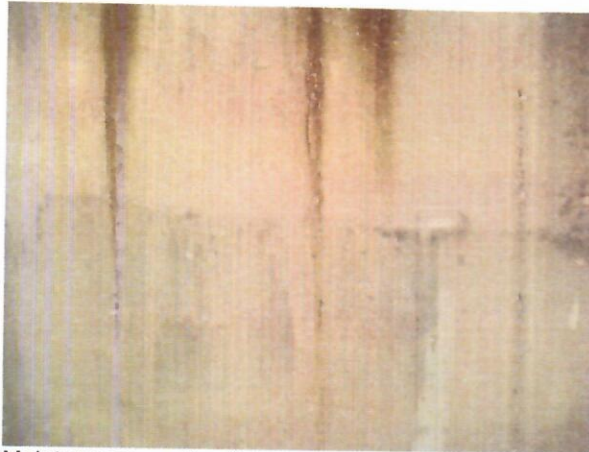
11. Clubhouse and Tennis Court Walls: The clubhouse yard and the tennis court areas are bordered with concrete walls. The walls were observed to be in fair condition. Evidence of deterioration was noted where water infiltration into the wall had caused damage to the metal ties and rebar and rust was leeching through the concrete. This is occurring primarily in the location of the attached fence posts due to the penetrations ion the concrete where they are attached. These require repairs that will prevent further water infiltration. The status quo will eventually cause the wall to begin to fail and patching sealing and related repairs should be undertaken to prevent a major expense.

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Maintenance yard wall



Tennis Court Wall



Example where fence post penetration is allowing water infiltration and damage.

12. Yard Chain Link Fence: The maintenance yard is enclosed with chain link fence. The fence is older however was observed to be functional at the time of the site visit. It is recommended that this fence continue to be used and repaired as needed for as long as possible. **The fence underwent repairs along with the concrete and based upon that the remaining useful life of the fence was extended.**



Gate in adequate condition.

13. Concrete Wall Chain Link Fence: The top of the clubhouse and tennis court walls are protected by a short chain link fence installed into the top of the walls. The fence was in adequate condition other than the post footings that have been compromised and are allowing water to infiltrate the wall as discussed above in note 11. The tennis court fencing was observed to be in better than average condition, but as it was added to the tennis court wall the penetrations require maintenance.

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Maintenance yard side wall



Extension to clubhouse front.

14. Entry Monument: There is an entry monument located at the main entry street into the Association. The monument was observed to be in good condition with well-maintained landscaping.



Detailed Reserve Study Update

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June 18, 2012
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Waterproofing

Component Inventory

Category: Waterproofing

				RESERVE REQUIREMENT				ANNUAL RESERVE	FULL FUNDING	
COMPONENT	QUANTITY	UNIT COST		PRESENT DOLLARS	BEGINNING BALANCE	ESTIMATED USEFUL LIFE	ESTIMATED REMAINING USEFUL LIFE	FUNDING REQUIRED	BALANCE	NOTES
Club House Roofing	2,562	SF	\$2.38	\$6,092	\$507	25	7	\$797.95	\$4,387	16
Club House Gutters and Downspouts	380	SF	\$6.96	\$2,645	\$220	25	7	\$346.40	\$1,904	17
6 Unit Roofs I	573	SQ	\$359.60	\$206,051	\$21,900	25	2	\$92,075.39	\$189,567	18
6 Unit Roofs II	573	SQ	\$359.60	\$206,051	\$20,948	25	3	\$61,700.99	\$181,325	18
6 Unit Roof III	765	SQ	\$359.60	\$275,094	\$26,696	25	4	\$62,099.55	\$231,079	18
6 Unit Gutters and Downspouts I	1,962	SF	\$6.96	\$13,656	\$1,451	25	2	\$6,102.07	\$12,563	19
6 Unit Gutters and Downspouts II	1,962	SF	\$6.96	\$13,656	\$1,388	25	3	\$4,089.08	\$12,017	19
6 Unit Gutters and Downspouts III	2,616	SF	\$6.96	\$18,207	\$1,767	25	4	\$4,110.12	\$15,294	19
8 Unit Roofs I	630	SQ	\$359.60	\$226,548	\$20,938	25	5	\$41,122.03	\$181,238	20
8 Unit Roofs II	630	SQ	\$359.60	\$226,548	\$19,891	25	6	\$34,442.84	\$172,176	20
8 Unit Gutters and Downspouts I	2,757	SF	\$6.96	\$19,189	\$1,596	25	7	\$2,513.23	\$13,816	21
8 Unit Gutters and Downspouts II	2,757	SF	\$6.96	\$19,189	\$1,685	25	6	\$2,917.32	\$14,583	21
Original Buildings Roofs (3 Bldgs)	274	SQ	\$359.60	\$98,530	\$10,245	20	2	\$44,142.90	\$88,677	22
Original Buildings Gutters and Downspouts (3 bldgs)	2,434	SF	\$6.96	\$16,941	\$1,801	25	2	\$7,570.06	\$15,585	23
Stack Units and Garages Roofs	297	SQ	\$359.60	\$106,801	\$7,897	25	9	\$10,989.40	\$68,353	24
Stack Units w/ Garages Gutters and Downspouts	3,030	SF	\$6.96	\$21,089	\$1,559	25	9	\$2,169.95	\$13,497	25
Chimney Caps	72	EA	\$406.00	\$29,232	\$675	20	16	\$1,784.79	\$5,846	26
French Drain System	1	LS	\$4,060.00	\$4,060	\$141	30	21	\$186.63	\$1,218	15
Totals				\$1,509,578	\$141,304			\$379,161	\$1,223,126	

Notes:

15. French Drain System: The community has installed French drain throughout the area to assist with storm water drainage, and the item has been added to the water proofing inventory. The cost estimate is to allow for repairs or replacement as needed.

16. Club House Roofing: The club house roof is comprised of dimensional shingles and was last replaced after the hail storm event in 2001-02. The current roof was viewed from the ground and was observed to be slightly past 50% of its useful life. The building has a small shingled canopied roof at the front of the building.

17. Club House Gutters and Downspouts: The gutters and downspouts were observed to be in good condition. The roof is designed for storm water to flow off the rear of the roof to gutters and downspouts.

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18. The 6-Unit Building Roofs: There are ten buildings containing 6- residential units. These roofs were also replaced after the storms of 2001. The shingles in the valleys of various garden style units may not have been properly weaved at the time of the replacement and have been or are scheduled for repair. The roofs are broken down into three phases for replacement beginning in 6 years.



19. The 6-Unit Gutters and Downspouts: The gutters and downspouts were in adequate condition. They are scheduled in the same manner of the roofs for replacement.



20. 8 Unit Roofs: There are six 8 Unit buildings in the community. The roofs were also replaced last in 2001-02. For budgeting purposes these have been divided into two phases for future replacement. The shingles observed were in a condition commensurate with their age.

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21. 8 Unit Downspouts and Gutters: The downspouts and gutters for the 8 Units buildings were observed to be in average condition and are scheduled for replacement with the roofs. Rusting downspouts at the elbows should be monitored



22. Original Building Roofs: There are two twin 10 unit original building and one additional 4 unit structure. These roofs are scheduled for replacement in a separate phase. These buildings in general do not have as steep a pitch as the newer models and as a result water run-off is not as efficient leading to shorter shingle life spans. Special attention should be placed upon correct flashing and freeze board installation at the time of replacement. The smaller building also has a car port roof constructed of metal decking.



23. Original Building Gutters and Downspouts: The original buildings' gutters and downspouts are scheduled for replacement along with the roofs. The system should be carefully reviewed by an engineer prior to replacement to ensure proper calculations to lessen the potential storm water pooling due to the character of the roofs. Note should be taken regarding the elbows in the downspouts that were observed to be rusting.



24. Stack Unit Buildings Roofs: There are three stack unit buildings. These have detached garage building. (Although the residential units and the garages abut). For the purposes of the phases for grouping roofing replacement the stack units with garages are scheduled together in one phase.
25. Stack Unit Gutters and Downspouts: The stack unit buildings were observed to have more than sufficient amounts of gutter and downspout which was in good condition based on the visual inspection.



Detailed Reserve Study Update

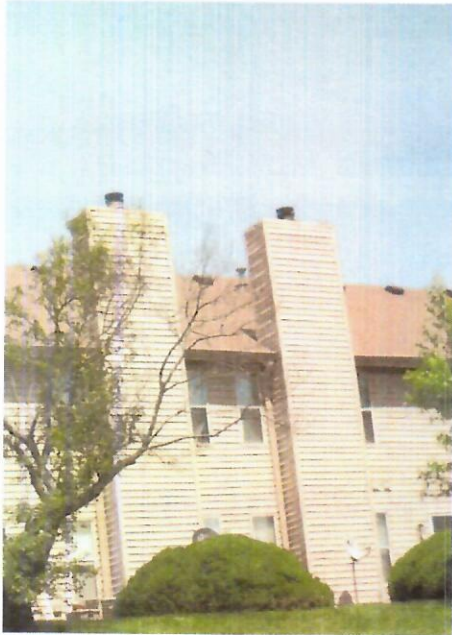
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26. Chimney Caps: The roofs of the development are equipped with seventy-five (75) total chimney caps. The Association is preparing to replace the chaps. This can be done individually, in groups or as part of the roof replacement schedule. A separate calculation has been included based on the current estimate to replace. ***The chimney caps were replaced in 2013; the useful life of the component has been restarted.***



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Interior

Component Inventory Category: Interior

COMPONENT	QUANTITY	UNIT COST	RESERVE REQUIREMENT PRESENT DOLLARS	BEGINNING BALANCE	ESTIMATED USEFUL LIFE	ESTIMATED REMAINING USEFUL LIFE	ANNUAL RESERVE FUNDING REQUIRED	FULL FUNDING BALANCE	NOTES	
Clubhouse Tile Flooring	1,310	SF	\$12.76	\$16,716	\$901	30	16	\$988.40	\$7,801	27
Club House Carpet	175	SY	\$48.89	\$8,556	\$791	10	2	\$3,882.83	\$6,845	28
Interior Furnishings	1	LS	\$29,000.00	\$29,000	\$1,608	25	13	\$2,107.07	\$13,920	29
Kitchen Appliances	1	LS	\$4,060.00	FALSE	\$0	25	16	\$0.00	\$0	30
Office Equipment/Computers	1	LS	\$3,480.00	\$3,480	\$295	15	4	\$796.29	\$2,552	31
Drinking Fountains	2	EA	\$1,044.00	\$2,088	\$121	20	10	\$196.74	\$1,044	32
Overhead Doors	2	EA	\$580.00	\$1,160	\$107	30	6	\$175.47	\$928	33
Locker Room & Restroom Fixtures	1	LS	\$13,920.00	\$13,920	\$772	25	13	\$1,011.39	\$6,682	34
Entry Door	1	LS	\$696.00	\$696	\$35	25	14	\$47.19	\$306	35
Interior Doors	9	EA	\$319.00	\$2,871	\$159	25	13	\$208.60	\$1,378	36
Patio Doors	2	EA	\$1,740.00	\$3,480	\$188	30	16	\$205.77	\$1,624	37
Double Hung Windows	5	EA	\$348.00	\$1,740	\$80	35	21	\$79.03	\$696	38
Windows (Sliders)	12	EA	\$319.00	\$3,828	\$177	35	21	\$173.86	\$1,531	39
Picture Windows w/Transoms	12	EA	\$522.00	\$6,264	\$83	35	31	\$199.40	\$716	40
Picture Windows	4	EA	\$446.60	\$1,786	\$24	35	31	\$56.86	\$204	41
Fire Extinguishers	6	EA	\$232.00	\$1,392	\$96	20	8	\$161.94	\$835	42
Totals				\$96,977	\$5,437			\$10,291	\$47,062	

Notes:

27. Clubhouse Tile Flooring: The clubhouse floors are covered with tile flooring in the entry vestibule, kitchen and in the locker room areas. Some discoloration in the tiles that was observed can be cleaned. There is also rubber tile flooring on the lower level appropriate for swimmers entering and exiting the locker room areas in good condition.



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28. Clubhouse Carpeting: The main floor of the clubhouse is carpeted. The carpeting shows wear and tear and some staining. The useful life may be able to be extended with regular cleaning.



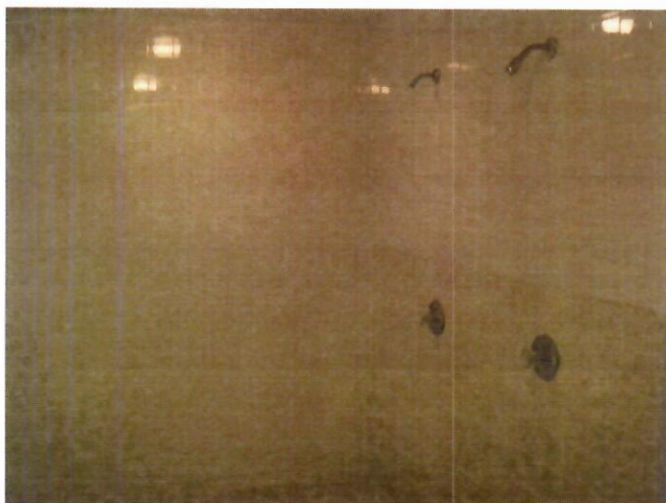
29. Clubhouse Furnishings: The clubhouse has modest furnishings, for which we have included a lump sum for replacing at some point in the future. **In 2014 new blinds and seat cushions were purchased. Based upon those costs and the general conditions of the furnishings a larger amount has been included in the budget for future expenditures in this area.**



30. Kitchen: The clubhouse kitchen is equipped with various appliances including stove, refrigerator and microwave oven. These were in very good condition. A lump sum has been recommended to reserve for the replacement.



31. Office Equipment: The Association maintains an office in the clubhouse, currently in use by the on-site manager. Equipment includes (2) computers and furniture.
32. Drinking Fountains: There are two drinking fountains located in clubhouse lower level. These were observed to be in good condition and operating. Overhead Doors: The lower level is equipped with two overhead doors for access from the maintenance yard area. One of the doors was set up in such way that it was not being used. The doors were in fair condition. If only one door is to be in use the permanent sealing and closure of the other could result in energy savings limiting heat and cooling loss at the area.
33. Locker Room and Restroom Fixtures: There are both men's and women's facilities in the clubhouse. These include showers, sinks and toilets. All were observed to be in1 adequate condition. A lump sum replacement recommendation has been placed in the schedule however; replacements can be installed on as needed basis.



34. Overhead Doors: The lower level is equipped with two overhead doors for access from the maintenance yard area. One of the doors was set up in such way that it was not being used. The doors were in fair condition. If only one door is to be in use the permanent sealing and closure of the other could result in energy savings limiting heat and cooling loss at the area.

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35. Entry Door: The clubhouse main entry door is constructed of double solid wood and was observed to be in very good condition.



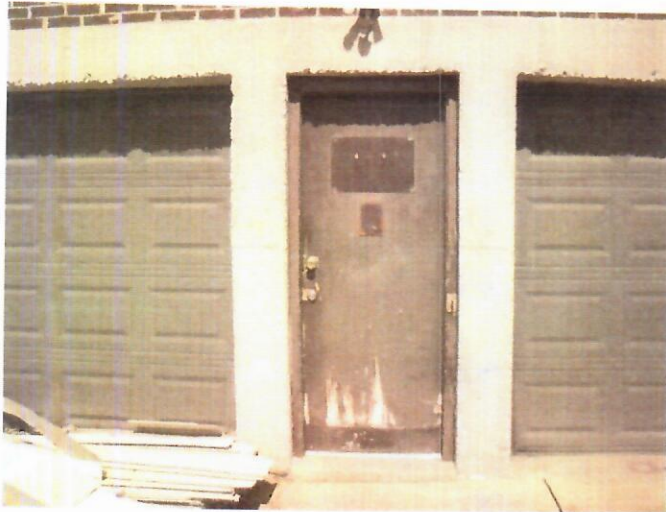
36. Other Doors: There are nine (9) other doors in the clubhouse that will eventually require replacement. If they are painted/stained or otherwise maintained their estimated remaining useful life can be extended. ***There is an exterior door at the maintenance yard that was replaced in 2013.***

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37. Patio Doors: There are two sliding glass patio doors installed in the clubhouse. These may have extended lives depending upon the frequency of use, and maintenance such as the upkeep of the rollers.



38. Double Hung Windows: There are (5) double hung windows at the front of club house. These should have extended useful lives.

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39-40. Slider Windows-Picture Windows with Transoms: There are twelve (12) window openings that have two light sliders on the bottom, large picture windows set in the middle and dead light transoms on the top of the opening all mulled together. In general these type windows should have long useful lives; however replacement in most cases is of the entire unit. The Association has been replacing these units as needed.



41. Picture Windows: There are four (4) opening in the club house with picture window units. Again to be replaced as needed. For all windows regular caulking and sealing, painting the exteriors and inspecting the headers and lintels to limit any potential water infiltration that could damage the window frames or adjoining interior walls will aid in extending the estimated remaining useful lives.

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42. Fire Extinguishers: There were six (6) extinguishers observed in the club house. Those viewed were properly tagged. These have manufacturer recommended care and replacement instructions to follow.

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Exterior

Component Inventory Category: Exterior										
				RESERVE REQUIREMENT		ESTIMATED	ESTIMATED	ANNUAL	FULL	
COMPONENT	QUANTITY	UNIT COST		PRESENT DOLLARS	BEGINNING BALANCE	USEFUL LIFE	REMAINING USEFUL LIFE	RESERVE FUNDING REQUIRED	FUNDING BALANCE	NOTES
6 Unit Façade Siding I	15,960	SF	\$3.48	\$55,541	\$2,994	30	16	\$3,284.15	\$25,919	43
6 Unit Façade Tuck Pointing I	4,440	SF	\$9.28	\$41,203	\$2,584	35	16	\$2,413.70	\$22,367	44
6 Unit Façade Siding II	15,960	SF	\$3.48	\$55,541	\$2,567	30	18	\$2,943.01	\$22,216	43
6 Unit Façade Tuck Pointing II	4,440	SF	\$9.28	\$41,203	\$1,904	30	18	\$2,183.29	\$16,481	44
6 Unit Façade Siding III	21,280	SF	\$3.48	\$74,054	\$2,852	30	20	\$3,560.13	\$24,685	43
6 Unit Façade Tuck Pointing III	5,920	SF	\$9.28	\$54,938	\$2,116	30	20	\$2,641.10	\$18,313	44
8 Unit Façade Siding I	29,730	SF	\$3.48	\$103,460	\$3,586	30	21	\$4,755.94	\$31,038	45
8 Unit Façade Tuck Pointing I	7,920	SF	\$9.28	\$73,498	\$2,547	30	21	\$3,378.59	\$22,049	46
8 Unit Façade Siding II	29,730	SF	\$3.48	\$103,460	\$3,187	30	22	\$4,557.87	\$27,589	45
8 Unit Façade Tuck Pointing II	7,920	SF	\$9.28	\$73,498	\$2,264	30	22	\$3,237.88	\$19,599	46
Original Buildings Façade Shingles	17,787	SF	\$2.32	\$41,266	\$2,384	30	15	\$2,592.15	\$20,633	47
Original Buildings Façade Tuck Pointing	8,368	SF	\$9.28	\$77,655	\$4,486	30	15	\$4,877.96	\$38,828	48
Club HouseFaçade Shingles	626	SF	\$9.28	\$5,809	\$291	30	17	\$324.62	\$2,517	49
Club House Façade Tuck Pointing	1,880	SF	\$9.28	\$17,446	\$873	30	17	\$974.88	\$7,560	49
Stack Units Façade Siding	21,846	SF	\$3.48	\$76,024	\$2,049	30	23	\$3,216.29	\$17,739	50
Stack Unit Facades Tuck Pointing	5,184	SF	\$9.28	\$48,108	\$0	30	23	\$2,091.63	\$0	51
Stack Units Wood Staircases	3	EA	\$5,220.00	\$15,660	\$422	30	23	\$662.52	\$3,654	52
Totals				\$958,364	\$37,106			\$47,696	\$321,188	

Notes:

43. 6 Unit Buildings Siding: The ten 6 unit buildings have exteriors of vinyl siding and brick. For replacement purposes the materials have been separated and the building split into three phases. For the 6 unit buildings the ratio is set at approximately 80-20. The side and rear elevations are covered with siding as well as a portion of the front. The siding was replaced after the storm of 2001. Certain areas were noted to have defects.

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44. 6 Unit Facades Tuck Pointing: The front elevations and garage walls have brick installed. The masonry was observed in adequate condition and the schedule to review if pointing is necessary is set with the time the siding will be probably require replacement. **3 buildings 3608/3610 and 3614 were pointed in 2015. The phase I useful life has been slightly adjusted adding some estimated remaining useful life.**



44. 8 Unit Facades Siding: The six 8 unit buildings have been divided into 2 phases for scheduled replacement. The age of all the siding is similar. There are some observable defects that should be repaired currently.

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45. 8 Unit Tuck Pointing: In general the design of the front and side elevations are similar for the 8 unit buildings And the tuck pointing for these areas have been set to coincide with siding replacement.



46. Original Building Façade, Shingles: The three original buildings were constructed with brick and mansard style shingled facades. The original buildings are phased together for replacement. The shingles reviewed were in adequate condition as per the schedule.

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47. Original Building Façade Tuck Pointing: The lower front, rear and side elevations of these buildings have brick facades. The tuck pointing is phased on the same schedule as the shingle replacement.



48. The Clubhouse Façade Shingles: The clubhouse was built with the same mansard style façade at the top of the building using shingles. These were observed to be in good condition. **There were repairs to the fascia made in 2015.**

49. The Clubhouse Façade Tuck Pointing: The remainder of the clubhouse is constructed of brick. The current condition of the mortar is satisfactory and can be done when the need arises.



50. The Stack Units Façade Siding: The stack units are constructed with brick and siding fronts, siding on the rear elevations and brick facades for the garages. The three buildings have been grouped together for siding replacement and tuck pointing.

51. The Stack Units Tuck Pointing: The garage walls and front elevations are constructed with brick. There are also small retaining walls build across the front areas. The condition of the masonry was satisfactory however careful attention should be paid to the walls and entry door areas.



52. The Stack Units Wood Staircases: Each of the stack unit buildings are equipped with wood staircases for ingress and egress to the units. The staircases were observed to have areas of deterioration and repairs to any damaged risers, balusters, and railings as needed should be done. In addition sealing and staining regularly is recommended. Possible long term reduction of maintenance for these stairs and landings would be using maintenance free materials such as Trex for replacement.

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Electrical

Component Inventory
Category: Electrical

				RESERVE REQUIREMENT		ESTIMATED	ESTIMATED	ANNUAL		
COMPONENT	QUANTITY	UNIT	COST	PRESENT DOLLARS	BEGINNING BALANCE	USEFUL LIFE	REMAINING USEFUL LIFE	RESERVE FUNDING REQUIRED	FULL FUNDING BALANCE	NOTES
Clubhouse Ext. Lighting Spots	7	EA	\$319.00	\$2,233	\$144	25	11	\$189.87	\$1,250	53
Clubhouse Ext. Lamps	2	EA	\$348.00	\$696	\$56	20	6	\$106.62	\$487	54
Interior Fixtures Standard	24	EA	\$261.00	\$6,264	\$405	25	11	\$532.61	\$3,508	55
Clubhouse Interior Lamps	5	EA	\$348.00	\$1,740	\$113	25	11	\$147.95	\$974	56
Interior Fluorescents	13	EA	\$280.14	\$3,642	\$185	25	14	\$246.91	\$1,602	57
Ceiling Fan Fixtures	3	EA	\$348.00	\$1,044	\$68	25	11	\$88.77	\$585	58
Chandelier	1	EA	\$464.00	\$464	\$30	25	11	\$39.45	\$260	59
Emergency Lights	2	EA	\$436.16	\$872	\$60	20	8	\$101.48	\$523	60
Exit Signs	4	EA	\$208.80	\$835	\$58	20	8	\$97.16	\$501	61
Smoke Detectors	6	EA	\$204.16	\$1,225	\$113	20	4	\$277.94	\$980	62
Totals				\$19,015	\$1,233			\$1,829	\$10,671	

Notes:

A one-time expense of \$7,800.00 for moving the electrical box inside was spent in 2013. This is not reflected on the schedules but reserve funds were properly used.

53. Clubhouse Exterior Spot Lights: The clubhouse is equipped with exterior spotlights in the rear of the building for safety particularly for evening pool activities, on the side stairway and at the maintenance yard. Timing mechanisms should be kept in good condition.



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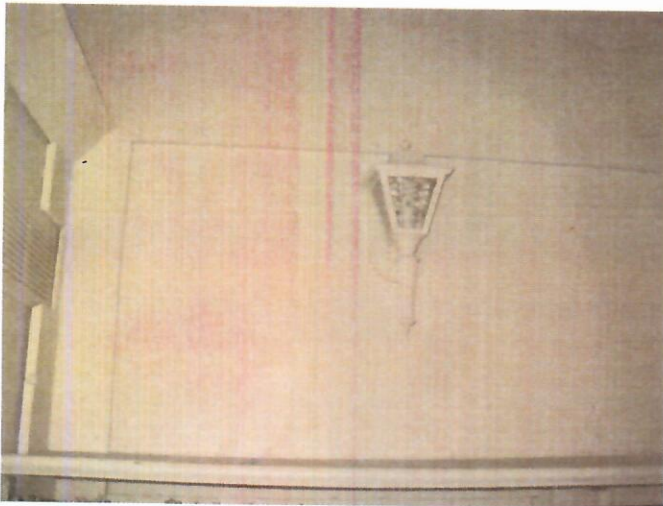
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54. Clubhouse Exterior Lamps: There are two lamps mounted at the front entry to the building. These were in good condition at the time of the inspection. These were viewed to be on during daylight hours suggesting the timers need attention or adjustment.



55. Interior Fixtures: The club house had various standard interior fixtures. When these become due for replacement higher efficiency fixtures and lights should be considered.

56. Interior Wall Mounted Lamps: There are five interior wall mounted lamps. Their uses appeared limited and are primarily decorative in nature. They may never require replacement.



57. Fluorescent Lighting: There are several fluorescent lights installed in the club house, including the office and maintenance room. These were observed to be in good condition.

58. Ceiling Fan Fixtures: Three ceiling fan fixtures are installed in the club house. When replacement is required efficient lights and cost effective mechanisms should be reviewed.

Detailed Reserve Study Update

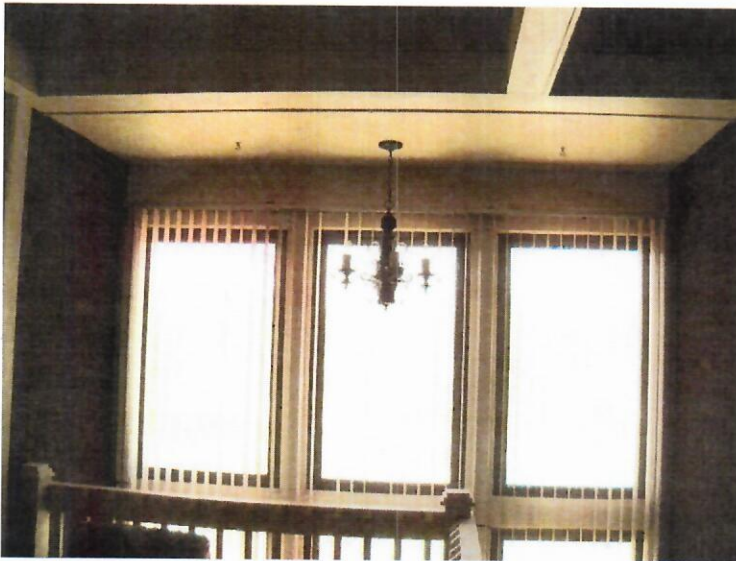
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59. Chandelier: A chandelier is installed at the top of the staircase top the lower level of the club house. The condition was observed to be adequate.



60. Emergency Lights: There are two emergency lights installed on the main floor of the club house. Review the lower level for additional lights as may be necessary.



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61. Exit Signs: Four exit signs were accounted for and observed to be in good condition and adequate for this building, at this time.



62. Smoke Detectors: Six smoke detectors are placed in the club house at appropriate locations. These should be changed as per manufacturer requirements and batteries changed each 6 months.



Special Construction

Component Inventory

Category: Special Construction

COMPONENT	QUANTITY	UNIT COST	RESERVE REQUIREMENT PRESENT DOLLARS	BEGINNING BALANCE	ESTIMATED USEFUL LIFE	ESTIMATED REMAINING USEFUL LIFE	ANNUAL RESERVE FUNDING REQUIRED	FULL FUNDING BALANCE	NOTES	
Tennis/Basketball Court Fence	315	LF	\$44.01	\$13,863	\$1,469	25	2	\$6,197.31	\$12,754	63
Tennis/Basketball Court Resurface	1	LS	\$11,020.00	\$11,020	\$127	10	9	\$1,210.34	\$1,102	64
Gazebo	1	EA	\$2,338.56	\$2,339	\$237	25	3	\$700.53	\$2,058	65
Pool Resurfacing	1	EA	\$29,000.00	\$29,000	\$334	20	18	\$1,592.56	\$2,900	66
Replace Outdoor Pool Decks	3,825	SF	\$2.69	\$10,294	\$474	15	9	\$1,091.08	\$4,118	67
Pool Fence	310	LF	\$56.84	\$17,620	\$232	35	31	\$560.92	\$2,014	68
Pool Furniture	1	LS	\$5,800.00	\$5,800	\$178	30	22	\$255.54	\$1,547	69
Pool Pump House	1	LS	\$522.00	\$522	\$50	30	5	\$94.38	\$435	70
Pool Covers	1	LS	\$6,960.00	\$6,960	\$240	10	7	\$959.94	\$2,088	71
Tractor	1	EA	\$17,400.00	\$17,400	\$240	25	22	\$779.98	\$2,088	72
Street Repairs	1	LS	\$40,600.00	\$40,600	\$3,740	5	1	\$36,859.89	\$32,480	*1
Retaining Wall and Sidewalk Repairs	1	EA	\$8,004.00	\$8,004	\$737	5	1	\$7,266.66	\$6,403	*3,*7
Totals			\$163,422	\$8,059			\$57,569	\$69,986		

Notes:

63. Tennis/Basketball Court Fence: The tennis and basketball courts are bordered with tall chain link fencing. The fencing is in varying stages of dis-repair including bad footings, broke links and areas of significant rust. Plans to replace fence in the near future should be considered. The basketball fencing along the new clubhouse staircase was in good condition. Issues with the tennis court drainage should be reviewed prior to any installation of new fencing.



64. Tennis/Basketball Court Resurfacing: The continued use of the tennis court for its designed purpose will require a re-surfacing. The court has significant cracks, is poorly pitched for drainage and is deteriorating. Deterioration will accelerate if repairs are not soon undertaken. **The tennis courts were resurfaced in 2016 at the cost of \$9,985 and the useful restarted and the future cost adjusted.**

The basketball court remains in adequate condition at the present time.



65. Gazebo: There is a gazebo shelter at the tennis court area. It was observed to be in fair condition and the support posts and footings should be monitored to ensure the post is sitting square on the footing.



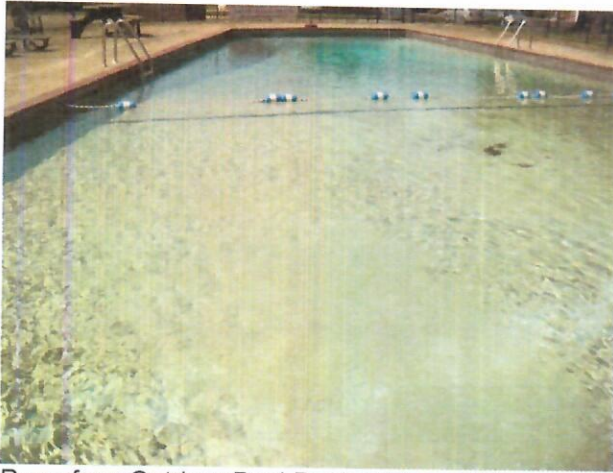
66. Repair/Paint Outdoor Pool: The Association maintains an outdoor swimming pool. The pool requires structural repairs and repainting regularly, so it has been added to the reserves. At the time of the inspection the pool lining was observed to be satisfactory, and no leaks were reported, For an actual inspection the water would have to be drained. Pool maintenance agreements should be maintained as the most cost effective method to keep up with the liner. **The Pool was resurfaced in 2014 at the cost of 26,571. This was adjusted for in the inventory.**

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67. **Resurface Outdoor Pool Decks:** The outdoor pool deck is comprised of concrete. It was observed to have cracking in several areas. It appeared that caulking or other repairs were attempted and that those repairs failed. New repairs with proper products such as "sika-crete" and "sika-top" should be attempted prior to costly re-surfacing. **4 sections of the deck are to be replaced in 2015. Adjustments were made in the inventory for this work to be done.**



68. **Pool Fence:** The current wrought iron pool fence has areas of rust and may not be tall enough to stop trespassers onto the property. The Association is considering a more suitable replacement. In the event the fence is not replaced it should have the areas of rust grinded and the entire fence painted. ***The pool fence was replaced in 2013 with a new 6ft "non-climbable" system.***



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69. Pool Furniture: The pool furniture is approximately 6-10 years old and made of primarily maintenance free materials. The condition of the furniture at the time of the inspection was very good and should have a significant remaining useful life.



70. Pool Pump House: There is a small sided "dog house" style pump house housing the pool pumps and filters. The house has been poorly maintained, has a lock that is difficult to operate and replacement with something more accessible and convenient should be considered when it is time to replace. (see photo of pumps below)

71. Pool Covers: The Association purchased pool covers in 2011 for approximately \$7,000.00. The manufacturer indicates the covers will last from 5-10 years. If they are well maintained the life would tend to the longer side.

72. Tractor: The Association owns a Kubota Tractor that is nearing the end of its useful life. The manufacturer has various similar styles and models, therefore the replacement cost here is merely for suggested cost of a possible replacement model. **A new tractor is in the process of being or will have been purchased by the time of the issuance of this report. The Association has contracted to pay \$17,539.00 for the new vehicle and finance it over 60 months at the cost of \$3504.00 per year.**



*1: Annual street repairs were added to the budget in this section; for this update they were skipped for 2016 as the work for this year was accounted for in the driveway resurfacing section in Sitework but added back in 2017.

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Mechanical

Component Inventory Category: Mechanical

COMPONENT					RESERVE			ANNUAL		
	QUANTITY	UNIT COST	PRESENT	BEGINNING	ESTIMATED	ESTIMATED	RESERVE	FULL	NOTES	
			DOLLARS	BALANCE	USEFUL	REMAINING	FUNDING	FUNDING		
					LIFE	USEFUL LIFE	REQUIRED	BALANCE		
Furnaces	3	EA	\$1,371.12	\$4,113	\$380	20	4	\$933.30	\$3,291	73
Condensers	3	EA	\$1,388.52	\$4,166	\$385	20	4	\$945.14	\$3,332	74
50 Gallon DHW	1	EA	\$1,240.00	\$1,240	\$115	20	4	\$281.35	\$992	75
Pool Pump and Filters	1	LS	\$6,000.00	\$6,000	\$116	12	10	\$588.45	\$1,000	76
Totals				\$15,519	\$995			\$2,748	\$8,615	

Notes:

73. Furnaces: The clubhouse is equipped with three (3) comfort maker furnaces that were replaced in 1999-2000. They were observed to be in good condition and if properly maintained will last at least an additional 8 years.



74. Condensers: The furnaces operate in tandem with three (3) Comfort Maker condensers set on concrete slabs. The condensers due to their location at the rear of the clubhouse have suffered wear and tear and should be monitored, and covered during the winter.

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75. Domestic Hot Water Heater: The clubhouse obtains hot water from a 50 gallon Ruud gas fired hot water heater. The unit was installed in 1998 and no operating deficiencies were reported.



76. Pool Pumps and Filters: The pool pumps and filters are located at the pool pump house as described above. The pumps and filters were not physically tested but visually appeared in adequate condition. ***A new pool pump was installed in 2014; the component inventory reflects this purchase, in both useful life and cost reduction.***



Financial Analysis

The *Cash Flow Chart* and *Cash Flow Graph* (pages 46 and 47) contain an **UPDATED Projected Thirty (30) Year Cash Flow** of the reserve requirements for the **Spring Creek Condominiums**. This analysis contains three (3) funding scenarios. The first, entitled *Full Funding*, is based on the assumption that all of the items which make up the schedule are fully funded. By this, we mean that each item will accumulate its full replacement cost during its *Estimated Remaining Life*. At the end of this period (which varies for each reserve component), the item would be replaced and the funding cycle would start again. This is due to the fact that each *Component* of the fund has a different *Estimated Useful Life* and a different replacement value.

The second funding scenario represents a continuation of the Association's current contribution amount for the duration of the projection period. It is based on the *Beginning Balance* provided by the Association Board of Directors, and the calculated expenditures.

The third funding scenario is "*Threshold Funding*", allows for the community to meet its funding needs by collecting assessments at a lesser amount than required for full funding. The goal of threshold funding is to maintain a minimum balance in the reserve account as determined by the Association and continue to be able to replace the common area elements as needed.

THE FOLLOWING SCENARIOS HAVE BEEN UPDATED

Because expenditures vary from year to year, the *Annual Contribution* to the reserves changes over the projection period. Since it is impractical to expect the Association to adjust the amount of its contribution to the reserve fund on a yearly basis, our cash flow analysis is based on an average contribution amount (designated *Average Annual Contribution*) for the *Full Funding* scenario in the chart. Based on calculating the average over 30 years, one (1) amount was obtained. In the case of the, Spring Creek Condominiums, the following data was calculated:

1. The *Annual Contribution* for the year beginning 2017 would be \$553,474. This amount is taken directly from the Summary of Replacement Reserve Needs page contained in this report, and is the number used in the cash flow projection. (This number continues to increase as projected projects get pushed back from the original study.)
2. Projections of the *Annual Contribution* amount for Years 2018 through 2046 also are shown. These vary from year to year but, generally decrease over time to an amount of \$95,492 in the final year of the projection.
3. The *Average Annual Contribution* for the thirty (30) years of the *Full Funding* analysis is \$125,234. This is based on calculating the total amount of the *Annual Contribution* column for Years 1 through 30, and averaging it. This is a slight increase from the 2016 projection based upon extending the useful life of various elements.
4. The continuation of the current funding plan of \$41,850 per year projects to a negative amount in the reserve account beginning in the year 2018, and continues to grow a significant deficit by the end of the plan. If this funding plan remains either a significant special assessment or bank loans will be necessary to fund replacement needs. The Association continues to adequately function at this time without depleting reserves by extending useful life estimates on various elements that do not demand immediate replacement action.
5. The *Annual Contribution* for the thirty (30) year time frame, when applying *Threshold Funding*, is \$100,813. Threshold funding at 80% of total replacement needs will eventually result in a low threshold figure of \$17,470 in 2018, and \$74,958 in 2033. The Association could adjust these figures to plan for increases to offset these deficits. This will allow more in depth financial planning to determine a course of action to maintain the association buildings and grounds. **Therefore, if the Association implements *Threshold Funding*, it is imperative that the Reserve Study be updated regularly to minimize the danger of creating a deficit in the reserve fund.**

6. The Association may want to gradually increase reserve contributions to offset any initial large increases. These smaller annual increases may result in deficits in certain years. In those years additional funds are added so as to keep the association from running a deficit. These funds can be obtained by a special assessment, borrowing or a combination of both. **A custom plan can be tailored for the Association upon request. Bear in mind that an increase in reserve funding does not dollar for dollar = an increase in the annual assessment. For example a 10% increase in reserve funding would be from \$41,850 to \$46,035 or \$4,185. This is equivalent to a dues increase of \$27.00 per unit or \$2.25 per month. Year 2 would increase the reserve contribution to \$50,638, or \$4,603 which equals \$29.69 per unit or \$2.47 per month.**

On the *Projected Thirty (30) Year Cash Flow Chart* on page 46 the column entitled *Reserve Fund Balance* shows the projected reserve fund amounts over the thirty (30) year period using the *Fully Funded* analysis. This cash balance is also represented by the upper line on the *Cash Flow Graph* (see page 47), which is designated as the *Reserve Fund Balance – Full Funding*. This is calculated by taking the amount that is currently contained in the reserve fund, adding to it the *Average Annual Contribution*, and subtracting from it the *Annual Expenditure*, if any.

The column entitled *Reserve Fund Balance – Threshold Funding* shows the projected reserve fund amounts over the thirty (30) year period using a *Threshold Funding* goal. The reduced funding goal is shown below the column heading. The *Reserve Fund Balance – Threshold Funding* is represented by the second line on the *Cash Flow Graph* and is calculated in the same manner as the *Reserve Fund Balance – Full Funding*, except that the *Annual Contribution* is used instead of the *Average Annual Contribution*.

Detailed Reserve Study Update

Spring Creek Condominiums
Project No. 5555-44



June 18, 2012
Updated February 3, 2017

Financial Analysis

FULL FUNDING ANALYSIS

Effective Date: January 1, 2017

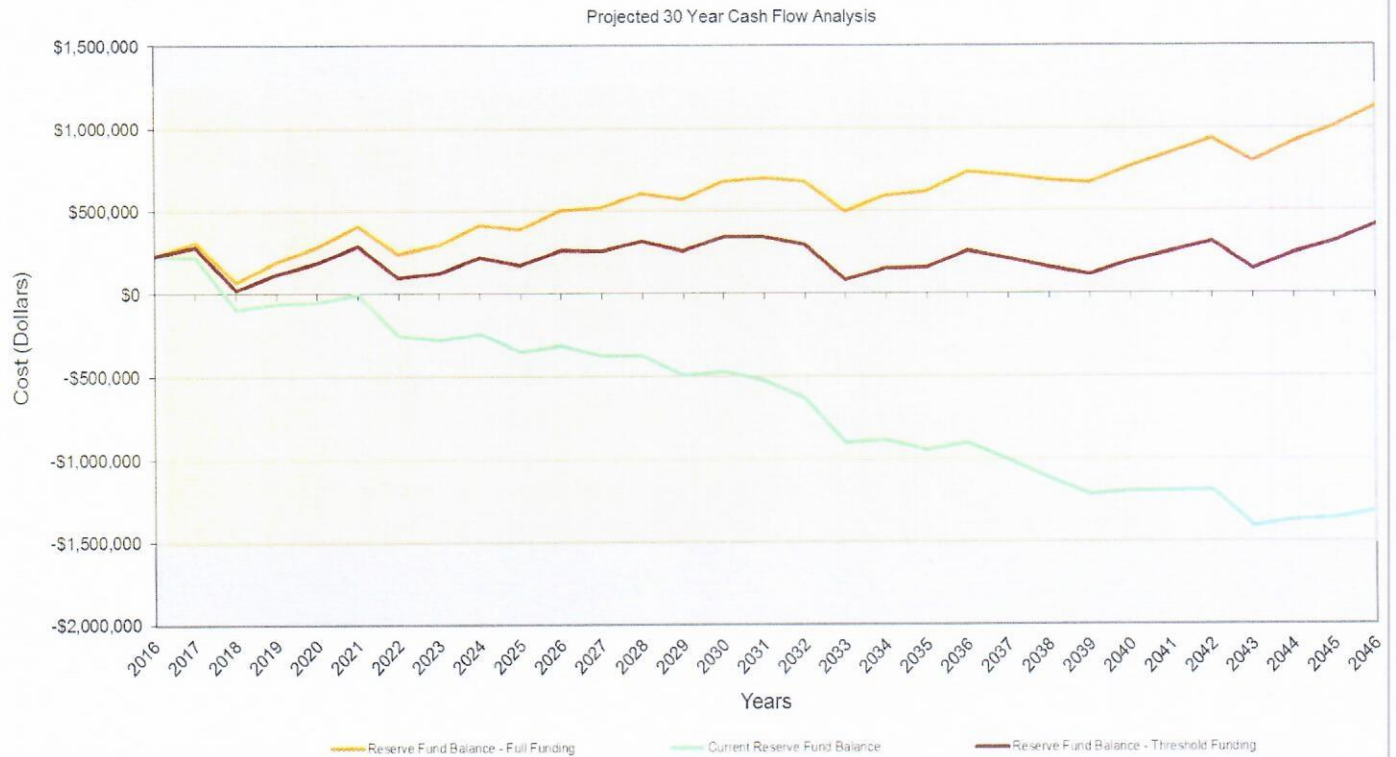
CURRENT FUNDING ANALYSIS

THRESHOLD FUNDING ANALYSIS

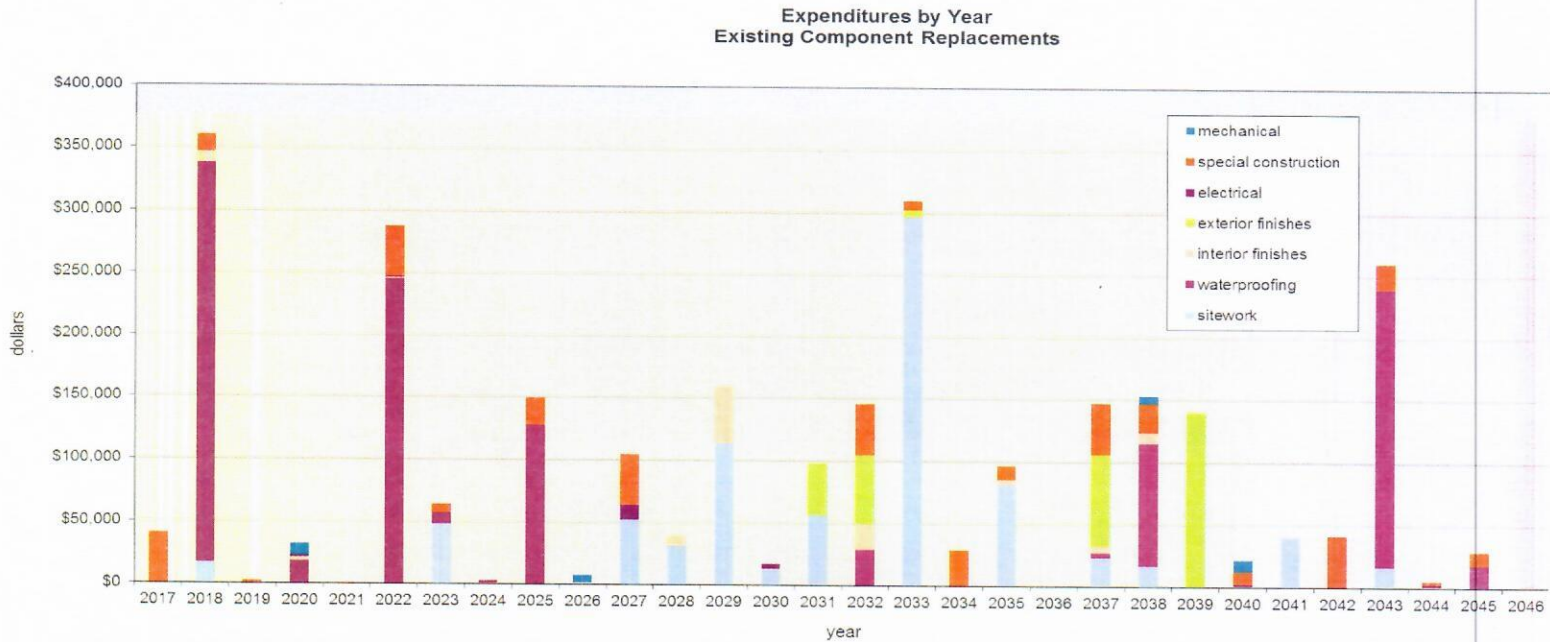
Year Beginning	Annual Contribution	Average Annual Contribution	Annual Expenditure	Reserve Fund Balance	Annual Contribution	Reserve Fund Balance	Annual Contribution	Reserve Fund Balance
2016	Beginning Balance			\$226,935	\$41,850	\$226,935	Pooling Factor	80.50%
2017	\$553,474	\$125,234	\$50,631	\$301,538	\$41,850	\$218,154	\$100,813	\$277,117
2018	\$260,005	\$125,234	\$360,460	\$66,311	\$41,850	-\$100,456	\$100,813	\$17,470
2019	\$134,843	\$125,234	\$2,339	\$189,206	\$41,850	-\$60,945	\$100,813	\$115,945
2020	\$138,370	\$125,234	\$32,431	\$282,009	\$41,850	-\$51,526	\$100,813	\$184,326
2021	\$135,190	\$125,234	\$522	\$406,720	\$41,850	-\$10,198	\$100,813	\$284,617
2022	\$147,194	\$125,234	\$296,197	\$235,757	\$41,850	-\$264,545	\$100,813	\$89,234
2023	\$114,417	\$125,234	\$71,290	\$289,700	\$41,850	-\$293,985	\$100,813	\$118,756
2024	\$108,793	\$125,234	\$3,100	\$411,834	\$41,850	-\$255,234	\$100,813	\$216,470
2025	\$111,672	\$125,234	\$149,204	\$387,864	\$41,850	-\$362,588	\$100,813	\$168,079
2026	\$103,730	\$125,234	\$8,088	\$505,010	\$41,850	-\$328,826	\$100,813	\$260,804
2027	\$104,954	\$125,234	\$113,053	\$517,190	\$41,850	-\$400,029	\$100,813	\$248,564
2028	\$101,983	\$125,234	\$40,071	\$602,353	\$41,850	-\$398,250	\$100,813	\$309,306
2029	\$102,095	\$125,234	\$159,705	\$567,881	\$41,850	-\$516,105	\$100,813	\$250,414
2030	\$99,118	\$125,234	\$17,267	\$675,848	\$41,850	-\$491,522	\$100,813	\$333,960
2031	\$99,353	\$125,234	\$98,080	\$703,001	\$41,850	-\$647,752	\$100,813	\$336,693
2032	\$98,744	\$125,234	\$153,572	\$674,663	\$41,850	-\$659,475	\$100,813	\$283,934
2033	\$98,061	\$125,234	\$309,789	\$490,107	\$41,850	-\$927,414	\$100,813	\$74,958
2034	\$96,288	\$125,234	\$29,000	\$586,341	\$41,850	-\$914,564	\$100,813	\$146,771
2035	\$96,271	\$125,234	\$96,437	\$615,137	\$41,850	-\$969,151	\$100,813	\$151,147
2036	\$95,975	\$125,234	\$0	\$740,371	\$41,850	-\$927,301	\$100,813	\$251,960
2037	\$96,085	\$125,234	\$154,673	\$710,931	\$41,850	-\$1,040,124	\$100,813	\$198,100
2038	\$95,881	\$125,234	\$152,805	\$683,360	\$41,850	-\$1,151,079	\$100,813	\$146,108
2039	\$95,721	\$125,234	\$139,792	\$668,802	\$41,850	-\$1,249,021	\$100,813	\$107,129
2040	\$95,584	\$125,234	\$22,256	\$771,779	\$41,850	-\$1,229,427	\$100,813	\$185,686
2041	\$95,580	\$125,234	\$40,600	\$856,413	\$41,850	-\$1,228,177	\$100,813	\$245,899
2042	\$95,570	\$125,234	\$49,300	\$932,347	\$41,850	-\$1,235,627	\$100,813	\$297,412
2043	\$95,577	\$125,234	\$260,333	\$797,247	\$41,850	-\$1,454,110	\$100,813	\$137,892
2044	\$95,493	\$125,234	\$5,438	\$917,043	\$41,850	-\$1,417,698	\$100,813	\$233,267
2045	\$95,495	\$125,234	\$29,227	\$1,013,049	\$41,850	-\$1,405,075	\$100,813	\$304,853
2046	\$95,492	\$125,234	\$2,088	\$1,136,194	\$41,850	-\$1,365,313	\$100,813	\$403,578
TOTAL	\$3,757,008	\$3,757,008			\$1,255,500		\$3,024,391	

Financial Analysis

Spring Creek Condominiums



Financial Analysis



Projected expenditures next 5 years:

2017: Street repairs/ seal coating; Sidewalk and Wall Repairs; Tractor

2018: Street repairs, seal coating; 6 Unit roofs; Tennis and Basketball Court Fence; Original Bldgs.: roofs, gutters and downspouts; Tractor; Clubhouse Carpet

2019: Street repairs, seal coating; gazebo; office equipment/computers; Tractor

2020: Street Repairs and Seal Coating; 6 unit gutters and downspouts; Pool pump house; Clubhouse furnace, condenser, hot water heater; smoke detectors

2021: Pool Pump House

Disclosures

In accordance with the *National Reserve Study Standards* of the Community Associations Institute, the following disclosures are provided regarding the preparation of this *Detailed Reserve Study*.

General. Kipcon Great Lakes LLC is not aware of any involvement with the Spring Creek Condominiums, which could result in any actual or perceived conflicts of interest which would influence the preparation of this study.

Physical Analysis. The on-site observations which were performed in the preparation of this study were cursory in nature and only included the accessible common and limited common elements. In addition, no field measurements were taken to confirm or provide quantities unless specifically outlined within this report.

Financial Analysis. Unless specifically noted within this report, Kipcon Great Lakes LLC has not utilized any assumptions in regard to interest, inflation, taxes, or any other outside economic factors.

Personnel Credentials. This study has been prepared under the direction of Mitchell H. Frumkin, P.E., R.S., C.G.P. Comprehensive curriculum vitae can be provided on request.

Completeness. Kipcon Great Lakes LLC is not aware of any material issues, which if not disclosed, would cause a distortion of the Association's situation.

Reliance on Client Data. Information provided by the official representative of the Association regarding financial, physical, quantity, or historical issues will be deemed reliable by Kipcon Great Lakes LLC.

Scope. The *Reserve Study* will be a reflection of information provided to Kipcon Great Lakes LLC and assembled for the Association's use, not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.

Reserve Balance. The actual or projected total presented in the *Reserve Study* is based upon the information provided and was not audited.

Reserve Projects. Information provided to Kipcon Great Lakes LLC about the reserve project will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection.

Glossary

<u>Abbreviation</u>	<u>Definition</u>	<u>Abbreviation</u>	<u>Definition</u>
Avg.	Average	Lg.	Long, Length
B.F.	Board Feet	L.S.	Lump Sum
Bit/Bitum.	Bituminous	Maint.	Maintenance
Bldg.	Building	Mat., Mat'l.	Material
Brk.	Brick	Max.	Maximum
Calc.	Calculated	MBF	Thousand Board Feet
C.C.F.	Hundred Cubic Feet	M.C.F.	Thousand Cubic Feet
C.F.	Cubic Feet	Min.	Minimum
C.L.F.	Hundred Lineal Feet	Misc.	Miscellaneous
Col.	Column	M.L.F.	Thousand Lineal Feet
Conc.	Concrete	M.S.F.	Thousand Square Feet
Cont.	Continuous, Continued	M.S.Y.	Thousand Square Yards
C.S.F.	Hundred Square Feet	NA	Not Available/Applicable
Cu. Ft.	Cubic Feet	No.	Number
C.Y.	Cubic Yard	O.C.	On Center
DHW	Domestic Hot Water	P.E.	Professional Engineer
Diam.	Diameter	Ply.	Plywood
Ea.	Each	Pr.	Pair
Est.	Estimated	PVC	Polyvinyl Chloride
Ext.	Exterior	Pvmt.	Pavement
Fig.	Figure	Quan., Qty.	Quantity
Fin.	Finished	R.C.P.	Reinforced Concrete Pipe
Fixt.	Fixture	Reinf.	Reinforced
Flr.	Floor	Req'd	Required
FRP	Fiberglass Reinforced Plastic	Sch., Sched.	Schedule
Ft.	Foot, Feet	S.F.	Square Feet
Galv.	Galvanized	Sq.	Square
Ht.	Height	Std.	Standard
Htrs.	Heaters	S.Y.	Square Yards
HVAC	Heating, Ventilation and AC	Sys.	System
HW	Hot Water	T & G	Tongue and Groove
In.	Inch	Th., Thk.	Thick
Int.	Interior	Tot.	Total
Inst.	Installation	Unfin.	Unfinished
Insul.	Insulation	V.C.T.	Vinyl Composition Tile
lb.	Pound	Vent.	Ventilator
L.F.	Lineal Feet	Yd.	Yard

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Dated 2015
- 8) Means Electrical Cost Data
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Dated 2015
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- 10) Budget of Association
- 10) Plats of Subdivision
Filed July, 1983
Prepared by: Stolwyck, McDaniel and Ferrenbach