RESERVE FUND STUDY

Prepared for:

LAKEWOOD HOMEOWNERS ASSOCIATION
HAMILTON, OHIO

Prepared by:

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On-site Inspection performed July 16, 2024
Submitted August 2024

Revision 1

CE Project No. 240609

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APPENDICES

1.0 INTRODUCTION

Following authorization by the Lakewood Homeowners Association's Board of Directors, Criterium-Cincinnati Engineers has conducted a Reserve Fund Study of your residential community located in Hamilton, Ohio. Our work is consistent with our proposal dated November 22, 2023.

This report must be reviewed in its entirety to understand our findings and their limitations. The Appendices are an integral part of this report and must be included in any review. Please refer to Appendix D for definitions of common terms of reference used herein.

We have conducted the study in general accordance with the National Reserve Study Standards published by the Community Association Institute (CAI). Please refer to Appendix D which contains a copy of the CAI standard.

This study was conducted by licensed Professional Engineers and other qualified staff working under the responsible charge of a CAI-certified Reserve Specialist. Please refer to Appendix E for the qualifications of the project team.

Scott Schaffer, P.E. of Criterium-Cincinnati Engineers performed this study. This report is principally based on our visual site inspection on July 16, 2024.

Mr. Schaffer prepared this report and the attached financial analysis. Matt Klein, P.E., R.S. of Criterium–Cincinnati Engineers reviewed their findings.

Criterium-Cincinnati presents this confidential report for the Board's review and use.

In reviewing the engineering assumptions, cost estimates and projected fund values herein, please understand that their accuracy diminishes greatly beyond Year Five. Long range facility maintenance projections are intended only to indicate the likely pattern of reserve expenditures and to guide financial planning.

Criterium-Cincinnati agrees with CAI's recommendation that reserve studies should be updated regularly to allow periodic adjustment of facility plans and funding strategies.

2.0 EXECUTIVE SUMMARY

In summary, as a result of our on-site inspections and other investigations, we find the common components of the property to be in good general condition and well-maintained.

We have identified an inventory of Association-responsible common components which are likely to require periodic repair or replacement or other recurrent reserve investment.

We have formed an opinion of the remaining useful life of each component. We have estimated the current cost of required reserve expenditures for their repair or replacement. We have projected annual reserve budgets over a 20-year planning period.

In summary, the 20-year total of projected reserve expenditures, (current dollar cost), is $364,577. The Board has provided us with information on the Association's Reserve Fund and the current funding plan. Our initial financial analysis was based on the data supplied.

Our projections indicate that the current reserve fund contributions will not be adequate.

3.0 PURPOSE & SCOPE

3.1 OBJECTIVES

The purpose of this reserve study is to determine a reserve needs plan for the Association, to evaluate the current rate of contribution to the reserve fund, and, if required, to suggest alternate funding strategies.

This report is intended to be used as a tool by the Association's Board for considering and managing its future financial obligations, for determining appropriate reserve fund allocations, and for informing the individual Owners of the Association's required reserve expenditures and the resulting financial plan.

For purposes of financial planning, Association-responsible expenses are typically divided into two categories:

- Operation and maintenance (O&M) of commonly-held elements of real property and other assets. These O&M expenses usually include taxes, insurance, property management costs and other service fees.
- Reserve expenditures for major periodic repairs or replacement of commonly-held elements.

Long-term reserve expenditures, the funding plan and ensuring adequate Reserve Fund balances are the focus of this Reserve Study.

History demonstrates that, as time progresses, property conditions and management strategies will change. As a result, planned scopes of work may be altered or deferred. Actual cost in the marketplace will vary from estimates. Actual rates of inflation and returns on investment will vary from projections.

For these reasons, we concur with the Community Association Institute guidelines and recommend that this reserve study be updated every three to five years.

3.2 LEVEL OF SERVICE

The Community Association Institute (CAI) identifies three levels of service for Reserve Studies:

I. Full Reserve Study, with site visit
II. Reserve Study Update, with site visit
III. Reserve Study Update, without site visit
IV. Preliminary, Community Not Yet Constructed

All may be appropriate for a community, depending on the condition of the facility and the phase of their planning cycle. The CAI National Reserve Study Standard in Appendix D contains more detail on these levels of service and the scope of study of each of them.

Our current study is a Level II - Full Reserve Study, with site visit.

Criterium-Cincinnati's actual scope of service is enhanced and exceeds the CAI standard in the Amount principal ways:

- Our investigation and evaluation of the property is performed by experienced professional engineers
- After preparing and submitting our initial analysis, we engage in a collaborative review process with the Board, toward developing a financial plan more responsive to the needs of the community.

3.3 SOURCES OF INFORMATION

The following people were interviewed during our study:

- Savannah Townsend, property manager with Elite Management Services
- Paul Weingartner, Board Member

The following was provided to us and reviewed:

- Current financial Status of the Association's reserve fund
- Access to the property
- Description of capital items in the community

4.0 PHYSICAL ANALYSIS

4.1 PROPERTY DESCRIPTION

Please refer to the Appendices for captioned photographs and available graphic exhibits.

Lakewood is a residential community with 244 single-family homes located in Hamilton, Ohio. The Association is responsible for common areas only, as the homes and yards are the responsibility of the individual owners. The property was developed about 26 years ago. The Association's responsibility for common elements on site including a pond, pool house, pool area, parking, entry signs, street signs, and landscaping.

4.2 COMMON COMPONENTS

Please refer to Appendix A for the Common Component Inventory.

4.3 CONDITION ASSESSMENT

4.3.1 Site Improvements

Asphalt surfaces

Asphalt materials need periodic work. The asphalt parking area at Lakewood HOA should be maintained by periodic sealing and patching. We observed that the asphalt was in only fair condition with some cracks visible. The total asphalt surface we measured was 598 square yards. We have included the cost for the asphalt to be fixed every 5 years with crack patch, seal coat applications. We also have included milling and replacement of the asphalt surface every 20 years.

Concrete flatwork

Concrete flatwork includes all the concrete work in the community, which for Lakewood HOA includes sidewalks and the concrete pool deck. These items do not have a definite replacement period, but sections of concrete usually are repaired every few years after aging. For this element, we use an annual allowance that is based on the square foot measurement of concrete. We calculate that annual allowance based on a useful life of 65 years and a cost per square foot to replace. We have calculated the square footage of concrete as follows.

- Sidewalks – 2,465 square feet
- Pool deck – 3,900 square feet

The Association's Manager and Board will evaluate concrete periodically and decide when to make needed repairs and the allowance we have used will be adequate to cover those costs. The Association has the option of spending the funded amount each year or let it accumulate for larger replacement projects. The concrete currently is in generally fair condition with areas of poor condition.

Pond expenses

The pond pictured in Photo 31 has an overflow to maintain a constant level. There are three aerators spaced evenly across the pond and they operate from one aerator pump. We have included replacement costs for the aerators and the aerator pump.

Ponds are typically used as part of the property stormwater management design and the inflows to the pond many times carry some silt, dirt and particulates that can build up in the pond over many years. Associations many times will use a dredging service to clean the ponds when required. The cost of dredging is based on how easily the contractor can get equipment around the pond shore to reach into the pond to do the dredging. We estimate dredging will be required every 30 years. Pond maintenance companies can inspect the pond for silt depth to determine when dredging is required. No silt depth reports have been provided for our review as of the time of this report.

Landscaping

We have included an allowance for landscape upgrades, beyond the normal general landscape maintenance. We show upgrades every 5 years. This could include large tree removal or replanting or adding shrubs or flower beds when required. These are costs that are not included annually for lawn care or general landscape maintenance.

Lighting

There are ground lights for the signs. We have replacement costs with 15 years of useful life.

Irrigation

The Association has irrigation systems for watering flower beds near the entry signs. No unusual conditions were noted. Irrigation systems typically require annual maintenance, refurbishment every 10 years, and replacement every 20 years. We have included costs for replacement every 20 years.

Street signs

The street signs were originally owned by the local municipality. However, the Lakewood community upgraded from to a decorative design that is now the responsibility of the Association. We have included an allowance for street sign replacement based on a useful life of 25 years.

Site drainage

There is a catch basin with metal grate in the landscaped area near the pool house and the site has been contoured and sloped for proper drainage. We also estimated that there are another 8 catch basins on the property at low spots for site drainage. Site

drainage includes pond overflow through a corrugated drain below a road. We have included an allowance for future repairs to site drainage. based on a 35 year useful life. Site drainage improvements are commonly required as a community ages. The drainage is in good condition.

Monuments

Monuments include the 2 stone walls at the community entry and the 3 stone signs. Two of the stone signs are located at the community entrance and one is located at the front of the pool house. The masonry design is long lasting and will be long lasting. We have included an allowance for repairs in future years. The signs are in good condition.

Common Components & Required Reserve Expenditures

Appendix A contains an inventory of all site improvements which are common components, and a detailed schedule of projected Reserve Expenditure budgets for these items:

4.3.2 Building Structure and Exterior

Individual owners are responsible for the structure and exterior of their own homes.

Common Components & Required Reserve Expenditures

Appendix A contains an inventory of all building components and systems which are common components, and a detailed schedule of projected Reserve Expenditure budgets for these items:

4.3.3 Building Interior

Individual owners are responsible for the interior of their own homes.

Common Components & Required Reserve Expenditures

Appendix A contains an inventory of all building components and systems which are common components, and a detailed schedule of projected Reserve Expenditure budgets for these items:

4.3.4 Mechanical, Electrical and Plumbing (MEP) Systems

This section of the report does not address Owner-responsible mechanical, electrical and plumbing systems.

Electrical distribution

Electrical components are present at the entry signs, pool house, and pond. Electrical distribution equipment typically has a useful lifespan of 40 years. The electrical equipment was generally in good condition. We noted a rusted electrical box near the

entry signs. We have included replacement of the rusted box and general replacement of distribution equipment

Security system

The security system at the pool house includes a fob lock and cameras. The system was installed in 2023 for $9,500. We have included costs to replace the security system based on a useful life of 15 years. No unusual conditions were noted with the security system.

Common Components & Required Reserve Expenditures

Appendix A contains an inventory of all MEP components and systems which are common components, and a detailed schedule of projected Reserve Expenditure budgets for these items:

4.3.5 Amenities

Pool area

The pool area has a concrete deck surrounding the pool and perimeter fence. Pool equipment is located in a storage room attached to the clubhouse. We have accounted for costs in the reserve study for the following items

- **Resurface** - We have included an expenditure to resurface the swimming pools every 15 years.
- **Pump** - We have included an expenditure to replace the pool pump every 10 years. No unusual conditions were noted in the pool pump.
- **Filter** - We have included an expenditure to pool filters every 10 years. No unusual conditions were noted in the pool filter.
- **Chemical feed system** - We have included an expenditure to replace the chemical controller every 15 years. No unusual conditions were noted in the pool chemical controller.
- **Cover** - We have included an expenditure to replace the swimming pool cover every 10 years. The cover was not present at the site inspection and could not be inspected.
- **Fence** - A painted metal fence is located around the perimeter of the pool area. We have included an expenditure to replace the pool fence based on the total length and an expected useful life of 30 to 40 years. As we understand, the pool fence was replaced around 2018. The fence is in good condition.
- **Furniture** - We have included an allowance to replace every 15 years. The pool furniture is in good condition.

Pool house

The pool house includes bathrooms and an equipment room. We have accounted for costs in the reserve study for the following items

- **Roof -** The Lakewood HOA pool house is approximately 20 years old and we expect the roof to be replaced in the next couple years. Asphalt composition shingles need replacing about every 20 to 25 years. We recommend removal of the shingles down to the roof deck so that the deck and flashing can be inspected for damage. In the reserve study, we included the cost to remove the old roof layers and install new roofing paper, shingles and flashing. We recommend that the roofs be regularly inspected for nail pops, leaks, lifted shingles and other problems. Correcting these problems as soon as they are found can help prolong the life of the roof and the roof deck.
- **Gutters and downspouts -** Gutters and downspouts have an expected useful life of about 25 to 30 years, although our experience is that they can last much longer. The gutters and downspouts on the pool house are in fair condition at Lakewood HOA.
- **Siding -** There are various siding materials on the pool house at Lakewood HOA. The sidings we have included are the masonry stone veneer and wood trim. The stone siding is a long lasting material that will require some repairs to mortar joints in future years which is typical for masonry veneer siding. We have included an allowance every 20 years for masonry repair.
- **Painting -** An allowance has been included to paint the interior of the pool house every 15 years.
- **Light fixtures -** An allowance has been included to replace light fixtures every 25 years.
- **Restroom fixtures -** An allowance has been included to replace bathroom fixtures every 20 years.
- **Doors -** We have an allowance to repair or replace the three doors based on a useful life of 40 years. No unusual conditions were noted.

Common Components & Required Reserve Expenditures

Appendix A contains an inventory of all amenities which are common components, and a detailed schedule of projected Reserve Expenditure budgets for these items:

4.3.6 Other Items

Miscellaneous

An annual allowance has been included for miscellaneous asset repair and replacement. We recommend the Association conduct periodic Reserve Study Updates in accordance with CAI best practices.

Common Components & Required Reserve Expenditures

Appendix A contains an inventory of all atypical components and systems which are common components, and a detailed schedule of projected Reserve Expenditure budgets for these items:

4.4 PENDING WORK

At the time of our inspection, no work was reportedly pending.

4.5 LIFE & VALUATION

4.5.1 Opinions of Useful Life

Simply stated, for components which require periodic reserve expenditures for their repairs or replacement, the frequency of work equals the typical, industry accepted expected useful life (EUL) for the type of feature,

And, theoretically, the remaining useful life (RUL) of a component before the next reserve expenditure for its repair or replacement is equal to the difference between its EUL and its age:

RUL = EUL - Age

However, the condition and rate of deterioration of the association's assets rarely conform to such simple analysis. And, often, a property's history and available documentation does not provide any record of a particular component's actual age.

In our experience, the effective age and actual RUL of an installed item vary greatly from its actual age and calculated RUL. These variances depend on the quality of its original materials and workmanship, level of service, climatic exposure, and ongoing maintenance. As part of Criterium-Cincinnati's work on this reserve study, we have determined our opinion of the effective age, EUL and RUL of each common component based on our evaluation of its existing condition and considering those factors.

When it seems appropriate, we will spread some budgets over multiple years. However, it is beyond the scope of this reserve study to prioritize the need for work between a number of buildings or installed locations or to closely specify or breakdown phased work packages.

In summary, we have based our opinion of the remaining useful life and expected frequency and schedule of repair for each common component on some or all of the following:

- Actual or assumed age
- Observed existing condition

- Association's or Property Manager's maintenance history and plan
- Our experience with actual performance of such components under similar service and exposure
- Our experience managing the repairs and replacements of such components

We use the following documentation to guide our considerations:

- Fannie Mae - Expected Useful Life Tables National Association of Home Builders - Life Expectancy of Components
- Marshall & Swift Valuation Service Expected Life Expectancies

4.5.2 Cost Estimating

In developing our estimate of reserve expenditure for most common components, we have estimated a quantity of each item and also a unit cost for its repair or replacement. In some cases, it is more appropriate to estimate a lump sum cost for a required work package or 'lot'.

Unless directed to take a different approach, we assume that contract labor will perform the work and apply appropriate installer's mark-ups on supplied material and equipment. When required, our estimated costs include demolition and disposal of existing materials, and protection of other portions of the property.

When appropriate for large reserve projects, we will also include soft costs for design and project management, and typical general contractor's cost for general conditions, supervision, overhead and profit.

We have based our opinion of unit and lump sum costs on some or all of the following:

- Records of previous maintenance expenses
- Previously solicited Vendor quotations or Contractor proposals
- Provided reserve budgets developed by others
- Our project files on repairs and replacements at other properties

We use the following publications to guide our considerations:

- On-Line R S Means - Construction Cost Data
- Marshall & Swift Valuation Service - Facility Cost Index

Annual aggregated reserve expenditure budgets have been calculated for all years during the study period by inflating the annual tallies of current dollar cost estimates, and compounding for inflation at 3.1% per year.

Of course, it is impossible to accurately predict inflation fluctuation. Three percent is close

to the average annual values of both consumer and construction cost increases since the US Bureau of Labor Statistics started publishing data approximately 85 years ago

5.0 FINANCIAL ANALYSIS

Please refer to Appendix A which contains tables and graphs illustrating the findings following below.

5.1 RESERVE EXPENDITURE PROJECTION

Based on our investigations and estimates described in Section 4 of this report, we have identified likely reserve expenditures throughout the study period.

For detailed information on projected reserve expenditures, please refer to the Appendix A tables and Appendix B graphs.

Please note that we have assumed that the cost of minor repair & replacement work valued will be covered by normal Operations & Maintenance budgets.

We have not included any reserve budget allowances for repair of casualty damage by vehicle impact, severe storm action, etc. It is assumed that such expenses would be defrayed by proceeds of insurance claims.

5.2 CURRENT FUNDING

5.2.1 Board-Provided Information

At the time we were retained to provide this study, we were provided with initial information on the Trust's Reserve Fund and its funding plan.

Our initial financial analysis was based on the information supplied.

- Fiscal Year Starting Date: January 1st
- For Designated Year: 2025
- Starting Fund Balance: 80,803
- On Date: June 28, 2024
- Current Rate of Contribution: $1,364 monthly
- Planned Increases: None
- Planned Special Assessments: None
- Projected Average Return on Investment: 1%

- Projected Rate of Annual Inflation: 3.1%

Financial data, records of past expenses, and cost estimates provided by others have been taken in good faith and at face value. No audit or other verification has been performed.

5.2.2 Current Funding Plan Projection

Our initial analysis was a projection of the Association's current rate of contribution forward over 20 years with no increases. For detailed data, please refer to the Appendix A tables and Appendix B graphs.

Given the reported $28,219 starting balance of the Reserve Fund on June 28, 2024, the current ongoing rate of contribution of $1,354 and an anticipated average rate of return on investment of 1% per year, our financial analysis indicates that the Association's current funding will prove insufficient to meet future needs.

Because of draw-downs for projected reserve expenditure expenses, projected year-end fund balances will fall into deficit in Year 7 (2031) of the study period. The projected year-end deficit at the end of the 20-year planning period in 2044 will be approximately ($130,000).

5.3 ALTERNATE FUNDING PLANS

One strategy to ensure there will be sufficient funds available to cover unplanned emergencies is to maintain prudent minimum threshold reserve balances.

For your association, we suggest an initial threshold equal to the average annual reserve expenditure in current dollars. This equals $18,229 in Year One. This current value is then adjusted for inflation over the study period leading to a future dollar threshold value of approximately $32,559 in Year 20.

The alternate funding plans we have developed should maintain positive reserve balances throughout the study which will not fall far below this suggested range of minimum threshold values.

We have prepared one alternate funding plan(s) for the Board's consideration:

- Annual escalations of $7 per unit in Years 1 - 5 in Years (2025 - 2029). The increases would be required to maintain a positive balance throughout the study period and not fall far below the suggested threshold. In Years 6 - 20 (2030 - 2044) total monthly contribution would equal $2,076

We further note that funding alternatives are not restricted to the alternative method included in this study. In fact, different variations of the basic method presented in this

study exist; however the funding must be increased as we have shown that at the rate of funding the reserve fund would not maintain a positive balance throughout the study period. We look forward to working with the Board to develop a satisfactory plan for their adoption.

5.4 FUNDING METHODOLOGIES (Background Information)

The Community Association Institute (CAI) recognizes several reserve funding methodologies, all of which may be used to satisfy these principles:

- Sufficient Funds When Required
- Stable Contribution Rate over the Years
- Evenly Distributed Contributions over the Years
- Fiscally Responsible

For the planning needs of your association, we have recommended a cash-flow projection approach. The projection considers anticipated annual expenditures and contributions to compute approximate year-end reserve fund balances throughout the study period. This methodology is approved by CAI.

There are other methods of determining appropriate reserve funding levels. If you are interested, these are set forth in CAI's National Reserve Study Standard attached in Appendix D.

6.0 LIMITATIONS

STANDARDS AND LIMITATIONS

Criterium-Cincinnati Engineers shall perform duties to at least the professional standards consistent with a licensed, Professional Engineer, but does not guarantee or warrant that all adverse conditions concerning the property can be or will be discovered and included in the report. The photographs are an integral part of this report and must be included in any review.

This study is limited to the visual observations made during our inspection. We did not undertake any excavation, conduct any destructive or invasive testing, remove surface materials or finishes, or displace furnishings or equipment. The observations described in this study are valid on the dates of the investigation.

Accordingly, we cannot comment on the condition of systems that we could not see, such as buried structures and utilities, nor are we responsible for conditions that could not be

seen or were not within the scope of our services at the time of inspection.

We did not perform any computations or other engineering analysis as part of this study, nor did we conduct a comprehensive code compliance investigation.

This information in this study is not to be considered a warranty of condition, quality, compliance or cost. No warranty is implied.

Financial data, records of past expenses, and cost estimates provided by others have been taken in good faith and at face value. No audit or other verification has been performed.

Reserve budgets are opinions of likely expenses based on reasonable cost estimates. We have not obtained competitive quotations or estimates from contractors. Actual costs can vary significantly, based on the specific scope of work developed, availability of materials and qualified contractors, and many other variables. We cannot be responsible for variances.

Criterium-Cincinnati Engineers does not offer financial counseling services. Although reasonable rates of inflation and return on investment must be assumed to calculate projected balances, no one can accurately predict actual economic performance. Although reserve fund management and investment may be discussed during the course of the study, we do not purport to hold any special qualifications in this area.

We recommend that the Board also seek other professional guidance before finalizing their current reserve fund planning activity. Depending on issues which may arise, an appropriate team of consultants to aid decision-making might include their property manager, accountant, financial counselor and attorney.

Criterium-Cincinnati Engineers prepared this confidential report for the review and use of the Board of the Association. We do not intend any other individual or party to rely upon this study without our express written consent. If another individual or party relies on this study, they shall indemnify, defend and hold Criterium-Cincinnati Engineers, its subsidiaries, affiliates, officers, directors, members, shareholders, partners, agents, employees and such other parties in interest specified by Criterium-Cincinnati Engineers harmless for any damages, losses, or expenses they may incur as a result of its use. Any use or reliance of the report by an individual or party other than shall constitute acceptance of these terms and conditions.

7.0 CONCLUSION

Criterium-Cincinnati Engineers appreciates this opportunity to assist the Board in support of the Lakewood HOA facility and financial planning. We are pleased to present this report for the Board's consideration and use.

To the best of our ability, we have attempted to work in the best interest of the community and to aid the Board toward fulfillment of their fiduciary responsibilities and obligations to the individual Unit Owners who comprise the association's membership.

In our professional opinion, and within the limitations disclosed elsewhere herein, all information contained herein is reliable and appropriate to guide the Board's deliberations and decision-making.

All of Criterium-Cincinnati's work for this study has been carried out in strict accordance with the CAI Code of Ethics. We consider our report confidential and will not share its content with anyone but the Board without its knowledge and release.

We are unaware of any other involvement or business relationship between Criterium-Cincinnati Engineers and the Developer, or individual Unit Owners, or members of the Board, or any other entities which constitutes any conflict of interest.

If you have any further questions or would like to direct additional, follow-on services, please contact us.

Criterium-Cincinnati Engineers appreciates this opportunity to assist the Board in support of the association's facility and financial planning. Thank you.

Thank you.

Respectfully submitted,

CRITERIUM-CINCINNATI ENGINEERS

Scott Schaffer, P.E., R.S.
Project Engineer - (Investigating & Reporting)

Matt Klein, P.E., R.S.
Senior Engineer - (Reviewing)

APPENDIX A
FINANCIAL EXHIBITS

Reserve Study Worksheet
Rev 1

General Information:

1 Organization: **Lakewood HOA**
2 Address: **3489 Lakewood Court**
Hamilton, Ohio

3	Number of Units	**244**
4	Age of Building (in years)	**26**
5a	Study Period (in years)	**20**
5b	Normal Fiscal Year starts:	**January 1, 2025**
5d	Partial Year Length:	**12 months**
6	Site Inspection Date	**July 16, 2024**
7	Reserve Funds at start	**$80,803**
8	Rate of Return on invested Reserve Funds (%)	**1.00%**
9	Inflation Rate (%)	**3.1%**

10 Current Funding Levels

Existing Funding Levels

		Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
Reserve Fund Contribution.....		**$1,364**	**$16,368**	**$5.59**	**$67.08**
Balance Computed.....	**($73,693)**				

Threshold balance **1** **times the Average Capital Expenditure**

11 Alternative Reserve Fund Contribution

Alternative 1 Fixed annual esclation of $7.00 per unit for the initial 5 years

			Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
First Year	2025		**$1,506**	**$18,076**	**$6.17**	**$74.08**
Year	2026		**$1,649**	**$19,784**	**$7**	**$81**
Year	2027		**$1,791**	**$21,492**	**$7**	**$88**
Year	2028		**$1,933**	**$23,200**	**$8**	**$95**
Year	2029		**$2,076**	**$24,908**	**$9**	**$102**
Year	2030		**$2,076**	**$24,908**	**$9**	**$102**
Year	2031		**$2,076**	**$24,908**	**$9**	**$102**
Year	2032		**$2,076**	**$24,908**	**$9**	**$102**
Year	2033		**$2,076**	**$24,908**	**$9**	**$102**
Year	2034		**$2,076**	**$24,908**	**$9**	**$102**
Year	2035		**$2,076**	**$24,908**	**$9**	**$102**
Year	2036		**$2,076**	**$24,908**	**$9**	**$102**
Year	2037		**$2,076**	**$24,908**	**$9**	**$102**
Year	2038		**$2,076**	**$24,908**	**$9**	**$102**
Year	2039		**$2,076**	**$24,908**	**$9**	**$102**
Year	2040		**$2,076**	**$24,908**	**$9**	**$102**
Year	2041		**$2,076**	**$24,908**	**$9**	**$102**
Year	2042		**$2,076**	**$24,908**	**$9**	**$102**
Year	2043		**$2,076**	**$24,908**	**$9**	**$102**
Last Year	2044		**$2,076**	**$24,908**	**$9**	**$102**
Average Annual Capital Expenditure.....			$18,229			
Balance Computed final year.....		**$92,055**				

Reserve Fund Worksheet

Fiscal Years:										
Normal: Jan 2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Partial: Jan 2025 (12 months)	1	2	3	4	5	6	7	8	9	10
Existing Funding Levels										
Beginning Reserve Fund Balance:	$80,803	$79,553	$88,597	$97,367	$108,834	$115,093	$79,432	($9,044)	$1,713	$11,829
Revenue:	$16,368	$16,368	$16,368	$16,368	$16,368	$16,368	$16,368	$16,368	$16,368	$16,368
Investment Earnings:	$788	$877	$964	$1,078	$1,140	$786	$0	$17	$117	$51
Capital Expenditures:	$18,405	$8,202	$8,562	$5,978	$11,248	$52,816	$104,844	$5,628	$6,369	$23,093
Ending Reserve Balance	$79,553	$88,597	$97,367	$108,834	$115,093	$79,432	($9,044)	$1,713	$11,829	$5,155
Percent Funded	60%	61%	61%	61%	60%	48%	-10%	2%	9%	4%
Alternative 1, Fixed annual esclation of $7 per unit for the initial 5 years										
Beginning Reserve Fund Balance:	$80,803	$81,278	$93,789	$107,786	$126,258	$141,317	$114,543	$34,954	$54,776	$74,048
Revenue:	$18,076	$19,784	$21,492	$23,200	$24,908	$24,908	$24,908	$24,908	$24,908	$24,908
Investment Earnings:	$805	$929	$1,067	$1,250	$1,399	$1,134	$346	$542	$733	$759
Inflated Cap Expenditures:	$18,405	$8,202	$8,562	$5,978	$11,248	$52,816	$104,844	$5,628	$6,369	$23,093
Ending Reserve Balance	$81,278	$93,789	$107,786	$126,258	$141,317	$114,543	$34,954	$54,776	$74,048	$76,621
Percent Funded	61%	64%	67%	70%	73%	69%	40%	51%	58%	59%
Average Cap Expenditure	$18,229	$18,794	$19,377	$19,977	$20,597	$21,235	$21,893	$22,572	$23,272	$23,993
Threshold	$18,229	$18,794	$19,377	$19,977	$20,597	$21,235	$21,893	$22,572	$23,272	$23,993
Full Funding By Year	$132,167	$146,182	$160,833	$179,100	$193,261	$166,909	$88,347	$107,220	$126,611	$130,574
70 Percent Funding By Year	$92,517	$102,327	$112,583	$125,370	$135,283	$116,836	$61,843	$75,054	$88,627	$91,402

Reserve Fund Worksheet

Fiscal Years:										
Normal: Jan 2025	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Partial: Jan 2025 (12 months)	11	12	13	14	15	16	17	18	19	20
Existing Funding Levels										
Beginning Reserve Fund Balance:	$5,155	$7,910	($3,837)	$3,485	$15,102	($41,813)	($38,232)	($40,599)	($71,776)	($66,314)
Revenue:	$16,368	$16,368	$16,368	$16,368	$16,368	$16,368	$16,368	$16,368	$16,368	$16,368
Investment Earnings:	$78	$0	$35	$150	$0	$0	$0	$0	$0	$0
Capital Expenditures:	$13,691	$28,115	$9,080	$4,900	$73,283	$12,787	$18,735	$47,545	$10,906	$23,747
Ending Reserve Balance	$7,910	($3,837)	$3,485	$15,102	($41,813)	($38,232)	($40,599)	($71,776)	($66,314)	($73,693)
Percent Funded	5%	-3%	2%	8%	-27%	-22%	-22%	-41%	-33%	-34%
Alternative 1, Fixed annual esclation of $7 per unit for the initial 5 years										
Beginning Reserve Fund Balance:	$76,621	$88,717	$86,365	$103,214	$124,454	$76,840	$89,850	$96,984	$75,090	$89,983
Revenue:	$24,908	$24,908	$24,908	$24,908	$24,908	$24,908	$24,908	$24,908	$24,908	$24,908
Investment Earnings:	$878	$855	$1,022	$1,232	$761	$890	$960	$743	$891	$911
Inflated Cap Expenditures:	$13,691	$28,115	$9,080	$4,900	$73,283	$12,787	$18,735	$47,545	$10,906	$23,747
Ending Reserve Balance	$88,717	$86,365	$103,214	$124,454	$76,840	$89,850	$96,984	$75,090	$89,983	$92,055
Percent Funded	61%	59%	62%	65%	50%	52%	52%	43%	45%	43%
Average Cap Expenditure	$24,737	$25,504	$26,294	$27,110	$27,950	$28,816	$29,710	$30,631	$31,580	$32,559
Threshold	$24,737	$25,504	$26,294	$27,110	$27,950	$28,816	$29,710	$30,631	$31,580	$32,559
Full Funding By Year	$144,780	$145,742	$166,530	$192,928	$152,572	$172,297	$187,546	$175,346	$200,322	$214,176
70 Percent Funding By Year	$101,346	$102,019	$116,571	$135,050	$106,801	$120,608	$131,282	$122,742	$140,226	$149,923

Itemized Worksheet

Capital Item To Be Replaced	Quantity		Unit cost	Reserve Requirement (*)	Frequency (yrs**)	Remaining Life (yrs)	Full Funding Balance
Site							
Asphalt parking crack repair and seal coating	598	square yards	$3.00	$1,794.00	5	5	$0.00
Asphalt parking new wear coat layer	598	square yards	$25.00	$14,950.00	20	0	$14,950.00
Concrete initial project around pool	400	square feet	$14.00	$5,600.00	0	2	$0.00
Concrete pool apron repairs	3900	square feet	$14.00	$840.00	1	5	($3,360.00)
Concrete sidewalks repair allowance	2465	square feet	$12.00	$455.08	1	0	$455.08
Entrance monument refurbish allowance	1	allowance	$5,000.00	$5,000.00	25	20	$1,000.00
Street sign and stop signs allowance	1	allowance	$25,000.00	$25,000.00	25	17	$8,000.00
Landscape upgrades (pine tree removal, etc)	1	allowance	$4,000.00	$4,000.00	5	4	$800.00
Pond aerator pump	1	each	$1,500.00	$1,500.00	10	9	$150.00
Pond underwater aerators	3	each	$1,500.00	$4,500.00	10	9	$450.00
Pond dredging	1.7	acre	$45,000.00	$76,500.00	30	6	$61,200.00
Catch basins and site drainage	1	allowance	$10,000.00	$10,000.00	35	14	$6,000.00
Concrete and corrugated steel water drains	1	allowance	$15,000.00	$15,000.00	35	11	$10,285.71
Ground lighting for signage	1	allowance	$3,700.00	$3,700.00	15	1	$3,453.33
Irrigation system	1	allowance	$3,500.00	$3,500.00	20	5	$2,625.00
Building Exterior							
Building Interior							
Mechanical							
Electric distribution replaceemnt	1	allowance	$5,000.00	$5,000.00	40	14	$3,250.00
Initial electrical refurbishment	1	allowance	$1,000.00	$1,000.00	0	0	$0.00
Security system replacment	1	each	$10,000.00	$10,000.00	15	14	$666.67
Amenities							
Pool house roof replacement	13	squares	$465.00	$6,045.00	25	23	$483.60
Pool house gutters and downspout replacement	154	linear feet	$11.00	$1,694.00	20	8	$1,016.40
Pool house tuckpointing	1	allowance	$5,000.00	$5,000.00	20	10	$2,500.00
Pool house painting	1	allowance	$1,250.00	$1,250.00	15	5	$833.33
Pool house light fixture replacement	1	allowance	$1,250.00	$1,250.00	25	9	$800.00
Pool house bathroom fixture replacement	1	allowance	$1,250.00	$1,250.00	20	7	$812.50
Pool house door replacement	3	each	$1,500.00	$4,500.00	40	14	$2,925.00
Pool resurfacing	1800	sqare feet	$17.50	$31,500.00	15	5	
Pool pump replacement	1	each	$1,800.00	$1,800.00	10	1	$1,620.00
Pool filter replacement	2	each	$2,250.00	$4,500.00	10	6	$1,800.00
Pool chemical system replacement	1	each	$4,000.00	$4,000.00	15	5	$2,666.67
Pool cover replacement	1	each	$3,500.00	$3,500.00	10	4	$2,100.00
Pool fence replacement	280	linear feet	$39.00	$10,920.00	30	24	$2,184.00
Pool furniture replacement	1	allowance	$7,500.00	$7,500.00	15	14	$500.00
Other							
Reserve Study	1	each	$3,000.00	$3,000.00	3	3	$0.00
Misc. Asset Replacement	1	each	$2,000.00	$2,000.00	1	0	$2,000.00
			Totals	$278,048.08			$132,167.29
			Total Over Term	$364,577.54			

* Costs are typically 10%±

** Reserve study is based on a 20 year projection of non-annual maintenance

Annual Expense By Year

Year:	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Year Number:	1	2	3	4	5	6	7	8	9	10	11
Site											
Asphalt parking crack repair and seal coating	0	0	0	0	0	1,794	0	0	0	0	1,794
Asphalt parking new wear coat layer	14,950	0	0	0	0	0	0	0	0	0	0
Concrete initial project around pool	0	0	5,600	0	0	0	0	0	0	0	0
Concrete pool apron repairs	0	0	0	0	0	840	840	840	840	840	840
Concrete sidewalks repair allowance	455	455	455	455	455	455	455	455	455	455	455
Entrance monument refurbish allowance	0	0	0	0	0	0	0	0	0	0	0
Street sign and stop signs allowance	0	0	0	0	0	0	0	0	0	0	0
Landscape upgrades (pine tree removal, etc)	0	0	0	0	4,000	0	0	0	0	4,000	0
Pond aerator pump	0	0	0	0	0	0	0	0	0	1,500	0
Pond underwater aerators	0	0	0	0	0	0	0	0	0	4,500	0
Pond dredging	0	0	0	0	0	0	76,500	0	0	0	0
Catch basins and site drainage	0	0	0	0	0	0	0	0	0	0	0
Concrete and corrugated steel water drains	0	0	0	0	0	0	0	0	0	0	0
Ground lighting for signage	0	3,700	0	0	0	0	0	0	0	0	0
Irrigation system	0	0	0	0	0	3,500	0	0	0	0	0
Building Exterior											
Building Interior											
Mechanical											
Electric distribution replaceemnt	0	0	0	0	0	0	0	0	0	0	0
Initial electrical refurbishment	1,000	0	0	0	0	0	0	0	0	0	0
Security system replacment	0	0	0	0	0	0	0	0	0	0	0
Amenities											
Pool house roof replacement	0	0	0	0	0	0	0	0	0	0	0
Pool house gutters and downspout replacement	0	0	0	0	0	0	0	0	1,694	0	0
Pool house tuckpointing	0	0	0	0	0	0	0	0	0	0	5,000
Pool house painting	0	0	0	0	0	1,250	0	0	0	0	0
Pool house light fixture replacement	0	0	0	0	0	0	0	0	0	1,250	0
Pool house bathroom fixture replacement	0	0	0	0	0	0	0	1,250	0	0	0
Pool house door replacement	0	0	0	0	0	0	0	0	0	0	0
Pool resurfacing	0	0	0	0	0	31,500	0	0	0	0	0
Pool pump replacement	0	1,800	0	0	0	0	0	0	0	0	0
Pool filter replacement	0	0	0	0	0	0	4,500	0	0	0	0
Pool chemical system replacement	0	0	0	0	0	4,000	0	0	0	0	0
Pool cover replacement	0	0	0	0	3,500	0	0	0	0	0	0
Pool fence replacement	0	0	0	0	0	0	0	0	0	0	0
Pool furniture replacement	0	0	0	0	0	0	0	0	0	0	0
Other											
Reserve Study	0	0	0	3,000	0	0	3,000	0	0	3,000	0
Misc. Asset Replacement	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total Costs	**18,405**	**7,955**	**8,055**	**5,455**	**9,955**	**45,339**	**87,295**	**4,545**	**4,989**	**17,545**	**10,089**
Total Costs Adjusted For 3.1% Inflation	**18,405**	**8,202**	**8,562**	**5,978**	**11,248**	**52,816**	**104,844**	**5,628**	**6,369**	**23,093**	**13,691**

Annual Expense By Year

Year:	2036	2037	2038	2039	2040	2041	2042	2043	2044
Year Number:	12	13	14	15	16	17	18	19	20
Site									
Asphalt parking crack repair and seal coating	0	0	0	0	1,794	0	0	0	0
Asphalt parking new wear coat layer	0	0	0	0	0	0	0	0	0
Concrete initial project around pool	0	0	0	0	0	0	0	0	0
Concrete pool apron repairs	840	840	840	840	840	840	840	840	840
Concrete sidewalks repair allowance	455	455	455	455	455	455	455	455	455
Entrance monument refurbish allowance	0	0	0	0	0	0	0	0	0
Street sign and stop signs allowance	0	0	0	0	0	0	25,000	0	0
Landscape upgrades (pine tree removal, etc)	0	0	0	4,000	0	0	0	0	4,000
Pond aerator pump	0	0	0	0	0	0	0	0	1,500
Pond underwater aerators	0	0	0	0	0	0	0	0	4,500
Pond dredging	0	0	0	0	0	0	0	0	0
Catch basins and site drainage	0	0	0	10,000	0	0	0	0	0
Concrete and corrugated steel water drains	15,000	0	0	0	0	0	0	0	0
Ground lighting for signage	0	0	0	0	0	3,700	0	0	0
Irrigation system	0	0	0	0	0	0	0	0	0
Building Exterior									
Building Interior									
Mechanical									
Electric distribution replaceemnt	0	0	0	5,000	0	0	0	0	0
Initial electrical refurbishment	0	0	0	0	0	0	0	0	0
Security system replacment	0	0	0	10,000	0	0	0	0	0
Amenities									
Pool house roof replacement	0	0	0	0	0	0	0	0	0
Pool house gutters and downspout replacement	0	0	0	0	0	0	0	0	0
Pool house tuckpointing	0	0	0	0	0	0	0	0	0
Pool house painting	0	0	0	0	0	0	0	0	0
Pool house light fixture replacement	0	0	0	0	0	0	0	0	0
Pool house bathroom fixture replacement	0	0	0	0	0	0	0	0	0
Pool house door replacement	0	0	0	4,500	0	0	0	0	0
Pool resurfacing	0	0	0	0	0	0	0	0	0
Pool pump replacement	1,800	0	0	0	0	0	0	0	0
Pool filter replacement	0	0	0	0	0	4,500	0	0	0
Pool chemical system replacement	0	0	0	0	0	0	0	0	0
Pool cover replacement	0	0	0	3,500	0	0	0	0	0
Pool fence replacement	0	0	0	0	0	0	0	0	0
Pool furniture replacement	0	0	0	7,500	0	0	0	0	0
Other									
Reserve Study	0	3,000	0	0	3,000	0	0	3,000	0
Misc. Asset Replacement	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total Costs	**20,095**	**6,295**	**3,295**	**47,795**	**8,089**	**11,495**	**28,295**	**6,295**	**13,295**
Total Costs Adjusted For 3.1% Inflation	**28,115**	**9,080**	**4,900**	**73,283**	**12,787**	**18,735**	**47,545**	**10,906**	**23,747**

APPENDIX B

GRAPHIC EXHIBITS

Existing Funding Levels

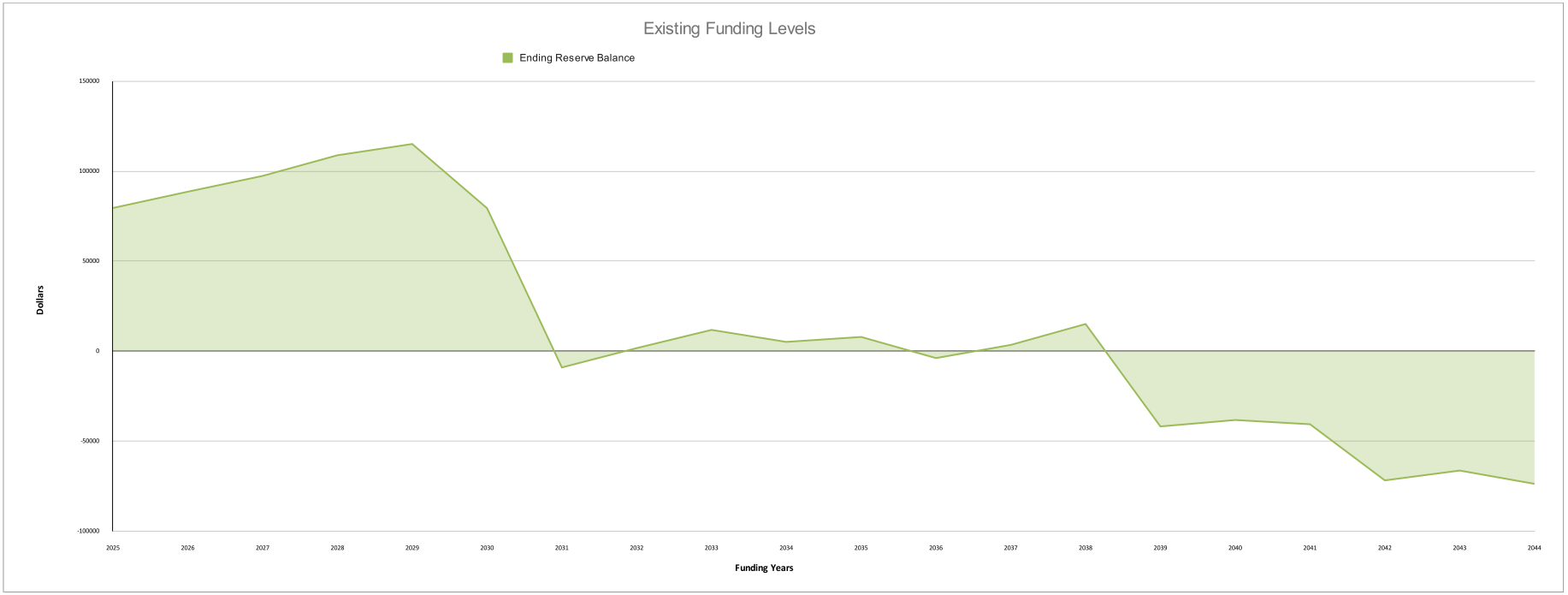
Beginning Balance as of start of year beginning Jan 2025: $80,803

CONTRIBUTIONS	
AMOUNT	
$16,368.00	**per year**
$67.08	**per unit per year**
$1,364.00	**per month**
$5.59	**per unit per month**

Projected Annual Funding and Expenditures:

Year:	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Year Number:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
End of Year Reserve Fund Balance	79,553	88,597	97,367	108,834	115,093	79,432	(9,044)	1,713	11,829	5,155	7,910	(3,837)	3,485	15,102	(41,813)
Capital Expenditures:	18,405	8,202	8,562	5,978	11,248	52,816	104,844	5,628	6,369	23,093	13,691	28,115	9,080	4,900	73,283
Total Revenue (all sources)	17,156	17,245	17,332	17,446	17,508	17,154	16,368	16,385	16,485	16,419	16,446	16,368	16,403	16,518	16,368
Percent Funded	60%	61%	61%	61%	60%	48%	-10%	2%	9%	4%	5%	-3%	2%	8%	-27%

Year:	2040	2041	2042	2043	2044
Year Number:	16	17	18	19	20
End of Year Reserve Fund Balance	(38,232)	(40,599)	(71,776)	(66,314)	(73,693)
Capital Expenditures:	12,787	18,735	47,545	10,906	23,747
Total Revenue (all sources)	16,368	16,368	16,368	16,368	16,368
Percent Funded	-22%	-22%	-41%	-33%	-34%



Alternative 1: Fixed annual esclation of $7 per unit for the initial 5 years

Beginning Balance as of start of year beginning Jan 2025: $80,803

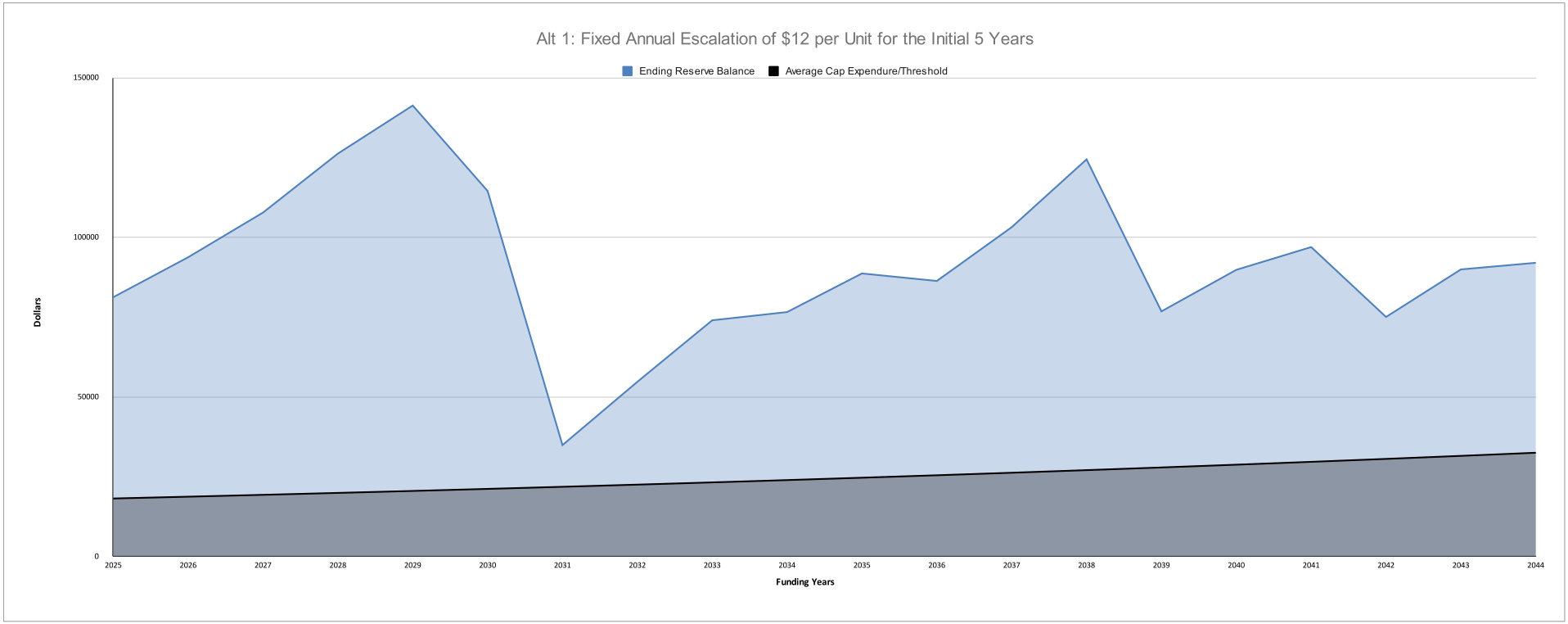
CONTRIBUTIONS		
FIRST YR	**LAST YR**	
$18,076.00	$24,908.00	**per year**
$74.08	$102.08	**per unit per year**
$1,506.33	$2,075.67	**per month**
$6.17	$8.51	**per unit per month**

SETTINGS (analyzed by unit/year)		
Starting amount ($):	$67.08	
Increment by ($):	$7.00	
Every	1	year
Frequency:	5	time

Projected Annual Funding and Expenditures:

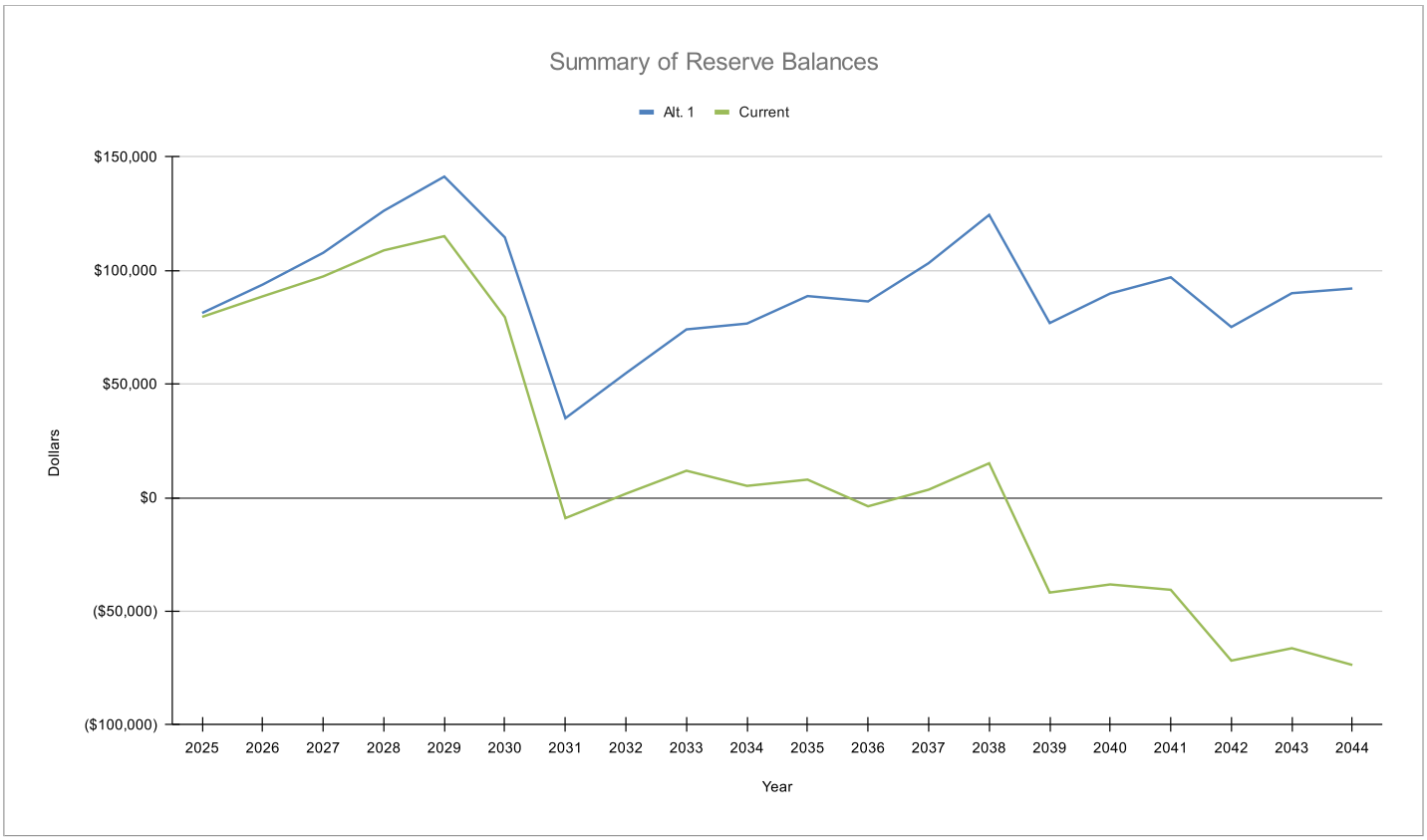
Year:	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Year Number:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
End of Year Reserve Fund Balance	81,278	93,789	107,786	126,258	141,317	114,543	34,954	54,776	74,048	76,621	88,717	86,365	103,214	124,454	76,840
Capital Expenditures:	18,405	8,202	8,562	5,978	11,248	52,816	104,844	5,628	6,369	23,093	13,691	28,115	9,080	4,900	73,283
Total Revenue (all sources)	805	20,713	22,559	24,450	26,307	26,042	25,254	25,450	25,641	25,667	25,786	25,763	25,930	26,140	25,669
Percent Funding	61%	64%	67%	70%	73%	69%	40%	51%	58%	59%	61%	59%	62%	65%	50%

Year:	2040	2041	2042	2043	2044
Year Number:	16	17	18	19	20
End of Year Reserve Fund Balance	89,850	96,984	75,090	89,983	92,055
Capital Expenditures:	12,787	18,735	47,545	10,906	23,747
Total Revenue (all sources)	25,798	25,868	25,651	25,799	25,819
Percent Funding	52%	52%	43%	45%	43%



Summary of Reserve Balances

Year	Year Number	Yearly Expenditures	Alt. 1	Current
2025	1	$18,405	$81,278	$79,553
2026	2	$8,202	$93,789	$88,597
2027	3	$8,562	$107,786	$97,367
2028	4	$5,978	$126,258	$108,834
2029	5	$11,248	$141,317	$115,093
2030	6	$52,816	$114,543	$79,432
2031	7	$104,844	$34,954	($9,044)
2032	8	$5,628	$54,776	$1,713
2033	9	$6,369	$74,048	$11,829
2034	10	$23,093	$76,621	$5,155
2035	11	$13,691	$88,717	$7,910
2036	12	$28,115	$86,365	($3,837)
2037	13	$9,080	$103,214	$3,485
2038	14	$4,900	$124,454	$15,102
2039	15	$73,283	$76,840	($41,813)
2040	16	$12,787	$89,850	($38,232)
2041	17	$18,735	$96,984	($40,599)
2042	18	$47,545	$75,090	($71,776)
2043	19	$10,906	$89,983	($66,314)
2044	20	$23,747	$92,055	($73,693)



APPENDIX C

PHOTOGRAPHS

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
1

Description:
One of two entry signs

Photo Number
2

Description:
Sign at front of pool house

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
3

Description:
Front of pool house

Photo Number
4

Description:
Pool area

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
5

Description:
Rear of pool house

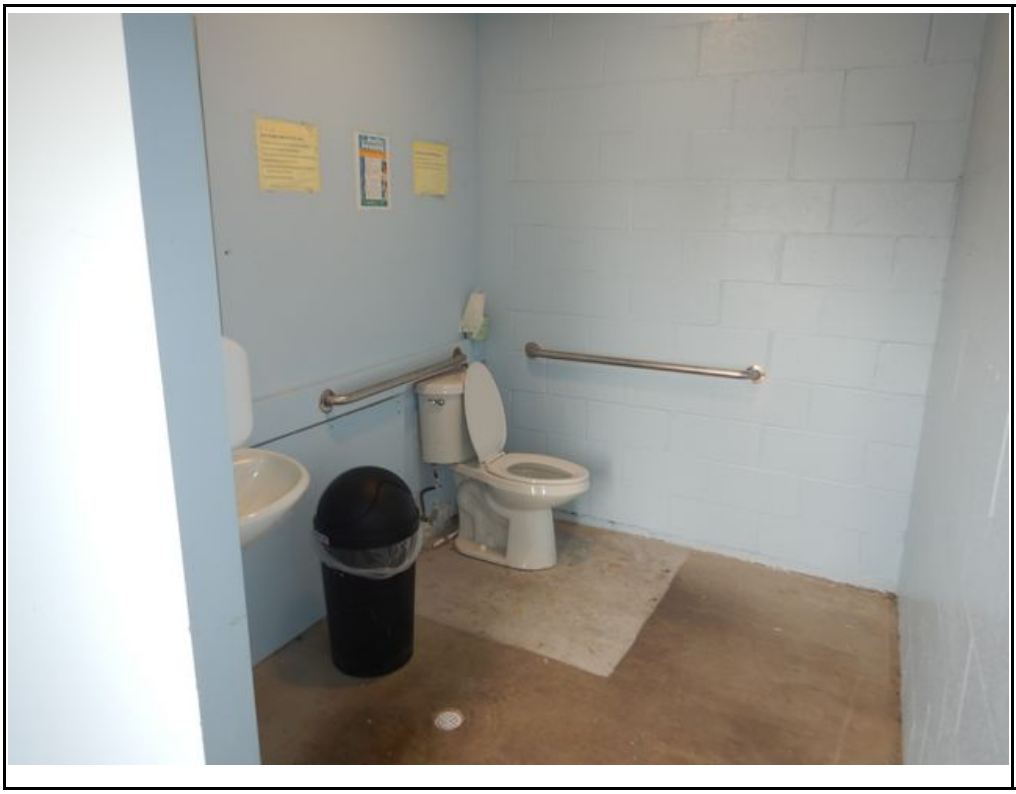


Photo Number
6

Description:
Pool house bathroom

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
7

Description:
Pool equipment in pool house

Photo Number
8

Description:
Pool house backflow preventer and pool filters

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
9

Description:
Pool pump

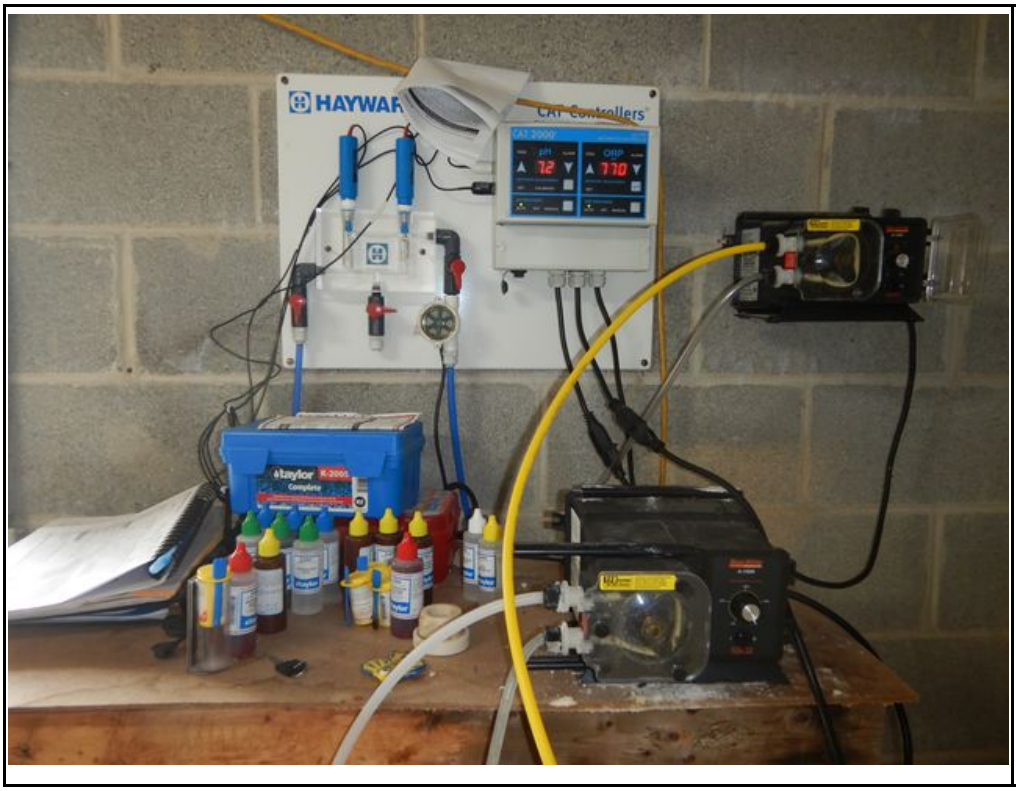


Photo Number
10

Description:
Pool chemical controller

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
11

Description:
Pool house security system

Photo Number
12

Description:
Cracks in concrete near pool

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

	Photo Number **13** Description: Replaced concrete along pool
	Photo Number **14** Description: Cracks in concrete near pool

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
15

Description:
Pool furniture

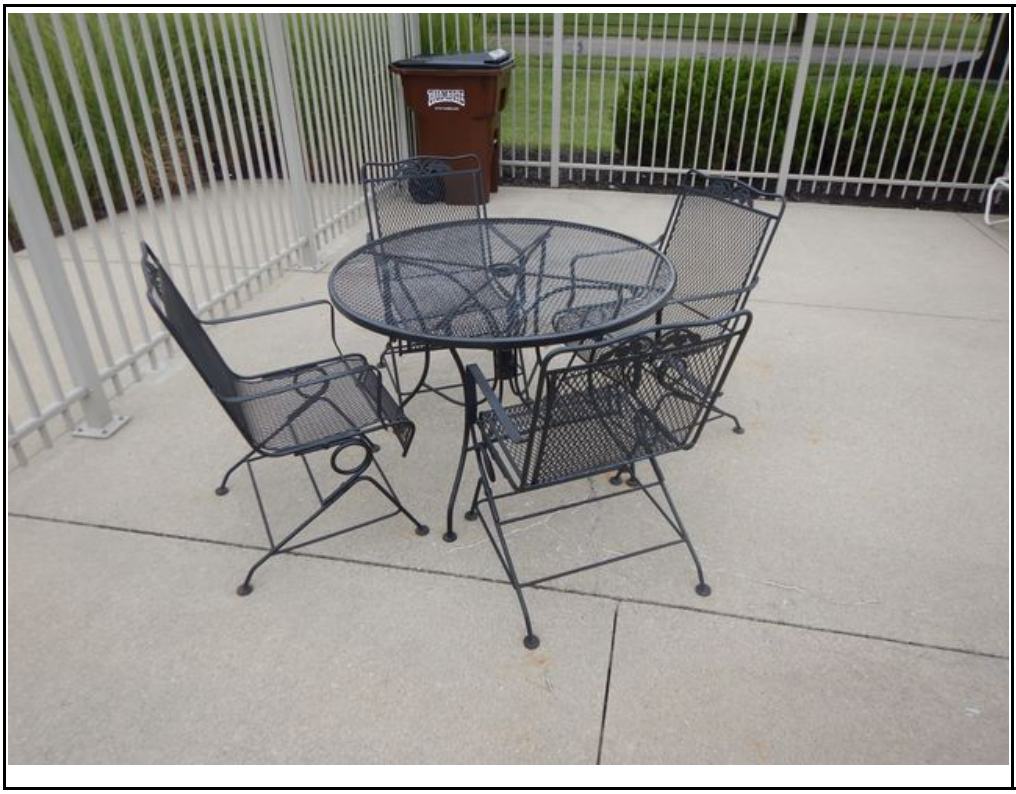


Photo Number
16

Description:
Pool furniture

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
17

Description:
Asphalt parking area

Photo Number
18

Description:
Irrigation near entry signs

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
19

Description:
rusted electrical box near entry signs

Photo Number
20

Description:
site lighting and controls

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
21

Description:
Street signs

Photo Number
22

Description:
Street signs

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
23

Description:
Sidewalk near amenities

Photo Number
24

Description:
Pond

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
25

Description:
Pond aerator

Photo Number
26

Description:
Pond aerator controls and power

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

Photo Number
27

Description:
Pond overflow

Photo Number
28

Description:
Drainage from pond that runs below road, corrugated metal. Concrete retaining wall near drainage.

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

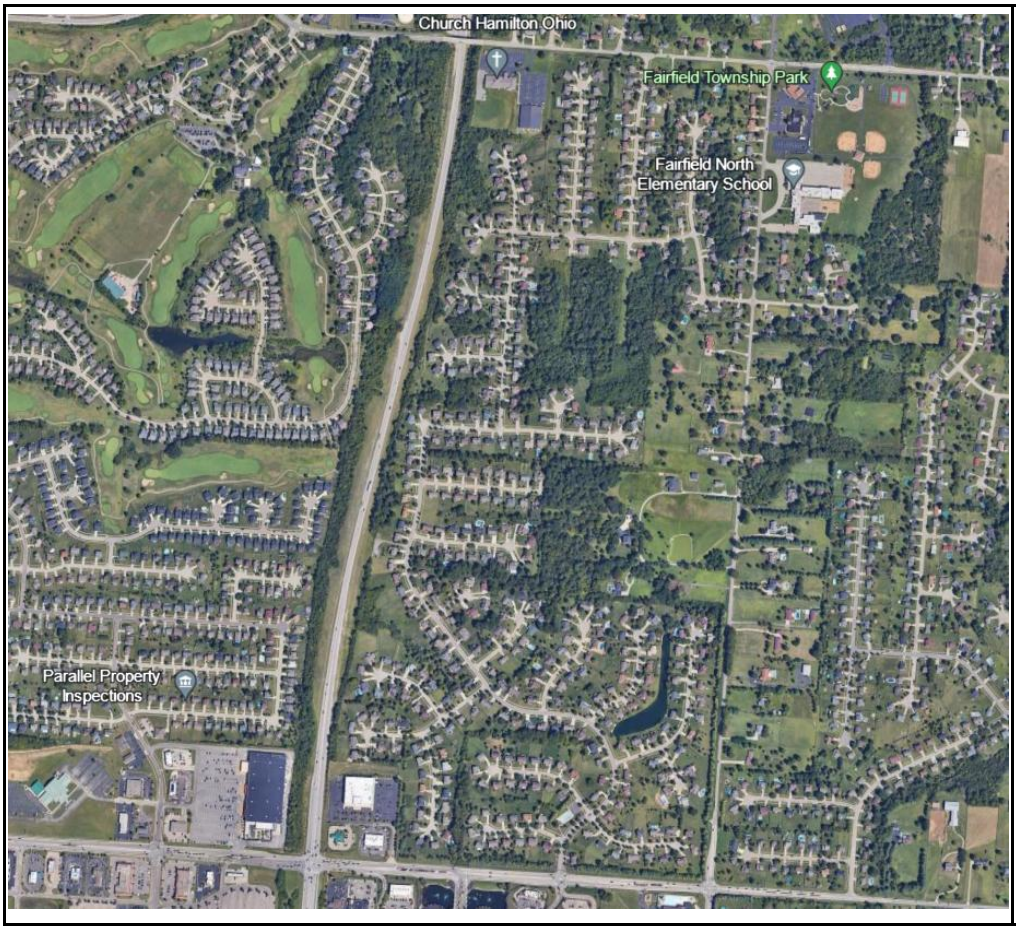


Photo Number
29

Description:
Lakewood HOA aerial view

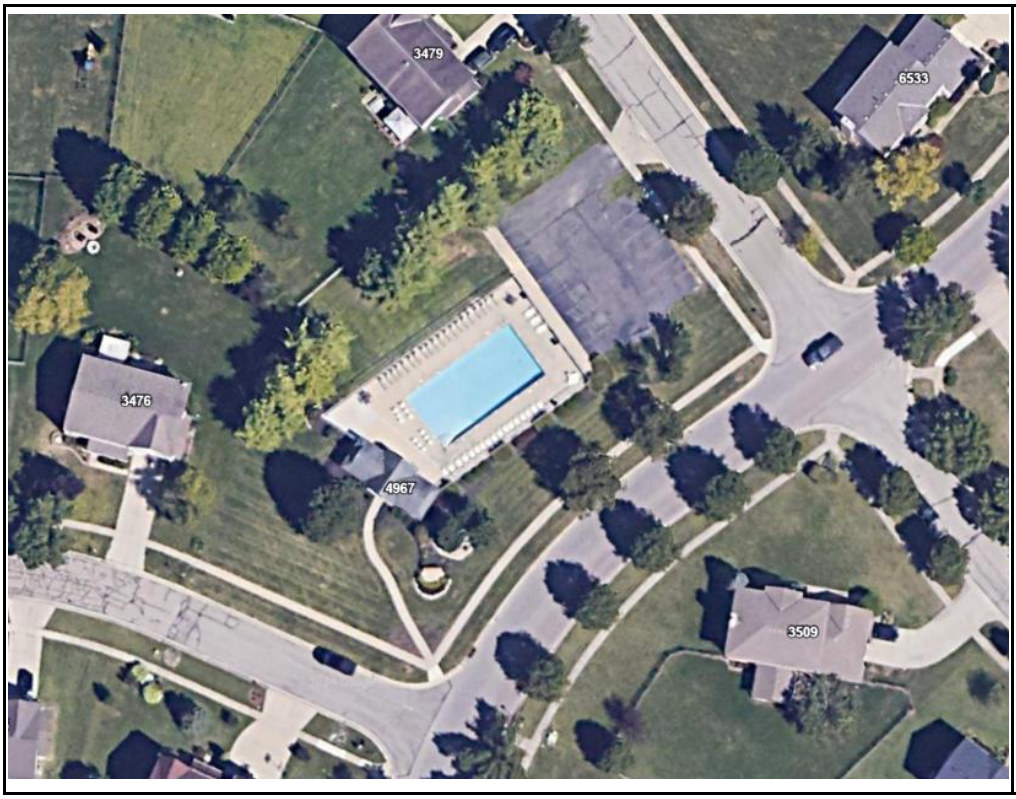


Photo Number
30

Description:
Pool house aerial view

Location
Lakewood HOA,
Hamilton, Ohio

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
July 16, 2024

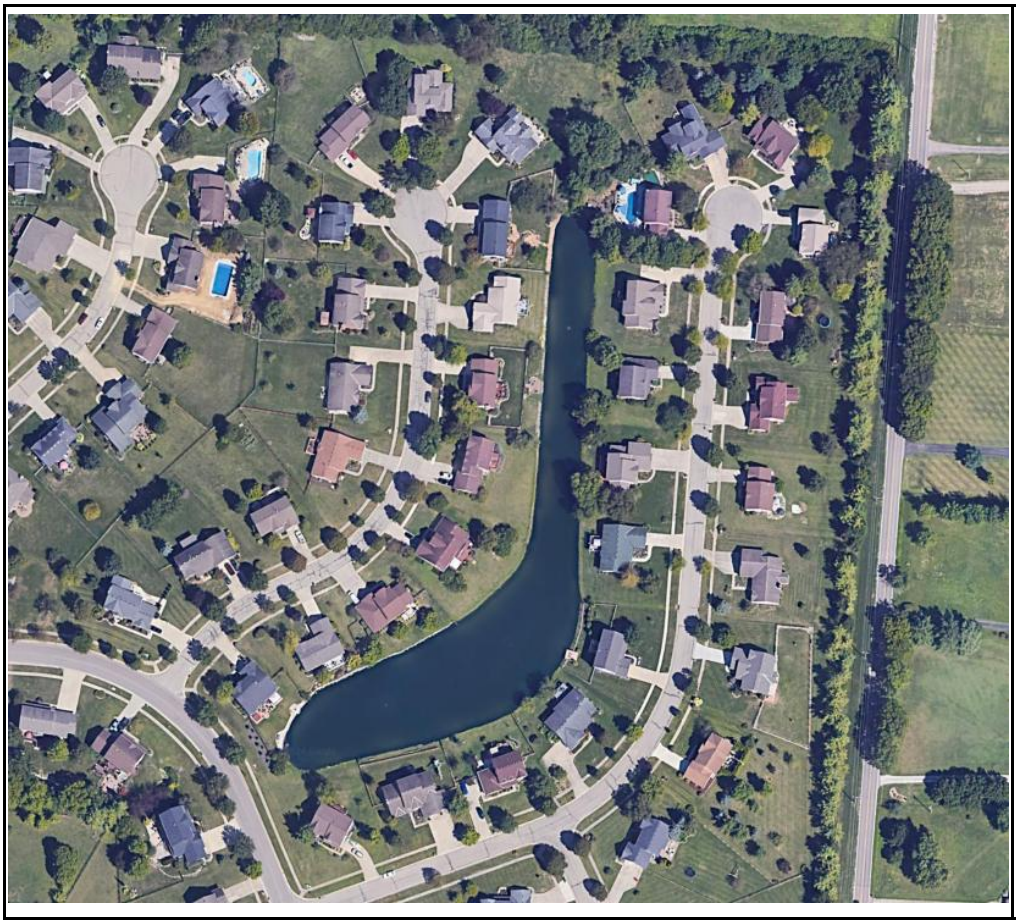


Photo Number
31

Description:
Pond aerial view

APPENDIX D

REFERENCE DOCUMENTS

community
ASSOCIATIONS INSTITUTE

Reserve Specialist® (RS®) Designation

NATIONAL RESERVE STUDY STANDARDS

General Information About Reserve Studies

One of the primary responsibilities of the board of directors of a community association is to protect, maintain, and enhance the assets of the association. To accomplish this objective, associations must develop multi-year plans to help them anticipate and responsibly prepare for the timely repair and replacement of common area components such as roofs, roads, mechanical equipment, and other portions of the community's common elements.

Originally published in 1998, the National Reserve Study Standards provide a consistent set of terminology, calculations, and expectations so reserve study providers and those they serve together can build a successful future for millions of community association homeowners across the country.

A reserve study is made up of two parts, the **physical analysis** and the **financial analysis.** The physical analysis includes the component inventory, condition assessment, and life and valuation estimates. The component inventory should be relatively stable from year to year, while the condition assessment and life and valuation estimate change from year to year.

The financial analysis is made up of an analysis of the client's current reserve fund status (measured in cash or as percent funded) and a recommendation for an appropriate reserve contribution rate (a funding plan).

Physical analysis
- Component inventory
- Condition assessment
- Life and valuation estimates

Financial analysis
- Fund status
- Funding plan

3/2018

CINCINNATI CRITERIUM ENGINEERS

Levels of Service

The following three categories describe the various types of reserve studies, from exhaustive to minimal.

I. **Full.** A reserve study in which the following five reserve study tasks are performed:
   - Component inventory
   - Condition assessment (based upon on-site visual observations)
   - Life and valuation estimates
   - Fund status
   - Funding plan

II. **Update, With Site Visit/On-Site Review.** A reserve study update in which the following five reserve study tasks are performed:
   - Component inventory (verification only, not quantification)
   - Condition assessment (based on on-site visual observations)
   - Life and valuation estimates
   - Fund status
   - Funding plan

III. **Update, No-Site-Visit/Off Site Review.** A reserve study update with no on-site visual observations in which the following three reserve study tasks are performed:
   - Life and valuation estimates
   - Fund status
   - Funding plan

IV. **Preliminary, Community Not Yet Constructed.** A reserve study prepared before construction that is generally used for budget estimates. It is based on design documents such as the architectural and engineering plans. The following three tasks are performed to prepare this type of study.
   - Component inventory
   - Life and valuation estimates
   - Funding plan

Terms and Definitions

CAPITAL IMPROVEMENTS: Additions to the association's common elements that previously did not exist. While these components should be added to the reserve study for future replacement, the cost of construction should not be taken from the reserve fund.

CASH FLOW METHOD: A method of developing a reserve funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

COMPONENT: The individual line items in the reserve study developed or updated in the physical analysis. These elements form the building blocks for the reserve study. These components comprise the common elements of the community and typically are: 1. association responsibility, 2. with limited useful life expectancies, 3. predictable remaining useful life expectancies, and 4. above a minimum threshold cost. It should be noted that in certain jurisdictions there may be statutory requirements for including components or groups of components in the reserve study.

COMPONENT INVENTORY: The task of selecting and quantifying reserve components. This task can be accomplished through on-site visual observations, review of association design and organizational documents, review of association precedents, and discussion with appropriate representative(s) of the association.

COMPONENT METHOD: A method of developing a reserve funding plan where the total contribution is based on the sum of contributions for the individual components.

CONDITION ASSESSMENT: The task of evaluating the current condition of the component based on observed or reported characteristics.

EFFECTIVE AGE: The difference between useful life and remaining useful life. Not always equivalent to chronological age, since some components age irregularly. Used primarily in computations.

FINANCIAL ANALYSIS: The portion of a reserve study where the current status of the reserves (measured as cash or percent funded) and a recommended reserve contribution rate (funding plan) are derived, and the projected reserve income and expense over a period of time are presented. The financial analysis is one of the two parts of a reserve study.

FULLY FUNDED: 100 percent funded. When the actual (or projected) reserve balance is equal to the fully funded balance.

FULLY FUNDED BALANCE (FFB): An indicator against which the actual (or projected) reserve balance can be compared. The reserve balance that is in direct proportion to the fraction of life "used up" of the current repair or replacement cost. This number is calculated for each component, and then summed for an association total.

FFB = Current Cost X Effective Age/Useful Life

Example: For a component with a $10,000 current replacement cost, a 10-year useful life and effective age of 4 years the fully funded balance would be $4,000.

FUND STATUS: The status of the reserve fund reported in terms of cash or percent funded.

FUNDING GOALS: Independent of methodology used, the following represent the basic categories of funding plan goals. They are presented in order of greatest risk to least risk. Risk includes, but is not limited to, cash problems, special assessments, and deferred maintenance.

Baseline Funding: Establishing a reserve funding goal of allowing the reserve cash balance to never be below zero during the cash flow projection. This is the funding goal with the greatest risk due to the variabilities encountered in the timing of component replacements and repair and replacement costs.

Threshold Funding: Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. Depending on the threshold selected, this funding goal may be weaker or stronger than "Fully Funded" with respective higher risk or less risk of cash problems.

Full Funding: Setting a reserve funding goal to attain and maintain reserves at or near 100 percent funded. This is the most conservative funding goal.

It should be noted that in certain jurisdictions there may be statutory funding requirements that would dictate the minimum requirements for funding.

FUNDING PLAN: An association's plan to provide income to a reserve fund to offset anticipated expenditures from that fund. The plan must be a minimum of twenty (20) years.

Terms and Definitions (cont'd.)

FUNDING PRINCIPLES: The reserve provider must provide a funding plan addressing these principles.

- Sufficient funds when required
- Stable contribution rate over the years
- Equitable contribution rate over the years
- Fiscally responsible

LIFE AND VALUATION ESTIMATES: The task of estimating useful life, remaining useful life, and current repair or replacement costs for the reserve components.

PERCENT FUNDED: The ratio, at a particular point in time related to the fiscal year end, of the actual (or projected) reserve balance to the fully funded balance, expressed as a percentage. While percent funded is an indicator of an association's reserve fund size, it should be viewed in the context of how it is changing due to the association's reserve funding plan in light of the association's risk tolerance.

PHYSICAL ANALYSIS: The portion of the reserve study where the component inventory, condition assessment, and life and valuation estimate tasks are performed. This represents one of the two parts of the reserve study.

REMAINING USEFUL LIFE (RUL): Also referred to as "remaining life" (RL). The estimated time, in years, that a reserve component can be expected to serve its intended function. Projects expected to occur in the initial year have zero remaining useful life.

REPLACEMENT COST: The cost to replace, repair, or restore the component to its original functional condition during that particular year, including all related expenses (including but not limited to shipping, engineering and design, permits, installation, disposal, etc.).

RESERVE BALANCE: Actual or projected funds, as of a particular point in time that the association has identified, to defray the future repair or replacement cost of those major components that the association is obligated to maintain or replace. Also known as reserves, reserve accounts, cash reserves. Based on information provided and not audited.

RESERVE PROVIDER: An individual who prepares reserve studies. In many instances the reserve provider will possess a specialized designation such as the Reserve Specialist (RS) designation provided by Community Associations Institute (CAI). This designation indicates that the provider has shown the necessary skills to perform a reserve study that conforms to these standards.

RESERVE PROVIDER FIRM: A company that prepares reserve studies as one of its primary business activities.

RESERVE STUDY: A budget planning tool which identifies the components that the association is responsible to maintain or replace, the current status of the reserve fund, and a stable and equitable funding plan to offset the anticipated future major common area expenditures. The reserve study consists of two parts: the physical analysis and the financial analysis.

RESPONSIBLE CHARGE: A Reserve Specialist (RS) in responsible charge of a reserve study shall render regular and effective supervision to those individuals performing services that directly and materially affect the quality and competence of services rendered by the Reserve Specialist. A Reserve Specialist shall maintain such records as are reasonably necessary to establish that the Reserve Specialist exercised regular and effective supervision of a reserve study of which he or she was in responsible charge. A Reserve Specialist engaged in any of the following acts or practices shall be deemed not to have rendered the regular and effective supervision required herein:

1. The regular and continuous absence from principal office premises from which professional services are rendered; except for performance of field work or presence in a field office maintained exclusively for a specific project;

2. The failure to personally inspect or review the work of subordinates where necessary and appropriate;

3. The rendering of a limited, cursory or perfunctory review of plans or projects in lieu of an appropriate detailed review; and

4. The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

SPECIAL ASSESSMENT: A temporary assessment levied on the members of an association in addition to regular assessments. Note that special assessments are often regulated by governing documents or local statutes.

USEFUL LIFE (UL): The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed in its present application or installation.

Reserve Study Contents

The following is a list of the minimum contents to be included in the Reserve Study.

1. A summary of the association's number of units, physical description and reserve fund financial condition.
2. A projection of reserve starting balance, recommended reserve contributions, projected reserve expenses, and projected ending reserve fund balance for a minimum of 20 years.
3. A tabular listing of the component inventory, component quantity or identifying descriptions, useful life, remaining useful life and current replacement cost.
4. A description of methods and objectives utilized in computing the Fund Status and development of the Funding Plan.
5. Source(s) utilized to obtain component repair or replacement cost estimates.
6. A description of the level of service by which the Reserve Study was prepared.
7. Fiscal year for which the Reserve Study is prepared.

Disclosures

The following are the minimum disclosures to be included in the Reserve Study:

1. **General:** Description of the other involvement(s) with the association, which could result in actual or perceived conflicts of interest.
2. **Physical Analysis:** Description of how thorough the on-site observations were performed: representative samplings vs, all common areas, destructive testing or not, field measurements vs. drawing take-offs, etc.
3. **Financial Analysis:** Description of assumptions utilized for interest and inflation, tax and other outside factors.
4. **Personnel Credentials:** State or organizational licenses or credentials carried by the individual responsible for Reserve Study preparation or oversight.
5. **Update Reports:** Disclosure of how the current work is reliant on the validity of prior Reserve Studies.
6. **Completeness:** Material issues which, if not disclosed, would cause a distortion of the association's situation.
7. **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 the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records.
8. **Reserve Balance:** The actual or projected total presented in the Reserve Study is based upon information provided and was not audited.
9. **Component Quantities:** For update with site visit and update no site visit levels of service, the client is considered to have deemed previously developed component quantities as accurate and reliable.
10. **Reserve Projects:** Information provided about reserve projects will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection.

TERMS OF REFERENCE RESERVE STUDY	
Association	The unit owners' association. May be referred to with different terminology in legal covenants of incorporation.
Board	Elected officers of the Association with fiduciary responsibility for the community's common holdings. May be referred to with different terminology in legal covenants of incorporation.
Owner	Individual Unit owner, a Member or the Association
Property Manager	Professional organization through which the Board delegates responsibilities for operations and maintenance of the community.
Excellent	Component or system is in "as new" condition, requiring no rehabilitation and should perform in accordance with expected performance.
Good	Component or system is sound and performing its function, although it may show signs of normal wear and tear. Some minor rehabilitation work may be required.
Fair	Component or system falls into one or more of the following categories: a) Workmanship not in compliance with commonly accepted standards, b) Evidence of previous repairs not in compliance with commonly accepted practice, c) Component or system is obsolete, d) Component or system approaching end of expected performance. Repair or replacement is required to prevent further deterioration or to prolong expected life.
Poor	Component or system has either failed or cannot be relied upon to continue performing its original function as a result of having exceeded its expected performance, excessive deferred maintenance, or state of disrepair. Present condition could contribute to or cause the deterioration of other adjoining elements or systems. Repair or replacement is required.
Adequate	A component or system is stable, has capacity to function as required, is sufficient for its service, is suitable for operation, and/or conforms to standard construction practices.
Basis of Comparison	Ratings are determined by comparison to other buildings of similar age and construction type.
Left, Right, Front, Rear	Directions are taken from the viewpoint of an observer standing at the property frontage and facing it. Or, for a building within a campus setting, the viewpoint of an observer standing in front of the principal entrance and

	facing it.
Current Deficiency Immediate Expense	We will note any observed or reported physical condition which requires immediate action to correct an existing or potential safety hazard, an enforceable building code violation, or the poor or deteriorated condition of a critical element or system. Also, to address any conditions which, if left "as is", would likely result in the failure of a critical element or system. Such items will be noted in our report even if they do not require a reserve expenditure.
Short-Term Reserve Expenditures	Correction of physical deficiencies including deferred maintenance, which may not warrant immediate attention, but require repairs or replacements which should be undertaken on a priority basis, taking precedence over preventive maintenance work within a one-year time frame. Included are physical deficiencies resulting from improper design, faulty installation, and/or substandard quality of original systems or materials. Components or systems that have exceeded their expected useful life and require repair or replacement within a one-year time frame are also included. Observed minor issues which would typically be addressed as normal operations & maintenance work may not be noted in the report.
Long-term Reserve expenditures	Non-routine repairs, replacements or planned improvements that will require significant expenditure during the study period. Included are items that will reach the end of their estimated useful life or which, in the opinion of the engineer, will require such expense during that time. If saving for longer- term expenditures is desired, then allowances or contingencies for such items may also be included. Observed minor issues which would typically be addressed as normal operations & maintenance work may not be noted in the report.
Expected Useful Life (EUL)	As components age, they wear and deteriorate at varying rates, depending on their service and exposure. Although it is an inexact science, various financial underwriters, data services and trade organizations publish guidance regarding the EULs of typical building materials and operating systems. For short-lived components, their EUL is used as the frequency between periodic repairs or replacements. Some systems' economic life may be shortened because improved equipment or materials has become available which is less costly to operate or maintain.

Remaining Useful Life (RUL)	The simple equation for determining remaining useful life before repair or replacement is: **EUL – Age = RUL** However, based on our evaluation of a component and our professional judgment, we may assign a shorter or longer RUL to actual items being considered.

BUILDING SYSTEMS AND COMPONENTS COMMON ABBREVIATIONS AND ACRONYMS			
ACM	Asbestos Containing Material	**HW**	Hot Water
ACT	Acoustic Ceiling Tile	**HWH**	Hot Water Heater (*domestic*)
ADA	Americans with Disabilities Act	**IBC**	International Building Code
AHU	Air Handling Unit	**IRC**	International Residential Code
ASHRAE	American Society of Heating, Refrigeration and Air- Conditioning Engineers	**KVA**	Kilovolt-Ampere
ASTM	American Society for Testing and Materials	**LF**	Lineal Foot
BOCA	Building Officials Code Administrators International	**MSL**	Mean Sea Level
BTU	British Thermal Unit	**NEC**	National Electric Code
BTUH	British Thermal Unit / Hour	**NFPA**	National Fire Protection Association
CFM	Cubic Foot / Minute	**MBH**	Thousand British Thermal Units / Hour
CI	Cast Iron (*piping*)	**MDP**	Main Distribution Panel (*electric power*)
CIP	Cast In Place (*concrete*)	**O&M**	Operations & Maintenance
CMU	Concrete Masonry Unit (*block*)	**OSB**	Oriented Strand Board (*sheathing or decking*)
CPVC	Chlorinated Poly Vinyl Chloride (*piping*)	**PCA**	Property Condition Assessment
CW	Cold Water	**PCR**	Property Condition Report
DI	Ductile Iron (*piping*)	**PE**	Licensed Professional Engineer
EIFS	Exterior Insulating and Finishing System	**PVC**	Poly Vinyl Chloride (*piping and siding*)
EPDM	Ethylene Propylene Diene Monomer	**PTAC**	Packaged Terminal Air Conditioning Unit
EUL	Expected Useful Life	**ROM**	Rough Order of Magnitude
FCU	Fan Coil Unit	**RUL**	Remaining Useful Life
FEMA	Federal Emergency Management Agency	**RTU**	Roof Top Unit
FFE	Furniture, Fixtures and Equipment	**SF**	Square Foot
FHA	Forced Hot Air	**SOG**	Slab on Grade (*concrete basement or ground floor*)
FHAA	Fair Housing Act and Amendments	**SQ**	100 Square Feet
FHW	Forced Hot Water	**SY**	Square Yard
FIRM	Flood Insurance Rate Map	**UBC**	Uniform Building Code
FOIA	Freedom of Information Act	**UL**	Underwriters Laboratories
GFI	Ground Fault Interruption (*circuit breaker*)	**VAC**	Volts Alternating Current
GWB	Gypsum Wall Board (*drywall or sheetrock*)	**VAV**	Variable Air Volume box

HID	High Intensity Discharge (*lamp, lighting fixture*)	**VCT**	Vinyl Composition Tile
HVAC	Heating Ventilation and Air Conditioning	**VWC**	Vinyl Wall Covering

APPENDIX E

PROJECT TEAM QUALIFICATIONS

Matthew Klein, P.E., RS, MBA (LCDR-Ret., USPHS)

Area of Expertise

- Building inspections, including home, multifamily, structural, roof, FHA and OMHC inspections.
- Commercial property condition assessments.
- Homeowner association reserve fund studies and analysis and transition studies.
- Mold and moisture intrusion investigations.
- Forensic engineering investigations.
- Sampling for chemical and biological contaminants and developing remedial plans.
- Airflow analyses.
- Laboratory and field test development, sampling and data analyses.
- Expert consultant and witness.
- Inspections of single and multifamily residences including condominiums; commercial properties including retail, hotels and offices.
- Clientele including home and commercial property owners and buyers, investors, realtors, operations managers, police department personnel, relocation professionals, lawyers and insurance companies.

Qualifications

- Criterium Engineers staff engineer, during which over 700 projects were completed in building ranging from single and multifamily residences to commercial multistory commercial buildings performing projects including condition assessments, roof and structural inspections and moisture intrusion investigations. Now, also business operations manager.
- Self-employed investigating indoor air quality problems, mainly mold and moisture intrusion problems, sampling for biological contaminants, developing mold remediation plans and serving as expert consultant.
- Twenty-year career with U.S. Public Health Service stationed with the Food and Drug Administration and the National Institute for Occupational Safety and Health. Work with USPHS included developing and executing test protocols, data collection and analyses, air sampling for chemical and biological contaminants, indoor air quality investigations in commercial buildings, schools and hospitals, firing range and industrial process contaminant control investigations and consulting, control system assessments and air handling system analyses and investigations. Buildings of note included the Library of Congress Madison, five schools and the FBI, Secret Service, Government Protective Services and U.S. Park Ranger's firing ranges. Retired from USPHS at the rank of LCDR.
- Authored or co-authored 40 published professional reports or articles.

Education and Affiliations

- Masters in Business Administration from Xavier University, Cincinnati, OH with specialties in general management, marketing, and personnel (primary focus on communication).
- Bachelors of Science in Mechanical Engineering from University of Louisville, Louisville, KY with elective and additional coursework in physiological psychology.
- Professional Engineering License in Mechanical Engineering (Kentucky, #11709).
- Professional Engineering License in Mechanical Engineering (Ohio, #71656).
- Ohio Manufactured Homes Commission Inspector Certification (#20070133)

SCOTT SCHAFFER, P.E., RS

EDUCATION / LICENSURES

- Bachelor of Science in Mechanical Engineering from The Ohio State University
- Civil: Structural Engineering Professional Engineer Licensure (P.E.)
- CAI certified Reserve Specialist (RS)
- Certified Solidworks Professional

WORK EXPERIENCE

- Criterium-Cincinnati Engineers (June 2021 - present)
    - Structural engineering firm
    - Completed structural inspections and accompanying reports for single and multi-family residences including condominiums
    - Completed structural inspections and accompanying reports for commercial properties including retail, manufacturing plants, and offices
    - Performed reserve studies and analysis in accordance with Community Associations Institute guidelines for Owner Association
    - Designed custom structural repairs and renovations for residential building including detailed drawing creation
    - Property condition assessments in accordance with ASTM guidelines
    - Manufactured Home FHA foundation inspections
    - Fire escape inspections in accordance with local ordinance
    - Moisture intrusion investigation
    - Cost segregation studies
- ZEM Properties LLC (August 2018 - present)
    - Small business focused on rehabilitation and renovation of residential buildings
    - Assessed housing value and associated financial risks
    - Performed all steps of the renovation process
        - Collaborated to create project plans including timelines and budgets
        - General construction includes electrical, plumbing, tiling, and etc.
        - Researched proper skills, techniques, and housing codes as required
    - Worked with subcontractors to quote jobs and complete work in a timely manner
    - Worked with county permit officials and inspectors to ensure job quality
- Skyclimber, LLC. (June 2016 - August 2018)
    - Suspended scaffolding design and manufacturing company
    - Designed standard equipment and custom products to meet the customer's needs
    - Tested and evaluated new designs
    - Engineering Change Request coordinator
    - Worked with customers and salesmen to meet project requirements
    - Worked with manufacturing to ensure finished products meet specifications
- Design Central (Summer 2015)
    - Consulting and design firm that develops innovative products and solutions
    - Designed, built, and validated test fixtures
    - Tested prototypes to verify functionality
    - Model construction

QUALIFICATIONS AND SKILLS

- Proficient with MATLAB and C++ for multiple engineering applications
- Proficient with SolidWorks, Fusion360, and Autocad drafting programs
- Knowledgeable with FDM 3D printing techniques and design
- Extensive experience with Microsoft Office with a focus on Word and Excel