RESERVE FUND STUDY

Prepared for:

GASLITE SQUARE CONDOMINIUM
SHERBURN LN
ST MATTHEWS, KY 40207

Prepared by:

9069 ARROWHEAD COURT
CINCINNATI, OHIO 45231
(513) 474-9600

On-site Inspection performed September 18, 2024
Submitted October 29, 2024

Revision 0

CE Project No. 240721

TABLE OF CONTENTS

1.0 INTRODUCTION **4**

2.0 EXECUTIVE SUMMARY **4**

3.0 PURPOSE & SCOPE **5**

3.1 OBJECTIVES 5
3.2 LEVEL OF SERVICE 6
3.3 SOURCES OF INFORMATION 6

4.0 PHYSICAL ANALYSIS **7**

4.1 PROPERTY DESCRIPTION 7
4.2 COMMON COMPONENTS 7
4.3 CONDITION ASSESSMENT 7
4.4 CURRENT DEFICIENCIES 9
4.5 LIFE & VALUATION 9

5.0 FINANCIAL ANALYSIS **11**

5.1 RESERVE EXPENDITURE PROJECTION 11
5.2 CURRENT FUNDING 11
5.3 ALTERNATE FUNDING PLANS 12
5.4 FUNDING METHODOLOGIES (Background Information) 13

6.0 LIMITATIONS **13**

7.0 CONCLUSION **14**

APPENDICES

A – FINANCIAL EXHIBITS
B – GRAPHIC EXHIBITS
C – PHOTOGRAPHS
D – REFERENCE DOCUMENTS
E – PROJECT TEAM QUALIFICATIONS

1.0 INTRODUCTION

Following authorization by the Gaslite Square Condominium's Board of Directors, Criterium-Cincinnati Engineers has conducted a Reserve Fund Study of your 75 unit residential community located in St Matthews, KY. Our work is consistent with our proposal dated June 6, 2024.

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 September 18, 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 fair general condition and fairly-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 $2,503,000. 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 I - Full Reserve Study.

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:

- The Board

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.

Valle Greene is a 75 unit residential community in two buildings developed around 1974..

The property occupies an estimated 3.6 acre site of fairly level ground. A concrete drainage channel passes through the community flowing from the southeast to the northeast. The yards are heavily grassed and erosion does not appear to be a significant problem. The northeast building is known as Building A and the southwest building is Building B

The residential buildings are apartment-style construction. As no drawings were available for review, any comments made on the structural systems in the community are derived from how the community appears to be constructed.The foundation appears to be concrete slab and the substructure appears to be poured concrete. Interior and exterior finishes prevent a view of many of the structural components. All floors appear to be concrete. Roofs are flat with membrane finishes. Roof drainage is through catch basins and internal downspout systems. The exterior materials include brick veneer.

The front and sides of the residential buildings are primarily asphalt parking areas. Two carports are present. The carports consist of storage rooms, covered walkways to the residential buildings, and asphalt parking surfaces. The roofs are flat with EPDM membranes as well as perimeter asphalt composite shingles.

Amenities include a clubhouse and pool area.

COMMON COMPONENTS

Please refer to Appendix A for the Common Component Inventory.

4.2 CONDITION ASSESSMENT

4.3.1 Site Improvements

Concrete Flatwork

Concrete flatwork includes all the concrete walkways, patios, and curbs. 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 allowance every year that is based on the square yardage amount of all concrete in the Association. We calculate that annual allowance based on a useful life of 50 years. We have calculated the area of concrete as follows.

- Entry walkways - 1,740 square feet
- Patios - 400 square feet
- Curbs - 600 linear 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.

We also noted a concrete drainage channel that was not included in this study. As we understand, the concrete channel is part of an easement for water drainage for neighboring sites. It is important for the community to know the responsible party for maintaining the concrete channel.

Asphalt Surfaces

For road asphalt areas, we recommend applications of an asphalt seal coat approximately every 5 years along with repair of cracks and small patches as necessary. The condition of asphalt usually requires milling and a 2" overlay be applied every 20 years. We estimate a total of 7,460 square yards of asphalt surface using Google Earth aerial images and measurement tools. We estimate the asphalt surfaces to be most recently replaced in 2016 based on historical aerial images.

The sealing costs should be sufficient for sectional repairs such as raising pavement near storm drains. A&R Concrete Solutions quoted a cost of $4,230 to repair pavement near storm drains.

Fencing

A metal fence was located along the concrete drainage channel near the southwest entrance to Building A. We estimate a service life of 30 to 40 years for the metal fence. No unusual conditions were noted. The metal fence is in good condition.

Wood privacy fences were located along the rear property line and near the exterior electrical distribution equipment. Based on discussions at the time of the inspection, the rear property line is the responsibility of the neighboring residential community. Wood fences have expected life spans of 20 years. The privacy fences were in good condition.

Stormwater Drainage

We have included an allowance for stormwater drainage improvements which are common for Associations as they get older. This includes repairs to catch basins as well as any added work to the site for directing the storm water to drains. As we understand, water pools on the asphalt surface near the south west property line. Stormwater drainage includes buried drain lines that were partially obstructed and a french drain to the rear of Building B. For the reserve study we have included an allowance of $10,000 once every 10 years. This does not account for repairs to the concrete drainage channel.

Costs of the drainage improvements are subjective and based on our experience with similarly sized communities. No unusual conditions were noted.

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

Roofs

The roofs were a roofing membrane, which are commonly used for flat roofs. We believe the residential roof membranes were installed in 2011, making the roofs approximately 13 years old. The residential membrane roof was generally in fair condition. The east carport roof was in the process of roof replacement and the west carport roof was in poor condition. These roofs normally have a 20 year life. These roof membranes are easily damaged by workmen in hot weather placing tools, buckets and equipment on the hot surface. Supervision of any workers on the roof is recommended to prevent roof damage.

Gutters & Downspouts

Aluminum gutters and downspouts are located on the carports and the residential building porticos. Gutters and downspouts have an expected useful life of about 25 years, although our experience is that they can last much longer. The gutters and downspouts on the residential buildings were in generally good condition. The gutters and downspouts on the porticos are planned to be replaced with the carport roof replacement.

Carport Refurbishment

We have included an allowance for refurbishment of the carports every 10 years. This could include painting and repair of the carport ceiling, replacement of steel columns, tuckpointing of brick walls, replacement of lighting. We noted rust on the steel columns and cracks in the brick walls near the steel columns. Costs of the carport improvements are subjective and based on our experience with similarly sized structures.

Siding

Siding includes brick veneer. The brick masonry walls will require some repairs to mortar joints in future years which is typical for brick walls. We have included an annual allowance to tuckpoint the brick based on the total area of the brick walls.

The Association's Manager and Board will evaluate brick veneer periodically and decide when to make needed repairs and the allowance we have used should 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.

Exterior lighting

The association is responsible for the exterior lights located on the buildings. The exterior light fixtures have an expected useful life of 25 to 35 years. We included an allowance every 10 years for sectional replacement of the exterior lighting. As we understand, the community plans to install lighting on Building A for $2,997 as quoted by Schell Electric Co.

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

This section of the report does not address Owner-responsible Unit interiors. Common areas in the residential buildings include stairwells, hallways, storage, laundry, and utility rooms.

Common halls, stairs, entrance foyer and elevator landings

There are common interior hallways on all 3 floors as well as elevator landings on each floor. The first floor has entrance foyers. There are staircases that are on opposite ends of the buildings. Storage rooms are present on the second and third floors. Utility, laundry rooms, and trash rooms are present on all three floors.

We have accounted for costs in the reserve study for the following items:

- Hall and common area carpets – 15 year life. The carpet was reported to be new.
- Ceramic tile flooring - 40 year life. No unusual conditions were noted.
- Painting of walls and ceilings in halls and common areas – 15 year life. No unusual conditions were noted.
- Light fixtures in common areas – 30 year life, we included an allowance for sectional replacement every 15 years.
- Mailboxes – 40 year life. No unusual conditions were noted.
- Common area exterior doors – 30 year life. No unusual conditions were noted.

Overall the interior components were in good condition. It was reported to us that concrete floors were crumbling in some one below the carpet**.** We were unable to view the damaged concrete during our inspection and cannot comment on its condition.

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.

Elevators

Each building has a hydraulic elevator used for both passenger and freight. As we understand, the elevators and lifting equipment are aging and will soon need modernization. DC Elevators has quoted modernization of one elevator for $81,750. Elevators have a typical service life of 20 to 25 years.

HVAC equipment

The Association has 4 individual HVAC systems for common hallway areas. These split unit systems in common areas with the condensers on the roof of the building and gas-fired furnaces in utility rooms. We have included replacement costs every 4 years for phased replacement of the HVAC equipment. This should allow all HVAC equipment to be replaced in a 16 year cycle.

Domestic Water Boilers

The four gas-fired boilers for domestic water were replaced in phases. The oldest boilers were installed in Building B in 2009. Life expectancy of a boiler is about 15 years. We have included costs to replace a boiler every 4 years. This allows all boilers to be replaced on a 16 year cycle.

Intercom

Allowance for the intercom system and system components. We have included an allowance of $3,500 for intercom upgrades every 20 years.

Fire Alarm System

An expenditure has been included for the upgrade of the fire alarm system based on a useful life of 20 to 25 years. No unusual conditions were noted.

Cast Iron Waste Piping

The plumbing in this community is cast iron. We do not do condition assessments of components we cannot see such as buried water laterals. Cast iron has a useful lifespan of about 50 years. The community has had issues with their cast iron plumbing and has replaced some sections. We have included costs to replace all cast iron piping in the

buildings based on the total area of the buildings. Costs of the cast iron replacement are subjective and based on our experience with similarly sized communities. Replacement of cast iron will also require repairs to interior finishes that cover the plumbing.

Electrical Distribution

Electric distribution equipment in this building was observed to be Federal Pacific electric panels. These are safety issues that are known potential fire risks. The recommended correction is to replace the electric panels. Schell Electric Co quoted replacement of the clubhouse breaker panel and Building B's electric meters. We separated the replacement into phases over the next 6 years.

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

Clubhouse Interior

The clubhouse interior includes an exercise room, a kitchen, two bathrooms, sitting rooms, billiards room, office, tv room, and pool equipment room. As we understand, half the clubhouse interior was renovated. The renovated sections include the kitchen, main sitting area and bathrooms. The billiards room, office, and a sitting room still need to be renovated. We have accounted for costs in the reserve study for the following items

- **Carpet -** The cost of replacement is based on the total area. Carpet is located in the billiards room, exercise room, and tv room. Typical lifespan of carpet is 10 to 15 years.
- **Composite floor -** Composite floors were installed with the recent renovation. The floors are in good condition with no unusual conditions. Composite floors have a service life of 20 to 25 years.
- **Ceramic tile floor -** Tile flooring has a long expected life of 40 years or more. Tile floors are often replaced before their end of life for aesthetic reasons. The cost of replacement is included every 40 years and based on the total area.
- **Furnishings -** An allowance has been included to replace furnishings every 15 years.
- **kitchen cabinets -** An allowance has been included to replace kitchen cabinets and countertops every 30 years based on the total linear feet. The cabinets are in good condition
- **Exercise equipment -** An allowance has been included to replace exercise equipment every 10 years.

- **Bathrooms -** An allowance has been included for bathroom refurbishment every 15 years. The bathrooms include showers and saunas. Both the showers and saunas were used for storage at the time of the site visit.
- **Interior painting and wall covering refurbishment**- We have included an expense every 15 years to paint the interior walls and ceilings of the clubhouse or replace/refurbish wall coverings. The walls in the billiards room have wood paneling.
- **Lighting** - We have included an allowance to replace the clubhouse lighting based on an expected life of 30 years.
- **HVAC equipment** - The HVAC equipment includes a gas-fired furnace and a condensing unit. The HVAC equipment appears to be in good condition. Typical service life for HVAC equipment is 15 years.
- **Water heater** - The water heater appears to have been installed around 2013. Life expectancy of a water heater is about 15 years.
- **Security system** - The security system at the clubhouse includes cameras and a monitoring station in the office. In our experience security systems are often upgraded every 10 years.
- **Electrical Distribution Equipment** - Electric distribution equipment includes a Federal Pacific electric panel. These are safety issues that are known potential fire risks. We have included an expense for electric panel replacement based on a quote from Schell Electric Co.

We did not account for appliance replacement, interior door replacement, sauna replacement. We believe the appliance and interior door replacement should be operating expenses. The saunas were used as storage and not for their original intended use.

Clubhouse exterior

The condition of the clubhouse exterior finishes is generally in fair condition.

- **Roof -** The roof is flat with a membrane and pitched composite asphalt shingles along the perimeter. Roof lifespan is approximately 20 years. The roofs appear to be in generally poor condition from our visual observations. We included an expense to replace the roof based on a quote from Highland Roofing. We recommend that the roofs be regularly inspected by a qualified contractor 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.
- **Gutters and downspouts -** The buildings in this community have aluminum gutters and downspouts. Gutters and downspouts have an expected useful life of about 25 years, although our experience is that they can last much longer. The gutters and downspouts were generally in good condition.

- **Windows -** We have included window replacement costs based on a useful life of 40 years. No unusual conditions were noted.
- **Exterior doors -** We have included door replacement costs based on a useful life of 30 years. We included an allowance every 4 years for door replacement. This should allow all 8 doors to be replaced on a 32 years cycle. No unusual conditions were noted.

We did not account for brick veneer repair. We believe brick veneer repair should be minor and therefore an operating expense.

Pool area

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

- **Pool deck** - We included an allowance every 5 years for concrete refurbishment or replacement. The expense is based on the total area and a service life of 50 years. We noted multiple cracks in the pool deck. 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.
- **Resurface** - We have included an expenditure to resurface the swimming pools every 13 years. The pool surface has an expected useful life of 10 to 15 years. The pool was covered during the site visit. The condition of the pool surface was reported to be poor and a leak was a known issue.
- **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 15 years. No unusual conditions were noted in the pool filter.
- **Chemical control 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 15 years. No unusual conditions were noted
- **Fence** - A steel 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.
- **Furniture** - We have included an allowance to replace every 15 years. Based on discussions at the time of the site visit, the furniture is in poor condition.

We did not account for the pool heater. As we understand, the pool heater was nonfunctional and no plans exist to replace the heater.

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. As we understand, repairs to the gas lines to fireplaces in individual units was a concern for the community and is an example of what may be covered by miscellaneous repair allowance. 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:

4.3 PENDING WORK

At the time of our inspection, these maintenance activities or improvements were reportedly pending:

- Replacement of the Building A carport roof

Since we understand that this work is expected to be completed before the study period commences, we have not made any allowance for them in the reserve expenditure budget projection.

4.4 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 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: $206,225
- On Date: July 13, 2024
- Current Rate of Contribution: $2,440 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 $206,225 starting balance of the Reserve Fund on July 13, 2024, the current ongoing rate of contribution of $2,440 monthly, 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 1 (2025) of the study period. The projected year-end balance at the end of the 20-year planning period in 2044 will be approximately ($1,725,000).

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 $125,000 in Year One. This current value is then adjusted for inflation over the study period leading to a future dollar threshold value of approximately $223,600 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 three alternate funding plan(s) for the Board's consideration:

- Recurring annual increases in the rate of contribution equal to 11% for the initial 10 years with a special assessment of $420,000 for cast iron piping replacement in 2025 and another special assessment of $612,800 for roof replacement would be required to maintain the suggested threshold balances throughout the planning period. Total monthly rates of contributions grow to $7,409 in Year 5 and $12,484 in Year 10 then remain constant for the remainder of the study period.
- Recurring annual increases in the rate of contribution equal to 20% for the initial 5 years with a special assessment of $420,000 for cast iron piping replacement in 2025 and another special assessment of $612,800 for roof replacement would be required to maintain the suggested threshold balances throughout the planning period. Total monthly rates of contributions grow to $10,120 in Year 5 and remain constant for the remainder of the study period.
- Recurring annual increases in the rate of contribution equal to 6.5% for the initial 15 years with a special assessment of $420,000 for cast iron piping replacement in 2025, $267,000 for electrical distribution upgrades in 2028, and another special assessment of $612,800 for roof replacement would be required to maintain the suggested threshold balances throughout the planning period. Total monthly rates of contributions grow to $6,278 in Year 5, $8,602 in Year 20, and $11,786 in Year 15 then remain constant for the remainder of the study period.

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 Gaslite Square Condominium 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 0

General Information:

1 Organization: **Gaslite Square Condominium**
2 Address: **Sherburn Lane**
St Matthews, KY 40207

3	Number of Units	**75**
4	Age of Building (in years)	**50**
5a	Study Period (in years)	**20**
5b	Normal Fiscal Year starts:	**January 1, 2025**
6	Site Inspection Date	**September 18, 2024**
7	Reserve Funds at start	**$218,426**
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.....		**$2,440**	**$58,565**	**$32.54**	**$780.86**
Balance Computed.....	**($1,739,345)**				

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

11 Alternative Reserve Fund Contribution

Alternative 1 Fixed annual esclation of 11.00% For the initial 10 years

		Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
First Year	2025	**$4,880**	**$58,565**	**$65.07**	**$780.86**
Year	2026	**$5,417**	**$65,007**	**$72**	**$867**
Year	2027	**$6,013**	**$72,158**	**$80**	**$962**
Year	2028	**$6,675**	**$80,095**	**$89**	**$1,068**
Year	2029	**$7,409**	**$88,905**	**$99**	**$1,185**
Year	2030	**$8,224**	**$98,685**	**$110**	**$1,316**
Year	2031	**$9,128**	**$109,540**	**$122**	**$1,461**
Year	2032	**$10,132**	**$121,590**	**$135**	**$1,621**
Year	2033	**$11,247**	**$134,965**	**$150**	**$1,800**
Year	2034	**$12,484**	**$149,811**	**$166**	**$1,997**
Year	2035	**$12,484**	**$149,811**	**$166**	**$1,997**
Year	2036	**$12,484**	**$149,811**	**$166**	**$1,997**
Year	2037	**$12,484**	**$149,811**	**$166**	**$1,997**
Year	2038	**$12,484**	**$149,811**	**$166**	**$1,997**
Year	2039	**$12,484**	**$149,811**	**$166**	**$1,997**
Year	2040	**$12,484**	**$149,811**	**$166**	**$1,997**
Year	2041	**$12,484**	**$149,811**	**$166**	**$1,997**
Year	2042	**$12,484**	**$149,811**	**$166**	**$1,997**
Year	2043	**$12,484**	**$149,811**	**$166**	**$1,997**
Last Year	2044	**$12,484**	**$149,811**	**$166**	**$1,997**
Average Annual Capital Expenditure.....		$125,172			

Special Assessments:	**Years Out**		**Total/Year**	**Per Unit**
First Assessment.....	1	Jan 2025	$420,000	$5,600
Second Assessment.....	8	Jan 2032	$612,788	$8,171

Balance Computed final year..... **$651,179**

Alternative 2 Annual escalation of 20.00% For the initial 5 years

		Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
First Year	2025	**$4,880**	**$58,565**	**$65**	**$780.86**
Year	2026	**$5,856**	**$70,278**	**$78**	**$937**
Year	2027	**$7,028**	**$84,333**	**$94**	**$1,124**
Year	2028	**$8,433**	**$101,200**	**$112**	**$1,349**
Year	2029	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2030	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2031	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2032	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2033	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2034	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2035	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2036	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2037	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2038	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2039	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2040	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2041	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2042	**$10,120**	**$121,440**	**$135**	**$1,619**
Year	2043	**$10,120**	**$121,440**	**$135**	**$1,619**
Last Year	2044	**$10,120**	**$121,440**	**$135**	**$1,619**
Average Annual Capital Expenditure.....		$125,172			

Special Assessments:	**Years Out**		**Total/Year**	**Per Unit**
First Assessment.....	1	Jan 2025	$420,000	$5,600
Second Assessment.....	8	Jan 2032	$612,788	$8,171
Balance Computed.....	**$428,496**			

Alternative 3 Annual escalation of 6.50% For the initial 15 years

		Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
First Year	2025	**$4,880**	**$58,565**	**$65.07**	**$780.86**
Year	2026	**$5,198**	**$62,372**	**$69**	**$832**
Year	2027	**$5,535**	**$66,426**	**$74**	**$886**
Year	2028	**$5,895**	**$70,743**	**$79**	**$943**
Year	2029	**$6,278**	**$75,342**	**$84**	**$1,005**
Year	2030	**$6,687**	**$80,239**	**$89**	**$1,070**
Year	2031	**$7,121**	**$85,454**	**$95**	**$1,139**
Year	2032	**$7,584**	**$91,009**	**$101**	**$1,213**
Year	2033	**$8,077**	**$96,924**	**$108**	**$1,292**
Year	2034	**$8,602**	**$103,225**	**$115**	**$1,376**
Year	2035	**$9,161**	**$109,934**	**$122**	**$1,466**
Year	2036	**$9,757**	**$117,080**	**$130**	**$1,561**
Year	2037	**$10,391**	**$124,690**	**$139**	**$1,663**
Year	2038	**$11,066**	**$132,795**	**$148**	**$1,771**
Year	2039	**$11,786**	**$141,427**	**$157**	**$1,886**
Year	2040	**$11,786**	**$141,427**	**$157**	**$1,886**
Year	2041	**$11,786**	**$141,427**	**$157**	**$1,886**
Year	2042	**$11,786**	**$141,427**	**$157**	**$1,886**
Year	2043	**$11,786**	**$141,427**	**$157**	**$1,886**
Last Year	2044	**$11,786**	**$141,427**	**$157**	**$1,886**
Average Annual Capital Expenditure.....		$125,172			

Special Assessments:	**Years Out**		**Total/Year**	**Per Unit**
First Assessment.....	1	Jan 2025	$420,000	$5,600
Second Assessment.....	4	Jan 2028	$266,653	$3,555
Third Assessment.....	8	Jan 2032	$612,788	$8,171
Balance Computed.....	**$564,727**			

Reserve Fund Worksheet

Fiscal Years:													
Normal: Jan 2025	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Partial: Jan 2023 (24 months)	1	2	3	4	5	6	7	8	9	10	11	12	13
Existing Funding Levels													
Beginning Reserve Fund Balance:	$218,426	($63,456)	($142,457)	($191,308)	($228,809)	($272,677)	($516,475)	($548,634)	($912,034)	($1,234,111)	($1,283,619)	($1,317,546)	($1,331,088)
Revenue:	$58,565	$58,565	$58,565	$58,565	$58,565	$58,565	$58,565	$58,565	$58,565	$58,565	$58,565	$58,565	$58,565
Investment Earnings:	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Expenditures:	$340,446	$137,566	$107,416	$96,066	$102,434	$302,363	$90,723	$421,965	$380,642	$108,072	$92,492	$72,107	$300,772
Ending Reserve Balance	($63,456)	($142,457)	($191,308)	($228,809)	($272,677)	($516,475)	($548,634)	($912,034)	($1,234,111)	($1,283,619)	($1,317,546)	($1,331,088)	($1,573,295)
Percent Funded	-4%	-9%	-11%	-13%	-15%	-30%	-30%	-57%	-87%	-85%	-81%	-76%	-94%
Alternative 1, Fixed annual esclation of 11% For the initial 10 years													
Beginning Reserve Fund Balance:	$218,426	$360,110	$290,426	$257,720	$244,167	$232,945	$29,560	$48,861	$364,887	$120,402	$163,762	$223,292	$304,006
Revenue:	$58,565	$65,007	$72,158	$80,095	$88,905	$98,685	$109,540	$121,590	$134,965	$149,811	$149,811	$149,811	$149,811
Special Assessment #1:	$420,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Special Assessment #2:	$0	$0	$0	$0	$0	$0	$0	$612,788	$0	$0	$0	$0	$0
Investment Earnings:	$3,565	$2,876	$2,552	$2,417	$2,306	$293	$484	$3,613	$1,192	$1,621	$2,211	$3,010	$1,530
Inflated Cap Expenditures:	$340,446	$137,566	$107,416	$96,066	$102,434	$302,363	$90,723	$421,965	$380,642	$108,072	$92,492	$72,107	$300,772
Ending Reserve Balance	$360,110	$290,426	$257,720	$244,167	$232,945	$29,560	$48,861	$364,887	$120,402	$163,762	$223,292	$304,006	$154,575
Percent Funded	23%	18%	15%	14%	13%	2%	3%	23%	8%	11%	14%	17%	9%
Alternative 2, Annual escalation of 20% For the initial 5 years													
Beginning Reserve Fund Balance:	$218,426	$360,110	$295,750	$275,394	$283,334	$305,363	$125,685	$157,966	$474,931	$217,887	$233,567	$265,140	$317,618
Revenue:	$58,565	$70,278	$84,333	$101,200	$121,440	$121,440	$121,440	$121,440	$121,440	$121,440	$121,440	$121,440	$121,440
Special Assessment #1:	$420,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Special Assessment #2:	$0	$0	$0	$0	$0	$0	$0	$612,788	$0	$0	$0	$0	$0
Investment Earnings:	$3,565	$2,928	$2,727	$2,805	$3,023	$1,244	$1,564	$4,702	$2,157	$2,313	$2,625	$3,145	$1,383
Inflated Cap Expenditures:	$340,446	$137,566	$107,416	$96,066	$102,434	$302,363	$90,723	$421,965	$380,642	$108,072	$92,492	$72,107	$300,772
Ending Reserve Balance	$360,110	$295,750	$275,394	$283,334	$305,363	$125,685	$157,966	$474,931	$217,887	$233,567	$265,140	$317,618	$139,669
Percent Funded	23%	18%	16%	16%	17%	7%	9%	29%	15%	15%	16%	18%	8%
Alternative 3, Annual escalation of 6.5% For the initial 15 years													
Beginning Reserve Fund Balance:	$218,426	$360,110	$287,765	$249,242	$492,812	$470,377	$250,736	$247,922	$529,754	$248,497	$246,086	$266,163	$314,248
Revenue:	$58,565	$62,372	$66,426	$70,743	$75,342	$80,239	$85,454	$91,009	$96,924	$103,225	$109,934	$117,080	$124,690
Special Assessment #1:	$420,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Special Assessment #2:	$0	$0	$0	$266,653	$0	$0	$0	$0	$0	$0	$0	$0	$0
Special Assessment #3:	$0	$0	$0	$0	$0	$0	$0	$612,788	$0	$0	$0	$0	$0
Investment Earnings:	$3,565	$2,849	$2,468	$2,239	$4,657	$2,483	$2,455	$0	$2,460	$2,436	$2,635	$3,111	$1,382
Inflated Cap Expenditures:	$340,446	$137,566	$107,416	$96,066	$102,434	$302,363	$90,723	$421,965	$380,642	$108,072	$92,492	$72,107	$300,772
Ending Reserve Balance	$360,110	$287,765	$249,242	$492,812	$470,377	$250,736	$247,922	$529,754	$248,497	$246,086	$266,163	$314,248	$139,547
Percent Funded	23%	18%	15%	28%	26%	14%	14%	33%	17%	16%	16%	18%	8%
Average Cap Expenditure	$125,172	$129,053	$133,053	$137,178	$141,430	$145,815	$150,335	$154,995	$159,800	$164,754	$169,861	$175,127	$180,556
Threshold	$125,172	$129,053	$133,053	$137,178	$141,430	$145,815	$150,335	$154,995	$159,800	$164,754	$169,861	$175,127	$180,556
Full Funding By Year	$1,586,311	$1,616,146	$1,680,721	$1,762,427	$1,844,193	$1,732,582	$1,833,290	$1,610,149	$1,425,816	$1,512,875	$1,622,892	$1,761,530	$1,680,773
70 Percent Funding By Year	$1,110,418	$1,131,302	$1,176,505	$1,233,699	$1,290,935	$1,212,807	$1,283,303	$1,127,105	$998,071	$1,059,013	$1,136,025	$1,233,071	$1,176,541

Reserve Fund Worksheet

Fiscal Years:							
Normal: Jan 2025	2038	2039	2040	2041	2042	2043	2044
Partial: Jan 2023 (24 months)	14	15	16	17	18	19	20
Existing Funding Levels							
Beginning Reserve Fund Balance:	($1,573,295)	($1,693,188)	($1,677,798)	($1,792,961)	($1,804,446)	($1,809,739)	($1,788,696)
Revenue:	$58,565	$58,565	$58,565	$58,565	$58,565	$58,565	$58,565
Investment Earnings:	$0	$0	$0	$0	$0	$0	$0
Capital Expenditures:	$178,457	$43,175	$173,728	$70,049	$63,859	$37,522	$9,213
Ending Reserve Balance	($1,693,188)	($1,677,798)	($1,792,961)	($1,804,446)	($1,809,739)	($1,788,696)	($1,739,345)
Percent Funded	-98%	-88%	-91%	-84%	-77%	-69%	-61%
Alternative 1, Fixed annual esclation of 11% For the initial 10 years							
Beginning Reserve Fund Balance:	$154,575	$127,188	$236,162	$214,367	$297,071	$386,853	$504,134
Revenue:	$149,811	$149,811	$149,811	$149,811	$149,811	$149,811	$149,811
Special Assessment #1:	$0	$0	$0	$0	$0	$0	$0
Special Assessment #2:	$0	$0	$0	$0	$0	$0	$0
Investment Earnings:	$1,259	$2,338	$2,122	$2,941	$3,830	$4,991	$6,447
Inflated Cap Expenditures:	$178,457	$43,175	$173,728	$70,049	$63,859	$37,522	$9,213
Ending Reserve Balance	$127,188	$236,162	$214,367	$297,071	$386,853	$504,134	$651,179
Percent Funded	7%	12%	11%	14%	16%	19%	23%
Alternative 2, Annual escalation of 20% For the initial 5 years							
Beginning Reserve Fund Balance:	$139,669	$83,478	$163,360	$112,183	$165,209	$225,019	$312,027
Revenue:	$121,440	$121,440	$121,440	$121,440	$121,440	$121,440	$121,440
Special Assessment #1:	$0	$0	$0	$0	$0	$0	$0
Special Assessment #2:	$0	$0	$0	$0	$0	$0	$0
Investment Earnings:	$827	$1,617	$1,111	$1,636	$2,228	$3,089	$4,243
Inflated Cap Expenditures:	$178,457	$43,175	$173,728	$70,049	$63,859	$37,522	$9,213
Ending Reserve Balance	$83,478	$163,360	$112,183	$165,209	$225,019	$312,027	$428,496
Percent Funded	5%	9%	6%	8%	10%	12%	15%
Alternative 3, Annual escalation of 6.5% For the initial 15 years							
Beginning Reserve Fund Balance:	$139,547	$94,824	$195,006	$164,332	$238,066	$318,791	$426,923
Revenue:	$132,795	$141,427	$141,427	$141,427	$141,427	$141,427	$141,427
Special Assessment #1:	$0	$0	$0	$0	$0	$0	$0
Special Assessment #2:	$0	$0	$0	$0	$0	$0	$0
Special Assessment #3:	$0	$0	$0	$0	$0	$0	$0
Investment Earnings:	$939	$1,931	$1,627	$2,357	$3,156	$4,227	$5,591
Inflated Cap Expenditures:	$178,457	$43,175	$173,728	$70,049	$63,859	$37,522	$9,213
Ending Reserve Balance	$94,824	$195,006	$164,332	$238,066	$318,791	$426,923	$564,727
Percent Funded	5%	10%	8%	11%	14%	17%	20%
Average Cap Expenditure	$186,153	$191,924	$197,874	$204,008	$210,332	$216,852	$223,575
Threshold	$186,153	$191,924	$197,874	$204,008	$210,332	$216,852	$223,575
Full Funding By Year	$1,724,955	$1,911,076	$1,977,863	$2,156,020	$2,351,684	$2,585,723	$2,861,484
70 Percent Funding By Year	$1,207,468	$1,337,753	$1,384,504	$1,509,214	$1,646,178	$1,810,006	$2,003,039

Itemized Worksheet

Capital Item To Be Replaced	Quantity		Unit cost	Reserve Requirement (*)	Frequency (yrs**)	Remaining Life (yrs)	Full Funding Balance
Site							
Concrete flatwork	65	square feet	$14.00	$910.00	1	0	$910.00
Asphalt seal, crack fill, & patch	7,460	square yards	$3.00	$22,380.00	5	1	$17,904.00
Asphalt mill & replace	7,460	square yards	$22.00	$164,120.00	20	12	$65,648.00
Metal fence replacement	80	linear feet	$64.23	$5,138.40	40	22	$2,312.28
Wood fence replacement	80	linear feet	$43.00	$3,440.00	20	15	$860.00
Stormwater drainage upgrade	1	allowance	$10,000.00	$10,000.00	10	2	$8,000.00
Building Exterior							
Roof replacement, Building A	18,500	square feet	$13.00	$240,500.00	20	7	$156,325.00
Roof replacement, Building B	18,500	square feet	$13.00	$240,500.00	20	8	$144,300.00
Roof replacement, Carport A	7,300	square feet	$8.91	$65,043.00	20	20	$0.00
Roof replacement, Carport B	7,800	square feet	$8.91	$69,498.00	20	0	$69,498.00
Carport refurbishment	1	allowance	$15,000.00	$15,000.00	10	1	$13,500.00
Gutter and downspout replacement, Carport A	570	linear feet	$14.00	$7,980.00	25	25	$0.00
Gutter and downspout replacement, Carport B	570	linear feet	$14.00	$7,980.00	25	0	$7,980.00
Gutter and downspout replacement, Porticos	160	linear feet	$14.00	$2,240.00	25	12	$1,164.80
Brick veneer tuckpointing	166	square feet	$7.52	$1,248.32	1	0	$1,248.32
Exterior lighting replacement	1	allowance	$5,000.00	$5,000.00	10	0	$5,000.00
Balcony railing replacement	650	linear feet	$64.00	$41,600.00	40	25	$15,600.00
Balcony decking replacement	3456	square feet	$20.00	$69,120.00	30	25	$11,520.00
Building Interior							
Carpet replacement	9,600	square feet	$5.43	$52,149.33	15	13	$6,953.24
Interior painting	8,000	square feet	$1.83	$14,640.00	3	3	$0.00
Tile replacement	5,000	square feet	$15.00	$75,000.00	40	15	$46,875.00
Lighting replacement	1	allowance	$7,500.00	$7,500.00	15	7	$4,000.00
Exterior door replacement	8	each	$2,500.00	$20,000.00	30	14	$10,666.67
Mailbox replacement	4	each	$4,500.00	$18,000.00	40	10	$13,500.00
Mechanical							
Elevator modernization, phase 1	1	each	$81,750.00	$81,750.00	20	0	$81,750.00
Elevator modernization, phase 2	1	each	$81,750.00	$81,750.00	20	5	$61,312.50
HVAC replacement	1	each	$8,500.00	$8,500.00	4	0	$8,500.00
Domestic water boiler replacement, phase 1	1	each	$13,950.00	$13,950.00	4	1	$10,462.50
Intercom replacement	2	each	$3,500.00	$7,000.00	20	5	$5,250.00
Fire alarm system replacement	2	each	$15,000.00	$30,000.00	20	10	$15,000.00
Cast iron waste piping replacement, phase 1	12,000	square feet	$3.50	$42,000.00	50	0	$42,000.00
Cast iron waste piping replacement, phase 2	12,000	square feet	$3.50	$42,000.00	50	1	$41,160.00
Cast iron waste piping replacement, phase 3	12,000	square feet	$3.50	$42,000.00	50	2	$40,320.00
Cast iron waste piping replacement, phase 4	12,000	square feet	$3.50	$42,000.00	50	3	$39,480.00
Cast iron waste piping replacement, phase 5	12,000	square feet	$3.50	$42,000.00	50	4	$38,640.00
Cast iron waste piping replacement, phase 6	12,000	square feet	$3.50	$42,000.00	50	5	$37,800.00
Cast iron waste piping replacement, phase 7	12,000	square feet	$3.50	$42,000.00	50	6	$36,960.00
Cast iron waste piping replacement, phase 8	12,000	square feet	$3.50	$42,000.00	50	7	$36,120.00
Cast iron waste piping replacement, phase 9	12,000	square feet	$3.50	$42,000.00	50	8	$35,280.00
Cast iron waste piping replacement, phase 10	12,000	square feet	$3.50	$42,000.00	50	9	$34,440.00
Electrical distribution upgrade, phase 1	15	each	$2,000.00	$30,000.00	50	0	$30,000.00
Electrical distribution upgrade, phase 2	15	each	$2,000.00	$30,000.00	50	1	$29,400.00
Electrical distribution upgrade, phase 3	15	each	$2,000.00	$30,000.00	50	2	$28,800.00
Electrical distribution upgrade, phase 4	15	each	$2,000.00	$30,000.00	50	3	$28,200.00
Electrical distribution upgrade, phase 5	15	each	$2,000.00	$30,000.00	50	4	$27,600.00
Electrical distribution upgrade, phase 6	2	each	$43,000.00	$86,000.00	50	5	$77,400.00
Amenities							
Clubhouse carpet replacement	910	square feet	$5.43	$4,941.30	15	1	$4,611.88
Clubhouse composite floor replacement	860	square feet	$10.91	$9,382.60	25	20	$1,876.52
Clubhouse ceramic tile floor replacement	400	square feet	$15.00	$6,000.00	40	18	$3,300.00
Clubhouse wall covering refurbishment and painting	5,500	square feet	$1.80	$9,900.00	15	5	$6,600.00
Clubhouse furnishing replacement	1	allowance	$10,000.00	$10,000.00	15	10	$3,333.33
Clubhouse kitchen cabinet replacement	22	linear feet	$425.00	$9,350.00	30	20	$3,116.67
Clubhouse exercise equipment replacement	1	allowance	$3,000.00	$3,000.00	10	4	$1,800.00
Clubhouse roof replacement	4,400	square feet	$13.30	$58,520.00	20	0	$58,520.00
Clubhouse gutter & downspout replacement	2,580	linear feet	$14.00	$36,120.00	25	7	$26,006.40
Clubhouse window replacement	8	each	$1,250.00	$10,000.00	30	15	$5,000.00
Clubhouse exterior door replacement	1	each	$2,000.00	$2,000.00	4	4	$0.00
Clubhouse bathroom refurbishment	2	each	$3,000.00	$6,000.00	15	12	$1,200.00
Clubhouse lighting replacement	1	allowance	$9,000.00	$9,000.00	30	9	$6,300.00
Clubhouse water heater replacement	1	each	$1,500.00	$1,500.00	15	5	$1,000.00
Clubhouse security system replacement	1	allowance	$5,000.00	$5,000.00	10	7	$1,500.00
Clubhouse electrical distribution upgrade	1	each	$2,000.00	$2,000.00	50	5	$1,800.00
Clubhouse HVAC replacement	1	each	$9,000.00	$9,000.00	15	11	$2,400.00
Pool decking, concrete	290	square feet	$15.50	$4,495.00	5	2	$2,697.00
Pool resurfacing	1,780	sqare feet	$18.00	$32,040.00	13	0	$32,040.00
Pool pump replacement	1	each	$2,300.00	$2,300.00	10	5	$1,150.00
Pool filter replacement	2	each	$4,700.00	$9,400.00	15	2	$8,146.67
Pool chemical system replacement	1	each	$4,500.00	$4,500.00	15	3	$3,600.00
Pool cover replacement	1	each	$6,000.00	$6,000.00	15	9	$2,400.00
Pool fence replacement	260	linear feet	$64.23	$16,699.80	40	13	$11,272.37
Pool furniture replacement	1	allowance	$8,000.00	$8,000.00	10	5	$4,000.00
Other							
Reserve Study	1	Each	$6,000.00	$6,000.00	3	3	$0.00
Misc. Asset Replacement	1	Each	$3,000.00	$3,000.00	1	0	$3,000.00
			Totals	$2,322,085.75			$1,586,311.14
			Total Over Term	$2,503,446.13			

* 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	2036	2037	2038	2039	2040	2041	2042	2043	2044
Year Number:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Site																				
Concrete flatwork	910	910	910	910	910	910	910	910	910	910	910	910	910	910	910	910	910	910	910	910
Asphalt seal, crack fill, & patch	0	22,380	0	0	0	0	22,380	0	0	0	0	22,380	0	0	0	0	22,380	0	0	0
Asphalt mill & replace	0	0	0	0	0	0	0	0	0	0	0	0	164,120	0	0	0	0	0	0	0
Metal fence replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood fence replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,440	0	0	0	0
Stormwater drainage upgrade	0	0	10,000	0	0	0	0	0	0	0	0	0	10,000	0	0	0	0	0	0	0
Building Exterior																				
Roof replacement, Building A	0	0	0	0	0	0	0	240,500	0	0	0	0	0	0	0	0	0	0	0	0
Roof replacement, Building B	0	0	0	0	0	0	0	0	240,500	0	0	0	0	0	0	0	0	0	0	0
Roof replacement, Carport A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Roof replacement, Carport B	69,498	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carport refurbishment	0	15,000	0	0	0	0	0	0	0	0	0	15,000	0	0	0	0	0	0	0	0
Gutter and downspout replacement, Carport A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gutter and downspout replacement, Carport B	7,980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gutter and downspout replacement, Porticos	0	0	0	0	0	0	0	0	0	0	0	0	2,240	0	0	0	0	0	0	0
Brick veneer tuckpointing	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248	1,248
Exterior lighting replacement	5,000	0	0	0	0	0	0	0	0	0	5,000	0	0	0	0	0	0	0	0	0
Balcony railing replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Balcony decking replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Building Interior																				
Carpet replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	52,149	0	0	0	0	0	0
Tile replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75,000	0	0	0	0
Lighting replacement	0	0	0	0	0	0	0	7,500	0	0	0	0	0	0	0	0	0	0	0	0
Exterior door replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,000	0	0	0	0	0
Mailbox replacement	0	0	0	0	0	0	0	0	0	0	18,000	0	0	0	0	0	0	0	0	0
Mechanical																				
Elevator modernization, phase 1	81,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Elevator modernization, phase 2	0	0	0	0	0	81,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HVAC replacement	8,500	0	0	0	8,500	0	0	0	8,500	0	0	0	8,500	0	0	0	8,500	0	0	0
Domestic water boiler replacement, phase 1	0	13,950	0	0	0	13,950	0	0	0	13,950	0	0	0	13,950	0	0	0	13,950	0	0
Intercom replacement	0	0	0	0	0	7,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire alarm system replacement	0	0	0	0	0	0	0	0	0	0	30,000	0	0	0	0	0	0	0	0	0
Cast iron waste piping replacement, phase 1	42,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cast iron waste piping replacement, phase 2	0	42,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cast iron waste piping replacement, phase 3	0	0	42,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cast iron waste piping replacement, phase 4	0	0	0	42,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cast iron waste piping replacement, phase 5	0	0	0	0	42,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cast iron waste piping replacement, phase 6	0	0	0	0	0	42,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cast iron waste piping replacement, phase 7	0	0	0	0	0	0	42,000	0	0	0	0	0	0	0	0	0	0	0	0	0
Cast iron waste piping replacement, phase 8	0	0	0	0	0	0	0	42,000	0	0	0	0	0	0	0	0	0	0	0	0
Cast iron waste piping replacement, phase 9	0	0	0	0	0	0	0	0	42,000	0	0	0	0	0	0	0	0	0	0	0
Cast iron waste piping replacement, phase 10	0	0	0	0	0	0	0	0	0	42,000	0	0	0	0	0	0	0	0	0	0
Electrical distribution upgrade, phase 1	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Electrical distribution upgrade, phase 2	0	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Electrical distribution upgrade, phase 3	0	0	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Electrical distribution upgrade, phase 4	0	0	0	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Electrical distribution upgrade, phase 5	0	0	0	0	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Electrical distribution upgrade, phase 6	0	0	0	0	0	86,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amenities																				
Clubhouse carpet replacement	0	4,941	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,941	0	0	0
Clubhouse composite floor replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clubhouse ceramic tile floor replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,000	0
Clubhouse wall covering refurbishment and painting	0	0	0	0	0	9,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clubhouse furnishing replacement	0	0	0	0	0	0	0	0	0	0	10,000	0	0	0	0	0	0	0	0	0
Clubhouse kitchen cabinet replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clubhouse exercise equipment replacement	0	0	0	0	3,000	0	0	0	0	0	0	0	0	0	3,000	0	0	0	0	0
Clubhouse roof replacement	58,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clubhouse gutter & downspout replacement	0	0	0	0	0	0	0	36,120	0	0	0	0	0	0	0	0	0	0	0	0
Clubhouse window replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,000	0	0	0	0
Clubhouse exterior door replacement	0	0	0	0	2,000	0	0	0	2,000	0	0	0	2,000	0	0	0	2,000	0	0	0
Clubhouse bathroom refurbishment	0	0	0	0	0	0	0	0	0	0	0	0	6,000	0	0	0	0	0	0	0
Clubhouse lighting replacement	0	0	0	0	0	0	0	0	0	9,000	0	0	0	0	0	0	0	0	0	0
Clubhouse water heater replacement	0	0	0	0	0	1,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clubhouse security system replacement	0	0	0	0	0	0	0	5,000	0	0	0	0	0	0	0	0	0	5,000	0	0
Clubhouse electrical distribution upgrade	0	0	0	0	0	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clubhouse HVAC replacement	0	0	0	0	0	0	0	0	0	0	0	9,000	0	0	0	0	0	0	0	0
Pool decking, concrete	0	0	4,495	0	0	0	0	4,495	0	0	0	0	4,495	0	0	0	0	4,495	0	0
Pool resurfacing	32,040	0	0	0	0	0	0	0	0	0	0	0	0	32,040	0	0	0	0	0	0
Pool pump replacement	0	0	0	0	0	2,300	0	0	0	0	0	0	0	0	0	2,300	0	0	0	0
Pool filter replacement	0	0	9,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,400	0	0
Pool chemical system replacement	0	0	0	4,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,500	0
Pool cover replacement	0	0	0	0	0	0	0	0	0	6,000	0	0	0	0	0	0	0	0	0	0
Pool fence replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	16,700	0	0	0	0	0	0
Pool furniture replacement	0	0	0	0	0	8,000	0	0	0	0	0	0	0	0	0	8,000	0	0	0	0
Other																				
Reserve Study	0	0	0	6,000	0	0	6,000	0	0	6,000	0	0	6,000	0	0	6,000	0	0	6,000	0
Misc. Asset Replacement	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Total Costs	**340,446**	**133,430**	**101,053**	**87,658**	**90,658**	**259,558**	**75,538**	**340,773**	**298,158**	**82,108**	**68,158**	**51,538**	**208,513**	**119,997**	**28,158**	**109,898**	**42,980**	**38,003**	**21,658**	**5,158**
Total Costs Adjusted For 3.1% Inflation	**340,446**	**137,566**	**107,416**	**96,066**	**102,434**	**302,363**	**90,723**	**421,965**	**380,642**	**108,072**	**92,492**	**72,107**	**300,772**	**178,457**	**43,175**	**173,728**	**70,049**	**63,859**	**37,522**	**9,213**

APPENDIX B

GRAPHIC EXHIBITS

Existing Funding Levels

Beginning Balance as of start of year beginning Jan 2025: $218,426

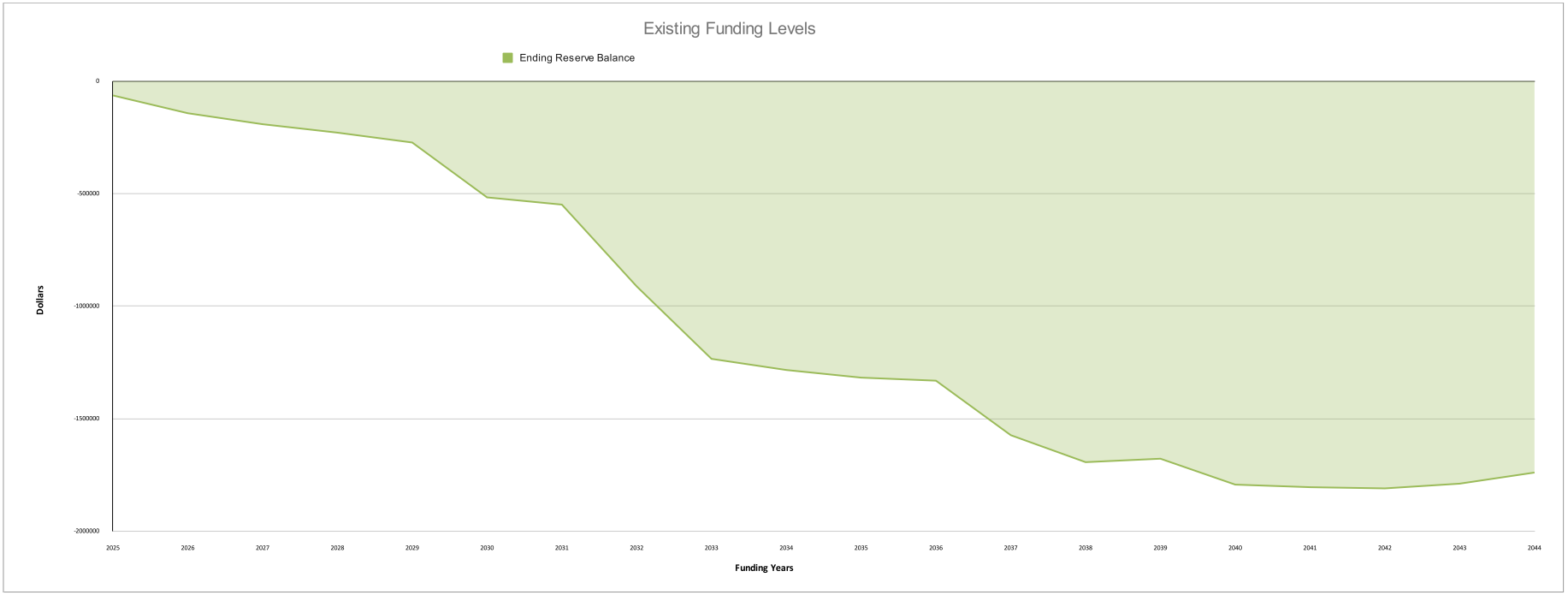
CONTRIBUTIONS	
AMOUNT	
$58,564.80	**per year**
$780.86	**per unit per year**
$4,880.40	**per month**
$65.07	**per unit per month**

SPECIAL ASSESSMENTS			
Totals			
Per Year	$0	**Per Unit**	$0

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	(63,456)	(142,457)	(191,308)	(228,809)	(272,677)	(516,475)	(548,634)	(912,034)	(1,234,111)	(1,283,619)	(1,317,546)	(1,331,088)	(1,573,295)	(1,693,188)	(1,677,798)
Capital Expenditures:	340,446	137,566	107,416	96,066	102,434	302,363	90,723	421,965	380,642	108,072	92,492	72,107	300,772	178,457	43,175
Total Revenue (all sources)	58,565	58,565	58,565	58,565	58,565	58,565	58,565	58,565	58,565	58,565	58,565	58,565	58,565	58,565	58,565
Percent Funded	-4%	-9%	-11%	-13%	-15%	-30%	-30%	-57%	-87%	-85%	-81%	-76%	-94%	-98%	-88%

Year:	2040	2041	2042	2043	2044
Year Number:	16	17	18	19	20
End of Year Reserve Fund Balance	(1,792,961)	(1,804,446)	(1,809,739)	(1,788,696)	(1,739,345)
Capital Expenditures:	173,728	70,049	63,859	37,522	9,213
Total Revenue (all sources)	58,565	58,565	58,565	58,565	58,565
Percent Funded	-91%	-84%	-77%	-69%	-61%



Alternative 1: Fixed annual esclation of 11% For the initial 10 years

Beginning Balance as of start of year beginning Jan 2025: $218,426

CONTRIBUTIONS		
FIRST YR	**LAST YR**	
$58,564.80	$149,810.92	**per year**
$780.86	$1,997.48	**per unit per year**
$4,880.40	$12,484.24	**per month**
$65.07	$166.46	**per unit per month**

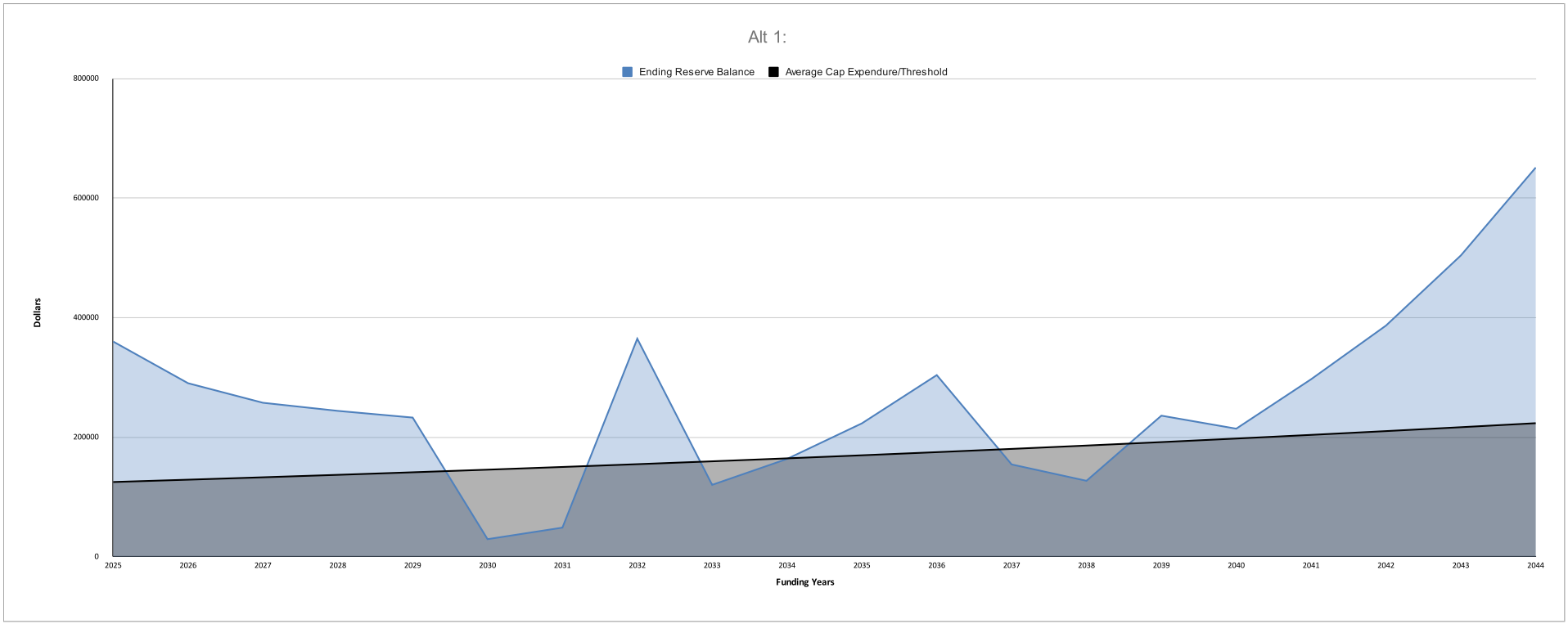
SPECIAL ASSESSMENTS				
	Totals			
First Jan 2025	**Per Year**	$420,000	**Per Unit**	$5,600
Second Jan 2032	**Per Year**	$612,788	**Per Unit**	$8,171

SETTINGS (analyzed by unit/year)		
Starting amount ($):	$780.86	
Increment by (%):	11.00%	
Every	1	year
Frequency:	9	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	360,110	290,426	257,720	244,167	232,945	29,560	48,861	364,887	120,402	163,762	223,292	304,006	154,575	127,188	236,162
Capital Expenditures:	340,446	137,566	107,416	96,066	102,434	302,363	90,723	421,965	380,642	108,072	92,492	72,107	300,772	178,457	43,175
Total Revenue (all sources)	423,565	67,882	74,709	82,513	91,212	98,978	110,024	737,991	136,157	151,432	152,022	152,821	151,341	151,070	152,149
Percent Funding	23%	18%	15%	14%	13%	2%	3%	23%	8%	11%	14%	17%	9%	7%	12%

Year:	2040	2041	2042	2043	2044
Year Number:	16	17	18	19	20
End of Year Reserve Fund Balance	214,367	297,071	386,853	504,134	651,179
Capital Expenditures:	173,728	70,049	63,859	37,522	9,213
Total Revenue (all sources)	151,933	152,752	153,641	154,802	156,258
Percent Funding	11%	14%	16%	19%	23%



Alternative 2: Annual escalation of 20% For the initial 5 years

Beginning Balance as of start of year beginning Jan 2025: $218,426

CONTRIBUTIONS		
FIRST YR	**LAST YR**	
$58,564.80	$121,439.97	**per year**
$780.86	$1,619.20	**per unit per year**
$4,880.40	$10,120.00	**per month**
$65.07	$134.93	**per unit per month**

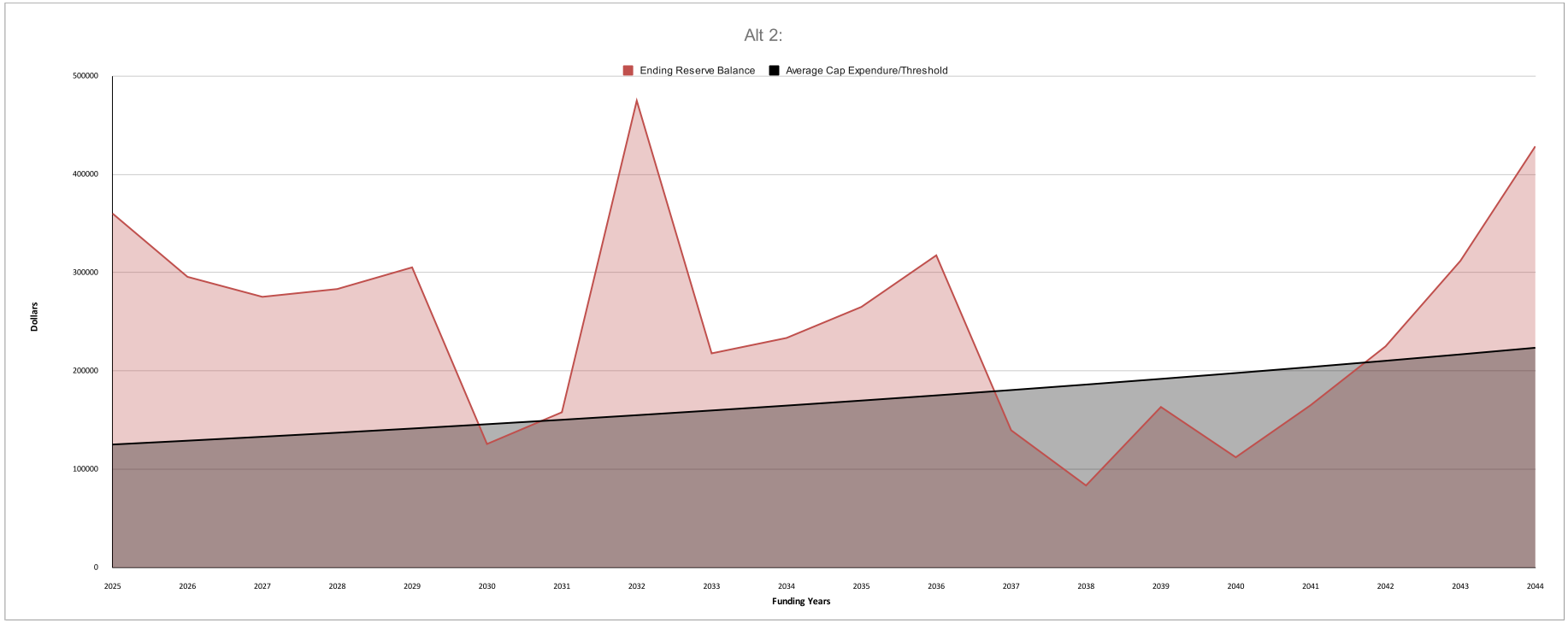
SPECIAL ASSESSMENTS				
	Totals			
First Jan 2025	**Per Year**	$420,000	**Per Unit**	$166
Second Jan 2032	**Per Year**	$612,788	**Per Unit**	$166

SETTINGS (analyzed by unit/year)		
Starting amount ($):	$58,564.80	
Increment by (%):	20%	
Every	1	year
Frequency:	4	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	360,110	295,750	275,394	283,334	305,363	125,685	157,966	474,931	217,887	233,567	265,140	317,618	139,669	83,478	163,360
Capital Expenditures:	340,446	137,566	107,416	96,066	102,434	302,363	90,723	421,965	380,642	108,072	92,492	72,107	300,772	178,457	43,175
Total Revenue (all sources)	482,130	73,206	87,060	104,005	124,463	122,684	123,004	738,931	123,597	123,753	124,065	124,585	122,823	122,266	123,057
Percent Funded	23%	18%	16%	16%	17%	7%	9%	29%	15%	15%	16%	18%	8%	5%	9%

Year:	2040	2041	2042	2043	2044
Year Number:	16	17	18	19	20
End of Year Reserve Fund Balance	112,183	165,209	225,019	312,027	428,496
Capital Expenditures:	173,728	70,049	63,859	37,522	9,213
Total Revenue (all sources)	122,551	123,076	123,668	124,529	125,683
Percent Funded	6%	8%	10%	12%	15%



Alternative 3: Annual escalation of 6.5% For the initial 15 years

Beginning Balance as of start of year beginning Jan 2025: $218,426

CONTRIBUTIONS		
FIRST YR	**LAST YR**	
$58,564.80	$141,426.62	**per year**
$780.86	$1,885.69	**per unit per year**
$4,880.40	$11,785.55	**per month**
$65.07	$157.14	**per unit per month**

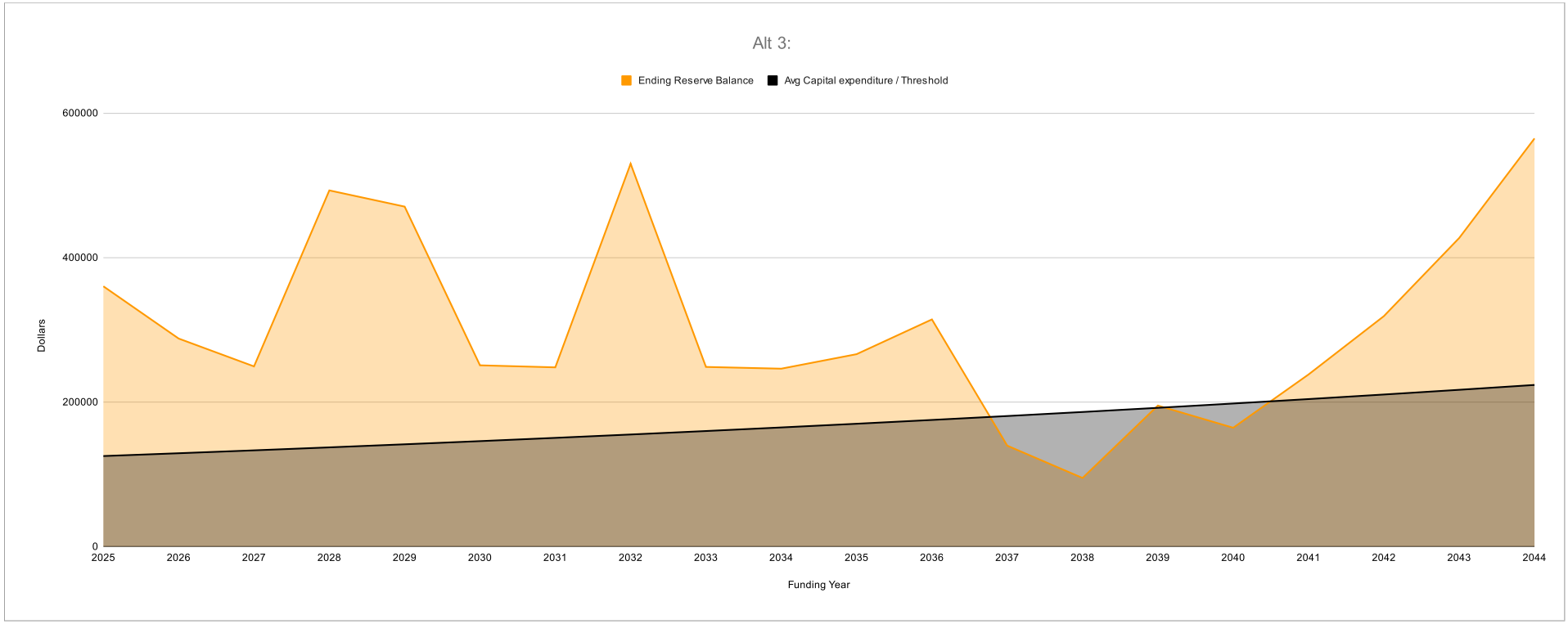
SPECIAL ASSESSMENTS		Totals		
First Jan 2025	**Per Year**	$420,000	**Per Unit**	$5,600
Second Jan 2028	**Per Year**	$266,653	**Per Unit**	$3,555
Third Jan 2032	**Per Year**	$612,788	**Per Unit**	$8,171

SETTINGS (analyzed by unit/year)		
Starting amount ($):	$780.86	
Increment by (%):	6.50%	
Every	1	year
Frequency:	9	time

Projected Annual Funding and Expenditures:

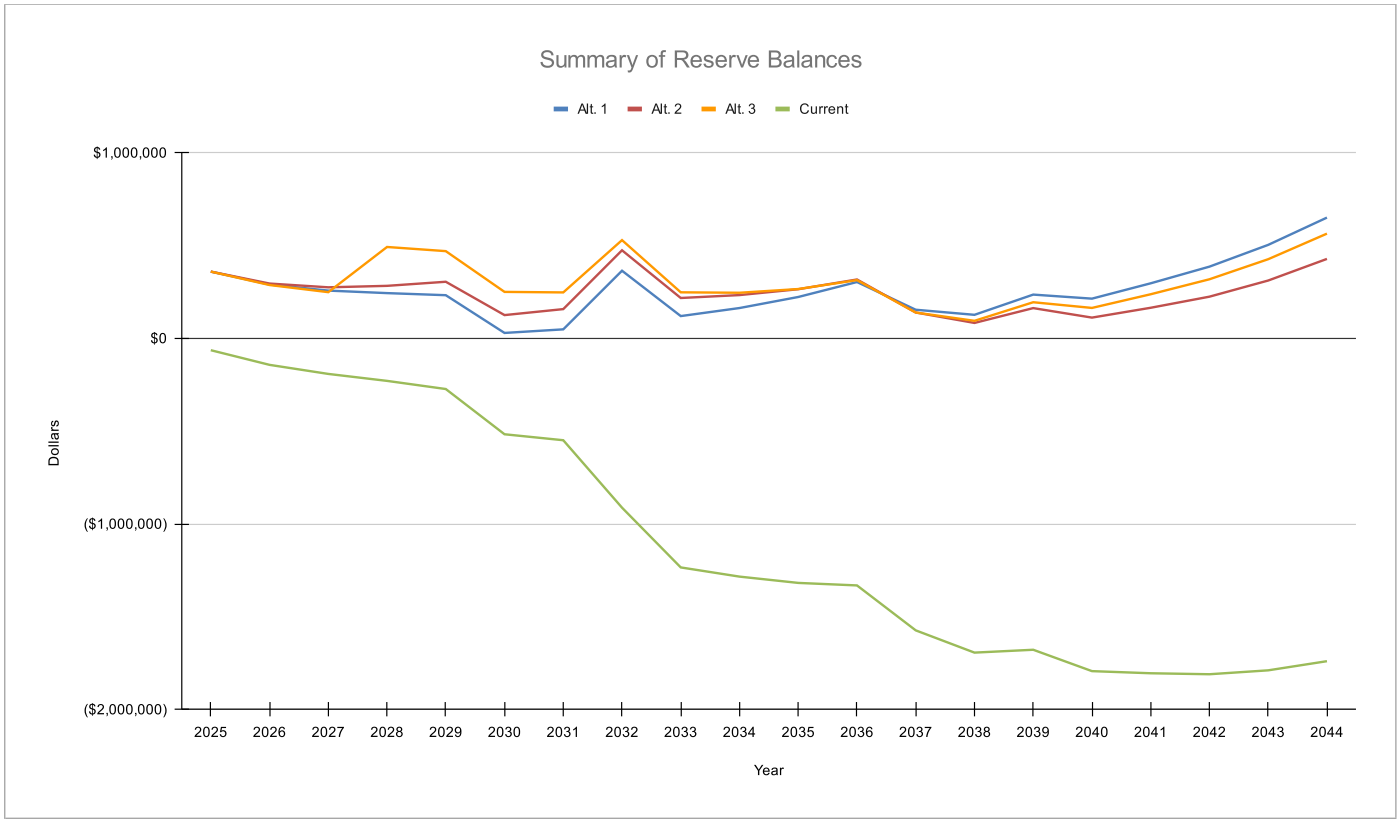
Year:	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Year Number:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
End of Year Reserve Fund Balance	360,110	287,765	249,242	492,812	470,377	250,736	247,922	529,754	248,497	246,086	266,163	314,248	139,547	94,824	195,006
Capital Expenditures:	340,446	137,566	107,416	96,066	102,434	302,363	90,723	421,965	380,642	108,072	92,492	72,107	300,772	178,457	43,175
Total Revenue (all sources)	482,130	65,221	68,893	339,636	79,999	82,721	87,909	703,797	99,385	105,661	112,569	120,191	126,072	133,734	143,357
Percent Funded	23%	18%	15%	28%	26%	14%	14%	33%	17%	16%	16%	18%	8%	5%	10%

Year:	2040	2041	2042	2043	2044
Year Number:	16	17	18	19	20
End of Year Reserve Fund Balance	164,332	238,066	318,791	426,923	564,727
Capital Expenditures:	173,728	70,049	63,859	37,522	9,213
Total Revenue (all sources)	143,054	143,784	144,583	145,654	147,018
Percent Funded	8%	11%	14%	17%	20%



Summary of Reserve Balances

Year	Year Number	Yearly Expenditures	Alt. 1	Alt. 2	Alt. 3	Current
2025	1	$340,446	$360,110	$360,110	$360,110	($63,456)
2026	2	$137,566	$290,426	$295,750	$287,765	($142,457)
2027	3	$107,416	$257,720	$275,394	$249,242	($191,308)
2028	4	$96,066	$244,167	$283,334	$492,812	($228,809)
2029	5	$102,434	$232,945	$305,363	$470,377	($272,677)
2030	6	$302,363	$29,560	$125,685	$250,736	($516,475)
2031	7	$90,723	$48,861	$157,966	$247,922	($548,634)
2032	8	$421,965	$364,887	$474,931	$529,754	($912,034)
2033	9	$380,642	$120,402	$217,887	$248,497	($1,234,111)
2034	10	$108,072	$163,762	$233,567	$246,086	($1,283,619)
2035	11	$92,492	$223,292	$265,140	$266,163	($1,317,546)
2036	12	$72,107	$304,006	$317,618	$314,248	($1,331,088)
2037	13	$300,772	$154,575	$139,669	$139,547	($1,573,295)
2038	14	$178,457	$127,188	$83,478	$94,824	($1,693,188)
2039	15	$43,175	$236,162	$163,360	$195,006	($1,677,798)
2040	16	$173,728	$214,367	$112,183	$164,332	($1,792,961)
2041	17	$70,049	$297,071	$165,209	$238,066	($1,804,446)
2042	18	$63,859	$386,853	$225,019	$318,791	($1,809,739)
2043	19	$37,522	$504,134	$312,027	$426,923	($1,788,696)
2044	20	$9,213	$651,179	$428,496	$564,727	($1,739,345)



APPENDIX C

PHOTOGRAPHS

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

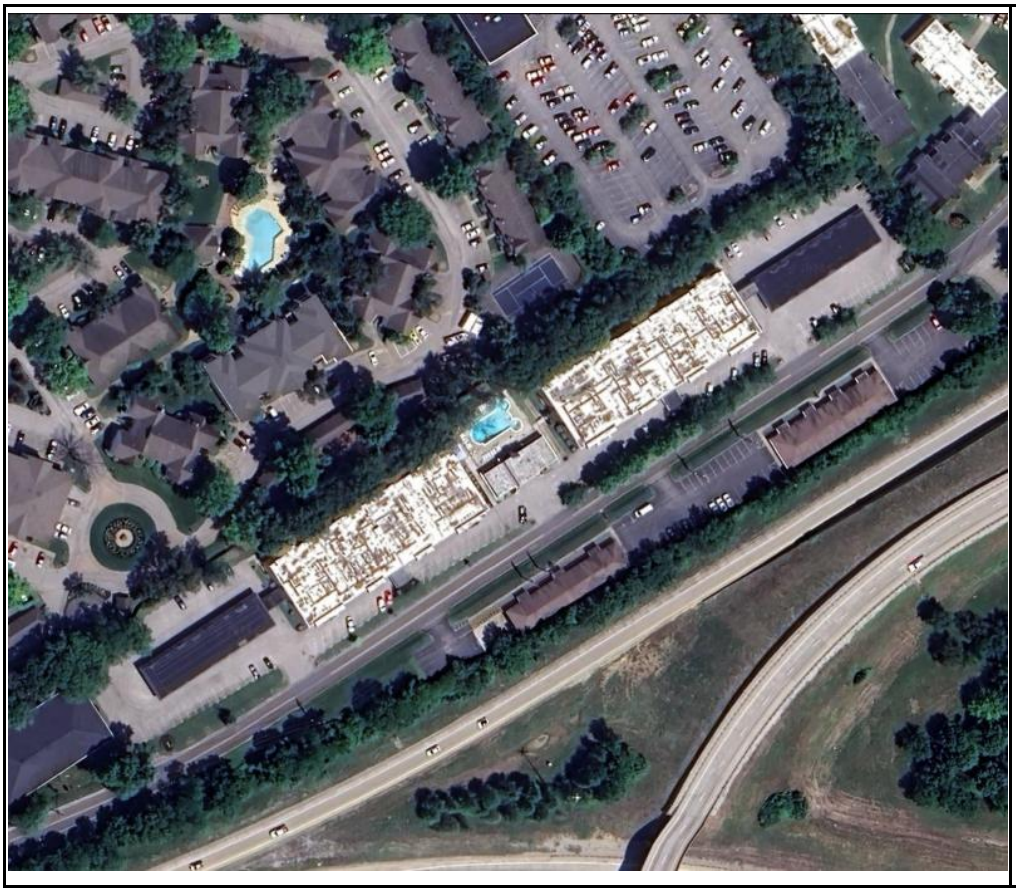


Photo Number
1

Description:
Aerial view of the community

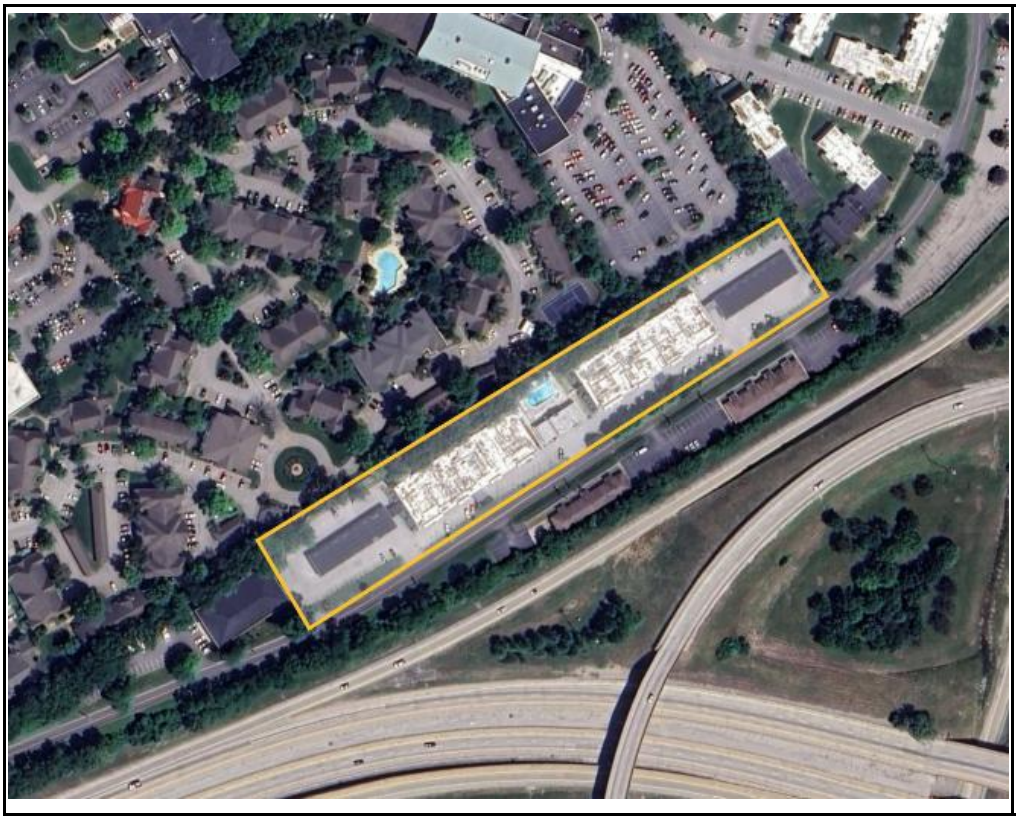


Photo Number
2

Description:
Aerial view with the community outlined

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

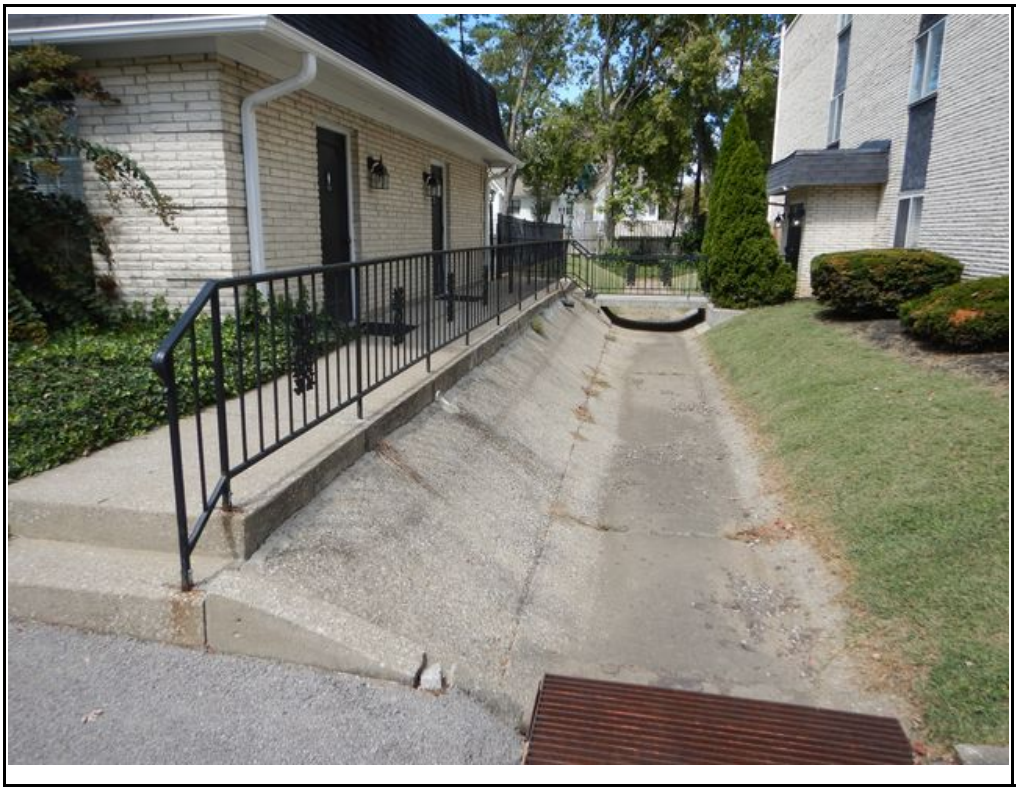


Photo Number
3

Description:
Concrete drainage channel appeared to be part of an easement through the community

Photo Number
4

Description:
Concrete drainage channel along rear of Building A with debris in channel

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

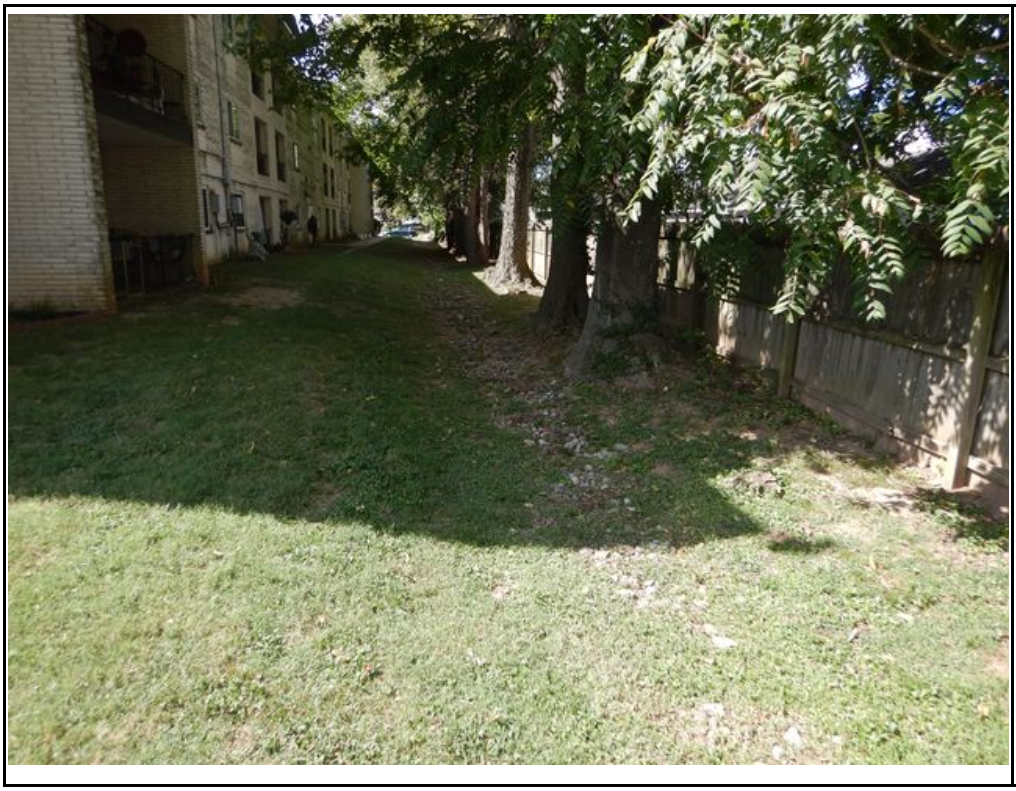


Photo Number
5

Description:
French drain along rear of Building B with reported drainage issues

Photo Number
6

Description:
Buried drain lines partially blocked by soil at discharge location

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
7

Description:
Typical concrete walkway

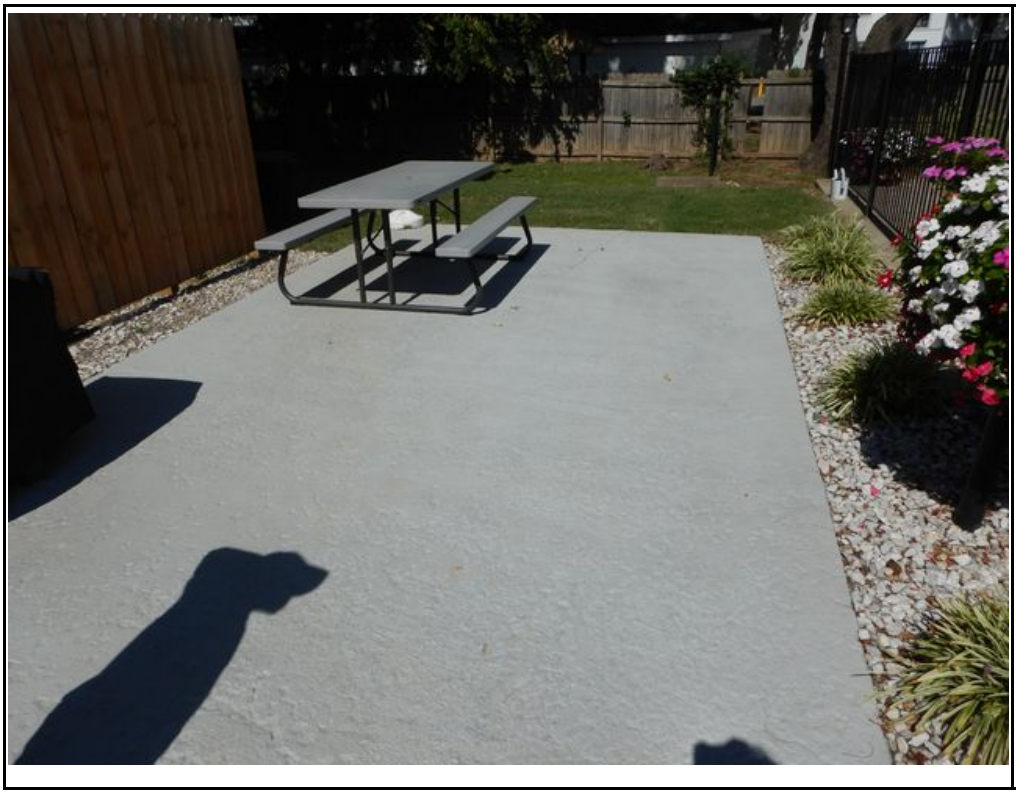


Photo Number
8

Description:
Concrete patio

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
9

Description:
Sunken Catch basin in asphalt surface

Photo Number
10

Description:
Sunken Catch basin in asphalt surface

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

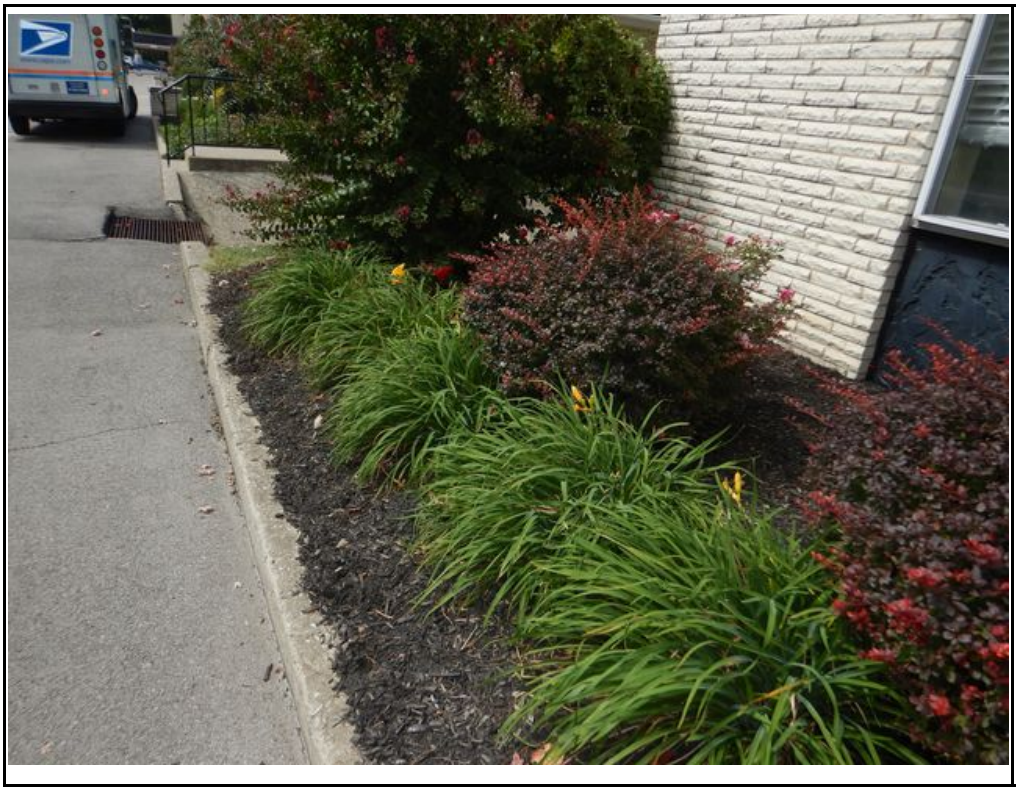


Photo Number
11

Description:
Flowerbeds along front of buildings

Photo Number
12

Description:
Wood privacy fence along the rear property line

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
13

Description:
General view of parking area

Photo Number
14

Description:
Water drainage was a reported problem near in the parking area near the left property line

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
15

Description:
Example of a parking structure

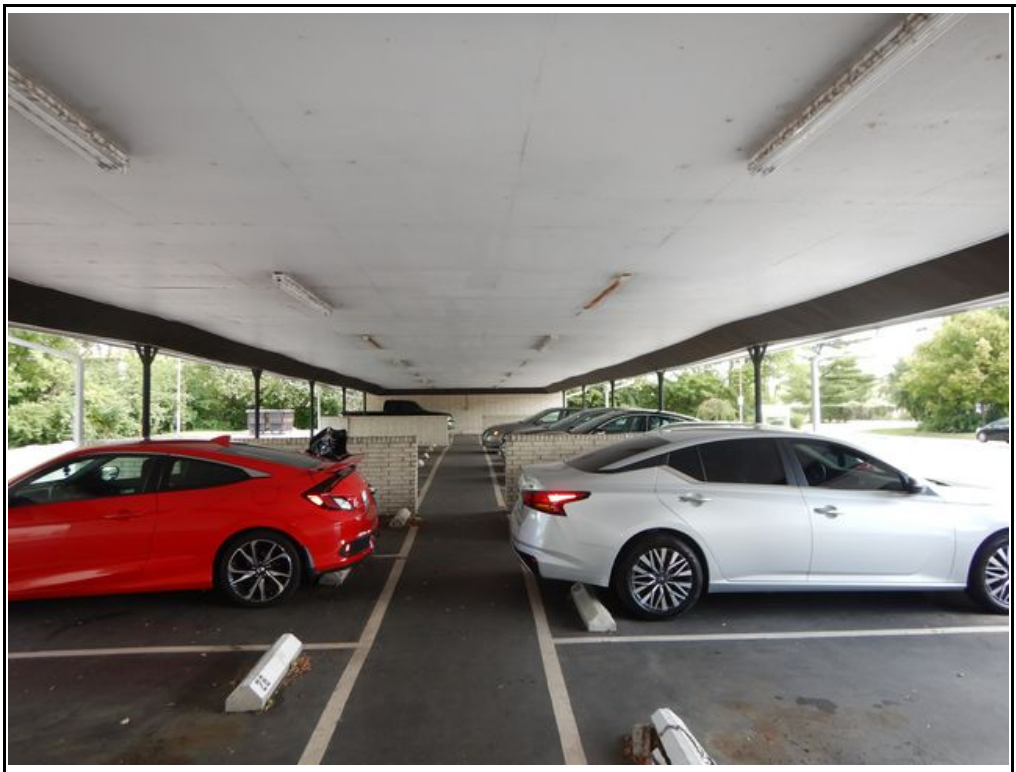


Photo Number
16

Description:
Parking structure ceiling

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

	Photo Number **17** Description: Parking stop in poor condition
	Photo Number **18** Description: Parking structure gutters that discharge on asphalt surfaces

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
19

Description:

Cracks in parking structure brick walls located near support columns

Photo Number
20

Description:

Rust present on parking structure support column

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
21

Description:
Storage room in parking structure

Photo Number
22

Description:
Example of water damage on parking structure ceiling

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
23

Description:
Parking structure lighting in poor condition

Photo Number
24

Description:
Parking structure with old roof

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
25

Description:
Parking structure with roof replacement in process

Photo Number
26

Description:
General front view of residential building

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
27

Description:
Rear view of residential building

Photo Number
28

Description:
Balconies

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
29

Description:
Balconies

Photo Number
30

Description:
Drive through portico entrance

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
31

Description:
Main entrance to residential building

Photo Number
32

Description:
Side entrance to residential building

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

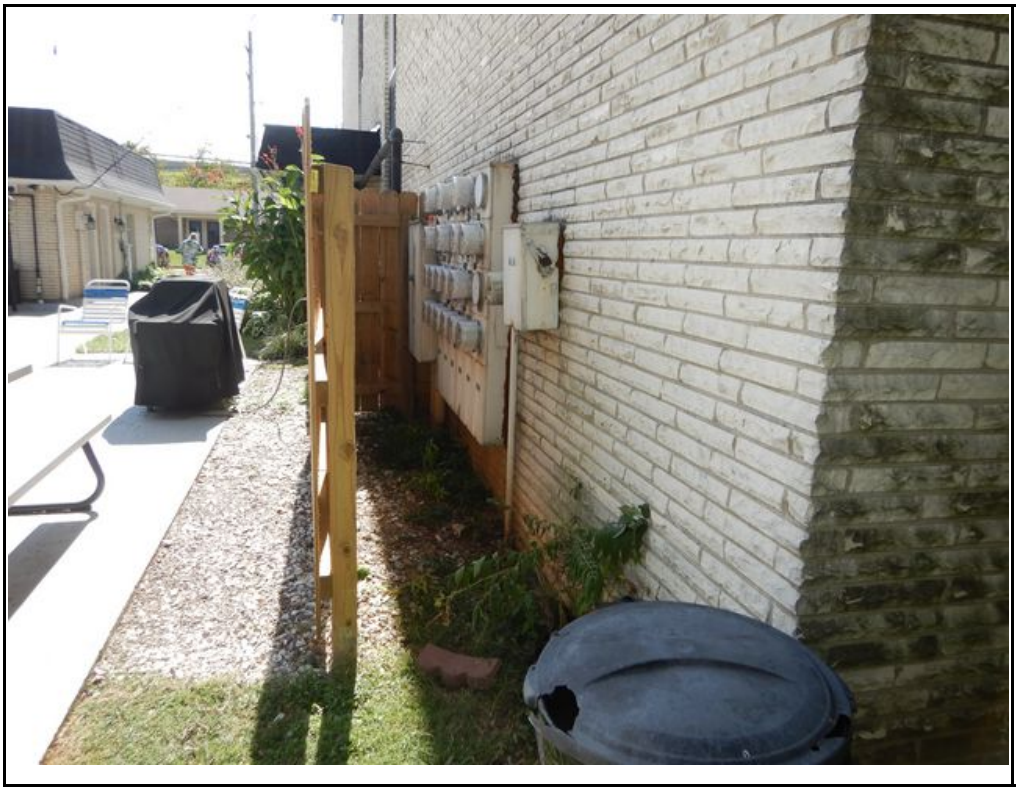


Photo Number
33

Description:
Electric meters and Federal Pacific electrical equipment

Photo Number
34

Description:
Typical residential building roof

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
35

Description:
Residential building exterior lighting

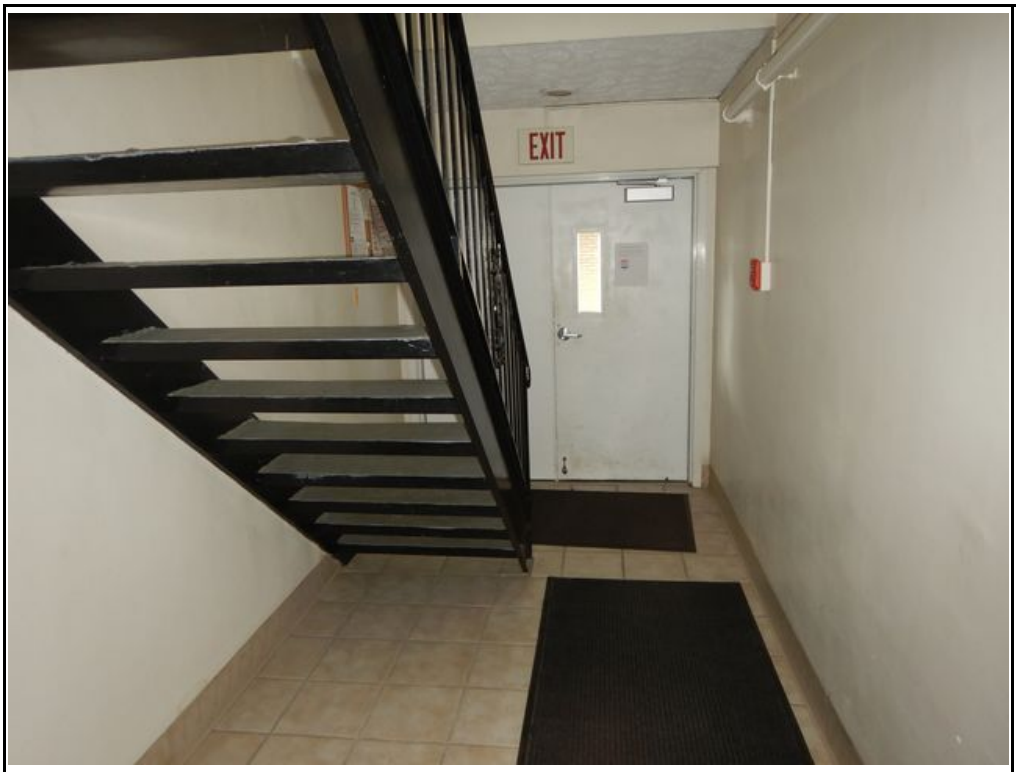


Photo Number
36

Description:
Typical stairwell

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
37

Description:
Typical common hallway

Photo Number
38

Description:
Main entrance interior

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
39

Description:
Mailboxes

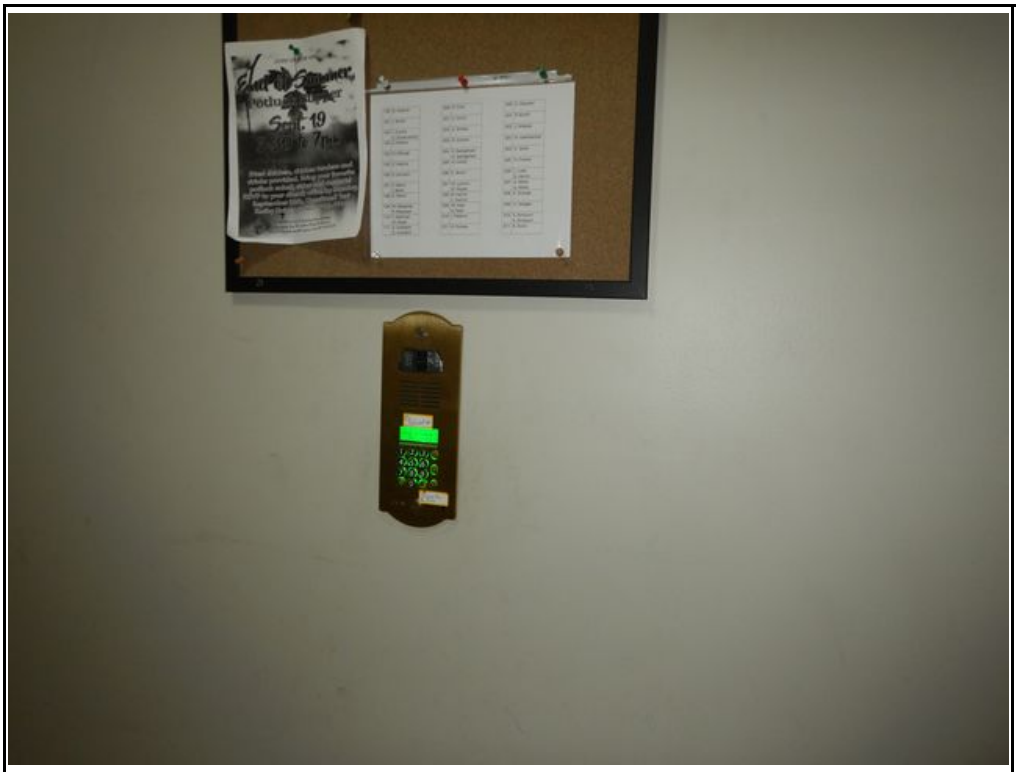


Photo Number
40

Description:
Intercom

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
41

Description:
Fire alarm panel

Photo Number
42

Description:
Smoke detectors

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
43

Description:
Garbage chute

Photo Number
44

Description:
Elevator door

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
45

Description:
Elevator lifting equipment

Photo Number
46

Description:
Common storage area

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
47

Description:
Laundry room

Photo Number
48

Description:
Gas-fired boilers for domestic water

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

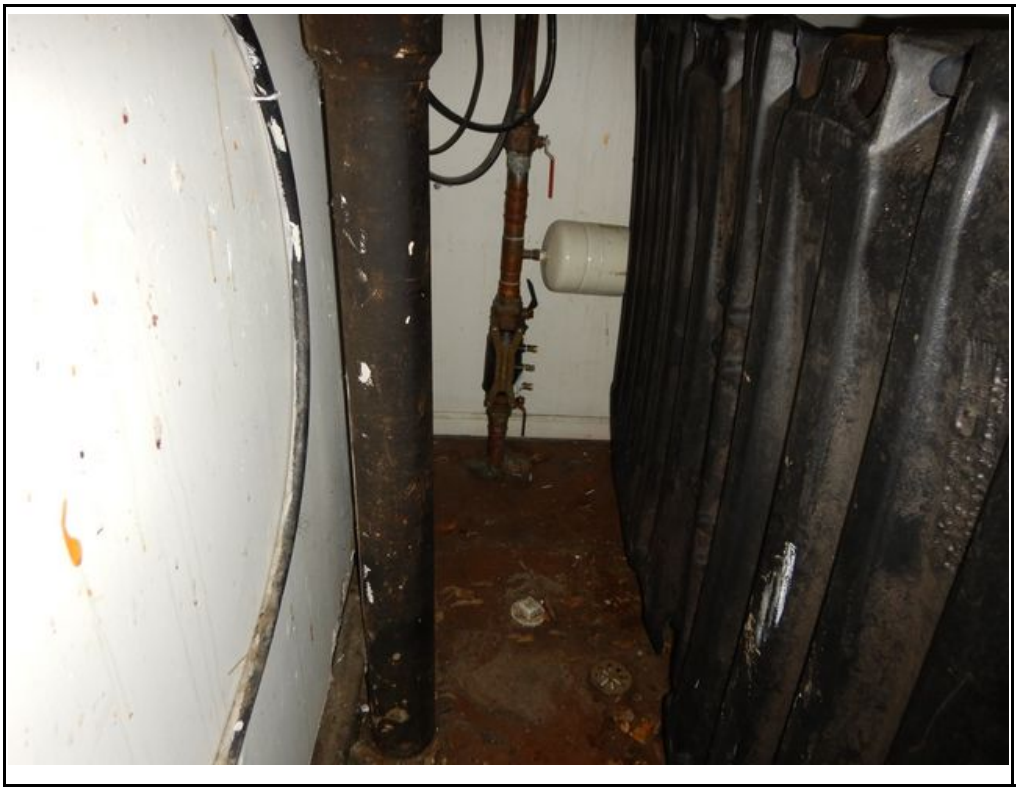


Photo Number
49

Description:
Cast iron drain piping and copper supply piping

Photo Number
50

Description:
Example of old cast iron piping that was replaced

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

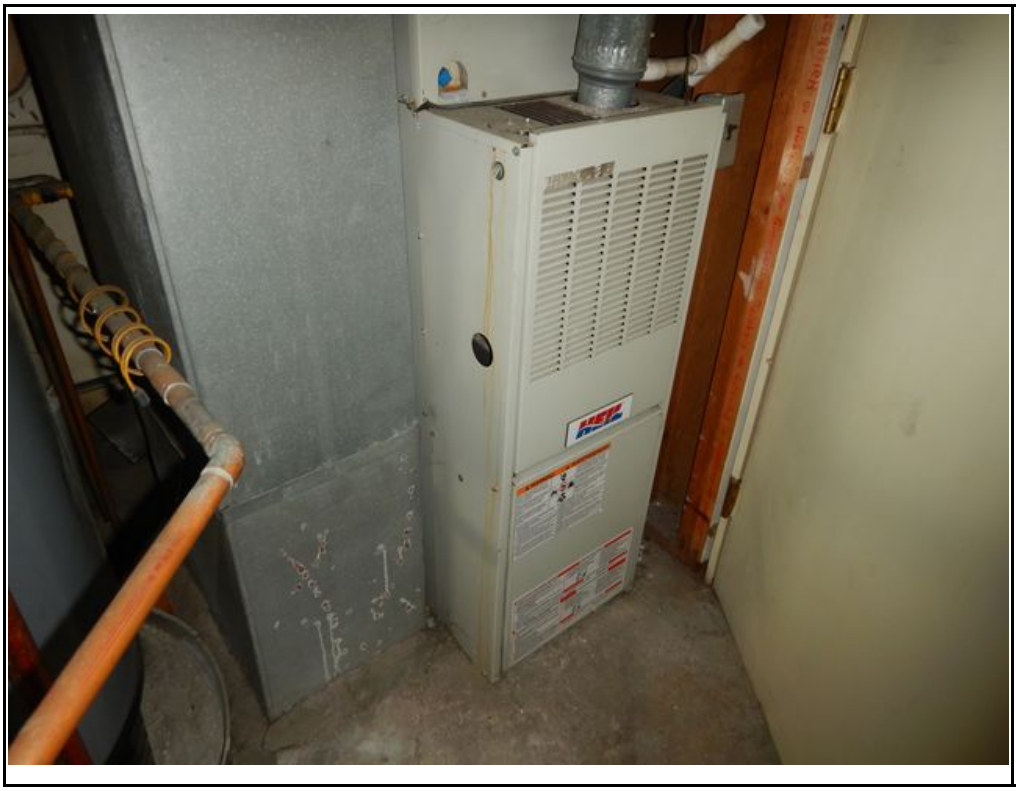


Photo Number
51

Description:
Example of gas-fire furnace for common areas

Photo Number
52

Description:
Example of gas-fire furnace for common areas

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
53

Description:
Rooftop condensing unit for common areas

Photo Number
54

Description:
Rooftop condensing unit for common areas

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
55

Description:
Breaker box that has been replaced

Photo Number
56

Description:
Front of clubhouse

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
57

Description:
Rear of clubhouse

Photo Number
58

Description:
Clubhouse roof

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
59

Description:
Clubhouse security camera and lighting

Photo Number
60

Description:
Clubhouse interior

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
61

Description:
Clubhouse interior

Photo Number
62

Description:
Clubhouse interior

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
63

Description:
Clubhouse interior

Photo Number
64

Description:
Clubhouse interior

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
65

Description:
Clubhouse interior

Photo Number
66

Description:
Clubhouse kitchen

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

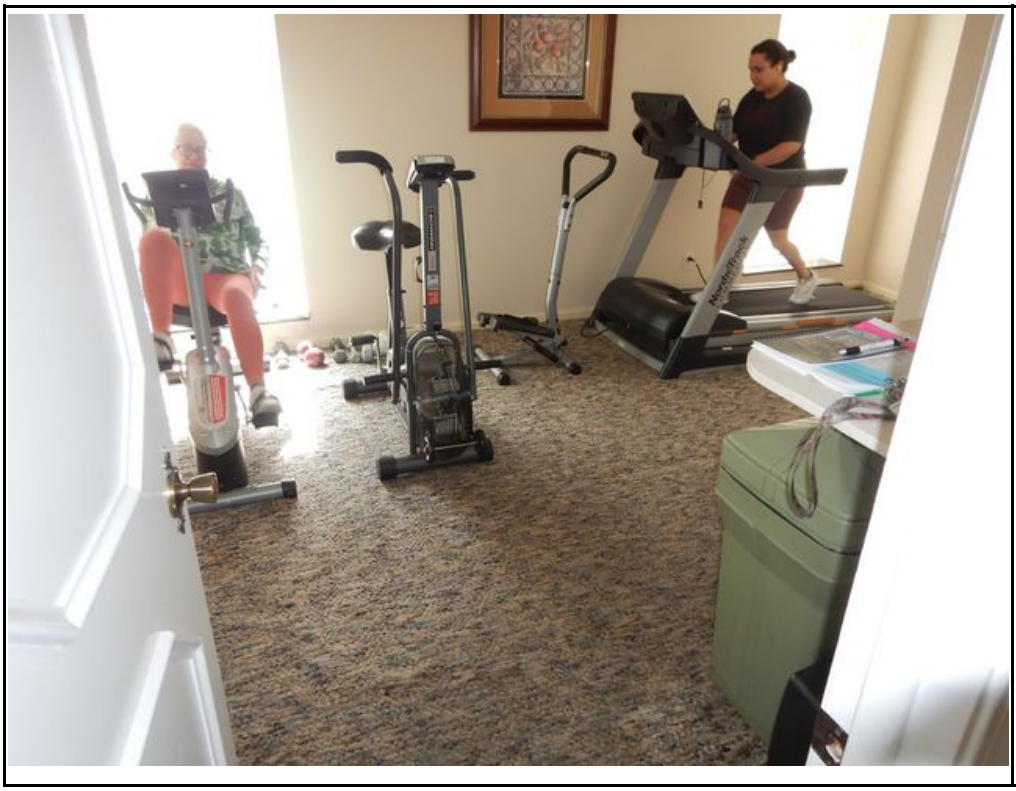


Photo Number
67

Description:
Clubhouse fitness room

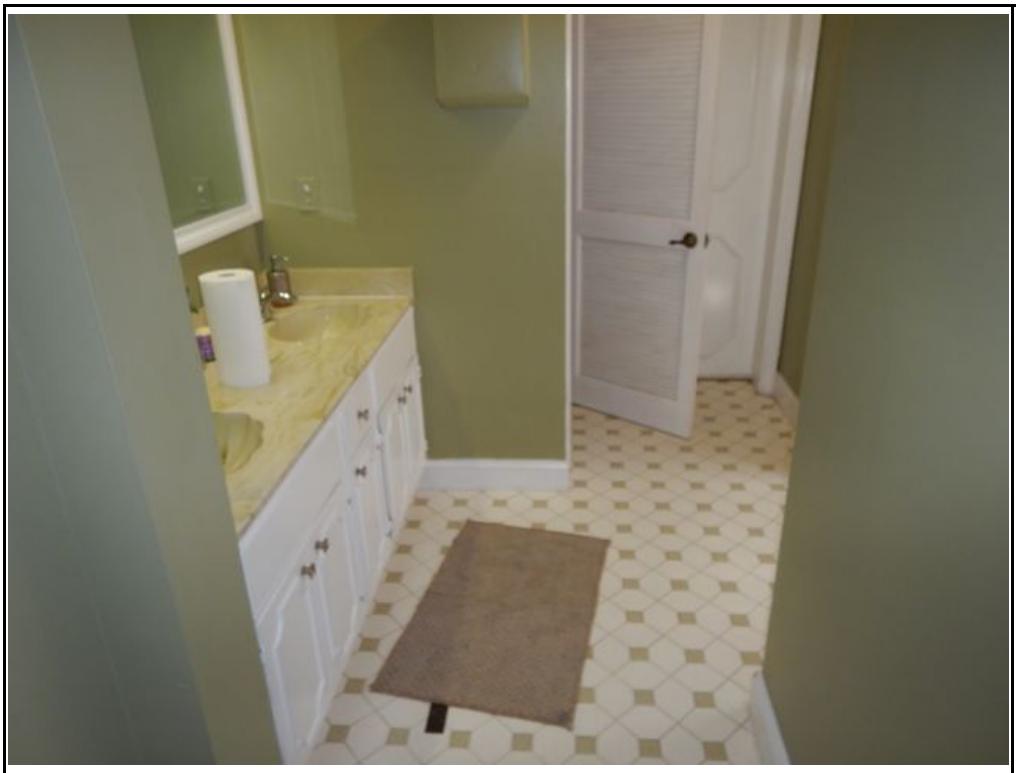


Photo Number
68

Description:
Typical bathroom

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
69

Description:
Typical bathroom

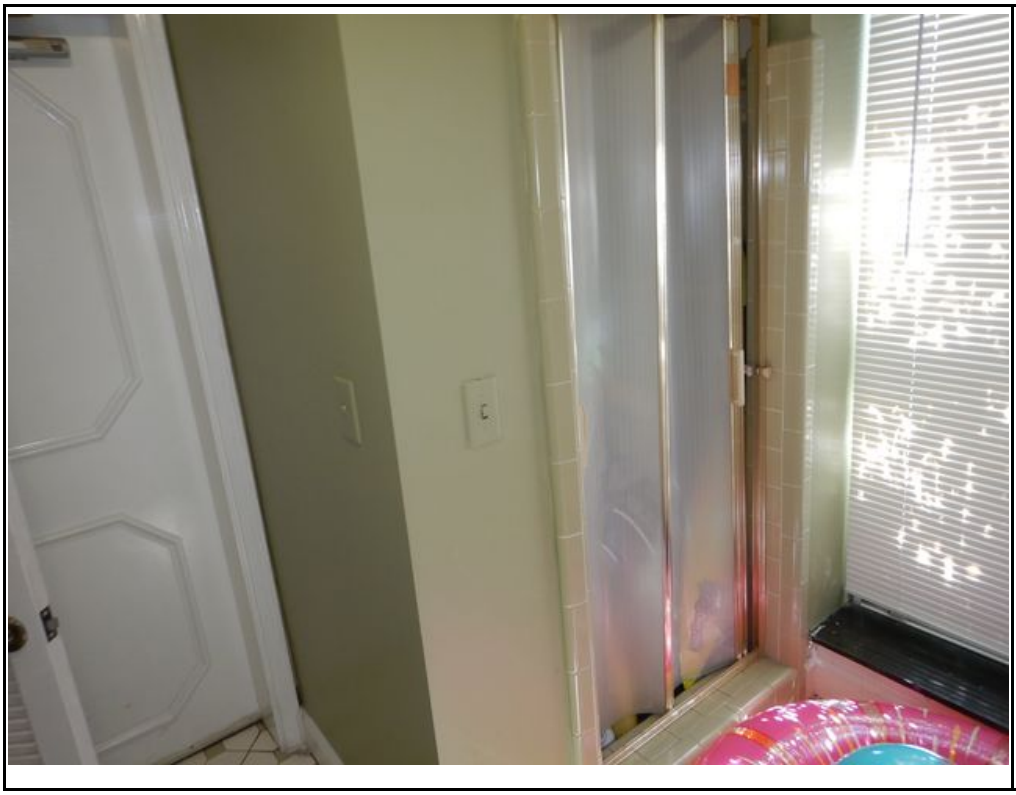


Photo Number
70

Description:
Typical shower used as storage

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

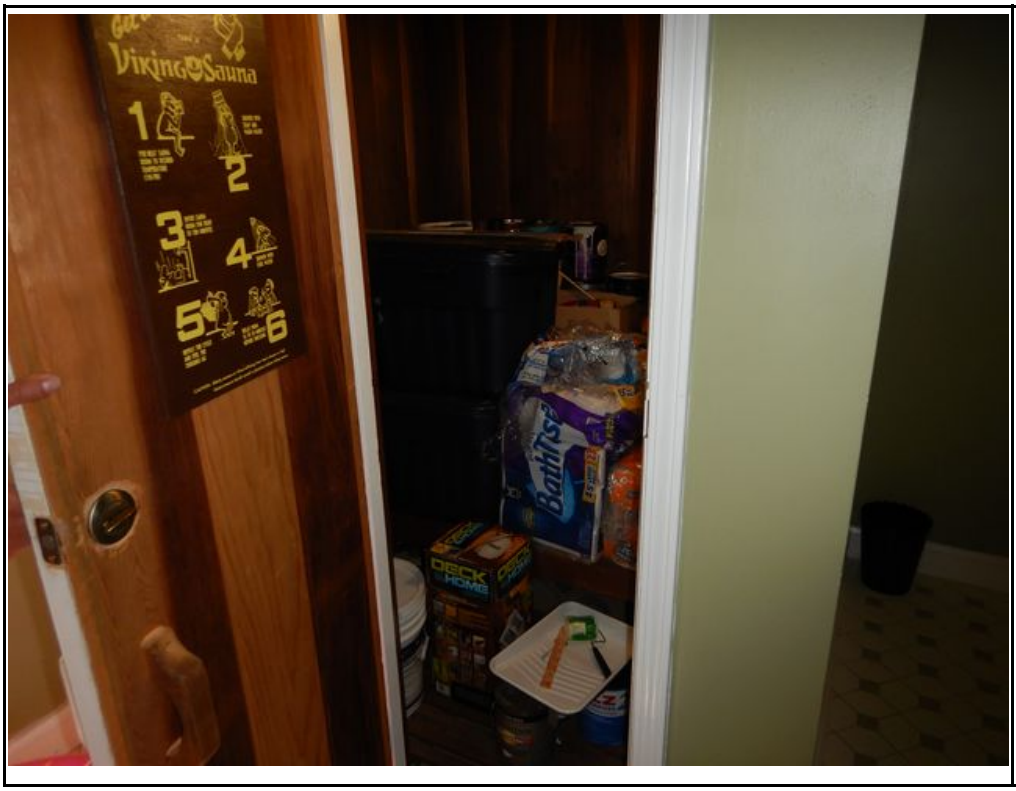


Photo Number
71

Description:
Typical sauna in bathroom used as storage

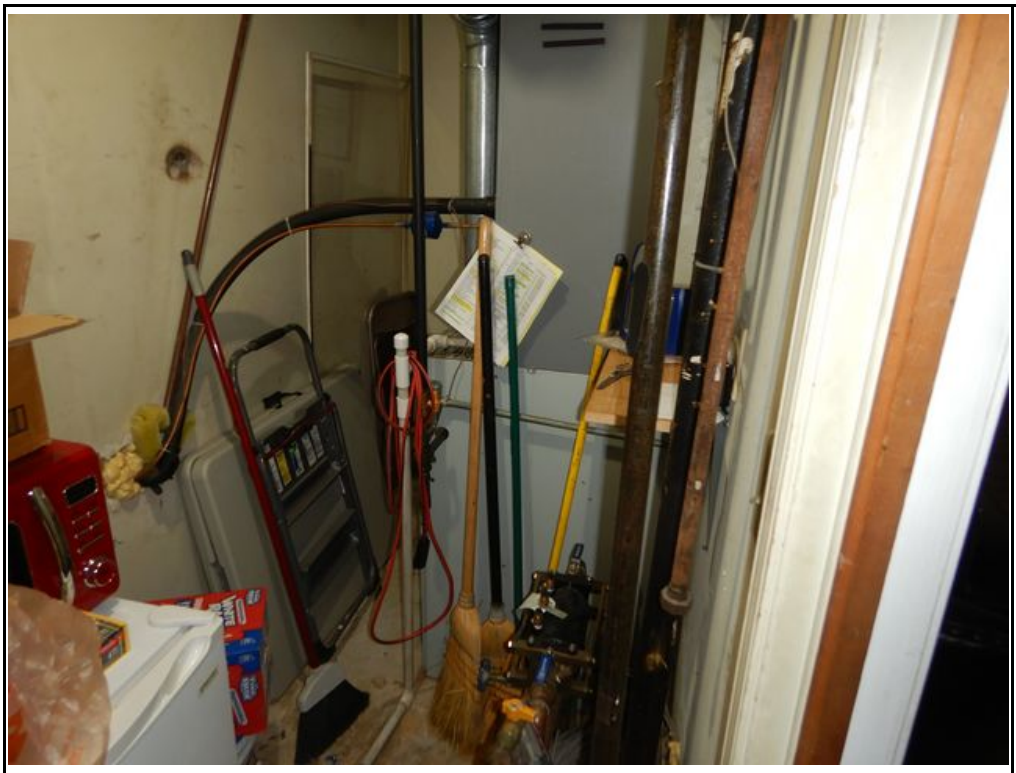


Photo Number
72

Description:
Clubhouse gas-fired equipment

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
73

Description:
Clubhouse condensing unit

Photo Number
74

Description:
Clubhouse Federal Pacific breaker box

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

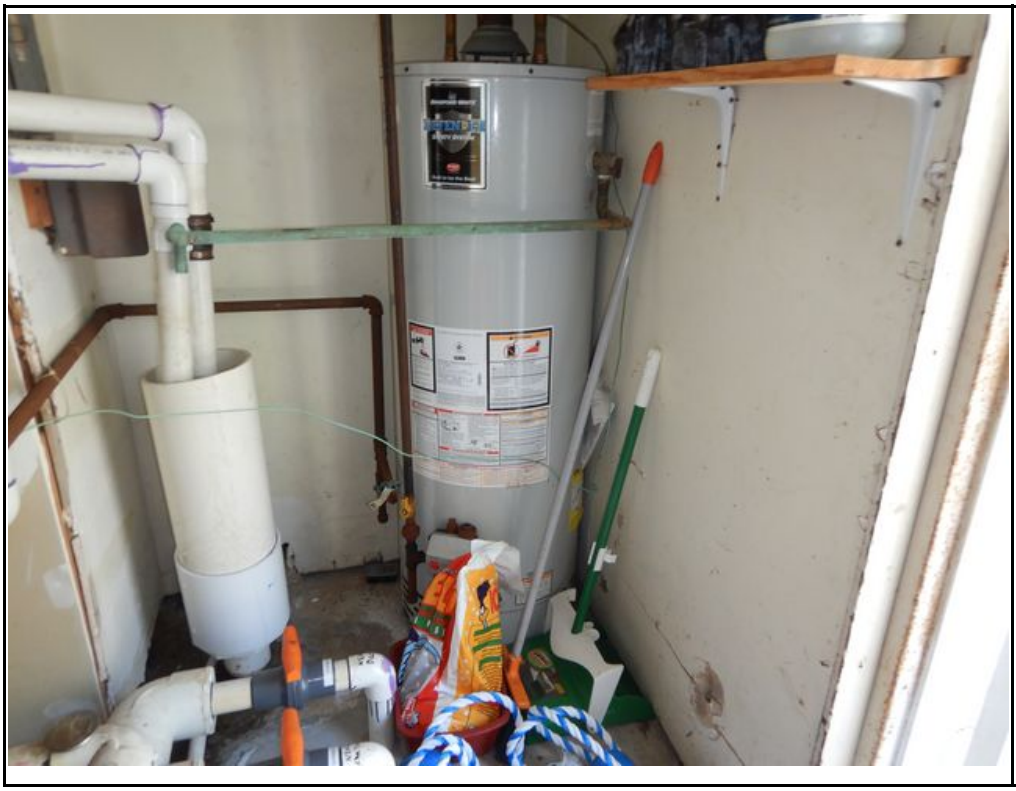


Photo Number
75

Description:
Clubhouse gas-fired water heater

Photo Number
76

Description:
Pool area

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
77

Description:
Pool deck and pool cover

Photo Number
78

Pool deck with cracks

Location
Gaslite Square Condominium,
St Matthews, Kentucky

Photos Taken by:
Scott Schaffer, 89780 (OH)

Inspection Date:
September 18, 2024

Photo Number
79

Description:
Pool equipment

Photo Number
80

Description:
Pool equipment

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