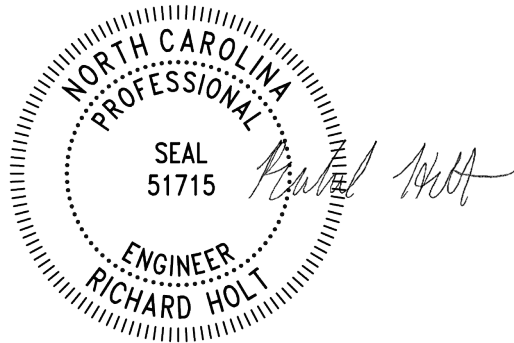


PREPARED FOR:

**SIENA TOWNHOMES POA, INC.
WAKE FOREST, NC**

**MANAGED BY:
ROGERS PROPERTY MANAGEMENT**



Richard S Holt
Digitally signed by Richard S Holt
Date: 2023.03.07 12:04:29 -05'00'

MARCH 07, 2023

**RESERVE STUDY UPDATE
with site inspection**

Raleigh Office:
7334 Chapel Hill Road
Suite 200
Raleigh, NC 27607
919.465.3801
NC Lic. No.: C-2871

Charlotte Office:
8819 University East Drive
Suite 200
Charlotte, NC 28213
704.810.1808



GILES & FLYTHE
ENGINEERS

TABLE OF CONTENTS

INTRODUCTIONS	1
EXECUTIVE SUMMARY	2
PURPOSE & SCOPE	3
Standards of Reference	4
SOURCES OF INFORMATION	5
Date of Inspection	5
Interviews	5
Documents	5
Cost Estimates	5
DESCRIPTION	6
OBSERVATIONS	7
Site Improvements	7
Common Building Exteriors	10
RESERVE FUND ANALYSIS	12
CONCLUSION & LIMITATIONS	14
Appendix A: Reserve Fund Projections	
Appendix B: Project Photographs	

INTRODUCTIONS

Siena Townhomes POA, Inc. authorized Giles Flythe Engineers to perform a Reserve Study Update with a site inspection for the Siena Townhomes community located in Wake Forest, NC. The purpose of the reserve study is to assist the association in planning for future capital repair expenses. A reserve study is an important tool for an association to adequately fund capital reserve accounts through regular annual reserve contributions. Adequately funded capital reserve accounts reduce the need to defer capital repairs, collect special assessments or borrow funds for capital repair projects.

A community association typically has certain responsibilities as described in the association governing documents. These responsibilities often include maintaining common areas and other components. An association, as a non-profit organization, will typically have two general asset cash accounts including an operating account and a reserve account. The operating account is funded from regular budgeted assessments and is used to fund routine operating expenses that occur on a predictable cycle, typically monthly or up to annually. The reserve account is funded from regular contributions and is primarily used to fund non-annual capital repair expenses.

The focus of the reserve study is on the reserve account. We have projected capital repair expenses over a term of twenty years. The capital repair expenses are limited to those components for which the association is responsible for maintaining. Capital repair expense estimates include an expected useful life and remaining useful life of the components to develop a projected schedule for capital repairs over the term. After developing a schedule of capital repairs over the term, we completed a cash flow analysis forecasting reserve account balances over the term and provided funding recommendations as needed. Capital repair expense estimates and funding estimates are most reliable in the first portion of the term. Updating a reserve study every three to five years will mitigate the impacts of variation in repair costs, component wear, inflation and reserve funding over time.

Capital reserve funding recommendations are provided to address funding principles including providing sufficient funds required, a stable reserve contribution rate over the term, an equitable contribution rate over the term and fiscally responsible. The reserve study is intended to assist the association in developing budgeted reserve contributions.

The report includes a narrative section which describes the scope of the reserve study, a discussion of observations and capital repair allocations, a general description of capital repairs and a description of our cash flow analysis and funding recommendations. The report appendices include the capital reserve analysis with tables detailing an itemized list of capital repair expenses, an itemized list of expenses by year and our cash flow analysis. A photo log is provided and includes a representative sample of our observations. The report includes multiple sections with information presented in various forms and should, therefore, be read in its entirety.

EXECUTIVE SUMMARY

The Siena Townhomes POA, Inc. is located on Piazza Way, Brunello Drive and Mangia Drive in Wake Forest, NC. The community is comprised of 96 individually owned townhouse units situated on private streets. Based on a review of Wake County Real Estate records, the neighborhood was constructed between 2017 and 2019.

The association is responsible for maintaining common area site improvements in the community including private streets, sidewalks, site fencing, mailbox kiosks, and drainage systems including shared responsibility for an offsite stormwater pond.

The buildings, common areas and grounds are generally in good condition. Based on our evaluation, the current levels of funding do not maintain a positive balance through the term of this study. We have provided recommendations for annual reserve contribution schedules that provide sufficient funding to meet capital expenditure requirements in the next twenty years. A more detailed analysis of the reserve funds has been provided in Appendix A.

- **Alternative 1:** Beginning in 2024, increase the annual reserve contribution rate by 15% every year through 2034. This alternative is projected to maintain a positive balance through the term of this study.
- **Alternative 2:** Beginning in 2023, increase the annual reserve contribution rate to \$96,000, then increase by 7% every year thereafter through 2036. This alternative is projected to maintain a positive balance through the term of this study.

A more detailed analysis of the reserve fund has been provided in Appendix A.

Some significant expenditures are expected over the term of the study. Some of the more notable examples are listed below:

- Resurface asphalt paving
- Common area drainage improvements
- Replace fencing
- Replace building roofs
- Paint/repair building exteriors

Additional capital expenditures are anticipated over the term of this study. Those items that will require repair or replacement are discussed later in this report.

PURPOSE & SCOPE

We have completed this study to estimate capital repair expenses the association is responsible for over the term of the study and provide a cash flow analysis and capital reserve funding plan. This study is intended to assist the association in determining the allocation requirements into the reserve fund which are projected to meet future anticipated capital expenditures for the community.

This report estimates capital repair expenses for the community twenty years into the future. Variations in capital repair expense forecasts due to the quality of maintenance, weather and other events may occur. Over time, age, premature deterioration, or other factors may necessitate the addition of assets into the reserve study. Additionally, fluctuations in material and labor costs beyond assumed inflation rates may also affect the accuracy of the forecasts. Therefore, a reserve study should be routinely updated, typically on a three to five-year cycle to provide the most accurate assessment of needs and financial obligations of the community.

This study has been performed according to the scope as generally defined by Siena Townhomes POA, Inc., Giles Flythe Engineers Inc., and the standards of the Community Associations Institute. The findings and recommendations are based on interviews with the community's management personnel; a review of available documents; and a limited visual inspection of the components maintained by the association.

The Cash Flow Method of calculating reserves has been utilized, whereby contributions to the reserve fund are designed to offset the variable annual expenditures. Funding alternates are recommended which are designed to achieve at minimum a Baseline Funding goal by maintaining a positive balance for the term of the study. We have also included a threshold funding goal which provides a minimum reserve account over the term. The minimum balance is typically calculated by determining the total over term forecasted expenses and dividing by the length of the term in years. This minimum threshold balance will help offset the risk of fluctuations in labor and material costs and component wear.

To determine which components should be included in this analysis, we used the following guidelines:

- The component must be maintained by the association.
- The component must have an estimated remaining useful life within the term of this study.
- The funding for the repair should be from the reserve account, not through an annual operating budget or other maintenance contracts.
- The cost of the capital repair must be significant enough to not be reasonably funded from an annual operating budget.

What is a reserve study?

A reserve study is a long-term capital budget planning tool which compares the current reserve fund of an organization to future capital repairs and replacements.

A reserve study is a tool to help identify and prepare for major repair and replacement projects for a community.

It is recommended that a reserve study be performed every five years to ensure that communities are saving the necessary funds for capital repairs and improvements.

Our process for completing the reserve study includes:

1. Reviewing information provided including governing documents, association financial statements, and information on previous or planned capital repairs.
2. Reviewing available information on the property as needed. This may include plat maps, tax records, historical aerial photographs, available site, and building plans.
3. Conducting a visual inspection of the property. This may include interviewing association representatives during the inspection.
4. Developing an inventory of components to be included in the reserve study.
5. Predicting their remaining service life and, approximating how frequently they will require repair or replacement.
6. Estimating repair or replacement costs (in 2023 dollars) for each capital item.
7. Develop a cash flow analysis adjusting for inflation and return on invested monies to determine the adequacy of current reserve funding plans.
8. Develop funding recommendations with specific reserve contribution recommendations for each year of the term.

The statements in this report are opinions about the present condition of the areas inspected within the community. Our inspection is limited to a visual ground level inspection and we did not remove any surface materials, perform any testing, or move any furnishings. This study is not an exhaustive technical evaluation or building code compliance review. For additional limitations, see Conclusion and Limitations.

Standards of Reference

The following definitions are provided as a standard of reference:

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) Evidence of previous repairs not in compliance with commonly accepted practice, b) Workmanship not in compliance with commonly accepted standards, c) Component or system is obsolete, d) Component or system approaching the 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. The 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 of a capacity that is defined as enough for what is required, sufficient, suitable, and/or conforms to standard construction practices.

SOURCES OF INFORMATION

Date of Inspection

Onsite inspection of the property occurred on January 11, 2023.

Interviews

We interviewed the following people in connection with this study:

- Deb Moorefield, Association Board Member
- Dennis Weldon, Association Board Member
- Dave Wakefield, Association Board Member
- Mike Cronin, Association Board Member
- Ken Vogel, Association Board Member
- Wayne Moorefield, Association Board Member

Documents

The following documents were made available to us and reviewed:

- Wake County tax records
- Association financial information
- Association governing documents
- Recent and planned capital repair projects

Cost Estimates

- Our internal data files on similar projects
- Local contractor estimates for similar projects
- R.S. Means Construction Cost Estimating Data

DESCRIPTION

The Siena Townhomes POA, Inc. is located on Piazza Way, Brunello Drive and Mangia Drive in Wake Forest, NC. The community is comprised of 96 individually owned townhouse units situated on private streets. Based on a review of Wake County Real Estate records, the neighborhood was constructed between 2017 and 2019.

The association is responsible for maintaining common area site improvements in the community including private streets, sidewalks, site fencing, mailbox kiosks, and drainage systems including shared responsibility for an offsite stormwater pond.

Common area amenities include an outdoor kitchen area with gas grill and furniture, as well as outdoor fitness stations.

The buildings in the community are of wood framed construction with vinyl siding and asphaltic fiberglass shingled roofing.

OBSERVATIONS

The following key observations were made about the current condition of the more significant and costly common elements of the property.

Note that the repair schedules discussed herein generally correspond to the schedules outlined in our previous Reserve Study Update for this community dated October 21, 2019, with updates to reflect current costs, and modifications to ensure serviceability and function of specific components based on the most recent site inspection.

Site Improvements

The streets throughout the community are noted as private streets on recorded plat maps and are assumed to be maintained by the association. The asphalt paving generally appeared to be in good condition. We observed limited areas of minor transverse and longitudinal cracking, as well as areas of patching repairs. The asphalt was reportedly resealed in 2021.

Typically, we recommend crack filling applications and oil resistant sealant to all asphalt paved surfaces on an approximately 5 to 7-year cycle. At this same time, all cracks should be properly filled, patched, and sealed. We have allocated funds for crack fill and seal coat applications of the asphalt pavement on a 5-year cycle beginning in 2027.

Assuming crack filling and seal coating are completed in the interim, we estimate the paving to have a remaining useful life of approximately 16 years prior to resurfacing. Resurfacing should include milling to remove the top 2-inches of asphalt paving in all areas, repairing sub-grade/base courses as needed and installing a new 2" thick layer of asphalt paving. We have allocated funds to resurface the asphalt paving in 2039.

The Association is responsible for the concrete curb and gutter and the concrete sidewalks along the streets in the community. The governing documents appear to note that individual unit owners are responsible for driveways, rear patios and walkways leading to each unit. The concrete flatwork generally appeared to be in good condition and with minor cracking observed. We also noted limited sections of concrete curbing that have been recently replaced. These replacements were reportedly made by the developer. It is likely that as the community ages, cracking and deterioration in concrete surfaces will continue to develop, requiring portions of the concrete flatwork and curbing to be replaced. We have allocated funds to replace approximately 5% of the concrete sidewalks and curb and gutter on an 8-year cycle beginning in 2028.

Site drainage is provided via landscaped swales and catch basins in the paved and landscaped areas. These systems direct water flow to an offsite shared pond. We noted significant erosion, rutting, and saturated soils behind 400-410 Piazza Way. Other, less severe, areas of erosion, ponding water, saturated soils, and poor turf health were noted throughout the community. Most drainage concerns are located along the swales between townhome buildings and within the landscaped areas and swales to the rear of the townhome buildings.

Multiple areas of neutral grade were noted along the rear perimeter of the townhome buildings that reportedly leads to standing water on rear patios. The townhome association has reportedly completed recent common area drainage improvements throughout the community which have included extending downspout leaders beneath grade away from the building perimeters, regrading of swales, and installation of underground pipe systems and catch basins. Note that the association is only responsible for drainage systems in the common areas and not on individually owned lots.

We have allocated funds for common area drainage improvements on a 5-year cycle beginning in 2023. Due to the amount of drainage concerns noted while on-site, we have allocated a larger amount of funds for drainage improvements in 2023, with a more moderate amount of funds in the years following. Common area drainage repairs will likely include regrading of swales, installation of turf reinforcement or other ground covers along slopes, installation of stone reinforcement along swales and at discharge locations, installation of french drains, and installation of underground piping systems with catch basins. Note that some common area drainage improvements may be difficult due to utilities and may require hand digging. The association may consider hiring an engineer to evaluate areas of concern to determine the most efficient solutions prior to completing drainage improvement projects.

The off-site stormwater pond is understood to be a shared component with adjoining properties. The pond generally appeared to be incomplete and it is our understanding work to the stormwater pond is planned to be enlarged in the near term for the new Wake Med facilities. We have assumed the pond will be completed and in adequate condition in the near term and that the cost of this work will not be the responsibility of the association. We have allocated funds for major pond improvements and silt removal on a 25-year cycle beginning in 2039. This larger repair work is expected to include items such as: dredging accumulated sediment, significant erosion repair, repair or replacement of erosion control geofabric, and replacing riprap. The HOA should ensure that the pond conforms to all applicable regulations at all times.

Two small entrance signs and one large entrance sign are maintained by the association and are comprised of parge coated masonry construction with sign inlays and light fixtures. The large sign monument also incorporates a clay, tile roof along with other wooden trim components. The entrance signs and monuments generally appeared to be in good condition with only minor cracking noted in the parge coatings. We have allocated funds to repair the entrance signs on a 10-year cycle beginning in 2029.

The landscaped areas along Siena Drive and Dr Calvin Jones Highway incorporate landscape lighting and irrigation systems. Both systems generally appeared to be in adequate condition and we are unaware of any current major issues with either system. We have allocated funds to repair the landscape lighting and irrigation systems on 12-year cycles beginning in 2031. Typical repairs will include replacement of irrigation controllers, backflow preventers, sprinkler heads and tubing, as necessary. We anticipate minor repairs for both systems may be required each year in the interim and would be funded from an annual maintenance budget.

Enamel coated aluminum fencing is located along the top of retaining walls throughout the community. We do not anticipate the aluminum fencing will require replacement over the term of this study. However, it is

likely that the fencing will require repairs and re-painting on an approximately 15-year cycle. We have allocated funds as such beginning in 2034.

Six-foot-tall wood fencing is located around a significant portion of the perimeter of the property and appeared to be in fair condition. We observed a number of fence boards that were cracked or warped. We also noted a section of fence along the southern portion of the property that was reportedly repaired in 2022. Staining/sealing has been completed on the sections of wooden fencing along the northern border of the community with the fencing along the western and southern borders are to be stained and sealed in 2023. We have allocated funds for future stain/seal applications on 5-year cycles beginning in 2023. Due to the amount of cracking and warping noted in the fence slats while on site, we have allocated funds to replace the wood fencing on a 15-year cycle beginning in 2034.

Limited areas of wood timber retaining walls are installed behind the units on a section of the north end of the community. Wood timber retaining walls have an expected useful life of approximately 20-years and we have allocated funds for their replacement in 2039.

Several moderate to large segmental block geo-grid reinforced retaining wall systems up to approximately 10-feet in height are installed around the community. It is our understanding that issues regarding the drainage behind the retaining walls has become a concern. During rain events, the wall drains reportedly do not discharge water. Additionally, it is our understanding that water leaks through or discharges over top of the walls. We did not observe any signs of distress such as leaning walls or displaced blocks while on site. However, we were unable to visually inspect the wall along the northern border of the property due to dense vegetation.

We recommend the association complete a borescope investigation of the retaining wall drains to determine if the drains have become blocked or have crushed. Additionally, to help reduce the amount of stormwater collection behind the walls, downspout leaders may be redirected away from the retaining walls to discharge into other landscaped or paved areas. Finally, we recommend removing the dense vegetation along the wall at the northern end of the property so that wall may be routinely inspected for signs of distress.

The concrete block retaining wall systems should have an expected useful life beyond the term of this study assuming the wall systems are installed correctly and drainage systems around the walls are well maintained. However, considering the large expense of replacement, we have provided an allocation of funds at the end of the term to prepare for long-term replacement costs.

Metal mailbox kiosks are located in multiple areas in the community and appeared to be in good condition. It is our understanding the mailboxes at the east end of the community were recently replaced in 2022 due to damages sustained from a vehicular impact. The metal kiosks have an expected useful life of approximately 30 years and we have allocated funds for their replacement at the end of the term.

An outdoor kitchen area with gas grill, stone veneer structure with concrete countertops and picnic tables, benches and a trash can are located in the common open spaces throughout the community. These site furnishings generally appeared to be in good condition. We have allocated funds to replace portions of the

site furnishings and grill on a 10-year cycle beginning in 2029. We have allocated funds to refurbish the outdoor kitchen structure and countertop on a 20-year cycle beginning in 2039.

New outdoor fitness stations have been installed at the outdoor kitchen area since our previous reserve study. Four (4) total stations were installed in 2022 and generally appeared to be in good condition. We have allocated funds for their replacement on a 20-year cycle beginning in 2042.

Typically, an association is responsible for maintaining common sewer piping installed under common areas. These components typically have an expected useful life beyond the term of this study. However, due to tree root growth and other concerns, it is likely that sections of the buried PVC sewer lines in common areas will begin to require repair over the term. We are unaware of any current issues with buried utilities. We have provided an allocation of funds to repair the buried utilities on a 15-year cycle beginning in 2042. The association may conduct video borescope inspections of a sample of sections to the piping to determine condition and better predict repair needs.

Common Building Exteriors

The buildings in the community are of wood framed construction and the buildings were constructed in approximately 2017 to 2019. The buildings are primarily clad in vinyl siding with sections of brick and stone veneer. The pitched roofs of the buildings are covered in asphaltic fiberglass 3-tab shingles. Vinyl shutters are installed on the front faces of some units. All units include garages with metal doors.

Based on our recent experience with similar communities, we anticipate the 3-tab roof shingles to have an expected useful life of approximately 15-20 years, as opposed to architectural-style shingles which typically provide useful lives of approximately 20-25 years. The roofs appeared to be in fair condition at the time of inspection. Areas of isolated lifted shingles were observed and it is our understanding that sections of roofing at (2) townhome units have recently been replaced. Leaks within the roofing has reportedly been an ongoing issue at multiple units. We have allocated funds to replace all townhome building roofs in two phases, in 2035 and in 2037 based on the observable condition of the roofs and information provided regarding issues with the roofing.

A re-roofing sequence should include removal of the existing shingle surfacing, replacement of any inadequate roof sheathing, replacement of any damaged flashing, and replacement of drip edge components. We strongly recommend that any re-roofing project closely follow procedures outlined by the National Roofing Contractors Association's *Roofing and Waterproofing Manual*. We have included funds for replacing sections of gutters as needed during roof replacements. It is likely that minor roof repairs and replacing vent boots will be required in the interim, we have assumed these repairs would be funded from an annual maintenance budget. We have included funds in our roof replacement allocation to replace sections of gutters and downspouts as needed during the project.

The paint/stain coating on the shutters, columns and other painted trim components generally appeared to be in good condition. We have allocated funds for exterior painting on all buildings on a 7-year cycle beginning

in 2027. Exterior painting projects should include replacing any damaged trim and siding components, replacing any deteriorated caulking and sealants, adequate surface cleaning and preparation and the application of 2-coats of a high-quality exterior latex paint.

We do not anticipate significant repairs or replacement of vinyl siding, brick or stone veneer will be required over the term of this study. However, while vinyl siding is generally projected to last at least 40-50 years, it has been our experience that a shorter life span should be expected of this material. As the siding ages, the colors begin to lose their color density and show signs of oxidation, the components become unsightly from neglect and impact damage, mold and mildew growth occurs, and replacement sections made necessary by periodic repairs become evident as colors and styles no longer match. In order to keep the standards of the community at a higher level, we anticipate beginning a partial vinyl siding replacement program near the end of the term. We have allocated funds to begin replacement of the vinyl siding at the end of the term.

Note that the association is not responsible for maintaining windows or doors on the building, we have not included funds for repairing/painting/replacement of these components.

RESERVE FUND ANALYSIS

We have performed a cash flow analysis projecting balances in the reserve account over the term of this study. We have included estimated capital repair expenses detailed in the first several pages of Appendix A. We have included tables and graphs depicting current funding levels along with recommended funding alternatives.

The financial projections include an assumed inflation rate of 3.5% and an assumed average return on invested funds of 1.5%. The inflation rate adjustment is noted at the bottom of the annual expense page and the return on invested funds is noted in the existing funding level and funding alternative cash flow tables.

The software utilized to analyze the reserve funds was developed by Giles Flythe Engineers, Inc. in cooperation with a technology consultancy. The software and our analysis system have been extensively reviewed by leading community association and non-profit certified public accountants.

The capital repairs listed were derived from the initial request for proposal, discussions with association representatives, our informal review of governing documents and our site inspection. The association should confirm that the items listed are, in fact, the responsibility of the association and appropriate to fund from the reserve account.

Appendix A includes the following:

1. The Project Summary page that lists pertinent details specific to the association, the terms of the analysis and summarizes total over term expenses and recommended threshold balance.
2. The Expense Projection page that itemizes the capital repairs by category, illustrates our cost estimating by unit and provides estimated useful life and remaining useful life of each item.
3. The Annual Expense Projection pages that populate the capital repairs over the term of the study. This page includes a total adjusted for inflation at the bottom of the pages.
4. The Itemized Funding Analysis page provides a summary of the capital expenditures over the term and a graph breaking down the portion of the capital repairs into each category – Site Improvements, Building Exterior, Building Interior, Mechanical/Electrical/Plumbing Systems and Amenities.
5. The Current Funding Projection page provides a table and graph illustrating our cash flow analysis assuming the association maintains the current level of reserve contributions over the term of this study. The table includes projected reserve account balances, contributions, return on invested funds and capital repair expenses for each year of the term of this study.
6. The Funding Alternative pages each provide a table and graph illustrating our cash flow analysis assuming the association implements one of our funding recommendations detailed below.

Current Reserve Funding Rate:	\$57,600 (2022 reserve contributions)
--------------------------------------	--

Current Reserve Balance:	\$183,179 (Estimated 2023 starting balance)
---------------------------------	--

Based on our evaluation, the current level of funding does not maintain a positive balance through the term of this study. We have provided recommendations for the annual reserve contribution schedules that provide sufficient funding to meet capital expenditure requirements in the next twenty years.

We have included recommended a funding alternative to your current reserve-funding program and recommend that the board adopt the alternative. Our funding recommendations are as follows:

- **Alternative 1:** Beginning in 2024, increase the annual reserve contribution rate by 15% every year through 2034. This alternative is projected to maintain a positive balance through the term of this study.
- **Alternative 2:** Beginning in 2023, increase the annual reserve contribution rate to \$96,000, then increase by 7% every year thereafter through 2036. This alternative is projected to maintain a positive balance through the term of this study.

CONCLUSION & LIMITATIONS

We have provided reserve funding recommendations based on our analysis of the association-maintained components, estimated capital repair costs over the term and the current funding levels. Further detail of the reserve fund analysis is provided in Appendix A and Appendix B.

The physical analysis portion of this reserve study was completed through a limited visual inspection. The visual inspection was completed from ground level unless otherwise specified. The visual inspection is generally limited to readily accessible and visible common areas that would likely require capital repair activities over the term. Note that this inspection does not include removing surface materials, excavation or any testing. The inspection does not include riparian buffers or other protected common areas. Buried utility components and other concealed components were not inspected as part of this analysis and we cannot be responsible for the condition of components not inspected.

The observations described in this study are valid on the date of the investigation and have been made under the conditions noted in the report. We prepared this study for the exclusive use of Siena Townhomes POA, Inc.. No other party should rely on the information in this report without consent. If another individual or party relies on this study, they shall indemnify and hold Giles Flythe Engineers Inc. harmless for any damages, losses, or expenses they may incur as a result of its use. This study is not to be considered a warranty of condition, and no warranty is implied. The appendices are an integral part of this report and must be included in any review.

Members of the Giles Flythe Engineers team working on this reserve study are not members of, or otherwise associated with the association. Giles Flythe Engineers has disclosed any other involvement with the association that could result in conflicts of interest.

Information provided by the representatives of the association regarding financial, physical, quantity, or historical issues, will be deemed reliable by Giles Flythe Engineers. The reserve balance presented in the Reserve Study is based upon information provided and was not audited. Information provided about reserve projects will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection. Giles Flythe Engineers is not aware of any additional material issues which, if not disclosed, would cause a distortion of the association's situation.

This reserve study is partially a reflection of information provided to us. The reserve study is assembled for the association's use and is not intended to be used for the purpose of performing an audit, quality/forensic analyses or background checks of historical records. Further, this study should not be considered a building code compliance analysis. The purpose of this study is to provide the association with a financial tool and is not to be considered an exhaustive technical or engineering evaluation which would consist of a broader scope of work.

We have provided estimated costs of capital repairs. These costs are based on our general knowledge of the construction industry. We have relied on standard sources as needed, such as Means Building Construction

Cost Data and estimates reviewed by Giles Flythe Engineers on similar projects. We have performed no design work or other engineering analysis as part of this study, nor have we obtained competitive quotations or estimates from contractors. Actual repair costs can vary due to a variety of factors. We cannot be responsible for the specific cost estimates provided.

If you have any questions about this reserve study, please feel free to contact us. Thank you for the opportunity to serve you.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard Holt". The signature is fluid and cursive, with the first name "Richard" and last name "Holt" clearly distinguishable.

Richard Holt, PE, RS
Project Manager
Giles Flythe Engineers, Inc.

APPENDIX A: RESERVE FUND PROJECTIONS

PROJECT SUMMARY

G | F

Siena Townhomes POA, Inc.

City/state location:	Wake Forest, NC
Date of inspection:	1/11/2023
Number of units:	96
Term of study (years):	20
Beginning Year of Term	2023
Estimated starting reserve account balance:	\$183,179
Current annual reserve contribution rate:	\$57,600
Assumed inflation rate:	3.50%
Assumed rate of return on invested funds:	1.50%
Total over term capital expenditure (un-inflated):	\$2,330,700
Total over term capital expenditure with inflation:	\$3,647,937
Recommended threshold reserve balance: (Average annual capital expenditure)	\$182,397



GILES FLYTHE
ENGINEERS

EXPENSE ESTIMATES

Capital Item Description	Quantity	Unit	Unit Cost	Total Cost Per Cycle	Estimated Useful Life (years)	Estimated Remaining Life (years)	Notes
Site Improvements							
Crack fill, seal coat, stripe asphalt paving	6,100	SY	\$4.00	\$24,400	5	4	
Resurface asphalt paving	6,100	SY	\$28.00	\$170,800	20	16	
Repair sections of concrete curb and gutter	250	LF	\$50.00	\$12,500	8	5	Approx. 5% every 8 years
Repair sections of concrete flatwork	150	SY	\$125.00	\$18,750	8	5	Approx. 5% every 8 years
Common area drainage improvements	1	LS	\$40,000.00	\$40,000	25	0	
Common area drainage improvements	1	LS	\$25,000.00	\$25,000	5	5	
Repair/dredge stormwater pond	1	LS	\$25,000.00	\$25,000	25	16	Shared expense
Refurbish entrance signs	1	LS	\$10,000.00	\$10,000	10	6	
Repair landscape irrigation systems	1	LS	\$15,000.00	\$15,000	12	8	
Repair landscape lighting systems	1	LS	\$7,500.00	\$7,500	12	8	
Paint/repair aluminum fencing	1,280	LF	\$15.00	\$19,200	15	11	
Stain/seal wood fencing - phase 1	1,330	LF	\$15.00	\$19,950	5	0	Southern & western
Stain/seal wood fencing - phase 2	1,970	LF	\$15.00	\$29,550	5	4	Northern border
Replace wood fencing	3,300	LF	\$40.00	\$132,000	15	11	
Replace sections of timber retaining walls	1	LS	\$10,000.00	\$10,000	20	16	
Allocation for long-term retaining wall repairs	1	LS	\$125,000.00	\$125,000	50	19	
Replace mailboxes	7	EA	\$2,800.00	\$19,600	30	19	
Replace portions of site furniture, grill	1	Allow.	\$10,000.00	\$10,000	10	6	
Refurbish outdoor cooking area	1	LS	\$15,000.00	\$15,000	20	16	
Replace outdoor fitness stations	4	EA	\$2,500.00	\$10,000	20	19	
Allocation for buried utility repair	1	LS	\$15,000.00	\$15,000	15	19	
Building Exterior							
Replace building roofs and gutters - phase 1	1,770	SQ	\$350.00	\$619,500	20	12	57 units west of circle
Replace building roofs and gutters - phase 2	1,200	SQ	\$350.00	\$420,000	20	14	39 units east of circle
Paint/repair shutters, columns, trim, etc.	96	EA	\$500.00	\$48,000	7	4	
Partial siding replacement contingency	1	LS	\$70,000.00	\$70,000	40	19	Approx. 10% of total

SY: Square Yard SF: Square Feet LF: Linear Feet SQ: Roofing Square
EA: Each LS: Lump Sum SYS: System

ANNUAL EXPENSE PROJECTION

Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Site Improvements										
Crack fill, seal coat, stripe asphalt paving					\$24,400					\$24,400
Resurface asphalt paving										
Repair sections of concrete curb and gutter						\$12,500				
Repair sections of concrete flatwork						\$18,750				
Common area drainage improvements	\$40,000									
Common area drainage improvements						\$25,000				
Repair/dredge stormwater pond										
Refurbish entrance signs							\$10,000			
Repair landscape irrigation systems									\$15,000	
Repair landscape lighting systems									\$7,500	
Paint/repair aluminum fencing										
Stain/seal wood fencing - phase 1	\$19,950					\$19,950				
Stain/seal wood fencing - phase 2					\$29,550					\$29,550
Replace wood fencing										
Replace sections of timber retaining walls										
Allocation for long-term retaining wall repairs										
Replace mailboxes										
Replace portions of site furniture, grill							\$10,000			
Refurbish outdoor cooking area										
Replace outdoor fitness stations										
Allocation for buried utility repair										
Building Exterior										
Replace building roofs and gutters - phase 1										
Replace building roofs and gutters - phase 2										
Paint/repair shutters, columns, trim, etc.					\$48,000					
Partial siding replacement contingency										
Totals	\$59,950	\$0	\$0	\$0	\$101,950	\$76,200	\$20,000	\$0	\$22,500	\$53,950
Totals including inflation:	\$59,950	\$0	\$0	\$0	\$116,990	\$90,502	\$24,585	\$0	\$29,628	\$73,528

ANNUAL EXPENSE PROJECTION

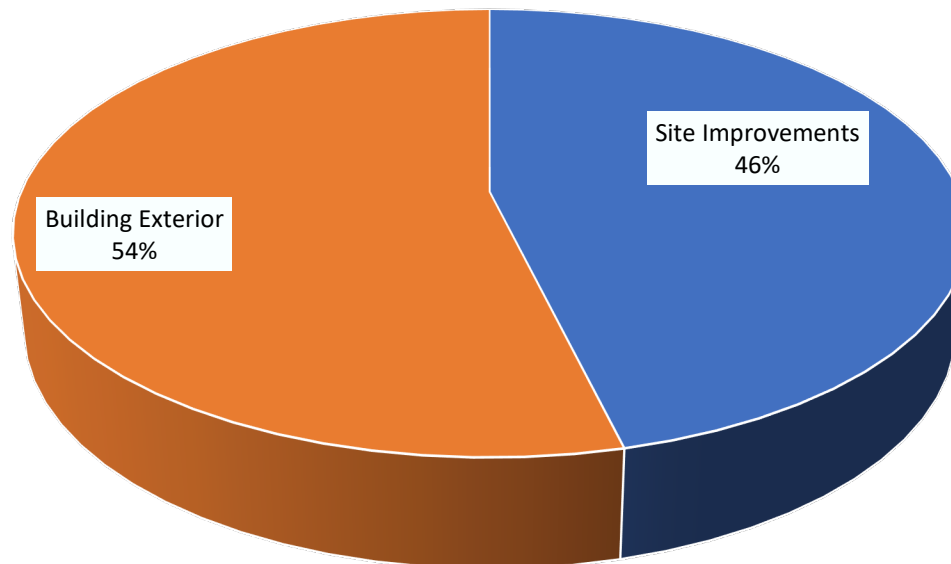
Description	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Site Improvements										
Crack fill, seal coat, stripe asphalt paving					\$24,400					\$24,400
Resurface asphalt paving							\$170,800			
Repair sections of concrete curb and gutter				\$12,500						
Repair sections of concrete flatwork				\$18,750						
Common area drainage improvements										
Common area drainage improvements	\$25,000					\$25,000				
Repair/dredge stormwater pond							\$25,000			
Refurbish entrance signs							\$10,000			
Repair landscape irrigation systems										
Repair landscape lighting systems										
Paint/repair aluminum fencing		\$19,200								
Stain/seal wood fencing - phase 1	\$19,950					\$19,950				
Stain/seal wood fencing - phase 2					\$29,550					\$29,550
Replace wood fencing		\$132,000								
Replace sections of timber retaining walls							\$10,000			
Allocation for long-term retaining wall repairs										\$125,000
Replace mailboxes										\$19,600
Replace portions of site furniture, grill							\$10,000			
Refurbish outdoor cooking area							\$15,000			
Replace outdoor fitness stations										\$10,000
Allocation for buried utility repair										\$15,000
Building Exterior										
Replace building roofs and gutters - phase 1			\$619,500							
Replace building roofs and gutters - phase 2					\$420,000					
Paint/repair shutters, columns, trim, etc.		\$48,000							\$48,000	
Partial siding replacement contingency										\$70,000
Totals	\$44,950	\$199,200	\$619,500	\$31,250	\$473,950	\$44,950	\$240,800	\$0	\$48,000	\$293,550
Totals including inflation:	\$63,406	\$290,826	\$936,107	\$48,874	\$767,180	\$75,307	\$417,544	\$0	\$89,159	\$564,350

EXPENSE SUMMARY



Total over term capital expenditure (un-inflated)	\$2,330,700
Total over term capital expenditure with inflation:	\$3,647,937
Average estimated annual capital expenditure with inflation:	\$182,397
Current Reserve Account Balance	\$183,179
Full Funding Balance	\$702,747
Percent Funded	26.07%

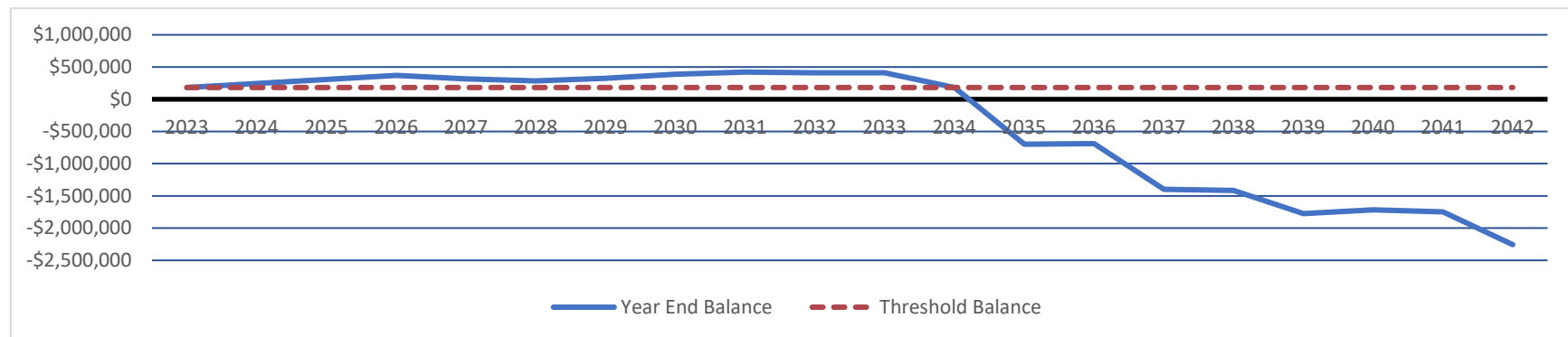
Breakdown of Total Costs by Type



Current Funding Analysis



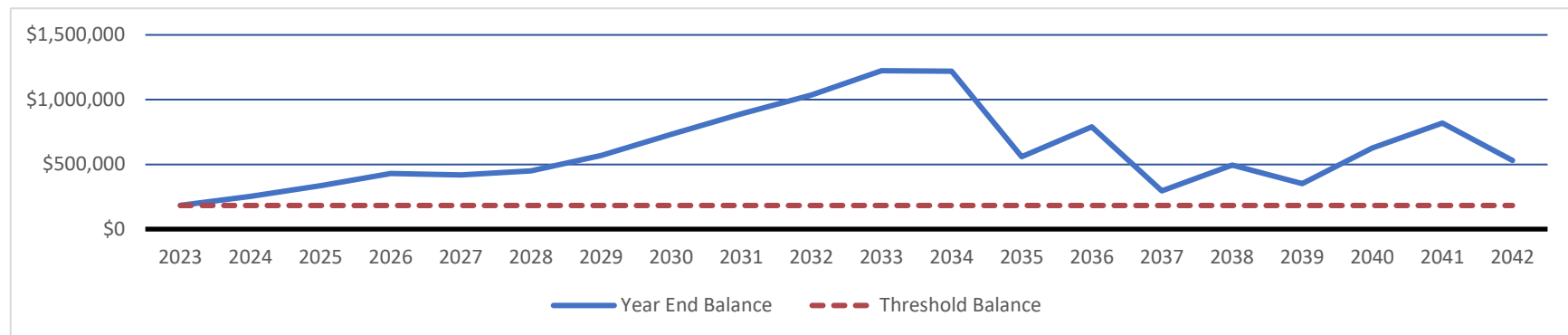
Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2023	\$183,179	\$57,600	\$50.00	\$2,712	\$59,950	\$0	\$183,541
2024	\$183,541	\$57,600	\$50.00	\$3,617	\$0	0	\$244,759
2025	\$244,759	\$57,600	\$50.00	\$4,535	\$0	0	\$306,894
2026	\$306,894	\$57,600	\$50.00	\$5,467	\$0	0	\$369,961
2027	\$369,961	\$57,600	\$50.00	\$4,659	\$116,990	0	\$315,230
2028	\$315,230	\$57,600	\$50.00	\$4,235	\$90,502	0	\$286,563
2029	\$286,563	\$57,600	\$50.00	\$4,794	\$24,585	0	\$324,372
2030	\$324,372	\$57,600	\$50.00	\$5,730	\$0	0	\$387,701
2031	\$387,701	\$57,600	\$50.00	\$6,235	\$29,628	0	\$421,908
2032	\$421,908	\$57,600	\$50.00	\$6,090	\$73,528	0	\$412,070
2033	\$412,070	\$57,600	\$50.00	\$6,094	\$63,406	0	\$412,357
2034	\$412,357	\$57,600	\$50.00	\$2,687	\$290,826	0	\$181,818
2035	\$181,818	\$57,600	\$50.00	\$0	\$936,107	0	-\$696,689
2036	-\$696,689	\$57,600	\$50.00	\$0	\$48,874	0	-\$687,963
2037	-\$687,963	\$57,600	\$50.00	\$0	\$767,180	0	-\$1,397,543
2038	-\$1,397,543	\$57,600	\$50.00	\$0	\$75,307	0	-\$1,415,250
2039	-\$1,415,250	\$57,600	\$50.00	\$0	\$417,544	0	-\$1,775,194
2040	-\$1,775,194	\$57,600	\$50.00	\$0	\$0	0	-\$1,717,594
2041	-\$1,717,594	\$57,600	\$50.00	\$0	\$89,159	0	-\$1,749,153
2042	-\$1,749,153	\$57,600	\$50.00	\$0	\$564,350	0	-\$2,255,903



Funding Alternative 1 - Beginning in 2024, increase by 15% every year through 2034



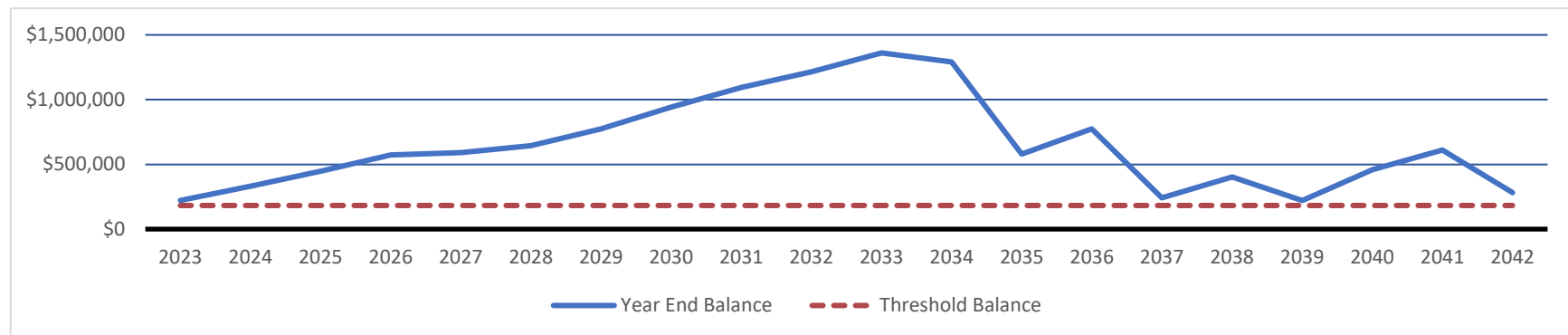
Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2023	\$183,179	\$57,600	\$50.00	\$2,712	\$59,950	\$0	\$183,541
2024	\$183,541	\$66,240	\$57.50	\$3,747	\$0	\$0	\$253,528
2025	\$253,528	\$76,176	\$66.13	\$4,946	\$0	\$0	\$334,650
2026	\$334,650	\$87,602	\$76.04	\$6,334	\$0	\$0	\$428,586
2027	\$428,586	\$100,743	\$87.45	\$6,185	\$116,990	\$0	\$418,524
2028	\$418,524	\$115,854	\$100.57	\$6,658	\$90,502	\$0	\$450,534
2029	\$450,534	\$133,232	\$115.65	\$8,388	\$24,585	\$0	\$567,569
2030	\$567,569	\$153,217	\$133.00	\$10,812	\$0	\$0	\$731,598
2031	\$731,598	\$176,200	\$152.95	\$13,173	\$29,628	\$0	\$891,342
2032	\$891,342	\$202,630	\$175.89	\$15,307	\$73,528	\$0	\$1,035,750
2033	\$1,035,750	\$233,024	\$202.28	\$18,081	\$63,406	\$0	\$1,223,449
2034	\$1,223,449	\$267,978	\$232.62	\$18,009	\$290,826	\$0	\$1,218,609
2035	\$1,218,609	\$267,978	\$232.62	\$8,257	\$936,107	\$0	\$558,737
2036	\$558,737	\$267,978	\$232.62	\$11,668	\$48,874	\$0	\$789,509
2037	\$789,509	\$267,978	\$232.62	\$4,355	\$767,180	\$0	\$294,661
2038	\$294,661	\$267,978	\$232.62	\$7,310	\$75,307	\$0	\$494,642
2039	\$494,642	\$267,978	\$232.62	\$5,176	\$417,544	\$0	\$350,252
2040	\$350,252	\$267,978	\$232.62	\$9,273	\$0	\$0	\$627,503
2041	\$627,503	\$267,978	\$232.62	\$12,095	\$89,159	\$0	\$818,416
2042	\$818,416	\$267,978	\$232.62	\$7,831	\$564,350	\$0	\$529,874



Funding Alternative 2 - Increase to \$96,000 in 2023, then increase by 7% every year through 2036



Year	Starting Balance	Reserve Account Contribution	Average Per Unit/Month	Return on Investments	Repair Expenses	Special Assessments	Year End Balance
2023	\$183,179	\$96,000	\$83.33	\$3,288	\$59,950	\$0	\$222,517
2024	\$222,517	\$102,720	\$89.17	\$4,879	\$0	\$0	\$330,116
2025	\$330,116	\$109,910	\$95.41	\$6,600	\$0	\$0	\$446,627
2026	\$446,627	\$117,604	\$102.09	\$8,463	\$0	\$0	\$572,694
2027	\$572,694	\$125,836	\$109.23	\$8,723	\$116,990	\$0	\$590,264
2028	\$590,264	\$134,645	\$116.88	\$9,516	\$90,502	\$0	\$643,923
2029	\$643,923	\$144,070	\$125.06	\$11,451	\$24,585	\$0	\$774,859
2030	\$774,859	\$154,155	\$133.82	\$13,935	\$0	\$0	\$942,950
2031	\$942,950	\$164,946	\$143.18	\$16,174	\$29,628	\$0	\$1,094,441
2032	\$1,094,441	\$176,492	\$153.20	\$17,961	\$73,528	\$0	\$1,215,366
2033	\$1,215,366	\$188,847	\$163.93	\$20,112	\$63,406	\$0	\$1,360,918
2034	\$1,360,918	\$202,066	\$175.40	\$19,082	\$290,826	\$0	\$1,291,241
2035	\$1,291,241	\$216,210	\$187.68	\$8,570	\$936,107	\$0	\$579,914
2036	\$579,914	\$231,345	\$200.82	\$11,436	\$48,874	\$0	\$773,821
2037	\$773,821	\$231,345	\$200.82	\$3,570	\$767,180	\$0	\$241,556
2038	\$241,556	\$231,345	\$200.82	\$5,964	\$75,307	\$0	\$403,558
2039	\$403,558	\$231,345	\$200.82	\$3,260	\$417,544	\$0	\$220,620
2040	\$220,620	\$231,345	\$200.82	\$6,779	\$0	\$0	\$458,744
2041	\$458,744	\$231,345	\$200.82	\$9,014	\$89,159	\$0	\$609,944
2042	\$609,944	\$231,345	\$200.82	\$4,154	\$564,350	\$0	\$281,093



APPENDIX B: PROJECT PHOTOGRAPHS

Description

General view of asphalt
paving

Photo No.
1



Description

Typical minor cracking

Photo No.
2



Description Typical patched area	
Photo No. 3	

Description Typical concrete curbing	
Photo No. 4	

Description

Typical concrete
sidewalk

Photo No.
5



Description

Typical minor cracking
in sidewalk

Photo No.
6



Description

Typical catch basin in
paved area

Photo No.
7



Description

Typical catch basin in
landscaped area

Photo No.
8



Description

Typical erosion

Photo No.
9



Description

Typical saturated soils
and erosion

Photo No.
10



Description

Typical erosion



Photo No.
11

Description

Recently installed
common area drainage
improvement



Photo No.
12

Description

Typical area with
saturated soils and poor
turf health

Photo No.
13



Description

Stormwater pond

Photo No.
14



Description

Outlet riser structure

Photo No.
15



Description

Significant erosion at
inlet

Photo No.
16



Description

Emergency spillway

Photo No.
17



Description

Small entrance sign at
west end of community

Photo No.
18



Description

Larger entrance sign

Photo No.
19



Description

Small entrance sign at
east end of community

Photo No.
20



Description

Typical landscape light

**Photo No.
21**



Description

Typical warped fence
slat

**Photo No.
22**



Description

Typical warped fence
slat

Photo No.
23



Description

Typical cracked fence
slat

Photo No.
24



Description

Typical section of
recently stained wooden
fencing at north end

Photo No.
25



Description

Timber retaining wall

Photo No.
26



Description

Typical segmental block retaining wall and aluminum fencing

Photo No.
27



Description

Typical mailboxes

Photo No.
28



Description

Typical outdoor
furnishings

**Photo No.
29**



Description

Typical outdoor
furnishings

**Photo No.
30**



Description

Outdoor kitchen area

Photo No.
31



Description

Fitness station

Photo No.
32



Description

Fitness station

Photo No.
33



Description

Fitness station

Photo No.
34



Description

Fitness station

Photo No.
35



Description

Typical front elevation
of townhome unit

Photo No.
36



Description

Typical side elevation of
townhome unit

Photo No.
37



Description

Typical rear elevation of
townhome unit

Photo No.
38



Description

Typical townhome roof

Photo No.
39



Description

Typical townhome roof

Photo No.
40



Description

Typical townhome roof

Photo No.
41



Description

Typical townhome roof

Photo No.
42

