

DRAFT

FULL RESERVE STUDY

***WILLOUGHBY PARK
GREENVILLE, NC***

Prepared for:
***WILLOUGHBY PARK CONDOMINIUM ASSOCIATION
GREENVILLE, NC
&
HOA MANAGEMENT COMPANY, LLC***

Prepared by:
***CRITERIUM – GILES ENGINEERS, INC.
1150 SE MAYNARD ROAD, SUITE 220
CARY, NC 27511
(919) 465-3801***

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1.0 INTRODUCTION

The Willoughby Park Condominium Association authorized Criterium-Giles Engineers to conduct a Reserve Study for the Willoughby Park community located in Greenville, North Carolina. Studies of this nature are important to ensure a community has sufficient funds for long-term, periodic capital expenditure requirements. Anticipating large expenditures over an extended period of time through a structured analysis and scheduling process assists the Association in meeting financial requirements without increasing the service fees above permitted maximums, borrowing the funds, or levying special financial assessments to the home owners.

Typically, a community association has two broad cash requirements: the general operating reserves and the capital repair and replacement reserves. In this report, we will focus on those items falling under the capital repair and replacement reserve criteria. We have projected a capital repair and replacement reserve for twenty (20) years. The first ten years are the most reliable. Such a study should be updated every five years.

This report is structured to analyze components of the community for which the Association is responsible and to assess a useful expected life and useful remaining life to those components. The anticipated scheduled repair or replacement of the component and the anticipated expense for the activity are then analyzed in conjunction with the current capital reserves funding program for the community. Funding program recommendations are made with the objective of limiting substantial cash excesses while minimizing financial burdens that can result from significant cash inadequacies.

This report is intended to be used as a tool to determine reserve fund allocation requirements for the community, to manage future Association obligations, and to inform the community of future financial needs in general. The report that follows has been prepared from the perspective of what an owner of this property would benefit from knowing. Some items, beyond those of immediate concern, may be discussed. Therefore, the report should be read in its entirety in order to fully understand all of the information that has been obtained.

2.0 EXECUTIVE SUMMARY

Willoughby Park is comprised of 204 condominiums housed in 32 buildings in the community. The buildings were constructed in phases between 1987 and 1991 according to Pitt County Real Estate Records. The association has responsibility for the roofing and exterior façade of the condominium buildings, as well as various amenities and site improvements. The most significant site improvements include the private streets/parking, concrete flatwork, fencing, drainage systems and mailbox centers. The association also maintains a swimming pool with associated equipment and furnishings in the community.

The buildings, common areas and grounds are generally in good to fair condition. Based on our evaluation, the current level of funding, while reasonable, does not maintain a positive balance through the term of this study. We have provided two alternatives 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 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:

- Repair, seal and resurface asphalt paved streets
- Replace building roofs

There are, of course, other capital expenditures to be expected over the next twenty years. Those items that will require attention are discussed later in this report. For your convenience, we have prepared the following summary of the condition of the major systems of the property.

PROPERTY SUMMARY			
SYSTEM	CONDITION	ACTIVITY REQUIRED	ANTICIPATED YEAR OF ACTIVITY
SITE			
Asphalt paved streets	G/F	repair/reseal/resurface	2014-2029
Concrete flatwork, curb and gutter	G/F	repair sections	2015-2030
Drainage systems	G/F	repair/improve	2018-2030
Fencing	G/F	replace	2022
Mailboxes	F/P	replace	2014
Entrance sign	G	repair	2019-2029
BUILDING EXTERIOR			
Roofs	G	replace/repair	2028-2030
Exterior doors, trim and stairways	G/F	repair/paint	2014-2033
Swimming pool	G	repair/resurface	2024
Swimming pool pumps and equipment	G	repair/replace components	2017-2033
Pool restrooms, plumbing and electrical	G/F	repair/refurbish	2014-2029

Table 2.1 Property Summary

3.0 PURPOSE & SCOPE

3.1 Purpose

The purpose of this study is to perform a reserve fund analysis and to determine a capital needs plan. It is intended to be used as a tool for the Willoughby Park Condominium Association in determining the allocation requirements into the reserve fund in order to meet future anticipated capital expenditures for the community.

This report forecasts obligations for the community twenty years into the future. It should be noted that events might occur that could have an effect on the underlying component or system useful life assumptions used in this study. Likewise, inevitable market fluctuations can have an impact on component or system replacement and repair costs. Therefore, a study such as this should be updated from time to time, usually on a three to five-year cycle, in order to reflect the most accurate needs and obligations of the community.

3.2 Scope

This study has been performed according to the scope as generally defined by Willoughby Park Condominium Association, Criterium-Giles Engineers Inc., HOA Management Company, LLC Group, 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 an investigation of the buildings and site.

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 a "Baseline Funding" goal by maintaining a positive balance for the term of the study.

The guidelines used to determine which physical components within the community are to be included in the component inventory are based on the following general criteria:

1. The component must be a common element, or otherwise noted to be the responsibility of the Association to replace.
2. The component must have an estimated remaining useful life of twenty years or less. As the site ages, additional components may need to be added.
3. The funding for replacement should be from one source only, not funded from another area of the budget or through a maintenance contract.
4. The cost of replacement should be high enough to make it financially unsound to fund it from the operating budget.

Our reserve study analysis included evaluating the following association property:

- **Buildings:** The association is responsible for maintenance and replacement of the roofing on the condominium buildings. The association is also responsible for maintaining the exterior façade of the buildings.

- **Site and Grounds:** The association is responsible for asphalt paving on private streets/parking and associated concrete sidewalks, drainage systems, fencing and mail kiosks.
- **Amenities:** The association is responsible for maintaining the swimming pool, bathroom building and associated equipment and furnishings.

The above list was obtained from the site inspection and discussions with the management firm prior to the inspection.

This study estimates the funding levels required for maintaining the long-term viability of the facility. Our approach involves:

1. Examining association managed equipment, building and site facilities.
2. Predicting their remaining service life and, approximating how frequently they will require repair or replacement.
3. Estimating repair or replacement costs (in 2013 dollars) for each capital item.
4. Using data developed in Steps 1, 2 and 3 to project Capital Reserve balances for Years 1 through 20.

The statements in this report are opinions about the present condition of the subject community. They are based on visual evidence available during a diligent investigation of all reasonably accessible areas falling under the responsibility of the Association. We did not remove any surface materials, perform any destructive testing, or move any furnishings. This study is not an exhaustive technical evaluation. Such an evaluation would entail a significantly larger scope than this effort. For additional limitations, see Section 8.0.

3.3 Sources of Information

Onsite inspections of the property occurred on the following date:

- September 12, 2013

The following people were interviewed during our study:

- Tasha Laughbaum, Community Manager with HOA Management Company, LLC.

The following documents were made available to us and reviewed:

- Pitt County tax records
- Bylaws and covenants of the association

We based our cost estimates on some or all of the following:

- R.S. Means
- Our data files on similar projects
- Local contractor estimates

For your reference, the following definitions may be helpful:

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 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 of a capacity that is defined as enough for what is required, sufficient, suitable, and/or conforms to standard construction practices.

All ratings are determined by comparison to other buildings of similar age and construction type. Further, some details of workmanship and materials will be examined more closely in higher quality buildings where such details typically become more relevant.

All directions (left, right, rear, etc.), when used, are taken from the viewpoint of an observer standing in front of a building and facing it.

Repair/Replacement Reserves - Non-annual maintenance items that will require significant expenditure over the life of the buildings. Included are items that will reach the end of their estimated useful life during the course of this forecast, or, in the opinion of the investigator, will require attention during that time.

4.0 DESCRIPTION

Willoughby Park is comprised of 204 condominiums housed in 34 buildings in the community. The buildings were constructed in phases between 1987 and 1991 according to Pitt County Real Estate Records. The association has responsibility for the roofing and exterior façade of the condominium buildings, as well as various amenities and site improvements. The most significant site improvements include the private streets/parking, concrete flatwork, fencing, drainage systems and mailbox centers.

The buildings are of wood frame construction on slab-on-grade

5.0 OBSERVATIONS

foundations. Exterior surfaces are primarily comprised of vinyl siding and trim. Exterior doors are of metal skin construction. The building windows are double pane wood and vinyl units.

The building roofs are primarily shingled with asphaltic fiberglass architectural grade shingles.

Site drainage is provided via landscaped swales and catch basins in the paved and landscaped areas. These systems direct water flow offsite.

The swimming pool is surrounded by a concrete deck and chain link fencing. The swimming pool facility includes a small pump house building and a bathroom building with two restrooms.

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

Site and Grounds

The roads and parking areas throughout the community are asphalt paved. The asphalt appeared to generally be in fair to poor condition with sections requiring full depth repair in the near term.

We observed several areas of cracking and depressions beginning to form in the asphalt. The cracking and depressions were generally more significant in the area of the community to the south of the pool and entrance drive. We also observed many areas with significant alligatoring (cracking), depressions and pot-holes in the asphalt paving that will require repair in the immediate term. The total amount of paving in these areas was measured to be approximately 500 square yards. We have allocated funds for full depth repairs of these sections of paving beginning in 2014.

Note that it is likely that additional sections of cracking and depressions will develop and we have allocated funds for full depth repairs on a 5 year cycle. Full depth repairs would include saw cut and removal of sections of asphalt around the deteriorated areas. The sub-grade should be repaired and tamped as needed and a new 3" to 4" thick layer of asphalt should be installed.

Additionally, we recommend the application of an oil resistant sealant to all asphalt paved surfaces on an approximately 5 year cycle. At this same time, all cracks should be properly filled, patched, and sealed. This cycle is scheduled to begin in 2014.

If full depth repairs, sealant and crack repairs are accomplished in the interim, we anticipate the asphalt paving in the community to have an estimated remaining useful life of approximately five to ten years. We have allocated funds to resurface the asphalt paving on the south side of the community in 2019 and the north side of the community in 2024. This allocation would include installing a new 1.5" to 2" thick wearing layer of asphalt over the entire parking area. Note that during resurfacing, areas of significant cracking/alligatoring or depressions will require full depth

repair as part of the resurfacing project. We have included an allocation of funds to complete the full depth repairs as needed.

The concrete curbing along the paved areas generally appeared to be in good to fair condition. We noted limited sections of significant cracking and upheaval in the concrete curbing. It is likely that due to differential settlement, cracking will continue to develop and sections of the concrete curb will require repair on an approximately 4 year cycle. We have allocated funds to repair approximately 2.5% of the total amount of concrete curbing every 5 years, beginning in 2015.

Concrete sidewalks are located in front of the buildings and along the parking areas. Concrete patios are located at the rear of each building. The deck around the swimming pool and the dumpster pads are also comprised of concrete. Elevated concrete balconies serve the front entry of the 2nd floor units. The concrete sidewalks and flatwork generally appeared to be in good to fair condition. We noted limited sections of significant upheaval in the concrete sidewalks and flatwork and minor cracking in the elevated concrete balconies on the front of the buildings. We have allocated funds for periodic replacement of concrete surfaces as required and have assumed that 2.5% of the surfaces will require replacement every 5 years beginning in 2015.

Stormwater on the site drains via surface flow or via landscaped swales toward catch basins in the paved and landscaped areas. Inlet grates in the roadway gutters and the grassed areas collect stormwater that flows in an underground system. The site is predominately flat and the drainage systems generally appeared to be in good to fair condition. However, we did observe several areas of bare soils in the community. The buildings do not include roofing gutters. Minor areas of erosion and bare soils were noted adjacent to the buildings below the edge of the roofs.

We have allocated funds to repair/improve the drainage systems on a 4 year cycle beginning in 2018. Improvements would likely include retrenching swales, cleaning/repairing underground stormwater piping, installing new french drains and other drainage/erosion control measures. As a general maintenance recommendation to reduce soil erosion we advise maintaining adequate soil stabilizing ground cover vegetation throughout the common areas.

A section of chain link fencing has been installed on adjacent to the swimming pool area. The fencing appeared to be in good to fair condition. We estimate that the chain link fencing will require significant repairs or replacement in the next 5 to 10 years. We have allocated funds to replace the fencing in 2022. Vinyl fencing is installed around the dumpster pads in the community, we do not anticipate the vinyl fencing will require significant repair over the next 20 years.

The association is responsible for maintaining the mailbox centers throughout the community. The mailbox centers appeared to be fair to poor condition. Significant surface rust and corrosion was noted on most of the mailbox units and bases. We have allocated funds for their

replacement in 2014.

A small entrance sign is located at the entrance of the community. The sign includes a stucco/EIFS finish with raised painted lettering. The sign generally appeared to be in good condition. We have allocated funds to repair the entrance sign on a 10 year cycle beginning in 2019.

Common Building Exteriors

The buildings in the community are of wood framed construction. The buildings are primarily clad in vinyl siding. Trim components primarily consist of vinyl and aluminum. Windows are of double pane construction. Front entry doors are of metal skin construction.

The vinyl siding and trim components were reportedly installed in approximately 2008. The vinyl siding and trim components generally appeared to be in good condition and have expected useful lives beyond the term of this study. However, minor repairs will likely be required, which we have assumed would be funded from an annual operating budget.

Painting of exterior doors and painted trim on the condominium buildings will also be required over the term. We have allocated funds for miscellaneous repairs to the siding and trim and to paint the exterior doors and trim on a seven year cycle beginning in 2019. The exteriors doors and painted trim of the pool buildings and storage room buildings should be painted in conjunction with the condominium buildings.

The 2nd floor units of each building are served by a painted metal framed exterior stairway with concrete treads. The metal stairways varied in condition. Approximately ½ of the stairways appeared to have been recently painted and were in good condition. The remaining stairways varied in condition, several were observed to have flaking paint and minor corrosion developing on the metal surfaces. We have allocated funds to paint and repair approximately half of the metal stairways every 5 years beginning in 2014.

The association is responsible for painting the exterior windows; however it is not responsible for full replacement. The association has developed a routine program of assisting individual unit owners with replacing the original wood windows with vinyl replacement windows. The vinyl replacement windows will not require painting over the term. As additional wood windows are replaced with vinyl windows, the exterior painting expenses will be reduced.

The predominant pitched roof surfaces over the buildings are covered in architectural grade asphaltic fiberglass shingles. Roof surfacing is applied over plywood roof sheathing, and appears to be in good condition and recently replaced. Typically, this type of roofing surface will last approximately 20-25 years. We strongly recommend that any re-roofing project closely follow procedures outlined by the National Roofing Contractors Association's *Roofing and Waterproofing Manual*, Fourth Edition. A re-roofing sequence should include removal of the existing

roofing material, replacement of any inadequate roof sheathing, replacement of any damaged flashing, and replacement of drip edge components. The roofing throughout the community appeared to be in good condition. The shingles were reportedly replaced in phases between 2005 and 2009. We have allocated funds for future roof replacement in 2 phases, with ½ of the roofs being replaced in 2028 and the remaining roofs to be replaced in 2030. Roof replacement estimates include the swimming pool buildings, storage room building and all of the condo buildings.

Amenities

The community includes an in-ground swimming pool. The pool area includes a concrete deck with outdoor furnishings. A small building housing the pool pumps and filtration equipment is located adjacent to the pool. A small building housing two restrooms is also located adjacent to the swimming pool.

The pool surface generally appeared to be in good condition. The surface appears to have been recently re-coated. The coping around the edge of the pool also appears to have been recently repaired. The pool surface will likely require repairs and re-coating on an approximately 12 year cycle. The repairs would likely include crack repairs, removal of existing coating and recoating/plastering the pool surface. We have allocated funds for the pool surface repairs and recoating beginning in 2024.

The swimming pool is served by two 2-horsepower pumps and two Triton sand filters. We anticipate that the pool pumps, motors, filters and equipment will require significant repair on an approximately 3 year cycle and we have allocated funds for repairs beginning in 2017. We observed surface rust and corrosion developing on the entrance doors to the pump room; we have allocated funds to replace the door on a 12 year cycle beginning in 2014. We also observed significant surface rusting on the electrical breaker panel in the pump room and we have allocated funds for its replacement in 2014.

The swimming pool includes a men's and women's restroom. The restrooms each include a sink and toilet and painted block walls. A small shower fixture is also provided. The restroom fixtures appeared to be in fair condition and of original construction. We noted surface rust developing on some of the fixtures. We have allocated funds to replace the fixtures on a 15 year cycle beginning in 2014.

6.0 RESERVE FUND ANALYSIS

Using software developed by Criterium Engineers and KPMG Peat Marwick, we have analyzed capital reserves draw-down for the projected capital expenditures to determine the amount needed. The following is a projected reserve fund analysis for non-annual items as discussed in the report. This projection takes into consideration a reasonable return on invested moneys and inflation. Please review this thoroughly and let us know of any changes that may be desired.

The intent of this reserve fund projection is to help the Association develop a reserve fund to provide for anticipated repair or replacements of various system components during the next twenty years.

The capital items listed are those that are typically the responsibility of the Association and are derived from a list provided the Association with several items added as a result of the inspection. However, association by-laws vary, and therefore, which components are the responsibilities of the owner and which are the responsibilities of the Association can vary. The Association should confirm that the items listed should be financed by the reserve fund.

This projection provides the following:

- An input sheet that defines all the criteria used for the financial alternatives, including the assumed inflation rate of 3% annually and rate of return on deposited reserve funds of 2.0% annually.
- A table that lists anticipated replacement and/or repair items complete with estimated remaining life expectancies, projected costs of replacement and/or repair, a frequency in years of when these items require replacement and/or repair, and a projection based on this frequency.
- A table and graph that represent end of year balances versus capital expenditures based on your current funding program and reserve balances, and alternatives to your current program. The provided graphs illustrate what effects the funding methods will have over the presented twenty-year period versus the anticipated capital expenditures.
- Note that based on our developed list of capital items and taking inflation into account; the current funding level is not adequate.
- The Association should bear in mind that unanticipated expenditures can always arise and maintenance of a significant reserve fund balance can be viewed as a way to avoid special assessments.

We have included alternatives to your current reserve funding program and recommend that the board adopt an alternative that best reflects the objectives of the community. In summary they are as follows:

Current Reserve Funding Rate: \$26,250 per year (Approx. \$10.72 per unit per month)

Current Reserve Balance: \$ 184,301 (Projected January 2014 Balance).

- **Alternative 1:** Beginning in 2014 increase the reserve contribution to \$50,723 per year (approx. \$20.72 per unit per month). Then increase the reserve contribution as a step function every other year for the next 10 years. The amount of the step increase should be \$11,016 per year (increase of \$4.50 per unit per month). This alternative is projected maintain a positive balance through the term of this study.

- **Alternative 2:** Beginning in 2014 increase the reserve contribution to \$70,307 per year (approx. \$28.72 per unit per month). Then, increase the reserve contribution amount by 3% annually over the next ten years. This alternative is projected maintain a positive balance through the term of this study.
- **Alternative 3:** Maintain the current reserve contribution rate. Apply two special assessments. The first should be in the amount of \$204,000 (\$1,000 per unit) and collected in 2019. The second should be in the amount of \$775,200 (\$3,800 per unit) and collected in 2028. **Note we do not endorse this alternative as special assessments are not a preferred method of funding reserves.**

Please note that the reserve fund study does not include typical annual maintenance items. Our assumption is that you already have an annual operating budget that provides for these typical, repetitive items. This includes miscellaneous repairs, lawn and grounds maintenance, routine minor painting, etc. We have focused on those significant, non-annual items where careful financial planning is important.

Finally, please note that the estimates we have developed are based on 2013 dollars. Our reserve fund study does adjust for an estimated annual inflation and a given return on investment assuming that the indicated fund balances are maintained.

7.0 CONCLUSION

The three alternatives provided above will provide sufficient funding to meet estimated capital expenditures during the next twenty years. Further detail of the reserve fund analysis is provided in Appendix A.

8.0 LIMITATIONS

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 the Willoughby Park Homeowners Association. Criterium-Giles Engineers Inc. does 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 and hold Criterium-Giles Engineers Inc. harmless for any damages, losses, or expenses they may incur as a result of its use.

This study is limited to the visual observations made during our inspection. We did not remove surface materials, conduct any destructive or invasive testing, move furnishings or equipment, or undertake any digging or excavation. 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 the investigation. We did not undertake to completely assess the stability of the buildings or the underlying foundation soil since this effort would require excavation and destructive testing. Likewise, this is not a seismic assessment.

We did not investigate the following areas:

- Buried utilities or infrastructure
- Concealed structural members or systems
- Unit interiors

We do not render an opinion on uninvestigated portions of the community.

We did not perform any computations or other engineering analysis as part of this evaluation, nor did we conduct a comprehensive code compliance investigation. 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 Criterium-Giles Engineers team working on this reserve study are not members of, or otherwise associated with the association. Criterium-Giles Engineers has disclosed any other involvement with the association that could result in conflicts of interest.

Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues, will be deemed reliable by Criterium-Giles 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. Criterium-Giles Engineers is not aware of any additional material issues which, if not disclosed, would cause a distortion of the association's situation.

In our Reserve Fund Analysis, we have provided estimated costs. These costs are based on our general knowledge of building systems and the contracting and construction industry. When appropriate, we have relied on standard sources, such as Means Building Construction Cost Data, to develop estimates. However, for items that we have developed costs (e.g.: structural repairs), no standard guide for developing such costs exists. Actual costs can vary significantly, based on the availability of qualified contractors to do the work, as well as many other variables. We cannot be responsible for the specific cost estimates provided.

We have performed no design work as part of this study, nor have we obtained competitive quotations or estimates from contractors as this also is beyond the scope of the project. The actual cost to remedy deficiencies and deferred maintenance items that we have identified may vary significantly from estimates and competitive quotations from contractors.

If you have any questions about this study or the reserve fund analysis, please feel free to contact us. Thank-you for the opportunity to be of assistance to you.

Respectfully submitted,

Robert C. Giles, PE, RS
President

Criterion-Giles Engineers Inc.

Kevin R. Giles
Project Manager
Criterion-Giles Engineers Inc

Appendix A: RESERVE FUND PROJECTIONS

Itemized Worksheet

Capital Item To Be Replaced	Quantity	Unit cost	Reserve Requirement (*)	Beginning Balance	Frequency (yrs**)	Remaining Life (yrs)	Reserve Funding Monthly	Reserve Funding Required Annual	Full Funding Balance	Information Source
Site										
Sealcoat and stripe asphalt paving	17,300	SY	\$1.50	\$25,950.00						
Full depth repairs of sections of paving	500	SY	\$35.00	\$17,500.00						
Asphalt overlay phase 1 (South Area)	10,200	SY	\$11.50	\$117,300.00						
Asphalt overlay phase 2 (North Area)	7,100	SY	\$11.50	\$81,650.00						
Repair sections of concrete curb and gutter	120	LF	\$30.00	\$3,600.00						
Repair sections of concrete flatwork	140	SY	\$55.00	\$7,700.00						
Drainage improvements	1	EA	\$12,000.00	\$12,000.00						
Replace pool fencing	550	LF	\$35.00	\$19,250.00						
Repair entrance sign	1	LS	\$2,000.00	\$2,000.00						
Replace mailbox kiosks	17	EA	\$1,500.00	\$25,500.00						
Building Exterior										
Replace roofs phase 1	950	SQ	\$255.00	\$242,250.00						
Replace roofs phase 2	950	SQ	\$255.00	\$242,250.00						
Repair and paint metal stairways	17	EA	\$1,000.00	\$17,000.00						
Paint building exterior trim and components	34	EA	\$1,200.00	\$40,800.00						
Building Interior										
Mechanical										
Amenities										
Repair and resurface swimming pool	1,800	SF	\$14.00	\$25,200.00						
Repair pool pumps and filtration equipment	1	LS	\$3,500.00	\$3,500.00						
Refurbish pool restroom fixtures	1	LS	\$3,500.00	\$3,500.00						
Replace electrical panel in pool pump room	1	EA	\$1,500.00	\$1,500.00						
Replace pool pump room door	1	EA	\$2,000.00	\$2,000.00						
Other										
			Totals	\$890,450.00	\$184,301.59		\$6,181.71	\$74,180.50	\$422,018.81	
			Total Over Term	\$1,244,800.00						

* Costs are typically 10%±

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

Annual Expense By Year

	Year: Year Number:	2014 1	2015 2	2016 3	2017 4	2018 5	2019 6	2020 7	2021 8	2022 9	2023 10	2024 11	2025 12	2026 13	2027 14	2028 15	2029 16
Site																	
Sealcoat and stripe asphalt paving		25,950	0	0	0	0	25,950	0	0	0	0	25,950	0	0	0	0	25,950
Full depth repairs of sections of paving		17,500	0	0	0	0	17,500	0	0	0	0	17,500	0	0	0	0	0
Asphalt overlay phase 1 (South Area)		0	0	0	0	0	117,300	0	0	0	0	0	0	0	0	0	0
Asphalt overlay phase 2 (North Area)		0	0	0	0	0	0	0	0	0	0	81,650	0	0	0	0	0
Repair sections of concrete curb and gutter		0	3,600	0	0	0	0	3,600	0	0	0	0	3,600	0	0	0	0
Repair sections of concrete flatwork		0	7,700	0	0	0	0	7,700	0	0	0	0	7,700	0	0	0	0
Drainage improvements		0	0	0	0	12,000	0	0	0	12,000	0	0	0	12,000	0	0	0
Replace pool fencing		0	0	0	0	0	0	0	0	19,250	0	0	0	0	0	0	0
Repair entrance sign		0	0	0	0	0	2,000	0	0	0	0	0	0	0	0	0	2,000
Replace mailbox kiosks		25,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Building Exterior																	
Replace roofs phase 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	242,250	0
Replace roofs phase 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	242,250	0
Repair and paint metal stairways		17,000	0	0	0	0	17,000	0	0	0	0	17,000	0	0	0	0	17,000
Paint building exterior trim and components		0	0	0	0	0	40,800	0	0	0	0	0	0	40,800	0	0	0
Building Interior																	
Mechanical																	
Amenities																	
Repair and resurface swimming pool		0	0	0	0	0	0	0	0	0	0	25,200	0	0	0	0	0
Repair pool pumps and filtration equipment		0	0	0	3,500	0	0	0	3,500	0	0	0	3,500	0	0	0	3,500
Refurbish pool restroom fixtures		3,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,500
Replace electrical panel in pool pump room		1,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replace pool pump room door		2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,000
Other																	
Total Costs		92,950	11,300	0	3,500	12,000	220,550	11,300	3,500	31,250	0	167,300	14,800	52,800	0	484,500	53,950
Total Costs Adjusted For 3% Inflation		92,950	11,639	0	3,825	13,506	255,678	13,493	4,305	39,587	0	224,837	20,487	75,280	0	732,850	84,052

Annual Expense By Year

	Year: Year Number:	2030 17	2031 18	2032 19	2033 20
Site					
Sealcoat and stripe asphalt paving		0	0	0	0
Full depth repairs of sections of paving		0	0	0	0
Asphalt overlay phase 1 (South Area)		0	0	0	0
Asphalt overlay phase 2 (North Area)		0	0	0	0
Repair sections of concrete curb and gutter		3,600	0	0	0
Repair sections of concrete flatwork		7,700	0	0	0
Drainage improvements		12,000	0	0	0
Replace pool fencing		0	0	0	0
Repair entrance sign		0	0	0	0
Replace mailbox kiosks		0	0	0	0
Building Exterior					
Replace roofs phase 1		0	0	0	0
Replace roofs phase 2		0	0	0	0
Repair and paint metal stairways		0	0	0	0
Paint building exterior trim and components		0	0	0	40,800
Building Interior					
Mechanical					
Amenities					
Repair and resurface swimming pool		0	0	0	0
Repair pool pumps and filtration equipment		0	0	0	3,500
Refurbish pool restroom fixtures		0	0	0	0
Replace electrical panel in pool pump room		0	0	0	0
Replace pool pump room door		0	0	0	0
Other					
Total Costs		23,300	0	0	44,300
Total Costs Adjusted For 3% Inflation		37,390	0	0	77,680

Reserve Study Worksheet

General Information:

1 Organization: **Willoughby Park Condominiums**
2 Address: **W. Victoria Court**
Greenville, NC

3	Number of Units	204
4	Age of Building (in years)	25
5a	Study Period (in years)	20
5b	Normal Fiscal Year starts:	January 1, 2014
5c	Partial Fiscal Year starts:	January 1, 2014
5d	Partial Year Length:	12 months
6	Site Inspection Date	September 12, 2013
7	Reserve Funds at start	\$184,302
8	Rate of Return on invested Reserve Funds (%)	2.0%
9	Inflation Rate (%)	3.0%

10 Current Funding Levels

Existing Funding Levels				
	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
Reserve Fund Contribution.....	\$2,188	\$26,250	\$10.72	\$128.68
	Years Out	Total Annual	Per Unit	
Planned Special Assessment.....	0	\$0	\$0	
Balance Computed.....	(\$961,132)			

11 Alternative Reserve Fund Contribution

Alternative 1 Level Funding with Steps				
	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
Monthly Amount, (First Year).....	\$4,227	\$50,723	\$20.72	\$248.64
Monthly Amount, (Last Year).....	\$8,817	\$105,803	\$43.22	\$518.64
Balance Required Final Year.....	\$84,378			
Special Assessments:	Years Out	Total/Year	Per Unit	
First Assessment.....	0	\$0	\$0	
Second Assessment.....	0	\$0	\$0	
Balance Computed.....	\$412,961			

Alternative 2 Escalating Funding at 3% per Year				
	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
Monthly Amount, (First Year).....	\$5,859	\$70,307	\$28.72	\$344.64
Monthly Amount, (Last Year).....	\$7,874	\$94,486	\$38.60	\$463.17
Balance Required Final Year.....	\$84,378			
Base Escalation %.....	3.00%			
Special Assessments:	Years Out	Total/Year	Per Unit	
First Assessment.....	0	\$0	\$0	
Second Assessment.....	0	\$0	\$0	
Balance Computed.....	\$399,954			

Alternative 3 Escalating Funding with Special Assessments				
	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
Monthly Amount, (First Year).....	\$2,188	\$26,250	\$10.72	\$128.68
Monthly Amount, (Last Year).....	\$2,188	\$26,250	\$10.72	\$128.68
Balance Required Final Year.....	\$84,378			
Base Escalation %.....	0.00%			
Special Assessments:	Years Out	Total/Year	Per Unit	
First Assessment.....	6	Jan 2019	\$204,000	\$1,000
Second Assessment.....	14	Jan 2027	\$775,200	\$3,800
Balance Computed.....	\$50,753			

Reserve Fund Worksheet

Fiscal Years:																
Normal: Jan 2014	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Partial: Jan 2014 (12 months)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Existing Funding Levels

Beginning Reserve Fund Balance:	\$184,302	\$119,954	\$137,256	\$166,776	\$192,986	\$209,844	(\$19,584)	(\$6,827)	\$15,421	\$2,126	\$28,944	(\$169,643)	(\$163,880)	(\$212,910)	(\$186,660)	(\$893,260)
Revenue:	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250
Special Assessments:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Investment Earnings:	\$2,352	\$2,691	\$3,270	\$3,784	\$4,115	\$0	\$0	\$302	\$42	\$568	\$0	\$0	\$0	\$0	\$0	\$0
Capital Expenditures:	\$92,950	\$11,639	\$0	\$3,825	\$13,506	\$255,678	\$13,493	\$4,305	\$39,587	\$0	\$224,837	\$20,487	\$75,280	\$0	\$732,850	\$84,052
Ending Reserve Balance:	\$119,954	\$137,256	\$166,776	\$192,986	\$209,844	(\$19,584)	(\$6,827)	\$15,421	\$2,126	\$28,944	(\$169,643)	(\$163,880)	(\$212,910)	(\$186,660)	(\$893,260)	(\$951,062)

Alternative 1, Level Funding with Steps

Average Cap. Expenditure \$84,378

Beginning Reserve Fund Balance:	\$184,302	\$144,916	\$187,679	\$254,406	\$318,567	\$385,371	\$206,497	\$282,310	\$369,012	\$432,696	\$538,032	\$427,377	\$522,947	\$564,539	\$683,748	\$57,835
Revenue:	\$50,723	\$50,723	\$61,739	\$61,739	\$72,755	\$72,755	\$83,771	\$83,771	\$94,787	\$94,787	\$105,803	\$105,803	\$105,803	\$105,803	\$105,803	\$105,803
Special Assessment #1:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special Assessment #2:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Investment Earnings:	\$2,841	\$3,680	\$4,988	\$6,246	\$7,556	\$4,049	\$5,535	\$7,236	\$8,484	\$10,550	\$8,380	\$10,254	\$11,069	\$13,407	\$1,134	\$1,592
Capital Expenditures:	\$92,950	\$11,639	\$0	\$3,825	\$13,506	\$255,678	\$13,493	\$4,305	\$39,587	\$0	\$224,837	\$20,487	\$75,280	\$0	\$732,850	\$84,052
Ending Reserve Balance:	\$144,916	\$187,679	\$254,406	\$318,567	\$385,371	\$206,497	\$282,310	\$369,012	\$432,696	\$538,032	\$427,377	\$522,947	\$564,539	\$683,748	\$57,835	\$81,177

Alternative 2, Escalating Funding at 3% per Year

Beginning Reserve Fund Balance:	\$184,302	\$164,891	\$230,181	\$310,865	\$391,544	\$466,312	\$297,981	\$375,807	\$467,130	\$526,938	\$631,045	\$510,708	\$596,402	\$627,920	\$736,854	\$100,460
Revenue:	\$70,307	\$72,416	\$74,588	\$76,826	\$79,131	\$81,505	\$83,950	\$86,468	\$89,062	\$91,734	\$94,486	\$94,486	\$94,486	\$94,486	\$94,486	\$94,486
Special Assessment #1:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special Assessment #2:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Investment Earnings:	\$3,233	\$4,513	\$6,095	\$7,677	\$9,143	\$5,843	\$7,369	\$9,159	\$10,332	\$12,373	\$10,014	\$11,694	\$12,312	\$14,448	\$1,970	\$2,218
Capital Expenditures:	\$92,950	\$11,639	\$0	\$3,825	\$13,506	\$255,678	\$13,493	\$4,305	\$39,587	\$0	\$224,837	\$20,487	\$75,280	\$0	\$732,850	\$84,052
Ending Reserve Balance:	\$164,891	\$230,181	\$310,865	\$391,544	\$466,312	\$297,981	\$375,807	\$467,130	\$526,938	\$631,045	\$510,708	\$596,402	\$627,920	\$736,854	\$100,460	\$113,112

Alternative 3, Escalating Funding with Special Assessments

Beginning Reserve Fund Balance:	\$184,302	\$119,954	\$137,256	\$166,776	\$192,986	\$209,845	\$188,105	\$204,880	\$231,362	\$222,386	\$253,609	\$56,122	\$63,123	\$14,375	\$816,638	\$112,239
Revenue:	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250	\$26,250
Special Assessment #1:	\$0	\$0	\$0	\$0	\$0	\$204,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special Assessment #2:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$775,200	\$0	\$0
Investment Earnings:	\$2,352	\$2,691	\$3,270	\$3,784	\$4,115	\$3,688	\$4,017	\$4,537	\$4,361	\$4,973	\$1,100	\$1,238	\$282	\$813	\$2,201	\$1,089
Capital Expenditures:	\$92,950	\$11,639	\$0	\$3,825	\$13,506	\$255,678	\$13,493	\$4,305	\$39,587	\$0	\$224,837	\$20,487	\$75,280	\$0	\$732,850	\$84,052
Ending Reserve Balance:	\$119,954	\$137,256	\$166,776	\$192,986	\$209,845	\$188,105	\$204,880	\$231,362	\$222,386	\$253,609	\$56,122	\$63,123	\$14,375	\$816,638	\$112,239	\$55,525

Reserve Fund Worksheet

Fiscal Years:				
Normal: Jan 2014	2030	2031	2032	2033
Partial: Jan 2014 (12 months)	17	18	19	20

Existing Funding Levels

Beginning Reserve Fund Balance:	(\$951,062)	(\$962,202)	(\$935,952)	(\$909,702)
Revenue:	\$26,250	\$26,250	\$26,250	\$26,250
Special Assessments:	\$0	\$0	\$0	\$0
Investment Earnings:	\$0	\$0	\$0	\$0
Capital Expenditures:	\$37,390	\$0	\$0	\$77,680
Ending Reserve Balance:	(\$962,202)	(\$935,952)	(\$909,702)	(\$961,132)

Alternative 1, Level Funding w

Beginning Reserve Fund Balance:	\$81,177	\$152,582	\$263,552	\$376,742
Revenue:	\$105,803	\$105,803	\$105,803	\$105,803
Special Assessment #1:	\$0	\$0	\$0	\$0
Special Assessment #2:	\$0	\$0	\$0	\$0
Investment Earnings:	\$2,992	\$5,168	\$7,387	\$8,097
Capital Expenditures:	\$37,390	\$0	\$0	\$77,680
Ending Reserve Balance:	\$152,582	\$263,552	\$376,742	\$412,961

Alternative 2, Escalating Fundi

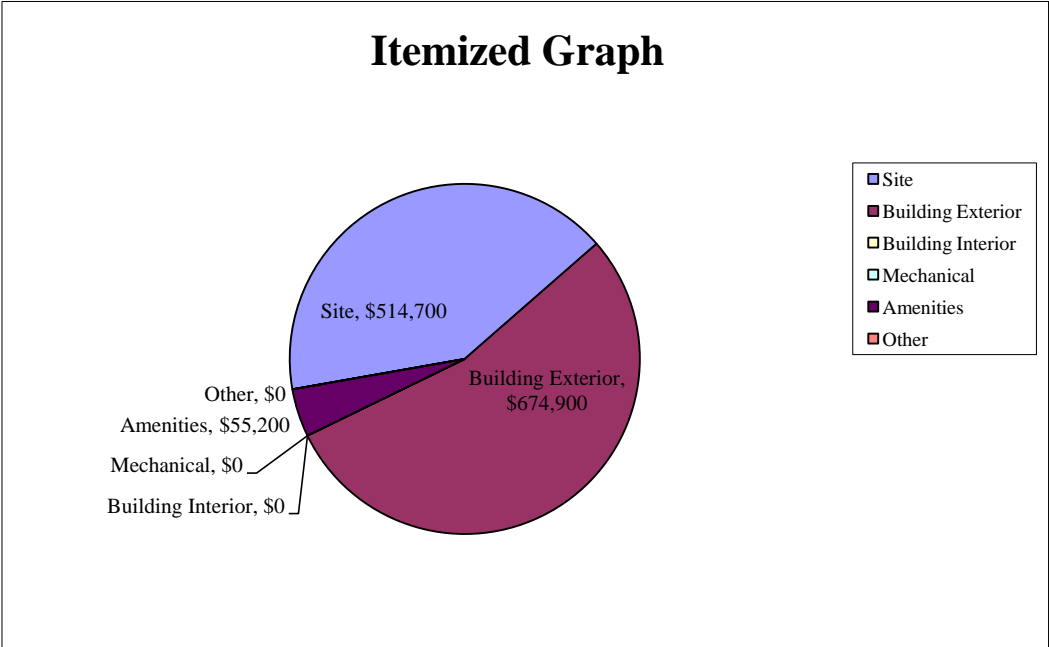
Beginning Reserve Fund Balance:	\$113,112	\$173,612	\$273,461	\$375,306
Revenue:	\$94,486	\$94,486	\$94,486	\$94,486
Special Assessment #1:	\$0	\$0	\$0	\$0
Special Assessment #2:	\$0	\$0	\$0	\$0
Investment Earnings:	\$3,404	\$5,362	\$7,359	\$7,842
Capital Expenditures:	\$37,390	\$0	\$0	\$77,680
Ending Reserve Balance:	\$173,612	\$273,461	\$375,306	\$399,954

Alternative 3, Escalating Fundi

Beginning Reserve Fund Balance:	\$55,525	\$45,274	\$72,954	\$101,188
Revenue:	\$26,250	\$26,250	\$26,250	\$26,250
Special Assessment #1:	\$0	\$0	\$0	\$0
Special Assessment #2:	\$0	\$0	\$0	\$0
Investment Earnings:	\$888	\$1,430	\$1,984	\$995
Capital Expenditures:	\$37,390	\$0	\$0	\$77,680
Ending Reserve Balance:	\$45,274	\$72,954	\$101,188	\$50,753

Itemized Graph

Categories	Totals
Site	\$514,700
Building Exterior	\$674,900
Building Interior	\$0
Mechanical	\$0
Amenities	\$55,200
Other	\$0
Total	\$1,244,800



Itemized Funding

Categories	Reserve Requirement	Beginning Balance	Balance Requiring Funding	Monthly Reserve Funding Required	Annual Reserve Funding Required	Full Funding Balance	Percent Funded
Site	\$514,700	\$103,037	\$411,663	\$2,799	\$33,590	\$235,937	
Building Exterior	\$674,900	\$75,991	\$598,909	\$3,101	\$37,215	\$174,007	
Building Interior	\$0	\$0	\$0	\$0	\$0	\$0	
Mechanical	\$0	\$0	\$0	\$0	\$0	\$0	
Amenities	\$55,200	\$5,273	\$49,927	\$281	\$3,376	\$12,075	
Other	\$0	\$0	\$0	\$0	\$0	\$0	
Totals	\$1,244,800	\$184,302	\$1,060,498	\$6,182	\$74,180	\$422,019	43.7%

Existing Funding Levels

Year	Year Number	Beginning Reserve Fund Balance	Fee Revenue	Special Assessments	Investment Earnings	Capital Expenditures	Ending Balance
2014	1	\$184,302	\$26,250	\$0	\$2,352	\$92,950	\$119,954
2015	2	\$119,954	\$26,250	\$0	\$2,691	\$11,639	\$137,256
2016	3	\$137,256	\$26,250	\$0	\$3,270	\$0	\$166,776
2017	4	\$166,776	\$26,250	\$0	\$3,784	\$3,825	\$192,986
2018	5	\$192,986	\$26,250	\$0	\$4,115	\$13,506	\$209,844
2019	6	\$209,844	\$26,250	\$0	\$0	\$255,678	(\$19,584)
2020	7	(\$19,584)	\$26,250	\$0	\$0	\$13,493	(\$6,827)
2021	8	(\$6,827)	\$26,250	\$0	\$302	\$4,305	\$15,421
2022	9	\$15,421	\$26,250	\$0	\$42	\$39,587	\$2,126
2023	10	\$2,126	\$26,250	\$0	\$568	\$0	\$28,944
2024	11	\$28,944	\$26,250	\$0	\$0	\$224,837	(\$169,643)
2025	12	(\$169,643)	\$26,250	\$0	\$0	\$20,487	(\$163,880)
2026	13	(\$163,880)	\$26,250	\$0	\$0	\$75,280	(\$212,910)
2027	14	(\$212,910)	\$26,250	\$0	\$0	\$0	(\$186,660)
2028	15	(\$186,660)	\$26,250	\$0	\$0	\$732,850	(\$893,260)
2029	16	(\$893,260)	\$26,250	\$0	\$0	\$84,052	(\$951,062)
2030	17	(\$951,062)	\$26,250	\$0	\$0	\$37,390	(\$962,202)
2031	18	(\$962,202)	\$26,250	\$0	\$0	\$0	(\$935,952)
2032	19	(\$935,952)	\$26,250	\$0	\$0	\$0	(\$909,702)
2033	20	(\$909,702)	\$26,250	\$0	\$0	\$77,680	(\$961,132)

Existing Funding Levels

Beginning Balance as of start of year beginning Jan 2014: \$184,302

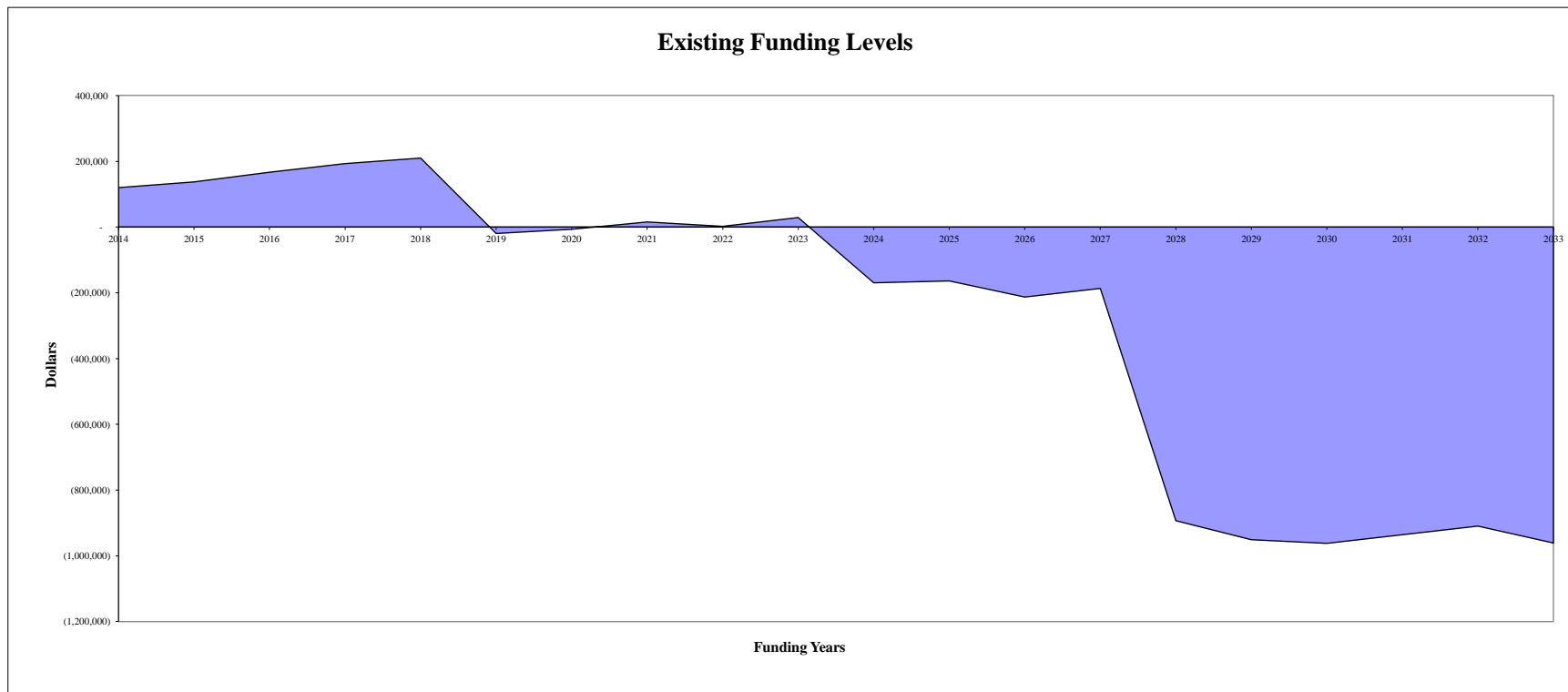
CONTRIBUTIONS	
AMOUNT	
\$26,250.00	per year
\$128.68	per unit per year
\$2,187.50	per month
\$10.72	per unit per month

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

Projected Annual Funding and Expenditures:

Year:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Year Number:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
End of Year Reserve Fund Balance	119,954	137,256	166,776	192,986	209,844	(19,584)	(6,827)	15,421	2,126	28,944	(169,643)	(163,880)	(212,910)	(186,660)	(893,260)
Capital Expenditures:	92,950	11,639	-	3,825	13,506	255,678	13,493	4,305	39,587	-	224,837	20,487	75,280	-	732,850
Total Revenue (all sources)	28,602	28,941	29,520	30,034	30,365	26,250	26,250	26,552	26,292	26,818	26,250	26,250	26,250	26,250	26,250

Year:	2029	2030	2031	2032	2033
Year Number:	16	17	18	19	20
End of Year Reserve Fund Balance	(951,062)	(962,202)	(935,952)	(909,702)	(961,132)
Capital Expenditures:	84,052	37,390	-	-	77,680
Total Revenue (all sources)	26,250	26,250	26,250	26,250	26,250



Alternative 1: Level Funding with Steps

Year	Year Number	Beginning Reserve Fund Balance	Fee Revenue	Special Assessments 1	Special Assessments 2	Investment Earnings	Capital Expenditures	Ending Balance
2014	1	\$184,302	\$50,723	\$0	\$0	\$2,841	\$92,950	\$144,916
2015	2	\$144,916	\$50,723	\$0	\$0	\$3,680	\$11,639	\$187,679
2016	3	\$187,679	\$61,739	\$0	\$0	\$4,988	\$0	\$254,406
2017	4	\$254,406	\$61,739	\$0	\$0	\$6,246	\$3,825	\$318,567
2018	5	\$318,567	\$72,755	\$0	\$0	\$7,556	\$13,506	\$385,371
2019	6	\$385,371	\$72,755	\$0	\$0	\$4,049	\$255,678	\$206,497
2020	7	\$206,497	\$83,771	\$0	\$0	\$5,535	\$13,493	\$282,310
2021	8	\$282,310	\$83,771	\$0	\$0	\$7,236	\$4,305	\$369,012
2022	9	\$369,012	\$94,787	\$0	\$0	\$8,484	\$39,587	\$432,696
2023	10	\$432,696	\$94,787	\$0	\$0	\$10,550	\$0	\$538,032
2024	11	\$538,032	\$105,803	\$0	\$0	\$8,380	\$224,837	\$427,377
2025	12	\$427,377	\$105,803	\$0	\$0	\$10,254	\$20,487	\$522,947
2026	13	\$522,947	\$105,803	\$0	\$0	\$11,069	\$75,280	\$564,539
2027	14	\$564,539	\$105,803	\$0	\$0	\$13,407	\$0	\$683,748
2028	15	\$683,748	\$105,803	\$0	\$0	\$1,134	\$732,850	\$57,835
2029	16	\$57,835	\$105,803	\$0	\$0	\$1,592	\$84,052	\$81,177
2030	17	\$81,177	\$105,803	\$0	\$0	\$2,992	\$37,390	\$152,582
2031	18	\$152,582	\$105,803	\$0	\$0	\$5,168	\$0	\$263,552
2032	19	\$263,552	\$105,803	\$0	\$0	\$7,387	\$0	\$376,742
2033	20	\$376,742	\$105,803	\$0	\$0	\$8,097	\$77,680	\$412,961

Alternative 1: Level Funding with Steps

Beginning Balance as of start of year beginning Jan 2014: \$184,302

CONTRIBUTIONS	
FIRST YR	LAST YR
\$50,722.56	\$105,802.56
\$248.64	\$518.64
\$4,226.88	\$8,816.88
\$20.72	\$43.22
	per year
	per unit per year
	per month
	per unit per month

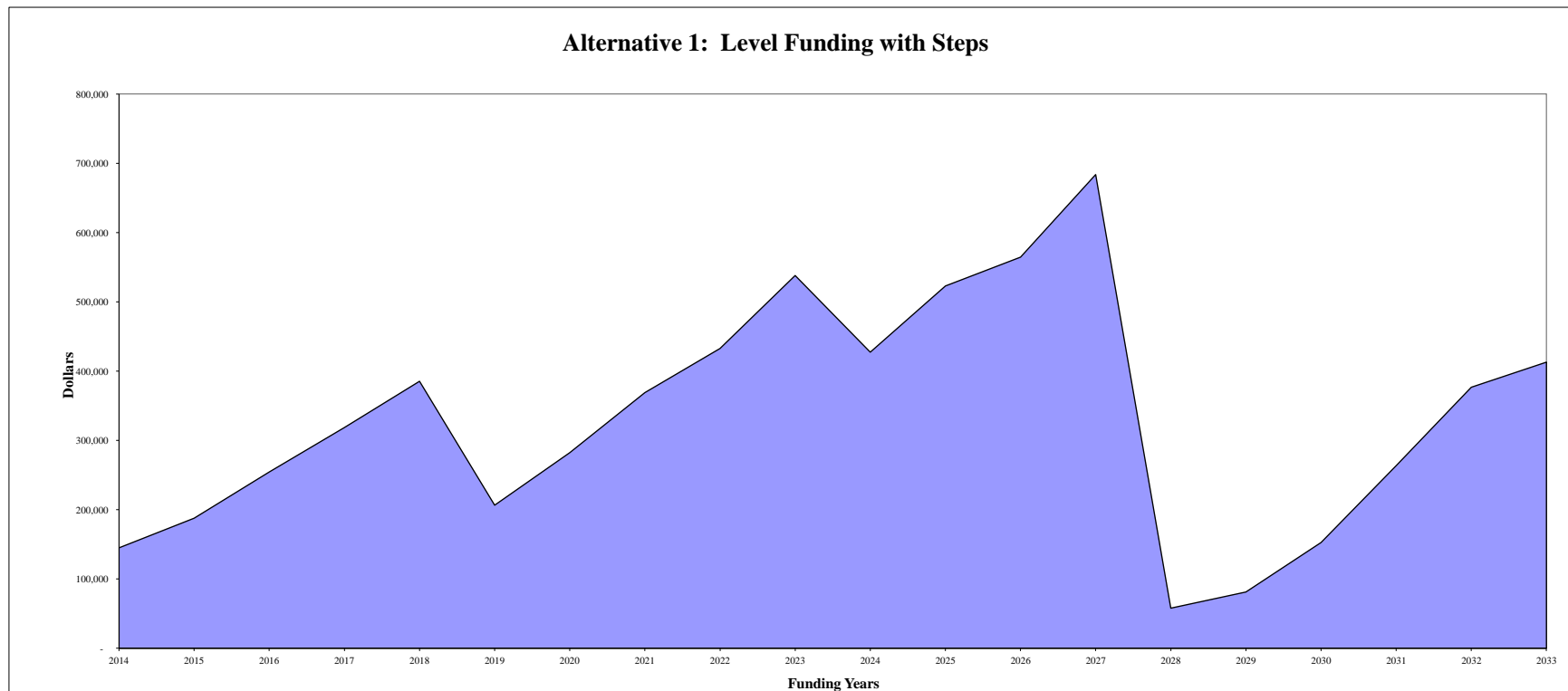
SPECIAL ASSESSMENTS				
First Second	Per Year Per Year	Totals		\$0 \$0
		\$0 \$0	Per Unit Per Unit	

SETTINGS (analyzed by unit/month)			
Starting amount (\$):	20.72		
Increment by (\$):	4.5		
Every	2	year	
Frequency:	5	time	

Projected Annual Funding and Expenditures:

Year:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Year Number:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
End of Year Reserve Fund Balance	144,916	187,679	254,406	318,567	385,371	206,497	282,310	369,012	432,696	538,032	427,377	522,947	564,539	683,748	57,835
Capital Expenditures:	92,950	11,639	-	3,825	13,506	255,678	13,493	4,305	39,587	-	224,837	20,487	75,280	-	732,850
Total Revenue (all sources)	53,564	54,403	66,727	67,985	80,311	76,804	89,306	91,006	103,271	105,336	114,183	116,056	116,872	119,209	106,937

Year:	2029	2030	2031	2032	2033
Year Number:	16	17	18	19	20
End of Year Reserve Fund Balance	81,177	152,582	263,552	376,742	412,961
Capital Expenditures:	84,052	37,390	-	-	77,680
Total Revenue (all sources)	107,394	108,794	110,970	113,190	113,900



Alternative 2: Escalating Funding at 3% per Year

Year	Year Number	Beginning Reserve Fund Balance	Fee Revenue	Special Assessments 1	Special Assessments 2	Investment Earnings	Capital Expenditures	Ending Balance
2014	1	\$184,302	\$70,307	\$0	\$0	\$3,233	\$92,950	\$164,891
2015	2	\$164,891	\$72,416	\$0	\$0	\$4,513	\$11,639	\$230,181
2016	3	\$230,181	\$74,588	\$0	\$0	\$6,095	\$0	\$310,865
2017	4	\$310,865	\$76,826	\$0	\$0	\$7,677	\$3,825	\$391,544
2018	5	\$391,544	\$79,131	\$0	\$0	\$9,143	\$13,506	\$466,312
2019	6	\$466,312	\$81,505	\$0	\$0	\$5,843	\$255,678	\$297,981
2020	7	\$297,981	\$83,950	\$0	\$0	\$7,369	\$13,493	\$375,807
2021	8	\$375,807	\$86,468	\$0	\$0	\$9,159	\$4,305	\$467,130
2022	9	\$467,130	\$89,062	\$0	\$0	\$10,332	\$39,587	\$526,938
2023	10	\$526,938	\$91,734	\$0	\$0	\$12,373	\$0	\$631,045
2024	11	\$631,045	\$94,486	\$0	\$0	\$10,014	\$224,837	\$510,708
2025	12	\$510,708	\$94,486	\$0	\$0	\$11,694	\$20,487	\$596,402
2026	13	\$596,402	\$94,486	\$0	\$0	\$12,312	\$75,280	\$627,920
2027	14	\$627,920	\$94,486	\$0	\$0	\$14,448	\$0	\$736,854
2028	15	\$736,854	\$94,486	\$0	\$0	\$1,970	\$732,850	\$100,460
2029	16	\$100,460	\$94,486	\$0	\$0	\$2,218	\$84,052	\$113,112
2030	17	\$113,112	\$94,486	\$0	\$0	\$3,404	\$37,390	\$173,612
2031	18	\$173,612	\$94,486	\$0	\$0	\$5,362	\$0	\$273,461
2032	19	\$273,461	\$94,486	\$0	\$0	\$7,359	\$0	\$375,306
2033	20	\$375,306	\$94,486	\$0	\$0	\$7,842	\$77,680	\$399,954

Alternative 2: Escalating Funding at 3% per Year

Beginning Balance as of start of year beginning Jan 2014: \$184,302

CONTRIBUTIONS	
FIRST YR	LAST YR
\$70,306.56	\$94,486.14
\$344.64	\$463.17
\$5,858.88	\$7,873.84
\$28.72	\$38.60
	per year
	per unit per year
	per month
	per unit per month

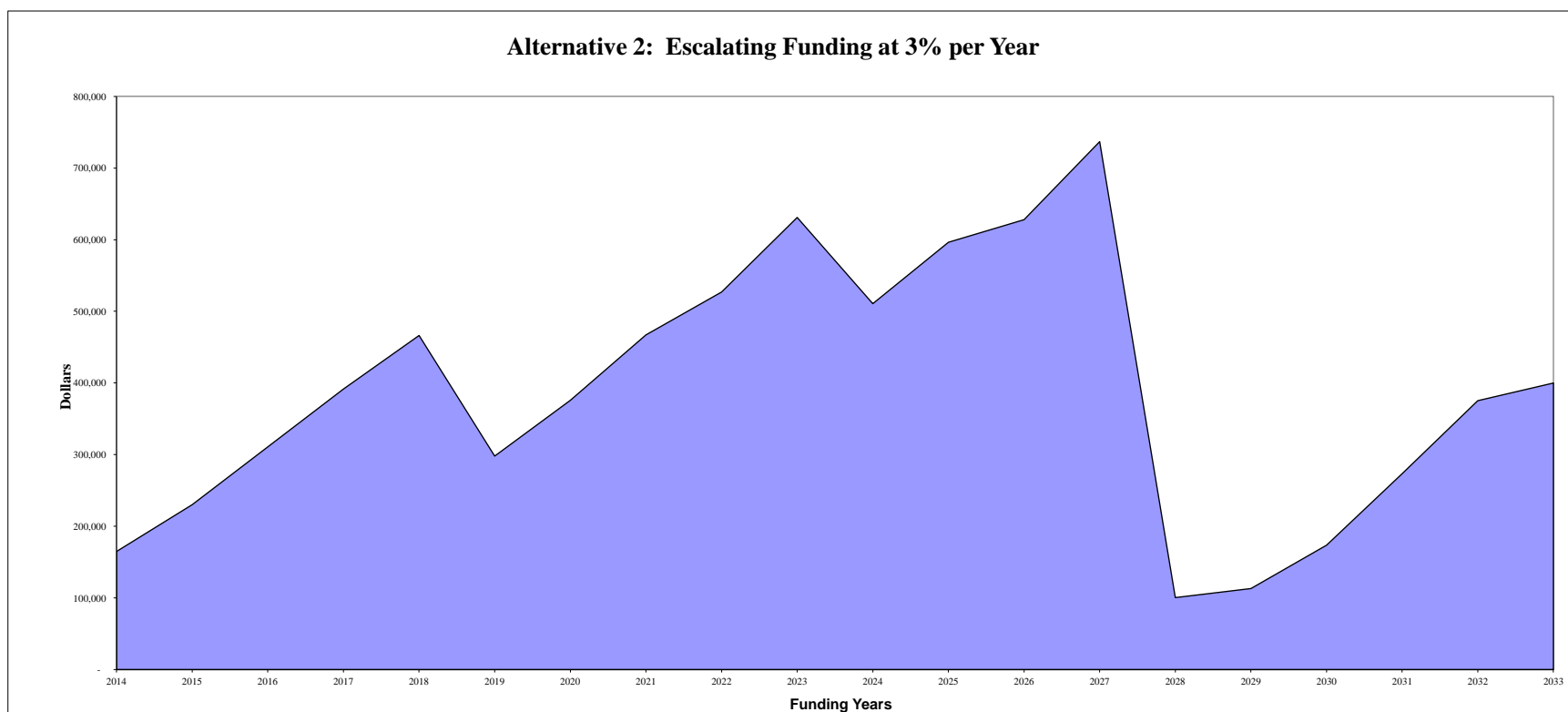
SPECIAL ASSESSMENTS				
First Second	Totals			
	Per Year	\$0	Per Unit	\$0
	Per Year	\$0	Per Unit	\$0

SETTINGS (analyzed by unit/month)			
Starting amount (\$):	28.72		
Increment by (%):	3		
Step (%):			
Every	1	year	
Frequency:	10	time	

Projected Annual Funding and Expenditures:

Year:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Year Number:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
End of Year Reserve Fund Balance	164,891	230,181	310,865	391,544	466,312	297,981	375,807	467,130	526,938	631,045	510,708	596,402	627,920	736,854	100,460
Capital Expenditures:	92,950	11,639	-	3,825	13,506	255,678	13,493	4,305	39,587	-	224,837	20,487	75,280	-	732,850
Total Revenue (all sources)	73,540	76,929	80,684	84,503	88,274	87,347	91,318	95,628	99,394	104,108	104,500	106,180	106,798	108,934	96,456

Year:	2029	2030	2031	2032	2033
Year Number:	16	17	18	19	20
End of Year Reserve Fund Balance	113,112	173,612	273,461	375,306	399,954
Capital Expenditures:	84,052	37,390	-	-	77,680
Total Revenue (all sources)	96,704	97,890	99,848	101,845	102,328



Alternative 3: Escalating Funding with Special Assessments

Year	Year Number	Beginning Reserve Fund Balance	Fee Revenue	Special Assessments 1	Special Assessments 2	Investment Earnings	Capital Expenditures	Ending Balance
2014	1	\$184,302	\$26,250	\$0	\$0	\$2,352	\$92,950	\$119,954
2015	2	\$119,954	\$26,250	\$0	\$0	\$2,691	\$11,639	\$137,256
2016	3	\$137,256	\$26,250	\$0	\$0	\$3,270	\$0	\$166,776
2017	4	\$166,776	\$26,250	\$0	\$0	\$3,784	\$3,825	\$192,986
2018	5	\$192,986	\$26,250	\$0	\$0	\$4,115	\$13,506	\$209,845
2019	6	\$209,845	\$26,250	\$204,000	\$0	\$3,688	\$255,678	\$188,105
2020	7	\$188,105	\$26,250	\$0	\$0	\$4,017	\$13,493	\$204,880
2021	8	\$204,880	\$26,250	\$0	\$0	\$4,537	\$4,305	\$231,362
2022	9	\$231,362	\$26,250	\$0	\$0	\$4,361	\$39,587	\$222,386
2023	10	\$222,386	\$26,250	\$0	\$0	\$4,973	\$0	\$253,609
2024	11	\$253,609	\$26,250	\$0	\$0	\$1,100	\$224,837	\$56,122
2025	12	\$56,122	\$26,250	\$0	\$0	\$1,238	\$20,487	\$63,123
2026	13	\$63,123	\$26,250	\$0	\$0	\$282	\$75,280	\$14,375
2027	14	\$14,375	\$26,250	\$0	\$775,200	\$813	\$0	\$816,638
2028	15	\$816,638	\$26,250	\$0	\$0	\$2,201	\$732,850	\$112,239
2029	16	\$112,239	\$26,250	\$0	\$0	\$1,089	\$84,052	\$55,525
2030	17	\$55,525	\$26,250	\$0	\$0	\$888	\$37,390	\$45,274
2031	18	\$45,274	\$26,250	\$0	\$0	\$1,430	\$0	\$72,954
2032	19	\$72,954	\$26,250	\$0	\$0	\$1,984	\$0	\$101,188
2033	20	\$101,188	\$26,250	\$0	\$0	\$995	\$77,680	\$50,753

Alternative 3: Escalating Funding with Special Assessments

Beginning Balance as of start of year beginning Jan 2014: \$184,302

CONTRIBUTIONS		
FIRST YR	LAST YR	
\$26,250.12	\$26,250.12	per year
\$128.68	\$128.68	per unit per year
\$2,187.51	\$2,187.51	per month
\$10.72	\$10.72	per unit per month

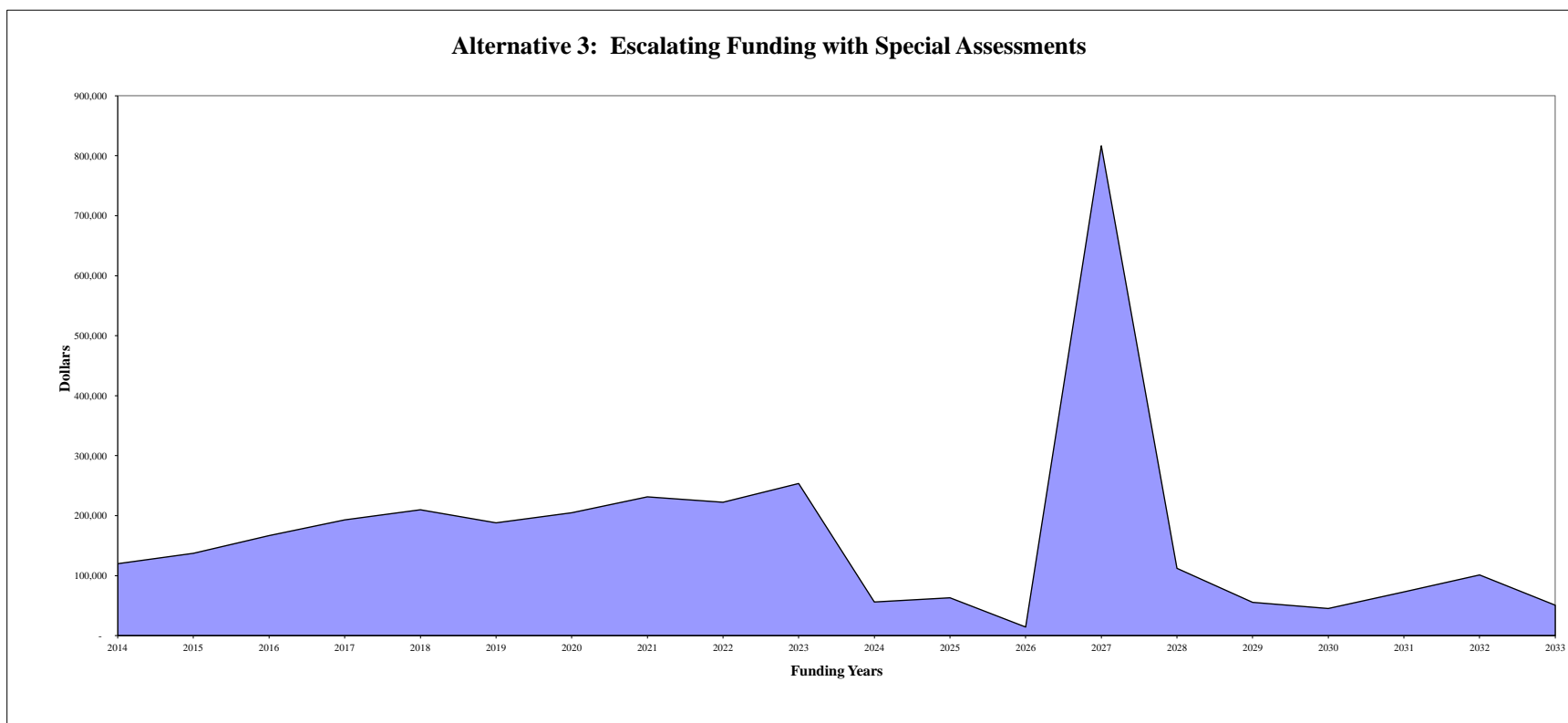
SPECIAL ASSESSMENTS				
		Totals		
First Jan 2019	Per Year	\$204,000	Per Unit	\$1,000
Second Jan 2027	Per Year	\$775,200	Per Unit	\$3,800

SETTINGS (analyzed by unit/month)		
Starting amount (\$):	10.72309	
Increment by (%):	0	
Step (%):	0	
Every	3	year
Frequency:	3	time

Projected Annual Funding and Expenditures:

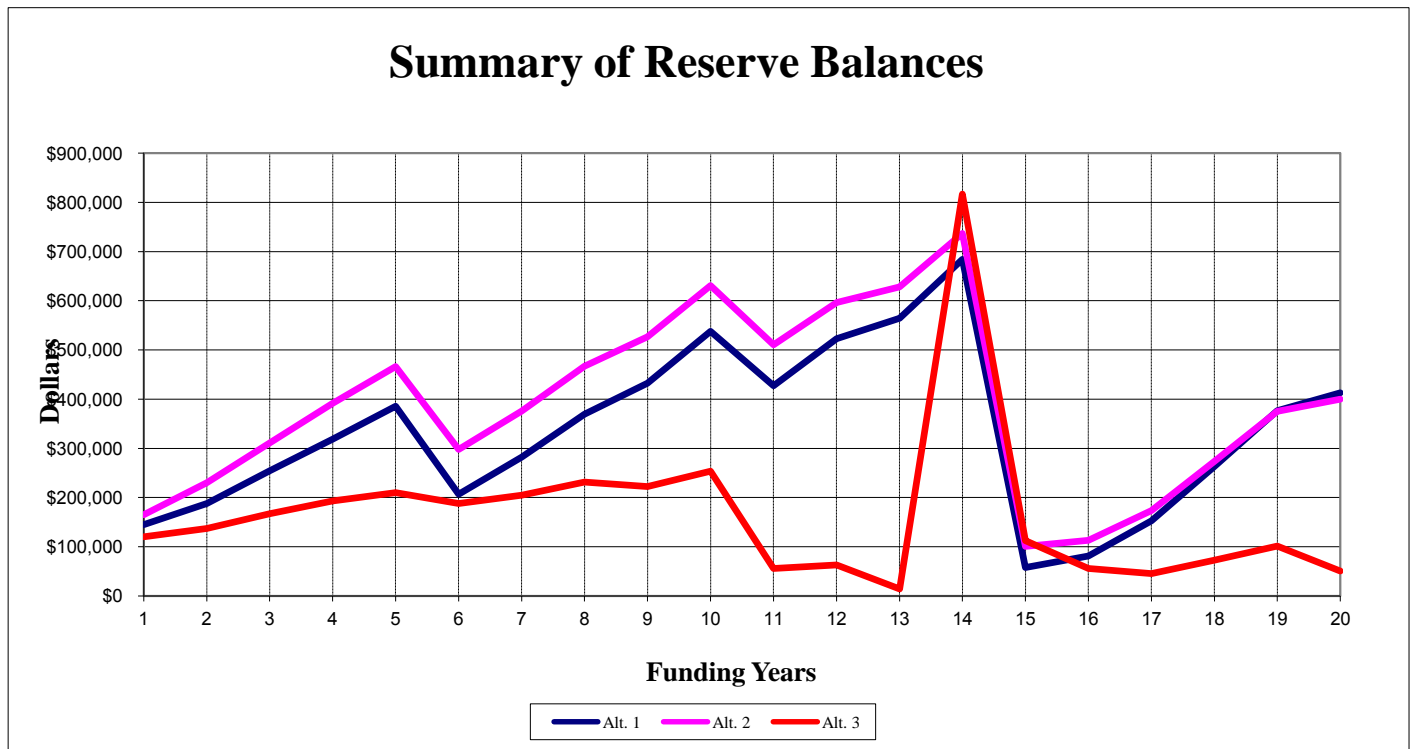
Year:	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Year Number:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
End of Year Reserve Fund Balance	119,954	137,256	166,776	192,986	209,845	188,105	204,880	231,362	222,386	253,609	56,122	63,123	14,375	816,638	112,239
Capital Expenditures:	92,950	11,639	-	3,825	13,506	255,678	13,493	4,305	39,587	-	224,837	20,487	75,280	-	732,850
Total Revenue (all sources)	28,602	28,941	29,520	30,034	30,365	233,938	30,267	30,787	30,611	31,223	27,351	27,488	26,532	802,263	28,451

Year:	2029	2030	2031	2032	2033
Year Number:	16	17	18	19	20
End of Year Reserve Fund Balance	55,525	45,274	72,954	101,188	50,753
Capital Expenditures:	84,052	37,390	-	-	77,680
Total Revenue (all sources)	27,339	27,138	27,681	28,234	27,245



Summary of Reserve Balances

<u>Year</u>	<u>Year Number</u>	<u>Yearly Expenditures</u>	<u>Alt. 1</u>	<u>Alt. 2</u>	<u>Alt. 3</u>
2014	1	\$92,950	\$144,916	\$164,891	\$119,954
2015	2	\$11,639	\$187,679	\$230,181	\$137,256
2016	3	\$0	\$254,406	\$310,865	\$166,776
2017	4	\$3,825	\$318,567	\$391,544	\$192,986
2018	5	\$13,506	\$385,371	\$466,312	\$209,845
2019	6	\$255,678	\$206,497	\$297,981	\$188,105
2020	7	\$13,493	\$282,310	\$375,807	\$204,880
2021	8	\$4,305	\$369,012	\$467,130	\$231,362
2022	9	\$39,587	\$432,696	\$526,938	\$222,386
2023	10	\$0	\$538,032	\$631,045	\$253,609
2024	11	\$224,837	\$427,377	\$510,708	\$56,122
2025	12	\$20,487	\$522,947	\$596,402	\$63,123
2026	13	\$75,280	\$564,539	\$627,920	\$14,375
2027	14	\$0	\$683,748	\$736,854	\$816,638
2028	15	\$732,850	\$57,835	\$100,460	\$112,239
2029	16	\$84,052	\$81,177	\$113,112	\$55,525
2030	17	\$37,390	\$152,582	\$173,612	\$45,274
2031	18	\$0	\$263,552	\$273,461	\$72,954
2032	19	\$0	\$376,742	\$375,306	\$101,188
2033	20	\$77,680	\$412,961	\$399,954	\$50,753



Appendix B: PROJECT PHOTOGRAPHS

Location:
Willoughby Park
Greenville, NC

Photo Taken by:
Kevin R. Giles

Date:
09/12/13



Description:
General view of
community.

Photo Number
1



Description:
Cracking and
alligatoring
observed in
sections of paving.

Photo Number
2

Location:
Willoughby Park
Greenville, NC

Photo Taken by:
Kevin R. Giles

Date:
09/12/13



Description:

Pot hole observed in paving, requiring full depth repair in near term.

Photo Number

3



Description:

Significant alligatoring and cracking observed in sections of the paving.

Photo Number

4

Location:
Willoughby Park
Greenville, NC

Photo Taken by:
Kevin R. Giles

Date:
09/12/13

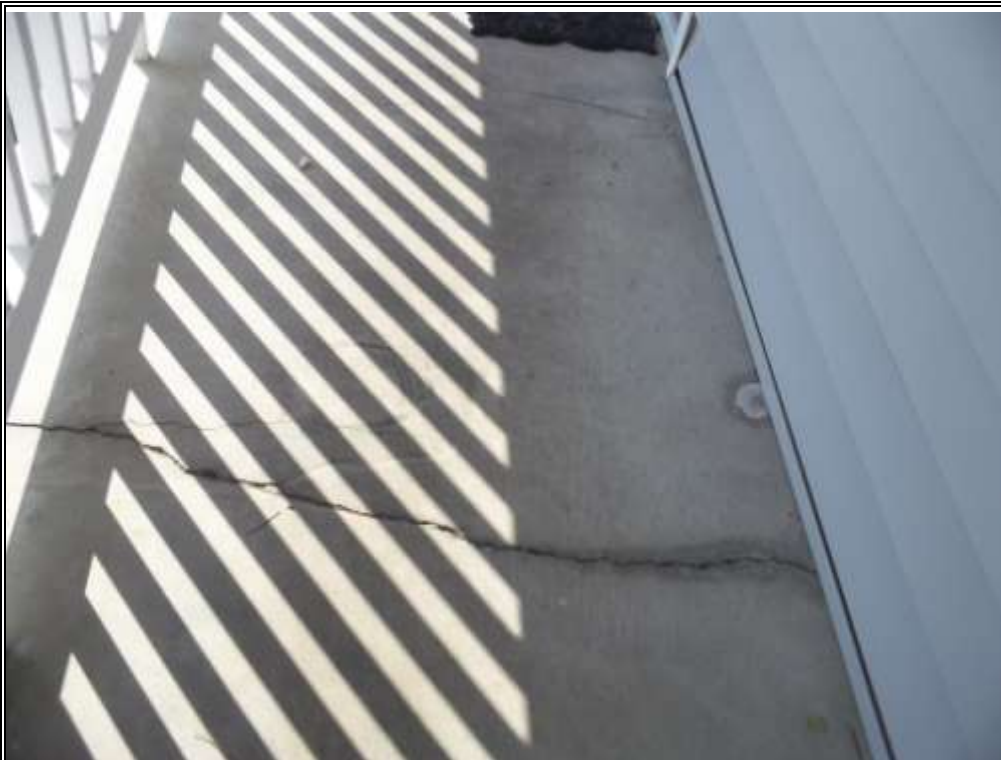


Description:

Cracking and deterioration noted in sections of concrete curbing.

Photo Number

5



Description:

Cracks developing in elevated concrete balconies on the front of the buildings.

Photo Number

6

Location:
Willoughby Park
Greenville, NC

Photo Taken by:
Kevin R. Giles

Date:
09/12/13



Description:
Cracks developing
in sidewalks.

Photo Number
7



Description:
Bare
soils/inadequate
ground cover
noted in some
areas around
buildings.

Photo Number
8

Location:
Willoughby Park
Greenville, NC

Photo Taken by:
Kevin R. Giles

Date:
09/12/13



Description:
Rust and deterioration noted on mailbox kiosk posts.

Photo Number
9



Description:
Chain link fencing in pool area.

Photo Number
10

Location:
Willoughby Park
Greenville, NC

Photo Taken by:
Kevin R. Giles

Date:
09/12/13



Description:
Entrance sign.

Photo Number
11



Description:
Typical building
front view, roofs,
siding, and trim.

Photo Number
12

Location:
Willoughby Park
Greenville, NC

Photo Taken by:
Kevin R. Giles

Date:
09/12/13



Description:
Typical rear view
of buildings,
siding and trim.

Photo Number
13



Description:
Flaking paint on
stairway structure.

Photo Number
14

Location:
Willoughby Park
Greenville, NC

Photo Taken by:
Kevin R. Giles

Date:
09/12/13



Description:
Stairway in good
condition and
appears to be
recently painted.

Photo Number
15



Description:
Storage room
building.

Photo Number
16

Location:
Willoughby Park
Greenville, NC

Photo Taken by:
Kevin R. Giles

Date:
09/12/13



Description:
Swimming pool.

Photo Number
17



Description:
Pool pump and
filtration
equipment.

Photo Number
18

Location:
Willoughby Park
Greenville, NC

Photo Taken by:
Kevin R. Giles

Date:
09/12/13



Description:

Surface rust noted
on electrical panel
in pump room.

Photo Number
19



Description:

Restroom fixtures.

Photo Number
20