

**RESERVE STUDY LEVEL II
UPDATE WITH VISUAL SITE
INSPECTION**

Prepared for:

**WANDERMERE ESTATES
HOMEOWNER'S ASSOCIATION**

Prepared by:



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CONTENTS

1.0	INTRODUCTION	1
2.0	EXECUTIVE SUMMARY	2
3.0	PURPOSE & SCOPE.....	3
3.1	PURPOSE	3
3.2	SCOPE	3
3.3	SOURCES OF INFORMATION	4
3.4	STANDARDS OF REFERENCE	5
4.0	DESCRIPTION	5
5.0	OBSERVATIONS	6
6.0	RESERVE FUND ANALYSIS	11
7.0	CONCLUSION	12
8.0	LIMITATIONS	12
APPENDIX A: RESERVE FUND PROJECTIONS		
APPENDIX B: PROJECT INVENTORY		
APPENDIX C: PROJECT PHOTOGRAPHS		
APPENDIX D: PROFESSIONAL QUALIFICATIONS		

1.0 INTRODUCTION

Wandermere Estates Homeowner's Association, through Eric Lundin, manager, authorized Criterium – Pfaff Engineers to conduct a Reserve Study Level II: Update with Visual Site Inspection for the Wandermere Estates Homeowner's Association. The purpose of this report is to update the Level II Update with Visual Site Inspection dated May 7, 2012. This includes a site inspection to determine the current condition and re-evaluating the remaining life and estimated costs of the items in the study. Studies of this nature are important to ensure that 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 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 thirty (30) years. The first ten years are the most reliable.

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

This homeowners association currently serves 190 lots, with 140 contributing to the reserves. This is up from 116 lots included in the 2012 Reserve Study. It is a master-planned, residential development located in Spokane County north of the City of Spokane, Washington. Construction began in 2004.

Wandermere Estates includes as common elements several private streets, street lights, pathways, concrete sidewalks, a pedestrian bridge over the stream, various retaining walls, common areas, and drainage systems. Also included as common areas are entrance and exit gates, pedestrian gates, mailboxes, a water feature, and fencing.

In this section of the report, we will address those issues that, in our opinion, will require immediate repair or replacement. For a more detailed discussion of all of our findings and any other material deficiencies that will require repair or replacement over the term of this study, refer to the appropriate sections of this report.

The streets are in good condition. The pathways are in good condition although areas of cracking need to be sealed and the pathway asphalt should be sealcoated next summer.

Some mortar gaps in the lower entry monument should be cleaned and re-pointed to help prevent moisture penetration and resulting damage. Decorative steel bands around the monuments are rusting and in need of painting. During the summer, these should be cleaned and painted with a high quality corrosion preventive paint. The vinyl fences have some missing and damaged panels. Some cobblestones in the entry bridge are loose and should be secured.

We understand plans are being made for a geotechnical engineering study to divert groundwater from Wandermere Estates Drive and have included estimated costs.

Since the original reserve study, we understand that the Copper Canyon pathway is being used as a driveway to access some new homes. It is our assumption that this pathway was not constructed to support traffic and we have included estimated costs for upgrading the path in the future.

In addition, since the 2012 reserve study, we have added some items to the inventory and updated the quantities of others.

Research into the ownership, responsibility, and easements for the underground vault, valves, and piping serving the water feature stream and pond is recommended.

There is \$47,379.10 in the reserve fund at the time of the study with regular contributions of \$16.67 per home per month being made to the capital repair and replacement reserves. Based on our evaluation, **the current level of funding of the reserve for the common areas is not adequate, and a funding increase is recommended.** A more detailed analysis of the reserve funds has been provided in Appendix A.

There are, of course, other capital expenditures to be expected over the next thirty years. Those items that will require attention are discussed in detail in this report and can be found in their appropriate sections.

For your convenience, we have prepared the following summary of the condition of the major systems of the property. Please refer to the

3.0 PURPOSE & SCOPE

3.1 Purpose

The purpose of this study is to provide an update to the previous Level I Reserve Study dated May 7, 2012. It is intended to be used as a tool for the Wandermere Estates Homeowner's 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 thirty 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 often, 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 at the time of the previous reserve study as well as discussion with Eric Lundin. The findings and recommendations are based on interviews with the community's management personnel; a review of available documents; and an investigation of the site.

The scope of work meets the requirements presented by the State of Washington. According to the State of Washington, RCW 64.34.380. This study was prepared by a Reserve Study Professional, as defined by State of Washington, RCW 64.34.380.

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 thirty 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.
5. Components, such as painting, which are considered deferred maintenance, are most appropriately funded from the Operating Budget instead of Reserves.

Our reserve study analysis included evaluating the following association property:

- **Site and Grounds:** In general, the site common elements include the entry and exit gates and operators, wood, vinyl, and chain link fences, retaining walls, common areas, the entry water feature, mailboxes, electrical equipment, street and landscaping lighting, and irrigation systems.

- **Private Streets, Sidewalks and Curbs:** The association maintains several private asphalt paved streets with rolled concrete curbs-Golf View, Quartz, Fireside, Rustic, Eagle View, Lakeview, Copper Canyon, Alpine, and Wandermere Estates Lane. Asphalt pathways include Alpine Lane cart path, Copper Canyon to Wandermere Estates Lane, Lakeview Lane walkway, a concrete walkway along the lake, and a walkway near the water feature pathways. We understand that the sidewalks along the streets are maintained by the individual homeowners while the sidewalks along the common areas are maintained by the association.

For a complete inventory, please see Appendix B. The common element inventory was obtained from the original reserve study and discussion with Eric Lundin as well as our inspection of the site.

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

1. Examining association managed equipment, buildings 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 current dollars) for each capital item.
4. Using data developed in Steps 1, 2 and 3 to project Capital Reserve balances for Years 1 through 30.

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 inspection of the property occurred on the following date:

- 9 November 2016.

The following people were interviewed during our study:

- Eric Lundin-Manager.

The following documents were made available to us and reviewed:

- Reserve Study dated May 7, 2012.

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

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

3.4 Standards of Reference

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

Wandermere Estates includes as common elements several private streets, street lights, pathways, a concrete sidewalk along the lake, sidewalks with a pedestrian bridge, various retaining walls, common areas, and drainage systems. Also included as common areas are auto entrance and exit gates, pedestrian gates, mailboxes, site lighting, a water feature, and fencing.

We have assumed that these were constructed in 2004.

5.0 OBSERVATIONS

The following key observations were made about the current condition of the common elements of the property.

In general for all of the asphalt surfaces, preventative maintenance includes crack repair, drainage maintenance, patching of damaged areas and regular sealing. For residential streets, we recommend sealcoating every 6-7 years. This helps seal small cracks, reduce moisture penetration, and UV sun damage. Both crack sealing and sealcoating provide best results when the sealants are “squeegeed” into the surface. Proper repair of asphalt cracks includes routing the crack, and pneumatically cleaning it out, then injection of a quality asphalt emulsion sealant into the crack. The roads should be observed and any open cracks or damaged areas should be repaired annually.

Excessive water is the major cause of street deterioration. Water should drain away from the asphalt. Areas with water found to be “ponding” on the streets should be built-up, sloped, or otherwise drained to prevent destabilizing the sub-base. We noted an area along Wandermere Estates Lane where groundwater appears to be flowing from the hillside, through the curb and into the street. While this does not appear to be causing damage, long term moisture could result in deterioration of the asphalt. In addition, ice from the runoff could present a safety hazard on the public sidewalk and street. We understand that a geo-technical study is being planned to determine the proper means to divert or drain this water at a cost of approximately \$8,000. We have included this cost in our analysis for 2017. Following this, excavation, drainage pipe and possible road re-work is anticipated to drain the water to the nearest swale. We have included an allowance of \$20,000 for this work. The actual cost is unknown until the study is completed and an estimate provided.

The asphalt paved streets are in good condition. Some typical cracking was noted and most has been filled. Some open cracks were noted near the main entry. These can lead to moisture penetration and resulting destabilization of the sub-base and damage to the streets. These should be repaired soon. No areas of significant damage were observed to the streets. Since several homes remain to be constructed, street damage by heavy trucks and equipment will likely occur. If these begin to break up, spot repairs would be indicated. Crack sealing and small repairs are assumed to be funded from the operating budget.

It appears that the streets were recently sealed. We have planned for sealing the streets in 2021 and every 7 years thereafter.

Residential asphalt streets typically have an estimated useful life (EUL) of approximately 25 to 35 years assuming regular sealing, crack repairs, and patching are accomplished in the interim. We have anticipated the need for applying a wear surface by chip sealing Lakeview Lane and lower Wandermere Estates Lane in 2031. Chip sealing of mid-Wandermere Estates Lane, Copper Canyon, and Alpine Lanes is planned for 2036, and chip-sealing of upper Wandermere Estates Lane, Golf View, Quartz,

Fireside, Rustic, and Eagle View is budgeted for 2041. Studies indicate that if the subgrade and asphalt are in good structural condition, chip sealing provides a good wear and traction surface at a lower cost than a complete overlay. This should provide an EUL of 20 years. We have deleted sealing the roads that occur within a few years of the chip-sealing.

The asphalt paved common pathways are in generally good condition. Some cracking was found along the paths which should be sealed this summer. The pathways do not appear to have been sealed along with the streets. We recommend that the paths be sealed in 2017. As with the streets, we have planned for re-sealing these pathways every 7 years.

Normally with good maintenance, the asphalt paths should last indefinitely. We noted however that the Copper Canyon path is now being used as a private drive to access driveways of recently constructed homes. While we could not determine the construction of the subgrade and thickness of the asphalt without construction plans or sampling, pathways typically are not designed and prepared to withstand auto and truck traffic loading. It is our assumption that this is the case with the pathways in this development. Given this assumption and that this pathway is being used for auto and truck traffic, reduced life should be expected as compared to the other pathways and the streets. This would be manifested by structural failure of the subbase resulting in broken up areas of asphalt. We have anticipated removing, preparing a proper subbase, slightly widening, and properly repaving this pathway in 2025.

We have based our asphalt repair estimates on current local estimates and those published by RS Means. With asphalt pricing based on oil prices and extremely volatile, these estimates may vary widely from the actual cost at the time of the work.

The entry car bridge over the stream on lower Wandermere Estates Lane has a cobble stone surface over concrete poured over a galvanized steel culvert. A few cobble stones are loose and/or damaged, probably due to heavy loads. These can be replaced from the operating budget in the near future. Cobble stone mortar should be inspected annually and any cracked or loose areas should be cleaned and repaired from the operating budget. The culvert has a fabric and concrete liner. This installation has an expected life of 50 to 70 years which is outside the reserve period.

The 5 foot wide concrete sidewalk along the lake is in good condition. "Rolled curbs" are provided along the streets and are in good condition with some cracking that appears to be due to heavy equipment loads during construction. The concrete mailbox pads are also in good condition.

Concrete flatwork has a published expected useful life (EUL) of 30 years, however, we believe in this area and this situation, the sidewalks and curbs can last indefinitely with regular maintenance. This places their replacement outside of the 30 year analysis. We have allowed for spot repairs and replacement of deteriorated sections (5% of the total) in 2028.

The Lakeview Lane pathway includes an 11 foot wide wood and composite

bridge over the water feature stream. The bridge is supported by glulam beams spanning between concrete abutments. The bridge was refurbished in 2015 with composite decking and new railing. The bridge is in good condition. The bridge support system, decking, and handrails should be inspected regularly and repaired or replaced as needed. These should be relatively low cost items funded by the operating budget. We have assumed a life of 25 years for the glulam beams and have planned for their replacement for year 2028.

The entrance gate monuments are concrete and concrete block structures with a mortared stone veneer with metal decorative bands and ornaments. The monuments appear to be in similar condition as the original reserve study with some maintenance needed. Loose stones and mortar gaps were observed here and there. These should be repaired in the near future to help prevent moisture related deterioration. Some corrosion of the metal bands is occurring. These should be cleaned and painted with a high quality rust preventive coating. If possible they should be removed so that the back side can be cleaned and painted as well. Annual inspections and needed repairs to the stone, mortar and metal work should be carried out. These should be relatively low cost items funded from the operations budget. With regular maintenance, these monuments should last indefinitely.

The gate operators and telephone touch pad controls are in good condition, dated 2003, with an expected life of 15 years. We have planned for replacement of the operators, control panels, and sensor loops in 2018 and 2033. The steel gates are in good condition and should last indefinitely with regular maintenance. Painting and replacement of the hinge bearings may be needed over the years. This cost should be taken from the operating budget.

The water feature is a landscaped area of a natural stream. Normal maintenance of cleaning debris and vegetation is anticipated to be funded from the operating budget.

We understand that the stream flows from a natural spring reported to be owned by the golf course. Water from the spring is collected in an underground concrete vault which includes valves to direct the water to the stream, directly to the pond, and to the river. Underground pipes then distribute the water to these areas. Ownership and responsibility of the vault, valves, and pipes is unknown and we recommend further investigation to determine ownership and responsibility. If ownership is by others, we recommend investigating whether easements exist for the portions on HOA property. If the HOA is responsible for portions of this, funds should be set aside for maintenance and replacement. The EUL for underground steel pipes is 75 to 100 years.

The concrete block retaining walls are in good condition. These structures have an expected life of 50+ years which is beyond the reserve period.

The drainage swales appear to be in generally good condition. We understand that a lower swale below Lakeview has been silting up. We

could not determine the source of the silt. Some silt is to be expected and filtering silt is part of the purpose of the swale. However excessive silting could indicate a number of issues including a problem with the piping in the drainage system. We recommend monitoring this over a period of time. Part of regular maintenance from the operating budget should include cleaning debris and build-up away from the inlet pipes to help prevent plugging and backups and cleaning out the excessive silt.

The storm drain grates are in good condition. As part of normal maintenance, the grates and catch basins should be inspected annually and vacuumed of debris as needed. With regular maintenance, these should provide service beyond the analysis period.

In general, the common area landscaping is in good condition. We have allowed \$2000 for major landscaping needs every 5 years for things such as dead tree removal/replacement, major stream maintenance, retaining wall repair, grading, etc.

Approximately 9 mailboxes are located around the development. The mailboxes are in good condition at this time. The mailboxes are dated 2004 and have an expected useful life of 15 years. We have planned for replacement of the mailboxes in 2019 although replacement will likely be gradual over a period of years.

We understand that maintenance of the approximately 34 street lights is the responsibility of the association. We assume that bulbs for the street lights will be replaced from the operating budget. The fiberglass light standards appear to be in good condition and have an expected life of 25 years. We have planned for replacing these in 2029. We understand that recoating material is available through Sherwin Williams. The underground wiring was not investigated. With good maintenance, these should provide service beyond the analysis period.

Landscape lighting is assumed to be maintained through the operating budget.

There are two sections of common vinyl fencing along the south boundary, one along the Fireside Lane home's backyard and the other along the south side of the Golf View lots. These have some broken panels which should be repaired from the operating fund. Vinyl fencing has an expected life of 30 years. We have planned for its replacement in 2033.

Two sections of wood fencing are provided at each side of the upper entrance monument. Wood fences have a published expected useful life of 12 years. These fences appear to use treated wood posts and should last considerably longer. They are in good condition and have been recently stained. With good maintenance, we have planned for replacement of the wood fences in 2026.

Chain link fences along the west side of the south boundary appear to belong to WADOT. We understand that the association recently erected a chain link fence at the center south boundary between the two vinyl fences.

Another chain link fence extends a short distance along the east boundary. While we could not verify its ownership, we have assumed this belongs to the association. Chain link fences have an EUL of 40 years. We have scheduled their replacement in 2046.

Our analysis does not include routine landscaping, irrigation systems, lighting fixtures, and electrical equipment which we assume to be maintained from the operating budget.

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 thirty years.

The capital items listed are those that are typically the responsibility of the Association and are derived from documents provided by Don Wilhelm. However, association by-laws vary, and therefore, which components are the responsibility of the owner and which are the responsibility of the Association can vary. The Wandermere Estates Homeowner's 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 and rate of return on deposited reserve funds.
- 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 that represents end of year balances and capital expenditures based on your current funding program and reserve balances, and alternatives to your current program.
- Since none of the Associations have any current funding, increases are recommended in each case.
- 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 suggest and have assumed maintaining a minimum reserve balance of \$5,000.00.

As required by Washington State RCW 64.34.382, we disclose that the interest rate used in the analysis is 0.02% and inflation rate is 2.0% based on discussions with association representatives. We have considered three alternatives to compare to your current funding program as well as the RCW mandated full funding option and recommend that the Association adopt an alternative that best reflects the objectives of the community. Please keep in mind that there are a myriad of possible alternatives. In summary they are as follows:

Current Funding Rate: We understand that the reserve fund balance was \$33,454.02 at the beginning of the fiscal year and stands at \$47,379.10 as of October 11, 2016. A monthly contribution of \$16.67 per month per occupied home is being collected. This will maintain positive funding through 2034 when it becomes increasingly more negative.

- **Alternative 1:** Maintain the current contribution through 2020 then increasing \$10.00 per unit per month and maintaining this for five years. Increase another \$10.00 per month at the beginning of 2026 for a final contribution of 36.67 per home per month. This alternative will maintain a positive balance.
- **Alternative 2:** Increase the contribution amount immediately to \$26.67 per home per month and increase the contribution 32% at the beginning of 2021 and again at the beginning of 2026 to a total of \$34.85 per unit per month. This alternative will maintain a positive.
- **Alternative 3:** Increase the contribution amount immediately to \$26.67 per home per month. Levy a special assessment of \$1000.00 per unit in 2020 and 2025 and another special assessment of \$1500.00 per unit in 2030. This alternative will maintain a positive balance.
- **Full Funding Option:** To achieve a full funding plan, the association will need to raise \$300,000 initially to achieve a full funding balance while maintaining the current contribution.

Addendum A lists estimated capital reserves over the analysis period.

7.0 CONCLUSION

The current funding plan will maintain positive funding through 2034 when it becomes increasingly more negative. We recommend following the one of the alternatives presented in this analysis. Three suggested alternatives and contribution levels are provided as well as the RCW mandated Full Funding Option.

In summary, the common elements are in generally good condition and with good maintenance, should provide adequate service throughout their useful lives. Additional items added to the common element inventory and planned drainage improvement along Wandermere Estates Lane have resulted in a need for increased funding.

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 Wandermere Estates Homeowner's Association. Criterium – Pfaff Engineers 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 – Pfaff Engineers 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 roadways or the underlying 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

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.

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,

Kenneth Pfaff, P.E.
Criterium – Pfaff Engineers

