

**FULL RESERVE STUDY
FUNDING ANALYSIS PLAN
Level I
MEADOWWOOD HOMEOWNER'S
ASSOCIATION**

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1.0 INTRODUCTION

Meadowwood Homeowner's Association, through Don Wilhelm, manager, authorized Criterium - Pfaff Engineers to conduct a Property Evaluation and Reserve Fund Study for the Meadowwood Homeowner's Association. 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. According to Washington State Law, this study should be updated annually.

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 serves approximately 900 acres and over 1200 homes. It is a master-planned, mixed-use development located in Liberty Lake, Washington. Construction began in 1994 and is nearing completion.

Our study is divided into four sub-developments-Meadowwood Commons, Rocky Hill, Grayhawk, and Garden Ridge. Separate analyses have been developed for each.

Meadowwood Commons includes as common elements three parks- Little Bear, Five Fingers, and Pump House-three sets of monuments at Country Vista, Molter and Boone, and Settler and Liberty Lake Road, and 17 common areas and associated sidewalks.

Rocky Hill Townhomes and Cottages includes several private streets and sidewalks.

Grayhawk includes 2 monuments and fencing at Country Vista and Pinehurst Lane, as well as Pinehurst Lane.

Garden Ridge includes entrance monuments and fencing at Country Vista and Eagle Bend, as well as several private streets.

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 parks are in good condition. No immediate repair/replacement is indicated.

The roads are in generally good condition. There is some cracking at Pinehurst Lane and Garden Ridge and some broken up areas at the Garden Ridge entry that should be maintained in the near term.

The condition of the fences is good, although some of the Grayhawk columns have some mortar deterioration and should be repaired. The sidewalks are in good condition, however a few heaved "bridge" sections currently present tripping hazards and should be re-leveled. The monuments need some mortar cleaning and maintenance, and the wood portions of the Molter and Boone monuments is deteriorating and will need replacement soon.

There are currently no regular contributions 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 appropriate sections of this report for a more detailed discussion of these systems.

3.0 PURPOSE & SCOPE

3.1 Purpose

The purpose of this study is to perform a reserve fund analysis. It is intended to be used as a tool for the Meadowwood 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. According to Washington State Law, this study should be updated annually.**

3.2 Scope

This study has been performed according to the scope as generally defined by Don Wilhelm and Criterium - Pfaff Engineers. 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, "...an association shall prepare and update a reserve study..." According to the State, the terminology for this Scope of Work is "Level I: Full reserve study funding analysis and plan".

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 common elements include the park amenities-playsets, benches, picnic tables, basketball courts and paved areas, entry monuments, and common area fencing. We have excluded mailboxes, electrical equipment and lighting, and irrigation systems.
- **Private Streets, Sidewalks and Curbs:** The association maintains several private asphalt paved streets, walkways and sidewalks.

For a complete inventory, please see Appendix B. The common element inventory was obtained from Don Wilhelm and by 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 2012 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 inspections of the property occurred on the following dates:

- 28 February 2012.

The following people were interviewed during our study:

- Don Wilhelm-Manager.

The following documents were made available to us and reviewed:

- Plat Map (Undated)
- Inventory list (provided by Mr. Wilhelm)

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

Meadowwood Homeowners Association serves over 1200 homes located in Liberty Lake, Washington. The common elements include three small parks, 17 common areas with sidewalks, several private roads, several monuments and fences.

Construction began in 1994 and is nearly completed.

Our study is divided into four sub-developments-Meadowwood Commons, Rocky Hill, Grayhawk, and Garden Ridge.

Meadowwood Commons includes as common elements three parks- Little Bear, Five Fingers, and Pump House. Each of the parks include sidewalks, benches, and playsets. Little Bear and Pump House also include a concrete

basketball court and goal. Other common elements are three sets of monuments at Country Vista, Molter and Boone, and Settler and Liberty Lake Road, and 17 common areas with associated sidewalks. We have assumed that these were constructed in 1994. We understand that there are 1030 homes in this HOA

Rocky Hill includes several private streets and sidewalks as well as 42 living units. We have assumed these were constructed in 2007.

Grayhawk includes 22 homes and the common areas include 2 monuments and fencing at Country Vista and Pinehurst Lane, as well as Pinehurst Lane. Our assumption is that this was constructed in 2000.

Garden Ridge includes entrance monuments and fencing at Country Vista and Eagle Bend, as well as several private streets. We understand that there are 81 living units in the HOA. We have assumed construction in 1996.

Our study does not include the landscaping, mailboxes, irrigation systems, electrical equipment and lighting which we understand are maintained from the annual budget.

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 roads and paved areas, 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 should be sealed annually. We recommend sealcoating with a slurry sealant every 7 years. This helps seal small cracks and reduce moisture penetration and UV sun damage. Both crack sealing and sealcoating provide best results when the sealants are "squeezeed" into the surface.

Meadowwood Commons

Little Bear Park is a small common area park with a grassy area, a concrete sidewalk, a concrete basketball court and goal, a playset, a bench, and two cast aluminum bear sculptures. An asphalt paved driveway leading to homes behind the park is part of the common area. The park installations are in good condition. Some minor paint damage was visible on the bear sculptures.

Five Fingers Park has a larger grassy area, bench, playset, picnic table, concrete sidewalk, and a plaque indicating that the park was dedicated in 1996.

Pump House Park includes a grassy area, two benches, a playset, a concrete basketball court and goal, and asphalt surrounding the pump building. The building is not a common element.

The parks' concrete sidewalks and basketball courts were partially covered with snow and portions were not visible. Where visible, they are 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 courts can last indefinitely with regular maintenance. This places the courts and sidewalk replacement outside of the 30 year analysis. We have allowed for spot repairs and replacement of deteriorated sections (5% of the total) in year 15 of the analysis.

The playsets, basketball goals, picnic table, and benches are in good condition with some typical wear and tear evident. These have an EUL of 20 with replacement planned for year 10.

The Little Bear asphalt driveway and the Pump House park asphalt are in good condition. Typically a paved road has an expected useful life (EUL) of 25 years. For a residential road, we recommend spot repairs, crack maintenance and sealcoating every 7 years. This helps seal small cracks and reduce moisture penetration and UV sun damage. We have planned for this to begin in year 4. We have also planned for an overlay in year 20.

The Little Bear sculptures have an EUL of 30 years. Our analysis anticipates replacement in year 20.

The two monuments at Country Vista are large, mortared brick structures with metal lettering, electrical power and lighting. These are in generally good condition although cleaning and replacing small areas of loose mortar is needed. We have allowed for this maintenance in year 2 and every 10 years thereafter.

The two monuments at Molter and Boone consist of smaller mortared brick structures with painted wood signs and attached painted wood side panels. Electrical power and lighting are provided. The brick portions are in good condition, however the wood panels are aging with some areas of rot present. We have allowed for mortar repair and replacement of the rotted wood portions in year 2 and every 10 years thereafter. The wood portions should be caulked annually to help prevent moisture penetration and rot.

The monument at Settler and Liberty Lake Road is a smaller structure of painted concrete and mortared cultured stone with painted metal lettering. It is not lighted. The mortar is showing some deterioration and should be maintained. The loose mortar should be cleaned away and replaced. The concrete portion has some typical cracking present. These cracks and gaps should be cleaned and sealed to help prevent further deterioration. We have allowed mortar replacement and repairs in year two and every 10 years thereafter.

With good maintenance, these monuments should last indefinitely.

The 17 common areas include grassy areas with sidewalks. Most sidewalks are concrete and generally 5 feet wide. Some have concrete "bridges" over drainage outlets. The visible (non-snow covered) concrete sidewalks are in good condition overall. A few areas have uneven joints at the bridges which could lead to tripping and catching bicycle or chair tires. These areas occurred at Boone near Stephenson, near Fairway, and near the

church and Settler just east of Garry. These bridges should be adjusted to eliminate these problems. A section of sidewalk between Fairway and Ormond is being lifted by tree roots. This area will need some attention in the near future. The best solution would be to remove the tree, but changes to the sidewalk could be budgeted for short term repairs.

As noted earlier, we have not considered sidewalk replacement in this 30 year projection due to their estimated indefinite life. We have allowed for spot replacement of damaged areas. We have assumed replacement of 5% of the total sidewalk area in year 15 and again in another 15 years.

The common walkway from Country Vista north of Mission to the first cottage is asphalt paved and approximately 10 feet wide. It is in good condition. Crack filling, spot repair, and sealing have been planned for year 4 and every 7 years thereafter. With good maintenance, this should last indefinitely. We have based our estimates on current local estimates 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.

Rocky Hill Townhomes and Cottages

The Rocky Hill development common areas include Oakland Lane and parking areas, the alley behind the townhomes, and sidewalks. The streets are asphalt paved and in generally good condition. Three areas of "raveling" asphalt were visible at Oakland lane. Each is approximately 3 ft x 8 ft. It appears that drainage is directed from the driveways onto Oakland Lane which may account for the raveling. We recommended cleaning and sealing these cracking areas in year 2, followed by a full sealing of the streets that year and every 7 years thereafter. Spot repairs for potholes are budgeted for year 7. We have allowed for a chip seal overlay in year 25.

The concrete and asphalt sidewalks are in good condition. Spot replacement of 5% of the concrete has been planned for year 15. The asphalt walkways are planned to have crack repair and sealing in year 4 and every seven years thereafter.

Grayhawk

The Grayhawk development common elements include two monuments on each side of the Pinehurst entries, fencing along Country Vista, and Pinehurst Lane.

The monuments are large mortared brick structures with metal letters and a cast metal hawk in the center. These include electrical power and lighting. While in good condition, there is some deterioration of the mortar which will need attention this year. These monuments should have an indefinite life with regular maintenance. We have allowed mortar replacement and repairs in year two and every 10 years thereafter.

The fencing is black powder coated "wrought-iron" panels with mortared

brick columns supporting the fence panels. As with the monuments, the brick columns are experiencing some mortar deterioration with maintenance needed similar to the monuments. The fence panels are in good condition and should last indefinitely with regular maintenance. We have allowed mortar replacement and repairs in year two and every 10 years thereafter.

A wrought iron fence has an EUL of 50 plus years. This puts replacement outside our 30 year study.

Pinehurst Lane is an asphalt paved lane through the development. It is in fair condition with many cracks to be sealed this year and a small area with "alligating" which should be sealed this year. We recommend sealing all of the Pinehurst Lane in year 2014 with crack repair and sealing every 7 years thereafter. We have planned for an overlay of the street in year 10.

Garden Ridge

The Garden Ridge development common areas include monuments at the entry, fencing along Country Vista, and 5 private, asphalt paved streets, Eagle Bend, Tanglewood, Oakmont, Sawgrass, and Doral.

The monuments are concrete columns with cast bronze plaques. The fencing is wrought iron panels supported between columns similar to the concrete monuments. These are in good condition. With regular maintenance including crack sealing, they should have an indefinite life. The fence panels have an EUL of 50 plus years. This places their replacement outside our 30 year study.

The streets are in fair to good condition. Eagle Bend from the entry to Oakmont is in fair condition with significant areas of "alligating". We recommend that these broken up areas be removed and replaced in year 2014 of the analysis. The north ends of Tanglewood and Oakwood have several areas with cracking present and appear to be older than the south ends. These cracks should be cleaned and filled in year 2. Sawgrass and Doral are in generally good condition although each has a small area of alligating at the intersections. These small areas should be cleaned and sealed in year two.

As noted earlier, paved roads have an expected useful life (EUL) of 25 years. We have planned for crack repair and sealing the roads in year 2 and every 7 years thereafter. An overlay is planned for year 15.

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 Meadowwood 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.

We have considered three alternatives to compare to your current funding program and recommend that the board adopt an alternative that best reflects the objectives of the community. Please keep in mind that there are a myriad of possible alternatives. According to Don Wilhelm, we have assumed a 0.4% return on investment and a 2.0% inflation rate. We have shown three different types of possibilities. In summary they are as follows:

Meadowwood Commons Current Funding Rate: No funds are currently being contributed.

- **Alternative 1:** Set the contribution immediately to \$4.60 per unit per year, then decrease the contribution to \$2.10 per unit per year in year fifteen of the analysis. This alternative will maintain the minimum balance.
- **Alternative 2:** Set the contribution amount immediately to \$4.75 per unit per year and decrease the contribution 60% to \$1.90 per unit per

year in year 15. This alternative will maintain the minimum balance.

- **Alternative 3:** Set the contribution amount immediately to \$2.50 per unit per year and levy one special assessment of \$29.00 per unit in year 10. This alternative will maintain the minimum balance.

Rocky Hill Current Funding Rate: No funds are currently being contributed.

- **Alternative 1:** Set the contribution immediately to \$100.00 per unit per year, then decrease the contribution to \$70.00 per unit per year in year fifteen of the analysis. This alternative will maintain the minimum balance.
- **Alternative 2:** Set the contribution amount immediately to \$75.00 per unit per year and increase the contribution 20% in year ten and another 20% in year 20. This alternative will maintain the minimum balance.
- **Alternative 3:** Set the contribution amount immediately to \$50.00 per unit per year and levy a special assessment of \$119.00 per unit now and another special assessment of \$881 per unit in year 20. This alternative will maintain the minimum balance.

Grayhawk Current Funding Rate: No funds are currently being contributed.

- **Alternative 1:** Set the contribution immediately to \$241.00 per unit per year, then decrease the contribution to \$90.00 per unit per year in year ten the analysis. This alternative will maintain the minimum balance.
- **Alternative 2:** Set the contribution amount immediately to \$245.00 per unit per year and decrease the contribution 60% per unit per year in year 10 and another 60% decrease in year 20. This alternative will maintain the minimum balance.
- **Alternative 3:** Levy a special assessment of \$1,818.00 per unit now and another special assessment of 1,727.00 per unit in year 10. This alternative will maintain the minimum balance.

Garden Ridge Current Funding Rate: No funds are currently being contributed.

- **Alternative 1:** Set the contribution immediately to \$165.00 per unit per year, then decrease the contribution to \$110.00 per unit per year in year 12 of the analysis. This alternative will maintain the minimum balance.
- **Alternative 2:** Set the contribution amount immediately to \$165.00 per unit per year and decrease the contribution 55% in year 15. This alternative will maintain the minimum balance.

7.0 CONCLUSION

8.0 LIMITATIONS

- **Alternative 3:** Set the contribution amount immediately to \$100.00 per unit per year and levy one special assessment of \$185.00 per unit now followed by another special assessment of \$568.00 per unit in year 15. This alternative will maintain the minimum balance.

Addendum A lists estimated capital reserves over the analysis period.

With no contributions, all developments are underfunded.

In summary, most of the common elements are in good condition and with good maintenance, should provide adequate service throughout their useful lives. Both the Grayhawk and Garden Ridge streets need significant maintenance in the near term to preserve their useful lives. Several of the monuments need mortar maintenance in the near term in order to prevent further deterioration.

The association needs to begin contributing to the reserve accounts to maintain these common elements. Three suggested alternatives and contribution levels are provided for each development.

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 Meadowwood 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
- Sidewalks and surfaces covered with snow
- 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