

**FULL RESERVE STUDY  
FUNDING ANALYSIS PLAN  
Level I**

Prepared for:

**OVERLOOK AT QUALCHAN  
HOMEOWNERS ASSOCIATION  
SPOKANE, WA**

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## 1.0 INTRODUCTION

Overlook at Qualchan Homeowners Association through Eric Lundin-manager, authorized Criterium-Pfaff Engineers to conduct a Level I: Full Reserve Study Funding Analysis and Plan for Overlook at Qualchan Homeowners Association located in the Latah Valley in south Spokane, WA. Studies of this nature are important to ensure that a Homeowners Association (HOA) has sufficient funds for long-term, periodic repair and replacement requirements. Anticipating large expenditures over an extended period of time through a structured analysis and scheduling process assists the HOA 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 repair and replacement reserves. In this report, we will focus on those items falling under the repair and replacement reserve criteria. We have projected a repair and replacement reserve for thirty (30) years. The first ten years are the most reliable. This study should be updated annually.

This report is structured to analyze components of the community for which the HOA 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 repair and replacement 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 HOA 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 housing project consists of 139 lots located on both public and private streets and on private driveways. 36 lots are located within two Public Utility Districts (PUDs [Menaul Court and Jordan Lane]); 38 lots are located on private driveways (there are four private driveways). The remaining lots are located on public (City-owned) streets. The Homeowners' Association (HOA) also includes common sidewalks, grassed areas, undeveloped common areas, drainage systems, landscaping, and fences. Menaul Court PUD owns a lift station.

As we understand, construction began in 1998 and is ongoing. At the time of this report, there are 16 undeveloped lots. Ten of the vacant lots are owned by P.O.S Development, Inc., the developer. One large lot is owned by HRH Holdings, Inc. The HRH property is over 19 acres, so it is expected that this parcel (34062.0074) will be subdivided into lots for future residential development.

The following is a 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:

### **Public Streets**

Public streets within the HOA include Lincoln Way, Bolan Avenue, and Willapa Avenue. The City of Spokane owns these streets and as such, is responsible for services (snow plowing, street sweeping), maintenance, repairs and eventual replacement. The City funds such expenses with taxes and vehicle licensing and registration fees.

### **Public Utility Districts (Menaul Court; Jordan Lane)**

There are two Public Utility Districts (PUDs) within the HOA: Menaul Court and Jordan Lane. The lots within these PUDs collectively own the streets that they are located on; they are privately owned streets. A PUD describes a type of development and the regulatory process that permits a developer to meet overall community density and land-use goals without being bound by existing zoning requirements (at the time of development, this would refer to City of Spokane zoning requirements). A PUD is a special type of floating overlay district, which generally does not appear on the municipal zoning map until a designation is requested (in this case, it is assumed the PUD designation was requested by P.O.S Development). A PUD is planned and built as a unit, thus fixing the type and location of uses and buildings. Reasons that developers form PUDs include more efficient site design, preservation of amenities such as open space, and lower costs for street construction and utility extension for the developer and lower maintenance costs for the municipality. PUDs are formed at the time a project is approved, which is when Menaul Court and Jordan Lane were constructed.

PUDs and their associated assets are privately owned by the collective lots within them; thus, the 11 lots situated on Menaul Court own the street, subsurface utility lines, a single meter, and a lift station. The 24 lots situated on Jordan Lane privately own Jordan Lane, subsurface utility lines, and single meter. The City invoices each PUD for collective utility usage (based on a single meter reading for each), collective garbage collection and an integrated capital facility fee. Per the City utility billing department, the integrated capital facility fee is based on the number of occupied lots (lots on City-owned streets pay an integrated capital facility fee as well).

Being that PUDs are privately owned entities, the City doesn't provide public services such as snow plowing or street sweeping. PUDs contract for private services – in this case, through the Homeowner Association. Street maintenance and replacement and lift station maintenance and replacement are private matters as well; the Association's managing documents require the Association to manage the maintenance and eventual replacement of private streets and as stated previously, contract for and manage private services for the PUDs. Costs of such services and maintenance are divided between the lots within PUDs. The Association CC&Rs stipulate the relationship between the PUDs and Association and the responsibilities of each. Dedication language on the development plat discusses the same.

Menaul Court and Jordan Lane are in fair to good condition. The scope of this study does not include subsurface utilities.

Significant replacement/repair items include breaking up asphalt on Upper West Bolan that will need to be repaired in the near term.

The common areas are in generally good condition. Maintenance of the drainage systems is needed in the short term. Some other maintenance items are discussed in this report that should be addressed.

At the request of the Association, we have provided separate analyses for the common areas, the PUDs, the private driveways, and the Menaul Ct lift station. There are currently no regular contributions being made to the repair and replacement reserves. Based on our evaluation, the current level of funding of the reserve for the common areas, PUD's, private driveways, and Menaul Ct. lift station are not adequate, and funding increases are recommended. A more detailed analysis of the reserve funds has been provided in Appendix A.

There are, of course, other repair and replacement 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.

### **3.0 PURPOSE & SCOPE**

#### **3.1 Purpose**

The purpose of this study is to perform a Level I Full Reserve Study and Funding Analysis Plan as required by Washington State statues. It is intended to be used as a tool for the Association in determining the allocation requirements into the reserve fund in order to meet future anticipated repair and replacement 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

### 3.2 Scope

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 RCW 64.38.065(3), unless doing so would impose an unreasonable hardship, the association shall update the reserve study annually. At least every three years an updated reserve study must be prepared and based upon a visual site inspection conducted by a reserve study professional.

This study has been performed according to the scope as generally defined in our proposal dated 12 August 2016, and 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 buildings and site.

The scope of work complies with the requirements presented by the State of Washington. According to the State of Washington, RCW 64.38.065 and 070, "...an association shall prepare and update a reserve study..." According to the State, the terminology for this Scope of Work is "Level II: Update with Visual Site Inspection".

This study was prepared by a Reserve Study Professional, as defined by State of Washington, RCW 64.38.010.

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 community property:

- **Site and Grounds** – Retaining wall, storm drainage, common area grass, undeveloped common areas, mailboxes, park benches, dog stations, vinyl fence, chain link fence, major landscaping, and entry monument.
- **PUDs/Private Streets** - Asphalt paved private streets-Menaul Ct., Jordan Lane
- **Private Driveways** - Upper West Bolan, Lower West Bolan, Upper Jordan Access, Anton Private Driveway
- **Sidewalks and Curbs** – Commonly owned paved paths, sidewalks, and rolled curbs.
- **Mechanical** – Menaul Ct sewage lift station, irrigation systems.

For a complete inventory, please see Appendix B. The common element inventory was obtained from 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 today's dollars) for each repair and replacement item.
4. Using data developed in the above steps to project Capital Reserve balances for the PUD's, private driveways, the common areas, and the Menaul Ct lift station 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 HOA. 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:

- 22 September 2016.

The following people were interviewed during our study:

- Eric Lundin and the 2017 Board of Directors of the Overlook at Qualchan HOA

The following documents were made available to us and reviewed:

- Site Map-undated; Overlook at Qualchan Third Addition, PUD (Final Plat), CC&Rs, Private Driveway Easement (Upper Jordan Access), Maintenance Agreement (private driveway off of Anton Court)

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

- R.S. Means
- Our data files on similar projects
- Local contractors
- Information provided by the association

### 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.

*Reserves* - Non-annual maintenance items that will require significant expenditure over the life of this study. 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.

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 the complex and facing it.

#### 4.0 DESCRIPTION

This housing project consists of 139 lots located on a moderate to steeply sloping hillside. Access to the lots is via Lincoln Way, Bolan Ave. and Willapa Ave. (public streets). There are also private asphalt-paved streets and private driveways. Jordan Lane and Menaul Court are private streets. The streets are each part of a Planned Unit Development (PUD). Per the HOA's CC&Rs and easement dedications, the PUDs are managed by the Association - the HOA manages finances and contracts for services, maintenance, repairs and replacement, and each lot within the PUDs pays for its pro-rata share of the expenses involved with being a part owner. The Menaul Court PUD is owned by eleven (11) lots. The Jordan Lane PUD is owned by twenty four (24) lots; 25 lots were originally platted (two lots on Jordan Lane were combined for tax purposes, but the single lot still shares in maintenance and replacement costs per the original plat).

There are four private driveways within the HOA. The driveways don't have official names presumably because they are private property. The HOA has given them names with the exception of the driveway off of Anton Ct. The four driveways are: Lower West Bolan, Upper West Bolan, Upper Jordan Access, and the unnamed driveway off of Anton Ct. There is



a Private Driveway Easement document for the driveway above Jordan Lane and below Lincoln Avenue (“Upper Jordan Access”). There is a maintenance agreement for the private driveway branching off of Anton Ct. The easement is included in Appendix E and the maintenance document is included in Appendix F.

Like the PUDs, the HOA has been charged with managing and performing maintenance, repair and replacement of the asphalt driveways on behalf of the lots served by, and that that share ownership in, each driveway; and the expenses are the responsibility of the lots served by (and owned by) the private driveways. Party responsibilities are described in the CC&Rs, private driveway easement for Upper Jordan Access, maintenance agreement for the driveway off of Anton Court, and dedication language on the plat for the development.

Concrete sidewalks with integral curbs are provided along City streets. Per City ordinance, each lot owner is responsible for the maintenance and repair of the sidewalk fronting each lot. Sidewalk fronting HOA common area is the responsibility of the HOA. A concrete block retaining wall supports the bank below the Bolan Ave. cul-de-sac. A grassed area is located at the Bolan Ave. cul-de-sac, which includes a 4 ft. vinyl fence, 2 benches, a doggie pot, lawn, and trees. Another common area at the intersection of Bolan and Willapa includes a faux stone and wood monument sign with metal letters, a bench, and lighting as well as grass and trees.

Menaul Ct. PUD branches off to the south of Willapa Ave. A large undeveloped common area is located south and east of the Bolan Ave cul-de-sac and encircles the lower portion of the Menaul Ct. cul-de-sac lots.

East of Menaul Ct. a large drainage area has been developed on community property to accept runoff. This contains two, tiered drainage ponds connected by a concrete overflow from the upper pond, another overflow from the lower pond to the common area, a perimeter 8 ft tall chain link fence with 2 gates and two paved access paths.

Menaul Ct PUD is served by a sewage lift station, which is located on the lower access path adjacent to Menaul Ct. Lift station components include two pump/motor units, check valves, a sump and the vault. The HOA is responsible for contracting for its maintenance, repair and replacement. The 11 lots sharing ownership of the lift station are responsible for all related expenses.

Street lights are the property of the utility, thus Inland Power and Light is responsible for maintenance and repairs of lamp posts within the HOA.

South of the lots along Bolan Ave are two unnamed private driveways. The HOA has named the westernmost street “Upper West Bolan”, and the easternmost street “Lower West Bolan”. As private driveways, the twenty-one (21) lots sharing ownership of the driveways are responsible for driveway expenses. Adjacent to these streets at the south side are long thin common areas with two drainage swales.

A small drainage swale is located at the intersection of Bolan and Upper West Bolan. Another drainage swale with a perimeter chain link fence is

located adjacent to Lincoln Way just south of the intersection with Bolan.

A large, generally undeveloped common area is located south of Lincoln Way and extends toward Cedar Rd. This has a single narrow access road apparently shared with the City of Spokane to access the water reservoir.

Jordan Lane PUD branches off Willapa Avenue. The PUD is made up of twenty four (24) lots. PUD maintenance expenses are divided by 25 because although one lot was combined after platting, it is still counted as two lots for the purposes of division of expenses as originally platted/intended. Eleven (11) of those 24 lots are also served by "Upper Jordan Access", which is a private driveway above Jordan Lane (access from Willapa Ave). The driveway is referred to as "Upper Jordan Access". As previously described, the HOA has been charged with managing and performing maintenance, repair and replacement of the asphalt driveway on behalf of the lots served by, and that that share ownership in the driveway; and the expenses are the responsibility of the lots served by (and owned by) the private driveway. These party responsibilities for Upper Jordan Access are described in the Private Driveway Easement (Appendix E).

The unnamed driveway off of Anton Court is managed by the HOA as well. As with the PUDs and other private driveways, maintenance and replacement expenses are the responsibility of the lots it serves; the responsibilities of the 6 lots whose vehicle access is via the "Anton Court private driveway" are described in a maintenance agreement, which is located in Appendix F.

More fenced drainage swales are included-one at the intersection of Lincoln Way and Willapa and another at the east side of the intersection of Jordan Lane and Willapa.

Small common areas are located between homes at the east end of Jordan Lane apparently to allow for drainage access.

Additional undeveloped common areas are provided west of Jordan Lane extending toward Willapa, and around the perimeter of the Jordan Lane cul-de-sac.

## 5.0 OBSERVATIONS

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

### Streets

The asphalt-paved PUD streets include Jordan Lane and Menaul Ct.

Asphalt-paved driveways include Upper West Bolan, Lower West Bolan, Upper Jordan Access, and Anton Ct.. Anton Ct. is only paved at the entry and the balance is graveled.

Lincoln Way, Bolan Ave. and Willapa Ave. are City streets.

In general, the PUD streets and the private driveways are in generally fair to good condition. Extensive, open cracks are visible in many areas. Some, but not all areas have been sealed in the past. Yearly all cracks should be properly cleaned, filled and sealed. This should be started in 2018.

Upper West Bolan has been sealed at some time in the past. Large areas of the street are broken up indicating thin asphalt, poorly prepared subbase, and/or poor drainage. We recommend that the asphalt at the south side of the street be removed and properly replaced including properly prepared subbase and drainage in 2022.

Lower West Bolan is in better condition. It appears to have been sealed fairly recently. As noted above open cracks should be cleaned and sealed in 2018 and annually thereafter.

The "Upper Jordan Access" private driveway is in good condition.

The "Anton Court private driveway" is in good condition.

Jordan Lane and Menaul Ct. are in good condition overall. Several open cracks should be cleaned and sealed in 2018 and annually thereafter.

Typically, we recommend the application of a squeegee applied, polymer modified asphalt emulsion sealant to all asphalt paved surfaces on a six-year cycle. This cycle is scheduled to begin in 2019.

Residential asphalt typically has an estimated useful life (EUL) of approximately twenty five years. We have anticipated the need for chip sealing the private asphalt streets in 2027 assuming regular sealing and crack repairs are accomplished in the interim. 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.

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.

Anton Ct. is generally graveled and appears to be lightly used. No maintenance has been planned for the graveled portion of Anton Ct at this

time.

### **Site and Grounds**

The common concrete pedestrian sidewalks around the complex are in good condition overall. The curbs are in generally good condition, with small areas of damage here and there. The concrete mailbox and bench pads are also in good condition.

This concrete flatwork has a published expected useful life (EUL) of 30 years, however, we believe in this area and this situation, the pads, sidewalks, and curbs can last indefinitely with regular maintenance. This places their replacement outside of the 30 year analysis. We have included an allowance to replace 5% of the flatwork every 10 years for spot repairs of any damaged areas beginning in 2021.

Two areas of damaged sidewalk along upper Lincoln are owned by HRH Holdings. These represent a tripping hazard; HRH is responsible for repair.

The asphalt paved paths in the Menaul Ct. common drainage area are in good condition. These should be sealed on a schedule similar to the asphalt streets.

The vinyl and chain link fences and gates are in good condition. Vinyl fencing has an expected life of 30 years. We have planned for vinyl fence replacement in 2029. The chain link fence has an expected life of 40 years. We have planned for replacing it in year 2039.

The drainage swales appear to be in good condition although we did not enter all of the fenced areas. Part of regular maintenance should include cleaning debris and build-up away from the inlet pipes to help prevent plugging and backups. The concrete overflow between the Menaul drainage ponds has a few transverse cracks with weeds growing in them. These cracks should be cleaned and properly patched in 2018 with epoxy based concrete mortar in accordance with the manufacturer's instructions. These concrete structures have an expected life of 30+ years although we believe these will last much longer and have not included them in this analysis.

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.

Groundwater was seen seeping from the hillsides in several areas. At one area along Bolan Ave (City street) this was flowing through gaps in the sidewalk and curb into the street. The City needs to frequently maintain the area to remove debris and algae. Maintenance and repair of this problem is the City's responsibility; therefore remedial costs have not been included in this analysis. Per the Association's CC&Rs, the HOA cannot use owner dues to pay for maintenance or repairs on City streets or property it doesn't own.

Exposed footing and/or roof drainage pipes for individual homes were observed on the hillside above Bolan and the hillside below Lincoln Way. Running water could be heard in one of them. The pipes are the private

property and responsibility of the homes on Upper and Lower Bolan. The exposed pipes will deteriorate in sunlight; the HOA might consider requiring or recommending that owners cover the pipes with soil or gravel in 2017. As previously mentioned, the HOA cannot use owner dues to fund improvements on private property.

It appears that a culvert opening across the intersection of Bolan and Upper West Bolan has been filled in with soil. This should be cleaned and kept clear so that runoff can drain properly to the swale. We have not included this cost.

The small, unfenced swale located at the intersection of Bolan and Upper West Bolan is in good condition at this time. As with the other swales, regular maintenance will be needed to clean debris, vegetation, and soil build-up. We have included an allowance of \$2,500 to maintain the outlet and inlets at the ponds and swales every 5 years.

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, grading, etc.

The benches and mailboxes are in good condition at this time. The benches have an expected useful life of 20 years. The benches appear to be newer and we have planned their replacement in 2030. The mailboxes have an expected useful life of 15 years. We have planned for replacement of the mailboxes in 2022.

The entry monument at the intersection of Willapa and Bolan has some deterioration occurring. It appears that moisture penetration into the structure is causing swelling which has resulted in cracking at the corners of the faux stone as well as some missing faux stone. While we could not be sure, due to the evidence of swelling we believe the interior structure is wood rather than the more common and more permanent concrete block. The exposed wood portion is in good condition with some weathering present. We recommend near term sealing of the open cracks in the faux stone as well as around the penetrations through the faux stone to help prevent further deterioration. The missing stones should be properly replaced. This should be funded from the operating budget. Annual inspections and any needed repairs to the monuments should be carried out. These should be relatively low cost items from the operating budget. Even with this maintenance, the deterioration will likely be an ongoing issue. We have planned for replacement of the monument with a more durable structure in 2022.

The three large undeveloped common areas at the ends of Jordan Lane and Menaul, and south of Lincoln were not traversed. We did not evaluate the unimproved common areas. Maintenance of these areas will include fire fuel removal from time to time. We recommend consultation with the Department of Natural Resources for advice and cost. We have not included the cost in this study.

While we cannot be sure, it appears from comparing Google Earth and the Spokane County Assessors websites that a few homeowners have encroached on the common areas south of the Jordan Lane cul-de-sac and into the Menaul drainage area with fences and gardens. While outside of

the scope of this analysis, it may affect the access, use, and enjoyment of these common areas.

The block retaining wall at the end of the Bolan cul-de-sac is in generally good condition. This may be the responsibility of the City. A cap block is missing. Weeds growing from the wall should be removed and controlled to help prevent damage to the wall and possible settlement.

Inland Power and Light Company owns the street lights; the company is responsible for maintenance, repairs and replacement. The HOA pays for energy usage.

Our study does not include routine landscaping, irrigation system maintenance, and electrical and lighting equipment maintenance, which are maintained from the operating budget.

### **Mechanical**

The Menaul Court PUD owns an underground sewage lift pump station; it was not accessible for a field survey. The two concrete tanks have an expected life of at least 50 years, which places them outside the analysis period. The 2 pump/motor units have an expected life of 15 years. According to George at R.C. Worst, their company maintains these every 6 months. One pump/motor unit was replaced in 2015 and the age of the other is unknown. He commented that its operating amperage is high, indicating aging and should be replaced soon. We have planned for its replacement at the end of 2018 and 15 years thereafter and the other unit in 2031 and 15 years thereafter. The float switches and control equipment are also included in the reserve financials for the 11 lots making up Menaul Court PUD to be replaced in 2024.

The underground water, sewer, and storm drain piping was not visible or accessible. These have an expected life of 50+ years, which places them outside the analysis period.

We have not allowed for unplanned maintenance or emergency repairs such as water pipe leakage etc. We recommend and have maintained a minimum of \$10,000 in your reserve fund for such events.

## **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 repair and replacement expenditures for the PUD streets, private driveways, the common areas, and the Menaul Ct. lift station. The following are projected reserve fund analyses for non-annual items. The projections take into consideration the return on invested moneys and inflation rates provided by the association representatives. Please review this thoroughly and let us know of any changes that may be desired.

The intent of these reserve fund analyses is to help the Association develop reserve accounts to provide for anticipated repair or replacements of various system components during the next 30 years.

The repair and replacement items listed are those that are typically the responsibility of the Association. However, association by-laws vary, and

therefore, which components are the responsibilities of the homeowner and which are the responsibilities of the Association vary. The Association should confirm that the items listed are to be financed by the reserve account.

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 the reserve account.
- A table that lists anticipated replacement and/or repair components 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 repair and replacement expenditures based on your current funding program and reserve balances, and alternatives. The provided graphs illustrate what effects the funding methods will have over the presented 30 year period versus the anticipated repair and replacement expenditures. Care should be taken in analyzing the graphs due to varying graphic scales that occur within each graph and between graphs.
- 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 \$10,000.00 for the PUD streets, Private driveways, and Common areas and a minimum reserve balance of \$0 for the Menaul Ct., PUD (baseline funding).

As required by Washington State RCW 64.38.070, the interest rate used in the analysis is 0.0% and inflation rate is 2.0% based on the information provided on the input sheet. We have analyzed baseline funding alternatives to your current funding program as well as the RCW mandated full funding plan 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:** No regular contributions are being made.

**PUD Streets (Menaul Ct, Jordan Ln):**

- **Recommended Funding Plan:** The 36 lots that are situated within Menaul Court and Jordan Lane PUDs should increase the annual contribution to \$390.00 per lot per year for 11 years, then reduce it to \$365.00 per lot per year throughout the balance of the period. Other than the first year, this alternative will maintain the minimum threshold balance.
- **Full Funding Plan:** To achieve a full funding plan, the association could follow the above funding plan. This will achieve 100% (full) funding at the end of the term.

Private Driveways (Upper Jordan Access, Upper West Bolan, Lower West Bolan, Anton Court Driveway):

▪ **Recommended Funding Plan:**

- The 38 lots that collectively own private driveways should increase the annual contribution to \$340.00 per lot per year for 11 years, then reduce it to \$220.00 per lot per year throughout the balance of the period. Other than the first year, this alternative will maintain the minimum threshold balance.

- **Full Funding Plan:** To achieve a full funding plan, the association would need to increase the annual contribution to \$340.00 per unit per year then reduce it to \$260.00 per unit per year throughout the rest of the period. This will achieve 100% (full) funding at the end of the term.

Common Areas (139 Lots):

- **Recommended Funding Plan:** Increase the annual contribution to \$75.00 per lot per year for 6 years, then reduce it to \$45.00 per lot per year throughout the balance of the period. Other than the first two years, this alternative will maintain the minimum threshold balance.

- **Full Funding Plan:** To achieve a full funding plan, the association would need to increase the annual contribution to \$100.00 per lot per year for 6 years, then reducing it to \$44.00 per lot throughout the balance of the period. This will achieve 100% (full) funding at the end of the term.

Menaul Court:

- **Recommended Funding Plan:** Menaul Court PUD owns a lift station. The 11 lots should increase the annual contribution to \$400.00 per unit per year for 3 years, then reduce it to \$80.00 per unit per year throughout the balance of the period.

- **Full Funding Plan:** To achieve a full funding plan, the association would need to increase the annual contribution to \$425.00 per lot per year for 4 years, then reducing it to \$85.00 per lot throughout the balance of the period. This will achieve 100% (full) funding at the end of the term.

**7.0 CONCLUSION**

With no regular contributions being made, the development is underfunded. **The association needs to begin contributing to the reserve accounts to maintain these common elements.** Recommend funding plans and the Full Funding Plan (required to be included by the state RCW) are provided for PUD streets, Private driveways, Common areas, and the Menaul Ct. PUD lift station.

**8.0 LIMITATIONS**

Per the State of Washington, RCW 64.34.380, the following disclosure has been included herein: *“This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a*



*component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.”*

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 Overlook at Qualchan Homeowners 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 buildings or the underlying foundation or soils 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
- Undeveloped common areas
- Concealed systems
- Interiors of pump stations and electrical gear.

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.

If you have any questions about this study, please feel free to contact us.

Thank-you for the opportunity to be of assistance to you.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Ken Pfaff", written over a light blue rectangular stamp.

Kenneth Pfaff, P.E.  
Criterium-Pfaff Engineers