

REPLACEMENT RESERVE REPORT FY 2009

WATER'S EDGE AT WOODS LANDING



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REPLACEMENT RESERVE REPORT

WATER'S EDGE AT WOODS LANDING

ANNAPOLIS, MARYLAND



Scope. Water's Edge at Woods Landing is a condominium community located in Annapolis, Maryland. Water's Edge was constructed in 1999. The community consists of 114 townhouse units. The survey examined the common elements of the property, including:

- Asphalt pavement.
- Concrete sidewalks, aprons and curb & gutter.
- Entrance feature.
- Storm drainage and storm water manage pond.
- Mailboxes.
- Dock and access gate.
- Mulch paths.

Level of Service. This study has been performed as a Level II Update, With Site Visit/On-Site Review as defined under the National Reserve Study Standards that have been adopted by the Community Associations Institute. As such, the component inventory is based on the study that was performed by Miller - Dodson Associates on February 13, 2003. This information was adjusted to reflect changed to the inventory that were provided by the community manager, and the quantities were adjusted accordingly from field measurement and/or quantity takeoffs from to-scale drawings. The condition of all commonly-owned components was ascertained from a site visit and the visual inspection of each component by the Analyst. The life expectancy and the value of components are provided based in part on these observations. The fund status and funding plan have been derived from analysis of this data.

Section A

Replacement Reserve Analysis

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Section B

Replacement Reserve Inventory

Replacement Reserve Inventory
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Section C

Projected Annual Replacements

Projected Annual Replacements
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Purpose. The purpose of this Replacement Reserve Study is to provide Water's Edge at Woods Landing (hereinafter called the Association) with an inventory of the common community facilities and infrastructure components that require periodic replacement. The Study includes a general view of the condition of these items and an effective financial plan to fund projected periodic replacements.

- **Inventory of Items Owned by the Association.** Section B Replacement Reserve Inventory lists the Projected Replacements of the commonly owned items that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about excluded items, which are items whose replacements are not scheduled for funding from Replacement Reserves.
- **Condition of Items Owned by the Association.** Section B Replacement Reserve Inventory includes our estimates of the normal economic life and the remaining economic life for the projected replacements. Section C Calendar of Projected Annual Replacements provides a year-by-year listing of the projected replacements. Section D Condition Assessment provides additional detail for items that are unique or deserving of attention because of their condition or the manner in which they have been treated in this Study.
- **Financial Plan.** The Association has a fiduciary responsibility to protect the appearance, value, and safety of the property and it is therefore essential the Association have a financial plan that provides funding for the projected replacements. In conformance with American Institute of Certified Public Accountant guidelines, Section A Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by two generally accepted accounting methods; the Cash Flow Method and the Component Method. Section A Replacement Reserve Analysis includes graphic and tabular presentations of these methods and current Association funding. An Executive Summary of these calculations is provided on Page A1.

Basis. The data contained in this Replacement Reserve Study is based upon the following:

- The Request for Proposal submitted and executed by the Association.
- Our visual evaluation and measurements on January 9, 2009. Miller - Dodson Associates has visually inspected the common elements of the property in order to ascertain the remaining useful life and the replacement costs of these components.

Engineering Drawings. No architectural drawings or engineering site plans were available for review in connection with this study. We recommend the Association assemble a library of site and building plans of the entire community. Reproducible drawings should be stored and kept in a secure fireproof location. The Association will find these drawings to be a valuable resource in planning and executing future projects.

Acknowledgement. Miller - Dodson Associates would like to acknowledge the assistance and input of Ms. Lori DeLooze. Ms. DeLooze provided very helpful insight into the current operations at the property.

Analyst's Credentials. Mr. Horace B. Jones graduated from the U.S. Naval Academy and from Rensselaer Polytechnic Institute with a Civil Engineering Degree. Mr. Jones has held various management positions in the real estate development and construction fields in the last 25 years. He is currently a Reserve Specialist (RS) for Miller - Dodson Associates.

Respectfully submitted,
MILLER - DODSON ASSOCIATES, INC.

Horace Jones, RS
Reserve Specialist

EXECUTIVE SUMMARY

The Waters Edge at Woods Landing HOA Replacement Reserve Inventory identifies 36 Projected Replacements for funding from Replacement Reserves, with an estimated one-time replacement cost of \$484,581.

The Replacement Reserve Analysis calculates recommended funding of Replacement Reserves by the two generally accepted methods, the Cash Flow Method and the Component Method. The Analysis also evaluates current funding of Replacement Reserves, as reported by the Association. The calculations and evaluation are summarized below:

\$14,133 CASH FLOW METHOD MINIMUM ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2009.

\$10.33 Per unit (average), minimum monthly funding of Replacement Reserves

The Cash Flow Method (CFM) calculates Minimum Annual Funding of Replacement Reserves that will fund Projected Replacements identified in the Replacement Reserve Inventory from a common pool of Replacement Reserves and prevent Replacement Reserves from dropping below a Minimum Recommended Balance.

CFM - Minimum Annual Funding remains the same between peaks in cumulative expenditures called Peak Years.

The first Peak Year occurs in 2042 which is outside of the 30-year Study Period. The Cash Flow Method - Minimum Annual Funding of Replacement Reserves remains constant at \$14,133 throughout the entire 30-year Study Period.

\$22,053 COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2009.

\$16.12 Per unit (average), recommended monthly funding of Replacement Reserves

The Component Method is a time tested and very conservative funding model developed by HUD in the early 1980's.

The Component Method treats each projected replacement in the Replacement Reserve Inventory as a separate account. Deposits are made to each individual account, where funds are held for exclusive use by that item.

Based on this funding model, the Association has a Current Funding Objective of \$185,266.

The Association reports having \$97,076 on deposit, which is 52.4% funded.

\$16,000 CURRENT ANNUAL FUNDING OF REPLACEMENT RESERVES (as reported by the Association).

\$11.70 Per unit (average), reported current monthly funding of Replacement Reserves

The evaluation of Current Funding, as reported by the Association, has calculated that if the Association continues to fund Replacement Reserves at the current level, there will be adequate funds for Projected Replacements throughout the entire 30-year Study Period.

Pages A2 and A3 explain the Study Year, Study Period, Adjustments (interest & inflation), Beginning Balance, and Projected Replacements. Pages A4 to A9 explain in more detail the calculations associated with the Cash Flow Method, Component Method, and Current Funding.

REPLACEMENT RESERVE STATUS AND FUNDING PLAN

Current funding of Replacement Reserves is adequate to fund Projected Replacements.

We recommend the Association adopt a Replacement Reserve Funding Plan based on the Cash Flow Method or the Component Method, to ensure that adequate funding is available throughout the 30-Year Study Period for the \$331,232 of Projected Replacements listed in the Waters Edge at Woods Landing HOA Replacement Reserve Inventory

The Funding Plan should be professionally evaluated every three to five years or after completion of each major replacement project. The Board of Directors has a fiduciary responsibility to review the Funding Plan annually and should consider annual increases in Replacement Reserve funding at least equal to the Consumer Price Index.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Waters Edge at Woods Landing HOA Replacement Reserve Analysis calculations of recommended funding of Replacement Reserves by the Cash Flow Method and the Component Method, and the evaluation of the Current Funding, are based upon the same General Information; including the Study Year, Study Period, Adjustments (for interest, inflation, and/or a constant increase in annual funding), Beginning Balance, and Projected Replacements:

STUDY YEAR

The Association reports that their accounting year begins on January 1, and the Study Year, the first year evaluated by the Replacement Reserve Analysis, begins on January 1, 2009.

STUDY PERIOD

The Replacement Reserve Analysis evaluates the funding of Replacement Reserves over a 30-year Study Period that begins on January 1, 2009.

ADJUSTMENTS

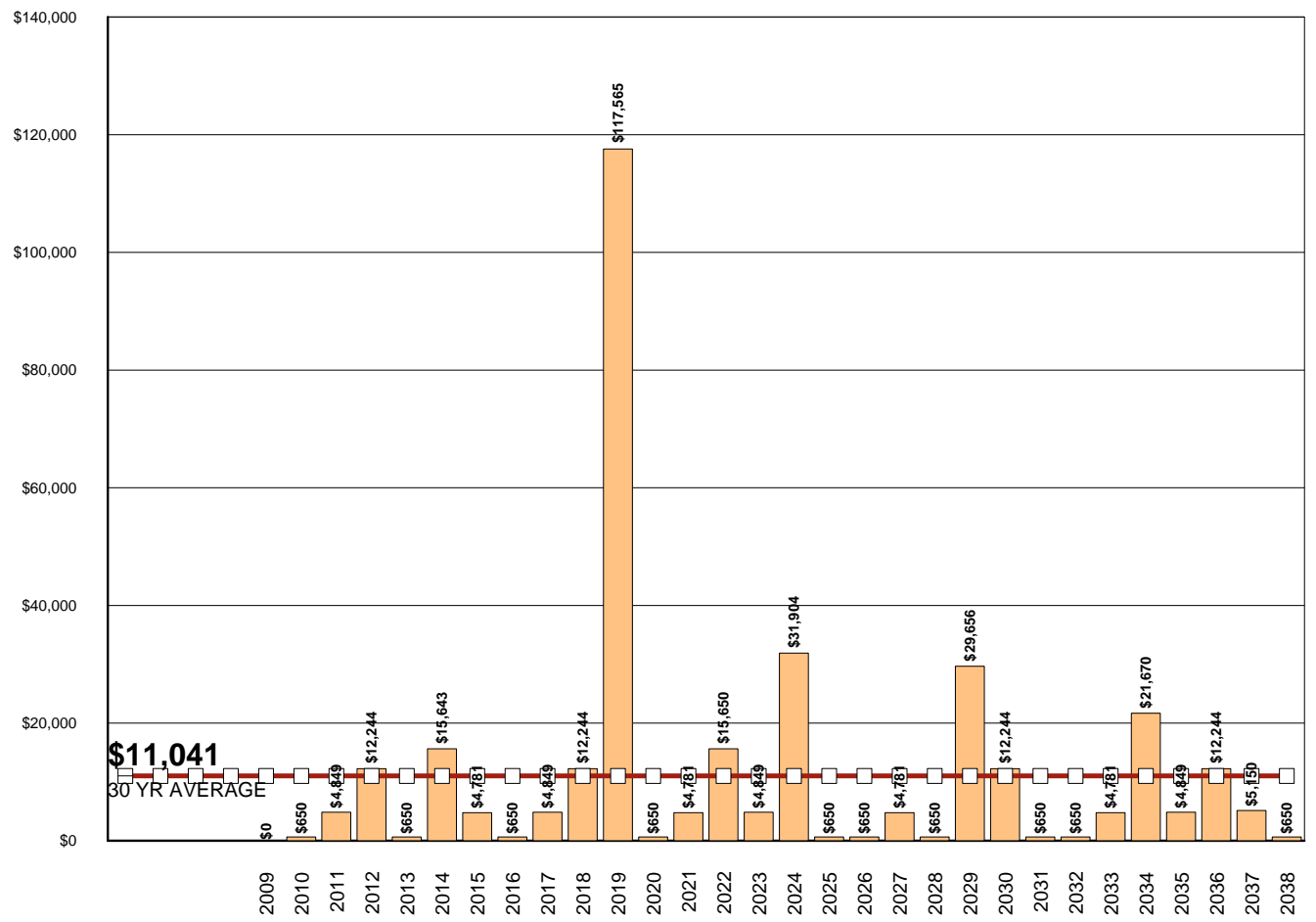
The calculations in this Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, the effects of inflation on the costs of Projected Replacements, or a constant annual increase in Annual Funding of Replacement Reserves. If requested, we will provide a Replacement Reserve Analysis with adjustments for inflation, interest, and/or a constant annual increase in funding, using values provided by the Association.

BEGINNING BALANCE

The Association reports Replacement Reserves on Deposit totaling \$97,076 at the start of the Study Year.

Graph #1. Annual Expenditures for Projected Replacements

This bar graph summarizes annual expenditures for the \$331,232 of Projected Replacements identified in the Replacement Reserve Inventory over the 30-year Study Period. The red line shows the average annual expenditure of \$11,041.



PROJECTED REPLACEMENTS

The Waters Edge at Woods Landing HOA Replacement Reserve Inventory (Section B) identifies 36 Projected Replacements with a one-time Replacement Cost of \$484,581 and replacements totaling \$331,232 over the 30-year Study Period. Projected Replacements are the replacement of commonly-owned items that:

- require periodic replacement and
- whose replacement is to be funded from Replacement Reserves.

The Replacement Reserve Inventory also identifies 30 Excluded Items. Expenditures for the replacement of these items are NOT scheduled for funding from Replacement Reserves. The accuracy of the calculations made in the Replacement Reserve Analysis is dependent on expenditures NOT being made for Excluded Items. The rationale behind these exclusions is discussed in detail on Page B1.

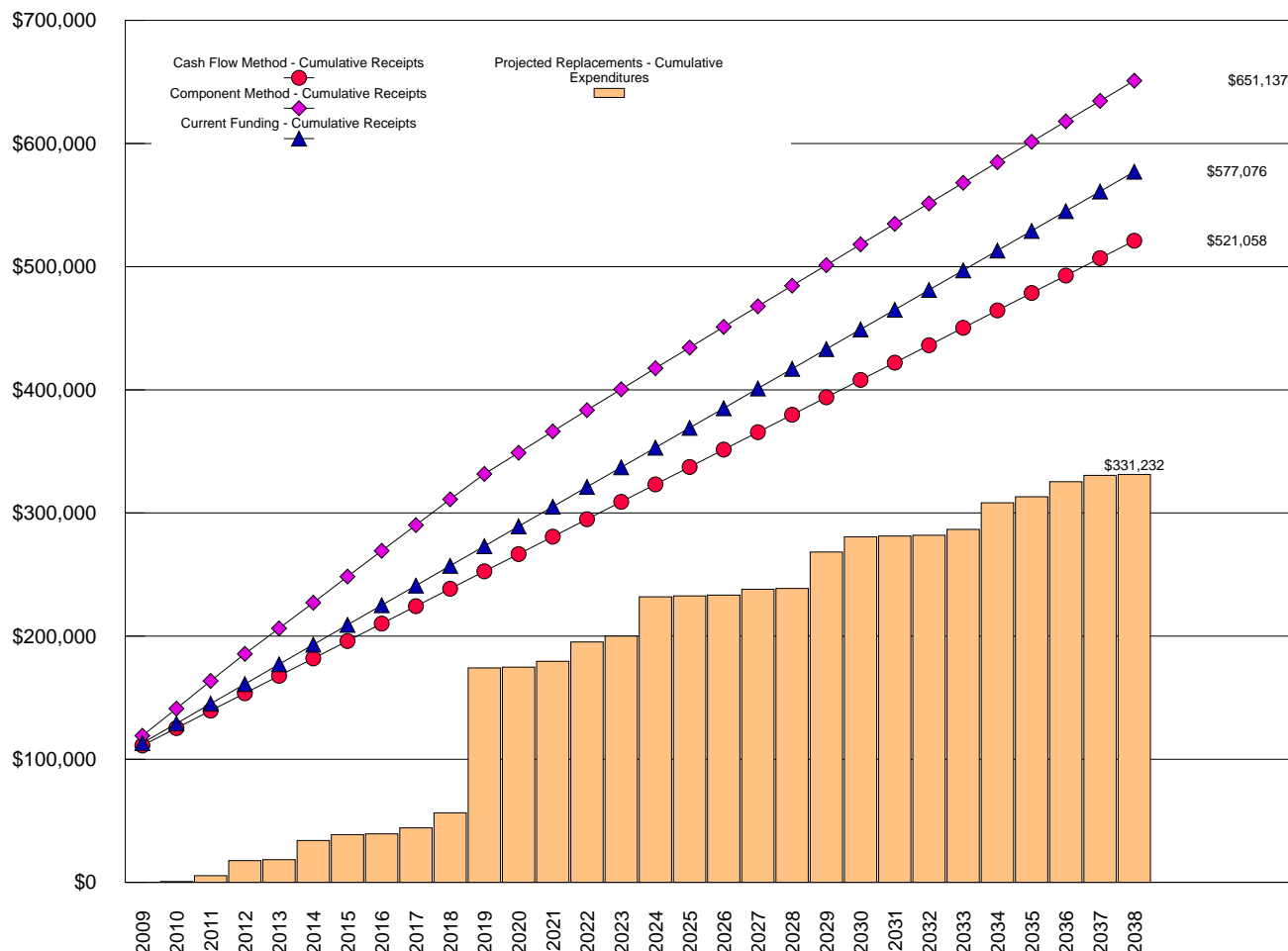
Expenditures from Replacements Reserves should be made only after consultation with an accounting professional.

The Section B - Replacement Reserve Inventory, contains Tables that list each Projected Replacement (and any Excluded Items) broken down into 7 major categories (Pages B3 to B9). Tables are also included that list each Projected Replacement by year for each of the 30 years of the Study Period beginning on Page C1.

The accuracy of this Replacement Reserve Analysis is dependent upon expenditures from Replacement Reserves being made only for the Projected Replacements specifically listed in the Replacement Reserve Inventory.

Graph #2. Comparison of Cumulative Replacement Reserve Funding and Expenditures

The line graph shows Replacement Reserves - Cumulative Receipts over the 30-year Study Period by the Cash Flow Method (red circles), Component Method (purple diamonds), and the Current Funding Plan as reported by the Association (blue triangles). The bar graph shows the Cumulative Expenditures necessary to fund the Project Replacements listed in the Replacement Reserve Inventory (Section B) and summarized in Graph #1.



CASH FLOW METHOD

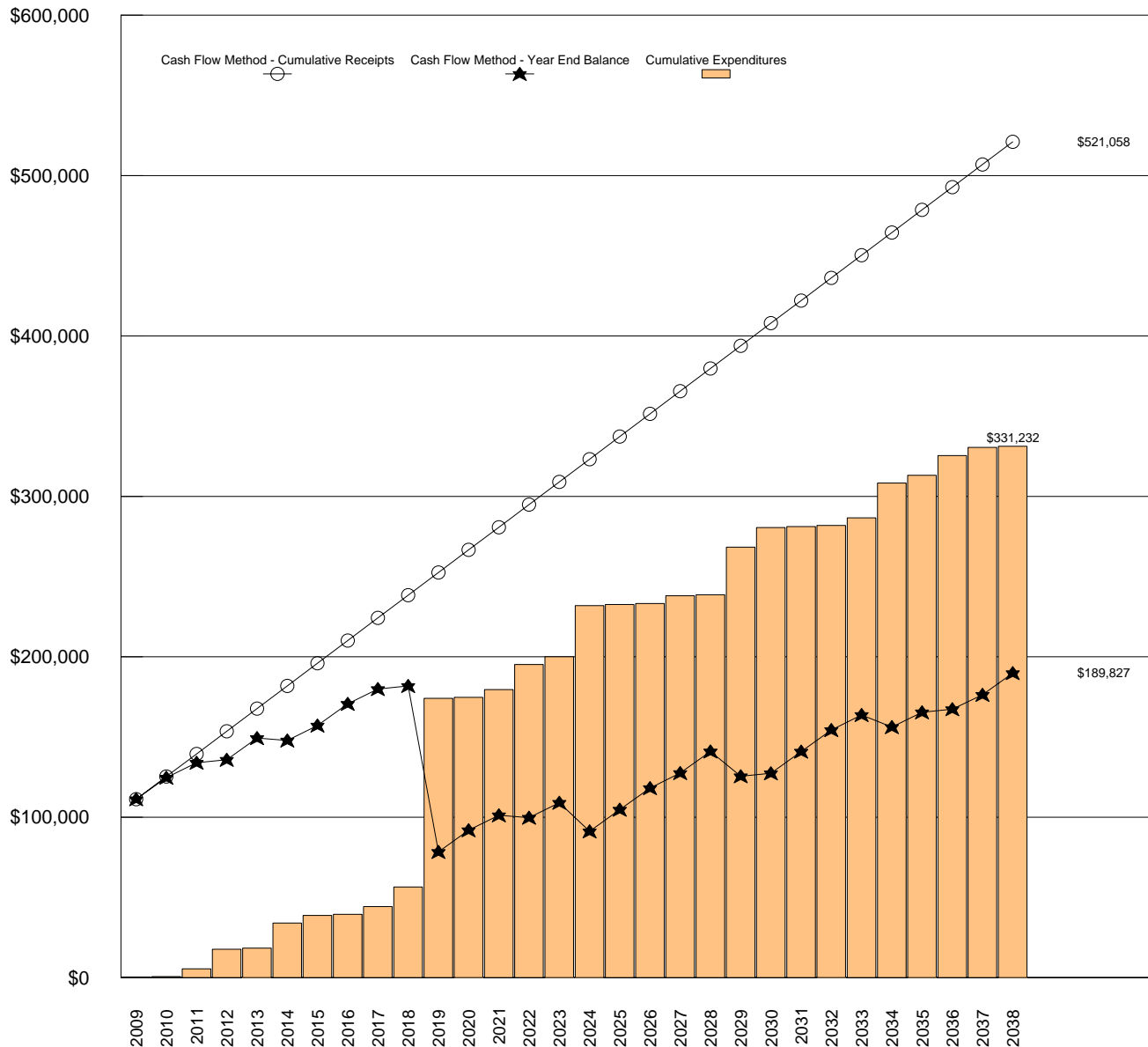
\$14,133 CASH FLOW METHOD MINIMUM ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2009.

\$10.33 Per unit (average), minimum monthly funding of Replacement Reserves

General. The Cash Flow Method is founded on the concept that the Replacement Reserve Account is solvent if cumulative receipts always exceed cumulative expenses. The Cash Flow Method calculates a MINIMUM annual deposit to Replacement Reserves that will:

- Fund all Projected Replacements listed in the Replacement Reserve Inventory (see Section B)
- Prevent Replacement Reserves from dropping below the Minimum Recommended Balance (see Page A-5)
- Allow a constant annual funding level between peaks in cumulative expenditures

Graph #3. Cash Flow Method - Cumulative Receipts and Expenditures Graph



CASH FLOW METHOD (cont'd)

- Replacement Reserves - Minimum Recommended Balance. The Minimum Recommended Balance is \$24,229, which is 5.0 percent of the one-time replacement cost of the Projected Replacements listed in the Replacement Reserve Inventory. Unless otherwise noted in the Comments on Page A-9, the Minimum Recommended Balance has been established by the Analyst based upon an evaluation of the types of items included in the Replacement Reserve Inventory.
- Peak Years. The Cash Flow Method calculates a constant annual funding of Replacement Reserves between peaks in cumulative expenditures called Peak Years. In Peak Years, Replacement Reserves on Deposit decline to the Replacement Reserves - Minimum Recommended Balance discussed in the paragraph above.
First Peak Year. The first Peak Year occurs in 2042, which is outside of the 30-year Study Period. The Cash Flow Method - Minimum Annual Funding of Replacement Reserves of \$14,133 remains the same throughout the entire 30-year Study Period.
This funding level is adequate to fund the \$331,232 of Projected Expenditures listed in the Replacement Reserve Inventory.
- Study Period. The Cash Flow Method calculates the recommended contributions to Replacement Reserves over the 30-year Study Period. These calculations are based upon a 40-year projection of expenditures for Projected Replacements to avoid the Replacement Reserve balance dropping to the Minimum Recommended Balance in the final year of the Study Period.
- Failure to Fund. The Cash Flow Method calculates a MINIMUM annual funding of Replacement Reserves. Failure to fund Replacement Reserves at the minimum level calculated by the Cash Flow Method will result in Replacement Reserves not being available for the Projected Replacements listed in the Replacement Reserve Inventory and/or Replacement Reserves dropping below the Minimum Recommended Balance.
- Adjustment to the Cash Flow Method for interest and inflation. The calculations in this Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, the effects of inflation of the cost of Projected Replacements, or a constant annual increase in Annual Funding of Replacement Reserves.
- Comparison of Cash Flow Funding and Average Annual Expenditure. The Average Annual Expenditure for Projected Replacements listed in the Reserve Inventory over the 30-year Study Period is \$11,041 (see Graph #1). The Cash Flow Method - Minimum Annual Funding of Replacement Reserves in the Study Year is \$14,133. This is 128.0 percent of the Average Annual Expenditure, indicating that the Association is building Replacement Reserves in advance of the first Peak Year in 2042.

Table #1. Cash Flow Method Data - Years 1 through 30

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Starting balance	\$97,076									
Annual deposit	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133
Expenditures		\$650	\$4,849	\$12,244	\$650	\$15,643	\$4,781	\$650	\$4,849	\$12,244
Year end balance	\$111,209	\$124,692	\$133,976	\$135,865	\$149,348	\$147,837	\$157,189	\$170,672	\$179,956	\$181,845
Minimum rec. funding lvl.	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229
Cumulative expenditures		\$650	\$5,499	\$17,743	\$18,393	\$34,036	\$38,817	\$39,467	\$44,315	\$56,559
Cumulative receipts	\$111,209	\$125,342	\$139,475	\$153,607	\$167,740	\$181,873	\$196,006	\$210,138	\$224,271	\$238,404
Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Annual deposit	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133
Expenditures	\$117,565	\$650	\$4,781	\$15,650	\$4,849	\$31,904	\$650	\$650	\$4,781	\$650
Year end balance	\$78,412	\$91,895	\$101,247	\$99,730	\$109,014	\$91,243	\$104,725	\$118,208	\$127,560	\$141,043
Minimum rec. funding lvl.	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229
Cumulative expenditures	\$174,124	\$174,774	\$179,555	\$195,205	\$200,054	\$231,958	\$232,608	\$233,258	\$238,039	\$238,689
Cumulative receipts	\$252,536	\$266,669	\$280,802	\$294,935	\$309,067	\$323,200	\$337,333	\$351,466	\$365,598	\$379,731
Year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Annual deposit	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133	\$14,133
Expenditures	\$29,656	\$12,244	\$650	\$650	\$4,781	\$21,670	\$4,849	\$12,244	\$5,150	\$650
Year end balance	\$125,520	\$127,408	\$140,891	\$154,374	\$163,725	\$156,188	\$165,472	\$167,361	\$176,344	\$189,827
Minimum rec. funding lvl.	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229	\$24,229
Cumulative expenditures	\$268,344	\$280,588	\$281,238	\$281,888	\$286,669	\$308,339	\$313,188	\$325,432	\$330,582	\$331,232
Cumulative receipts	\$393,864	\$407,996	\$422,129	\$436,262	\$450,395	\$464,527	\$478,660	\$492,793	\$506,926	\$521,058

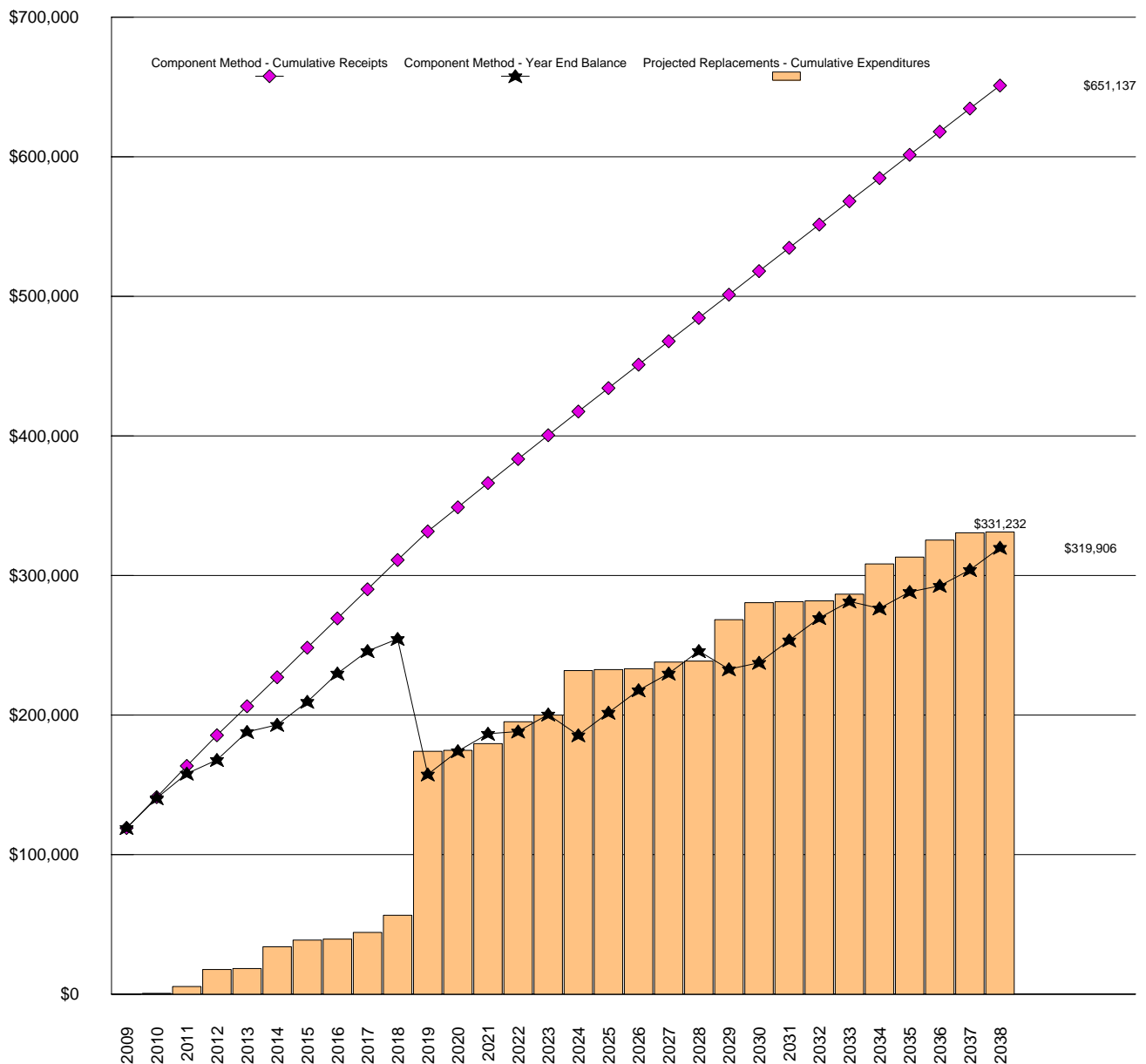
COMPONENT METHOD



\$22,053 COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2009.
 \$16.12 Per unit (average), recommended monthly funding of Replacement Reserves

General. The Component Method is a time tested and very conservative mathematical model developed by HUD in the early 1980s. Each of the 36 Projected Replacements listed in the Replacement Reserve Inventory is treated as a separate account. The Beginning Balance is allocated to each of these individual accounts, as is all subsequent funding of Replacement Reserves. These funds are "locked" in these individual accounts and are not available to fund other Projected Replacements. The calculation of the Recommended Annual Funding of Replacement Reserves is a multi-step process outlined in more detail on Page A7.

Graph #4. Component Method - Cumulative Receipts and Expenditures Graph



COMPONENT METHOD (cont'd)

- **Current Funding Objective.** A Current Funding Objective is calculated for each of the Projected Replacements listed in the Replacement Reserve Inventory. Replacement Cost is divided by the Normal Economic Life to determine the nominal annual contribution. The Remaining Economic Life is then subtracted from the Normal Economic Life to calculate the number of years that the nominal annual contribution should have been made. The two values are then multiplied to determine the Current Funding Objective. This is repeated for each of the 36 Projected Replacements. The total, \$185,266, is the Current Funding Objective.

For an example, consider a very simple Replacement Reserve Inventory with one Projected Replacement, a fence with a \$1,000 Replacement Cost, a Normal Economic Life of 10 years, and a Remaining Economic Life of 2 years. A contribution to Replacement Reserves of \$100 (\$1,000 + 10 years) should have been made in each of the previous 8 years (10 years - 2 years). The result is a Current Funding Objective of \$800 (8 years x \$100 per year).

- **Funding Percentage.** The Funding Percentage is calculated by dividing the Beginning Balance (\$97,076) by the Current Funding Objective (\$185,266). At Waters Edge at Woods Landing HOA the Funding Percentage is 52
- **Allocation of the Beginning Balance.** The Beginning Balance is divided among the 36 Projected Replacements in the Replacement Reserve Inventory. The Current Funding Objective for each Projected Replacement is multiplied by the Funding Percentage and these funds are then "locked" into the account of each item.

If we relate this calculation back to our fence example, it means that the Association has not accumulated \$800 in Reserves (the Funding Objective), but rather at 52.4 percent funded, there is \$419 in the account for the fence.

- **Annual Funding.** The Recommended Annual Funding of Replacement Reserves is then calculated for each Projected Replacement. The funds allocated to the account of the Projected Replacement are subtracted from the Replacement Cost. The result is then divided by the number of years until replacement, and the result is the annual funding for each of the Projected Replacements. The sum of these is \$22,053, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2009).

In our fence example, the \$419 in the account is subtracted from the \$1,000 Total Replacement Cost and divided by the 2 years that remain before replacement, resulting in an annual deposit of \$290. Next year, the deposit remains \$290, but in the third year, the fence is replaced and the annual funding adjusts to \$100.

- **Adjustment to the Component Method for interest and inflation.** The calculations in the Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, the effects of inflation of the cost of Projected Replacements, or a constant annual increase in Annual Funding of Replacement Reserves.

Table #2. Component Method Data - Years 1 through 30

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Starting balance	\$97,076									
Annual deposit	\$22,053	\$22,053	\$22,378	\$22,045	\$20,757	\$20,757	\$21,190	\$20,941	\$20,941	\$20,941
Expenditures		\$650	\$4,849	\$12,244	\$650	\$15,643	\$4,781	\$650	\$4,849	\$12,244
Year end balance	\$119,129	\$140,533	\$158,062	\$167,863	\$187,970	\$193,085	\$209,493	\$229,785	\$245,877	\$254,575
Cumulative Expenditures		\$650	\$5,499	\$17,743	\$18,393	\$34,036	\$38,817	\$39,467	\$44,315	\$56,559
Cumulative Receipts	\$119,129	\$141,183	\$163,561	\$185,606	\$206,363	\$227,120	\$248,310	\$269,251	\$290,192	\$311,134
Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Annual deposit	\$20,482	\$17,322	\$17,322	\$17,204	\$17,051	\$17,051	\$16,765	\$16,765	\$16,765	\$16,694
Expenditures	\$117,565	\$650	\$4,781	\$15,650	\$4,849	\$31,904	\$650	\$650	\$4,781	\$650
Year end balance	\$157,491	\$174,163	\$186,705	\$188,258	\$200,460	\$185,607	\$201,722	\$217,837	\$229,820	\$245,865
Cumulative Expenditures	\$174,124	\$174,774	\$179,555	\$195,205	\$200,054	\$231,958	\$232,608	\$233,258	\$238,039	\$238,689
Cumulative Receipts	\$331,615	\$348,937	\$366,260	\$383,463	\$400,514	\$417,564	\$434,329	\$451,094	\$467,859	\$484,553
Year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Annual deposit	\$16,694	\$16,849	\$16,690	\$16,690	\$16,690	\$16,645	\$16,634	\$16,634	\$16,529	\$16,527
Expenditures	\$29,656	\$12,244	\$650	\$650	\$4,781	\$21,670	\$4,849	\$12,244	\$5,150	\$650
Year end balance	\$232,903	\$237,508	\$253,549	\$269,589	\$281,499	\$276,473	\$288,259	\$292,650	\$304,029	\$319,906
Cumulative Expenditures	\$268,344	\$280,588	\$281,238	\$281,888	\$286,669	\$308,339	\$313,188	\$325,432	\$330,582	\$331,232
Cumulative Receipts	\$501,247	\$518,097	\$534,787	\$551,478	\$568,168	\$584,813	\$601,447	\$618,081	\$634,611	\$651,137

CURRENT FUNDING



\$16,000 CURRENT ANNUAL FUNDING OF REPLACEMENT RESERVES
 (as reported by the Association).

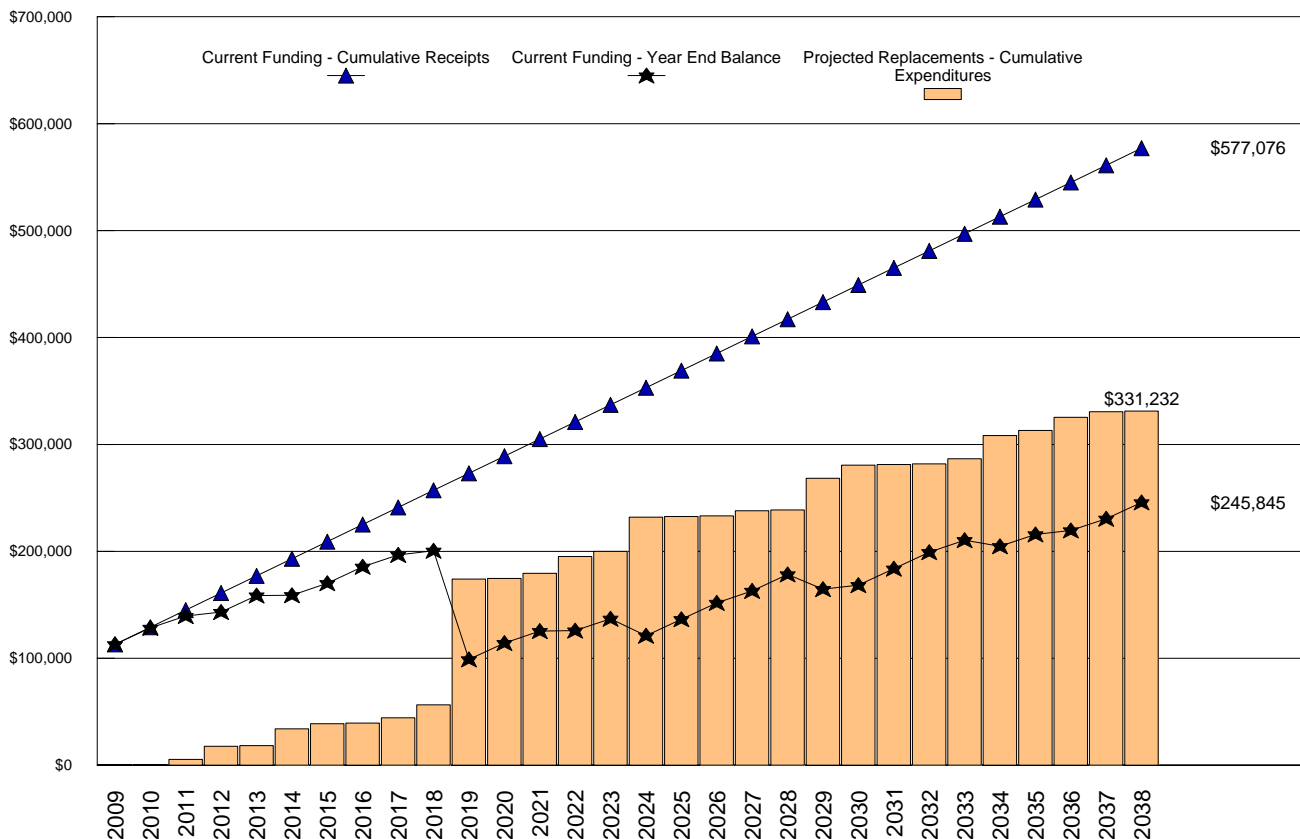
\$11.70 Per unit (average), reported current monthly funding of Replacement Reserves

General. Our evaluation of the Current Association Funding assumes that the Association will continue to fund Replacement Reserves at the current level of \$16,000 per year in each of the 30 years of the Study Period.

Our evaluation is based upon this Replacement Reserve Funding Level, a \$97,076 Beginning Balance, the Projected Annual Replacement Expenditures shown in Graph #1 and listed in the Replacement Reserve Inventory, and any interest, inflation rate, or constant annual increase in annual contribution adjustments discussed below.

- Evaluation. Our calculations have determined that Current Annual Funding of Replacement Reserves, as reported by the Association, is adequate to fund Projected Replacements throughout the 30-year Study Period.
- Adjustment to the Current Association Funding for interest and inflation. The Calculations in the Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, the effects of inflation of the cost of Projected Replacements, or a constant annual increase in Annual Funding of Replacement Reserves.
- Comparison of Current Association Funding and Average Annual Expenditure. The average annual expenditure for Projected Replacements listed in the Reserve Inventory over the 30-year Study Period is \$11,041 (see Graph #1). Current Association annual funding of Replacement Reserves is \$16,000, or approximately 145 percent of the Average Annual Expenditure.

Graph #5. Current Association Funding - Cumulative Receipts and Expenditures Graph



CURRENT FUNDING (cont'd)

Table #3. Current Funding Data - Years 1 through 30

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Starting balance	\$97,076									
Annual deposit	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000
Expenditures		\$650	\$4,849	\$12,244	\$650	\$15,643	\$4,781	\$650	\$4,849	\$12,244
Year end balance	\$113,076	\$128,426	\$139,578	\$143,334	\$158,684	\$159,041	\$170,260	\$185,610	\$196,761	\$200,517
Cumulative Expenditures		\$650	\$5,499	\$17,743	\$18,393	\$34,036	\$38,817	\$39,467	\$44,315	\$56,559
Cumulative Receipts	\$113,076	\$129,076	\$145,076	\$161,076	\$177,076	\$193,076	\$209,076	\$225,076	\$241,076	\$257,076
Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Annual deposit	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000
Expenditures	\$117,565	\$650	\$4,781	\$15,650	\$4,849	\$31,904	\$650	\$650	\$4,781	\$650
Year end balance	\$98,952	\$114,302	\$125,521	\$125,871	\$137,023	\$121,119	\$136,469	\$151,819	\$163,038	\$178,388
Cumulative expenditures	\$174,124	\$174,774	\$179,555	\$195,205	\$200,054	\$231,958	\$232,608	\$233,258	\$238,039	\$238,689
Cumulative receipts	\$273,076	\$289,076	\$305,076	\$321,076	\$337,076	\$353,076	\$369,076	\$385,076	\$401,076	\$417,076
Year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Annual deposit	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000
Expenditures	\$29,656	\$12,244	\$650	\$650	\$4,781	\$21,670	\$4,849	\$12,244	\$5,150	\$650
Year end balance	\$164,732	\$168,488	\$183,838	\$199,188	\$210,407	\$204,737	\$215,889	\$219,645	\$230,495	\$245,845
Cumulative Expenditures	\$268,344	\$280,588	\$281,238	\$281,888	\$286,669	\$308,339	\$313,188	\$325,432	\$330,582	\$331,232
Cumulative Receipts	\$433,076	\$449,076	\$465,076	\$481,076	\$497,076	\$513,076	\$529,076	\$545,076	\$561,076	\$577,076

COMMENTS ON THE REPLACEMENT RESERVE ANALYSIS

- This Replacement Reserve Study has been developed in compliance with the Community Associations Institute, National Reserve Study Standards, for a Level Two - Update (with site visit and on-site review).
- Waters Edge at Woods Landing HOA has 114 units. The type of property is a homeowner association.
- Our calculations assume that Replacement Reserves are not subject to tax.

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REPLACEMENT RESERVE INVENTORY GENERAL INFORMATION

Waters Edge at Woods Landing HOA - Replacement Reserve Inventory identifies 66 items. Two types of items are identified, Projected Replacements and Excluded Items:

- **PROJECTED REPLACEMENTS.** 36 of the items are Projected Replacements and the periodic replacements of these items are scheduled for funding from Replacement Reserves. The Projected Replacements have an estimated one-time replacement cost of \$484,581. Replacements totaling \$331,232 are scheduled in the Replacement Reserve Inventory over the 30-year Study Period.

Projected Replacements are the replacement of commonly owned physical assets that require periodic replacement and whose replacement is to be funded from Replacement Reserves.

- **EXCLUDED ITEMS.** 30 of the items are Excluded Items, and expenditures for these items are NOT scheduled for funding from Replacement Reserves. The accuracy of the calculations made in the Replacement Reserve Analysis is dependent on expenditures NOT being made for Excluded Items. The Excluded Items are listed in the Replacement Reserve Inventory to identify specific items and categories of items that are not to be funded from Replacement Reserves. There are multiple categories of items that are typically excluded from funding by Replacement Reserves, including but not limited to:

Tax Code. The United States Tax Code grants very favorable tax status to Replacement Reserves, conditioned on expenditures being made within certain guidelines. These guidelines typically exclude maintenance activities, partial replacements, repairs, capital improvements, and one-time only replacements.

Value. Items with a replacement cost of less than \$1,000 are typically excluded from funding from Replacement Reserves. This exclusion is made to accurately reflect how Replacement Reserves are administered. If the Association has selected an alternative level, it will be noted in the Replacement Reserve Inventory - General Comments on Page B2.

Long-lived Items. Items that when properly maintained, can be assumed to have a life equal to the property as a whole, are typically excluded from the Replacement Reserve Inventory.

Unit improvements. Items located on property owned by a single unit and where the items serve a single unit are generally assumed to be the responsibility of that unit, not the Association.

Other non-common improvements. Items owned by the local government, public and private utility companies, the United States Postal Service, Master Associations, state and local highway authorities, etc., may be installed on property that is owned by the Association. These types of items are generally not the responsibility of the Association and are excluded from the Replacement Reserve Inventory.

The rationale for the exclusion of an item from funding by Replacement Reserves is discussed in more detail in the 'Comments' section of its page of the Replacement Reserve Inventory.

- **CATEGORIES.** The 66 items included in the Waters Edge at Woods Landing HOA Replacement Reserve Inventory are divided into 7 major categories. Each category is printed on a separate page, Pages B3 to B9.
- **LEVEL OF SERVICE.** This Replacement Reserve Inventory has been developed in compliance with the standards established for a Level Two - Update (with site visit and on-site review), as defined by the National Reserve Study Standards, established in 1998 by Community Associations Institute, which states:

Level II Studies are based entirely on the component inventory from a prior study. This information is adjusted to reflect changes to the inventory that are provided by the property manager, and the quantities are adjusted accordingly from field measurement and/or quantity takeoffs from to-scale drawings that are made available to us. The condition of all components is ascertained from a site visit and the visual inspection of each component by the analyst. The life expectancy and the value of components are provided based in part on these observations and the fund status and funding plan are derived from analysis of this data.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- **INVENTORY DATA.** Each of the 36 Projected Replacements listed in the Replacement Reserve Inventory includes the following data:

Item Number. The Item Number is assigned sequentially and is intended for identification purposes only.

Item Description. We have named each item included in the Inventory. Where the name of the item and the category are not sufficient to specifically identify the item, we have included additional information in the Comments section at the bottom of the page.

Units. We have used standard abbreviations to identify the number of units including SF-square feet, FT-foot, SY-square yard, LS-lump sum, EA-each, and PR-pair. Nonstandard abbreviations are noted in the Comments section on the page on which the abbreviation is used.

Number of Units. The methods used to develop the quantities are discussed in "Level of Service" above.

Unit Replacement Cost. We use two sources to develop the unit cost data shown in the Inventory; industry standard estimating manuals published by R. S. Means Company, Inc., and data that we have developed based upon our experience with similar replacement projects. We frequently use our best professional judgment to modify these values to reflect conditions at the site that we believe will affect the unit costs. Actual Replacement Costs may vary substantially from our estimates because of unforeseen demolition costs, engineering and architectural fees, timing of the replacement, etc.

Normal Economic Life (Yrs). The number of years that a new and properly installed item should be expected to remain in service.

Economic Life Remaining (Yrs). The estimated number of years before an item will need to be replaced. In "normal" conditions, this could be calculated by subtracting the age of the item from the Normal Economic Life of the item, but only rarely do physical assets age "normally". Some items may have longer or shorter lives depending on many factors such as environment, initial quality of the item, maintenance, etc.

Total Replacement Cost. This is calculated by multiplying the Unit Replacement Cost by the Number of Units.

Each of the 30 Excluded Items includes the Item Description, Units, and Number of Units. Many of the Excluded Items are listed as a 'Lump Sum' with a quantity of 1. For the Excluded Items, this indicates that all of the items identified by the 'Item Description' are excluded from funding by Replacement Reserves.

- **REVIEW OF EXPENDITURES.** All expenditures from Replacement Reserves should be made only after consultation with an accounting professional.
- **PARTIAL FUNDING.** Items may have been included in the Replacement Reserve Inventory at less than 100 percent of their full quantity and/or replacement cost. This is done on items that will never be replaced in their entirety, but which may require periodic replacements over an extended period of time. The assumptions that provide the basis for any partial funding are noted on in the Comments section.

SITE IMPROVEMENTS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
1	Asphalt Pavement - Overlay	sf	70,800	\$1.40	40	10	\$99,120
2	Asphalt Pavement - Mill and Overlay	sf	70,800	\$1.70	40	30	\$120,360
3	Asphalt Pavement - Seal Coat	sf	70,800	\$0.20	5	5	\$14,160
4	Painted Signs	sf	50	\$16.66	15	5	\$833
5	Mailbox	ea	128	\$120.00	35	33	\$15,360
6	Entrance Sign, repointing 10%	sf	300	\$12.50	10	20	\$3,750
7	Mulch Trail @ 20% per year	sf	1,000	\$0.65	1	1	\$650
8	Wood walkway, deck	sf	280	\$9.50	15	10	\$2,660
9	Wood walkway, structure	sf	280	\$15.00	30	25	\$4,200
10	Storm Water Management Pond	ls	1	\$5,500.00	20	15	\$5,500
11	Storm Water System 30%	ls	1	\$30,000.00	20	30	\$30,000
12	Pier Deck @ 20%	sf	270	\$15.55	6	2	\$4,199
13	Pier Structure (Pilings, Stringers, etc.)	lf	26	\$233.24	30	20	\$6,064
14	Lights	ea	13	\$75.00	20	10	\$975
15	Metal Access Gate	ls	1	\$4,500.00	30	28	\$4,500
SITE IMPROVEMENTS - Replacement Costs - Subtotal							\$312,331

SITE IMPROVEMENTS
COMMENTS

●

- Winter Gull 4,514 sf
- Entrance Circle 5,040 sf
- Wood Duck Lane 14,864 sf
- Snow Goose Lane 18,432 sf
- Woods Landing 18,980 sf
- Pintail 8,970 sf
- TOTAL: 70,800 sf

CONCRETE COMPONENTS
 PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
16	Concrete sidewalk (6%)	sf	486	\$8.50	60	6	\$4,131
17	Concrete sidewalk (6%)	sf	486	\$8.50	60	12	\$4,131
18	Concrete sidewalk (6%)	sf	486	\$8.50	60	18	\$4,131
19	Concrete sidewalk (6%)	sf	486	\$8.50	60	24	\$4,131
20	Concrete sidewalk (6%)	sf	486	\$8.50	60	30	\$4,131
21	Concrete sidewalk (6%)	sf	486	\$8.50	60	36	\$4,131
22	Concrete sidewalk (6%)	sf	486	\$8.50	60	42	\$4,131
23	Concrete sidewalk (6%)	sf	486	\$8.50	60	48	\$4,131
24	Concrete sidewalk (6%)	sf	486	\$8.50	60	54	\$4,131
25	Concrete sidewalk (6%)	sf	486	\$8.50	60	60	\$4,131
26	Concrete curb & gutter (6%)	ft	341	\$34.00	60	3	\$11,594
27	Concrete curb & gutter (6%)	ft	341	\$34.00	60	9	\$11,594
28	Concrete curb & gutter (6%)	ft	341	\$34.00	60	15	\$11,594
29	Concrete curb & gutter (6%)	ft	341	\$34.00	60	21	\$11,594
30	Concrete curb & gutter (6%)	ft	341	\$34.00	60	27	\$11,594
31	Concrete curb & gutter (6%)	ft	341	\$34.00	60	33	\$11,594
32	Concrete curb & gutter (6%)	ft	341	\$34.00	60	39	\$11,594
33	Concrete curb & gutter (6%)	ft	341	\$34.00	60	45	\$11,594
34	Concrete curb & gutter (6%)	ft	341	\$34.00	60	51	\$11,594
35	Concrete curb & gutter (6%)	ft	341	\$34.00	60	57	\$11,594

CONCRETE COMPONENTS - Replacement Costs - Subtotal \$157,250

CONCRETE COMPONENTS
 COMMENTS

Empty box for comments.

**TOT LOT
 PROJECTED REPLACEMENTS**

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
36	Tot Lot	ls	1	\$15,000.00	20	13	\$15,000

TOT LOT - Replacement Costs - Subtotal \$15,000

**TOT LOT
 COMMENTS**

- Tot lots and tot lot equipment should be evaluated annually by a playground safety specialist for compliance with the Consumer Product Safety Commission, Handbook for Public Playground Safety. Defects should be corrected immediately to protect the users of the facilities from potential injury and the Association from potential liability for those injuries.

VALUATION EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Site lighting fixtures	ls	1				EXCLUDED
	Miscellaneous signage	ls	1				EXCLUDED

VALUATION EXCLUSIONS

COMMENTS

- Valuation Exclusions. For ease of administration of the Replacement Reserves and to reflect accurately how Replacement Reserves are administered, items with a dollar value less than \$1,000.00 have not been scheduled for funding from Replacement Reserves. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

UNIT IMPROVEMENTS EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Driveway on an individual lot	ls	1				EXCLUDED
	Sanitary sewers serving one unit	ls	1				EXCLUDED
	Electrical wiring serving one unit	ls	1				EXCLUDED
	Cable TV service serving one unit	ls	1				EXCLUDED
	Telephone service serving one unit	ls	1				EXCLUDED
	Gas service serving one unit	ls	1				EXCLUDED
	Stairs on an individual lot	ls	1				EXCLUDED
	Fence on an individual lot	ls	1				EXCLUDED
	Driveway on an individually lot	ls	1				EXCLUDED
	Unit exterior	ls	1				EXCLUDED

UNIT IMPROVEMENTS EXCLUSIONS

COMMENTS

- Unit improvement Exclusions. We understand that the elements of the project that relate to a single unit are the responsibility of that unit owner. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

UTILITY EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Primary electric feeds	ls	1				EXCLUDED
	Electric transformers	ls	1				EXCLUDED
	Cable TV systems and structures	ls	1				EXCLUDED
	Telephone cables and structures	ls	1				EXCLUDED
	Site lighting	ls	1				EXCLUDED
	Gas mains and meters	ls	1				EXCLUDED
	Water mains and meters	ls	1				EXCLUDED
	Sanitary sewers	ls	1				EXCLUDED
	Sewage pumping stations	ls	1				EXCLUDED

UTILITY EXCLUSIONS

COMMENTS

- Utility Exclusions. Many improvements owned by utility companies are on property owned by the Association. We have assumed that repair, maintenance, and replacements of these components will be done at the expense of the appropriate utility company. Examples of items excluded from funding Replacement Reserves by this standard are listed above.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

MAINTENANCE AND REPAIR EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Cleaning of asphalt pavement	ls	1				EXCLUDED
	Crack sealing of asphalt pavement	ls	1				EXCLUDED
	Painting of curbs	ls	1				EXCLUDED
	Striping of parking spaces	ls	1				EXCLUDED
	Numbering of parking spaces	ls	1				EXCLUDED
	Landscaping and site grading	ls	1				EXCLUDED
	Repair services	ls	1				EXCLUDED
	Partial replacements	ls	1				EXCLUDED
	Capital improvements	ls	1				EXCLUDED

MAINTENANCE AND REPAIR EXCLUSIONS

COMMENTS

- Maintenance activities, one-time-only repairs, and capital improvements. These activities are NOT appropriately funded from Replacement Reserves. The inclusion of such component in the Replacement Reserve Inventory could jeopardize the special tax status of ALL Replacement Reserves, exposing the Association to significant tax liabilities. We recommend that the Board of Directors discuss these exclusions and Revenue Ruling 75-370 with a Certified Public Accountant.
- Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

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PROJECTED ANNUAL REPLACEMENTS GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 36 Projected Replacements in the Waters Edge at Woods Landing H Replacement Reserve Inventory whose replacement is scheduled to be funded from Replacement Reserves are broken down on a year-by-year basis, beginning on Page C2.

REPLACEMENT RESERVE ANALYSIS AND INVENTORY POLICES, PROCEDURES, AND ADMINISTRATION

- **REVISIONS.** Revisions will be made to the Replacement Reserve Analysis and Replacement Reserve Inventory in accordance with the written instructions of the Board of Directors. No additional charge is incurred for the first revision, if requested in writing within three months of the date of the Replacement Reserve Study. It is our policy to provide revisions in electronic (Adobe PDF) format only.
- **CONFLICT OF INTEREST.** Neither Miller - Dodson Associates nor the Reserve Analyst has any prior or existing relationship with this Association which would represent a real or perceived conflict of interest.
- **RELIANCE ON DATA PROVIDED BY THE CLIENT.** Information provided by an official representative of the Association regarding financial, physical conditions, quality, or historical issues is deemed reliable.
- **INTENT.** This Replacement Reserve Study is a reflection of the information provided by the Association and the visual evaluations of the Analyst. It has been prepared for the sole use of the Association and is not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.
- **PREVIOUS REPLACEMENTS.** Information provided to Miller - Dodson Associates regarding prior replacements is considered to be accurate and reliable. Our visual evaluation is not a project audit or quality inspection.
- **UPDATING.** In the first two or possibly three years after the completion of a Level One Replacement Reserve Study, we recommend the Association review and revise the Replacement Reserve Analysis and Inventory annually to take into account replacements which have occurred and known changes in replacement costs. This can frequently be handled as a Level Two or Level Three Study (as defined by the Community Associations Institute), unless the Association has completed major replacement projects. A full analysis (Level One) based on a comprehensive visual evaluation of the site should be accomplished every three to five years or after each major replacement project.
- **EXPERIENCE WITH FUTURE REPLACEMENTS.** The Calendar of Annual Projected Replacements, lists replacements we have projected to occur over the next thirty years, begins on Page C2. Actual experience in replacing the items may differ significantly from the cost estimates and time frames shown because of conditions beyond our control. These differences may be caused by maintenance practices, inflation, variations in pricing and market conditions, future technological developments, regulatory actions, acts of God, and luck. Some items may function normally during our visual evaluation and then fail without notice.
- **REVIEW OF THE REPLACEMENT RESERVE STUDY.** For this study to be effective, it should be reviewed by the Waters Edge at Woods Landing HOA Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Association.

PROJECTED REPLACEMENTS - YEARS ONE TO FIFTEEN

Item	2009	\$
No Scheduled Replacements		

Item	2010	\$
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$650

Item	2011	\$
7	Mulch Trail @ 20% per year	\$650
12	Pier Deck @ 20%	\$4,199
Total Scheduled Replacements		\$4,849

Item	2012	\$
7	Mulch Trail @ 20% per year	\$650
26	Concrete curb & gutter (6%)	\$11,594
Total Scheduled Replacements		\$12,244

Item	2013	\$
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$650

Item	2014	\$
3	Asphalt Pavement - Seal Co	\$14,160
4	Painted Signs	\$833
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$15,643

Item	2015	\$
7	Mulch Trail @ 20% per year	\$650
16	Concrete sidewalk (6%)	\$4,131
Total Scheduled Replacements		\$4,781

Item	2016	\$
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$650

Item	2017	\$
7	Mulch Trail @ 20% per year	\$650
12	Pier Deck @ 20%	\$4,199
Total Scheduled Replacements		\$4,849

Item	2018	\$
7	Mulch Trail @ 20% per year	\$650
27	Concrete curb & gutter (6%)	\$11,594
Total Scheduled Replacements		\$12,244

Item	2019	\$
1	Asphalt Pavement - Overlay	\$99,120
3	Asphalt Pavement - Seal Co	\$14,160
7	Mulch Trail @ 20% per year	\$650
8	Wood walkway, deck	\$2,660
14	Lights	\$975
Total Scheduled Replacements		\$117,565

Item	2020	\$
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$650

Item	2021	\$
7	Mulch Trail @ 20% per year	\$650
17	Concrete sidewalk (6%)	\$4,131
Total Scheduled Replacements		\$4,781

Item	2022	\$
7	Mulch Trail @ 20% per year	\$650
36	Tot Lot	\$15,000
Total Scheduled Replacements		\$15,650

Item	2023	\$
7	Mulch Trail @ 20% per year	\$650
12	Pier Deck @ 20%	\$4,199
Total Scheduled Replacements		\$4,849

PROJECTED REPLACEMENTS - YEARS SIXTEEN TO THIRTY

Item	2024	\$
3	Asphalt Pavement - Seal Co	\$14,160
7	Mulch Trail @ 20% per year	\$650
10	Storm Water Management F	\$5,500
28	Concrete curb & gutter (6%)	\$11,594
Total Scheduled Replacements		\$31,904

Item	2025	\$
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$650

Item	2026	\$
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$650

Item	2027	\$
7	Mulch Trail @ 20% per year	\$650
18	Concrete sidewalk (6%)	\$4,131
Total Scheduled Replacements		\$4,781

Item	2028	\$
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$650

Item	2029	\$
3	Asphalt Pavement - Seal Co	\$14,160
4	Painted Signs	\$833
6	Entrance Sign, repointing 1C	\$3,750
7	Mulch Trail @ 20% per year	\$650
12	Pier Deck @ 20%	\$4,199
13	Pier Structure (Pilings, Stringer)	\$6,064
Total Scheduled Replacements		\$29,656

Item	2030	\$
7	Mulch Trail @ 20% per year	\$650
29	Concrete curb & gutter (6%)	\$11,594
Total Scheduled Replacements		\$12,244

Item	2031	\$
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$650

Item	2032	\$
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$650

Item	2033	\$
7	Mulch Trail @ 20% per year	\$650
19	Concrete sidewalk (6%)	\$4,131
Total Scheduled Replacements		\$4,781

Item	2034	\$
3	Asphalt Pavement - Seal Co	\$14,160
7	Mulch Trail @ 20% per year	\$650
8	Wood walkway, deck	\$2,660
9	Wood walkway, structure	\$4,200
Total Scheduled Replacements		\$21,670

Item	2035	\$
7	Mulch Trail @ 20% per year	\$650
12	Pier Deck @ 20%	\$4,199
Total Scheduled Replacements		\$4,849

Item	2036	\$
7	Mulch Trail @ 20% per year	\$650
30	Concrete curb & gutter (6%)	\$11,594
Total Scheduled Replacements		\$12,244

Item	2037	\$
7	Mulch Trail @ 20% per year	\$650
15	Metal Access Gate	\$4,500
Total Scheduled Replacements		\$5,150

Item	2038	\$
7	Mulch Trail @ 20% per year	\$650
Total Scheduled Replacements		\$650

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CONDITION ASSESSMENT

General Comments. Miller - Dodson Associates conducted a Reserve Study at Water's Edge in January 2009. Water's Edge is in very good condition for a condominium community constructed in 1999. A review of the Replacement Reserve Inventory will show that we are anticipating most of the components achieving their normal economic lives.

The following comments pertain to the larger, more significant components in the Replacement Reserve Inventory and to those items that are unique or deserving of attention because of their condition or the manner in which they have been treated in the Replacement Reserve Analysis or Inventory.

SITE IMPROVEMENTS

Asphalt Pavement. The site includes asphalt pavement for vehicle access and parking. In general, the asphalt pavement is in very good condition with limited cracking, alligating, or deterioration. The Association maintains an inventory of 70,800 square feet of asphalt pavement.

As a rule of thumb, asphalt should be overlaid when approximately five percent of the surface area has become cracked or has failed. The normal service life of asphalt pavement is typically 18 to 20 years.

In order to maintain the condition of the pavement throughout the community and to insure the longest life of the asphalt, we recommend a systematic and comprehensive maintenance program that includes:



1. **Crack Sealing.** All cracks should be sealed with an appropriate sealing compound to prevent water infiltration through the asphalt compound into the base. This repair should be done annually. This is an entirely different process from the seal coating discussed below. Crack sealing is normally considered a maintenance activity and is not funded from Reserves. Areas of extensive cracking or deterioration that cannot be made watertight by crack sealing should be cut out and patched.
2. **Cleaning.** Long-term exposure to oil or gas breaks down asphalt. Because this asphalt pavement is generally not used for long term parking, it is unlikely that frequent cleaning will be necessary. When necessary, spill areas should be cleaned, or if deterioration has penetrated the asphalt, patched. This is a maintenance activity, and we have assumed that it will not be funded from Reserves.
3. **Seal Coating.** The asphalt should be seal coated every three to five years. For this maintenance activity to be effective in extending the life of the asphalt, the crack sealing and cleaning of the asphalt, discussed above should be done first.

Pricing used in the study is based on a recent contract for a two-inch overlay and reflects the current local market.

Concrete Sidewalks, Driveway Aprons, and Curb Gutter. The Association maintains an inventory of approximately 8,100 square feet of concrete sidewalks and driveway aprons and 5,683 feet of curb and gutter in the community. The overall condition of the concrete sidewalks, driveway aprons and curb and gutter is good.

The standards we used for recommending replacement are as follows:

1. Trip hazard, 0.5 inch height difference.
2. Severe cracking.
3. Severe spalling.
4. Uneven riser heights on steps.
5. Steps with risers in excess of 8.25 inches.

Because it is highly unlikely that all of the community's concrete components will fail and require replacement in the period of the study, we have programmed funds for the replacement of 60% of the inventory and spread those funds over a 60-year timeframe to reflect the incremental nature of this work. This approach assumes a failure rate of 1% per year.

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1. Trip hazard, 0.5 inch height difference.
2. Severe cracking.
3. Severe spalling
4. Uneven riser heights on steps.
5. Steps with risers in excess of 8.25 inches.

Because it is highly unlikely that all of the community's concrete components will fail and require replacement in the period of the study, we have programmed funds for the replacement of 60% of the inventory and spread those funds over a 60-year timeframe to reflect the incremental nature of this work. This approach assumes a failure rate of 1% per year.

Entrance Feature. The entrance feature consists of a brick wall and concrete sign. The brickwork and concrete on the entrance feature are in good condition. Brick and concrete are usually considered to be a life of structure item and therefore excluded from reserve funding. Because weather and other conditions result in the slow deterioration of the mortar in the brick joints and concrete, we have included funding in the Reserve Analysis for tuckpointing. We have assumed that five percent of the brick will require tuckpointing every ten years.



Mulch Trail. The Association maintains an inventory of approximately 5,000 square feet of mulch trail throughout the community. The paths are in fair to good condition. This type of material is highly susceptible to erosion from rain or snow run off. We have calculated replacing 20% each year, giving total lifetime of five years.



Wood Walkway. There is a 70-foot wood walkway located along a low portion of the mulch trail. The overall condition of the walkway is good. For the Reserve Analysis, we have separated the walkway into two components, the wood deck, and the structure, to reflect their different service lives.

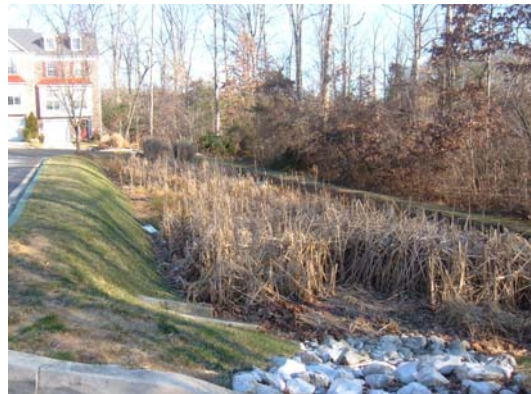


Tot Lot. There is a small tot lot on the property. We were informed that the association is considering removing it. It was included in the study as if it will be used and replaced at the end of its useful life.

Storm Water System. We have included the catch basins, underground piping and drain fields portions of the storm water system in the Reserve Analysis. No engineering drawings were available to accurately determine distances, sizes of lines and materials used for underground components of the system. Accordingly, we have provided an estimate of the approximate replacement cost based on our experience with other communities of similar size and on our inspection of the visible components while on site. Inspection of the underground lines and structures is beyond the scope of work of this study.



Storm Water Pond. The community is served by a small storm water pond that has an approximate total surface area of 3,250 square feet. This pond will accumulate silt and over time, lose its ability to store storm water at their design levels. This could result in overflows and minor local flooding conditions. Accordingly, the ponds will require periodic dredging.



Estimates of cost and the frequency of dredging the ponds are a function of many variables, including the volume of the pond, the siltation rate, the nature of the material being removed, the method of removal, and the haul distance to a site that will accept the spoil material. Most of this information is unknown and must be assumed for the purpose of Reserve Study planning. The rate of siltation and the cost of periodically dredging the ponds to remove this material are very speculative and will vary greatly with local conditions.

As a rule of thumb, dredging should be accomplished when approximately one third of the volume of the pond has been filled with silt. In the absence of accurate information about the original depth of the pond and the local siltation rate, we have assumed that it will be necessary to remove one cubic yard of material over one third of the pond area every 20 years. We have assumed that the material being removed is free of heavy metals and hydrocarbons, and that it will be accepted as fill at a local landfill. The cost to remove, haul and dispose of the material is estimated at \$45/ cubic yard. A more accurate prediction will require a hydrologic analysis and testing of the silt for contaminants, which is beyond the scope of our study.

Please note that the periodic removal of overgrown vegetation from the pond is considered to be a maintenance activity and has not been reserved for or included in the Reserve Analysis.

Pier. The community has a 72' pier with an 11' 8' platform at the end. Preceding the pier is an 11' x 8' deck. To the right of the pier is a 20' x 12' float. The pier has lights on the piles. There is an access gate to the pier. All the pier items appear to be good condition. For the Reserve Analysis we have separated the pier into two components, the woods deck, and the structure, to reflect their different service lives.



This Condition Assessment is based upon our visual survey of the property. The sole purpose of the visual survey was an evaluation of the common elements of the property to ascertain the remaining useful life and the replacement costs of these common elements. Our evaluation assumed that all components met building code requirements in force at the time of construction. Our visual survey was conducted with care by experienced persons, but no warranty or guarantee is expressed or implied.

End of Condition Assessment

1. COMMON INTEREST DEVELOPMENTS - AN OVERVIEW

Over the past 40 years, the responsibility for community facilities and infrastructure around many of our homes has shifted from the local government to Community Associations. Thirty years ago, a typical new town house abutted a public street on the front and a public alley on the rear. Open space was provided by a nearby public park and recreational facilities were purchased ala carte from privately owned country clubs, swim clubs, tennis clubs, and gymnasiums. Today, 60% of all new residential construction, i.e. townhouses, single family homes, condominiums, and cooperatives, is in Common Interest Developments (CID). In a CID, a home owner is bound to a Community Association that owns, maintains, and is responsible for periodic replacements of various components that may include the roads, curbs, sidewalks, playgrounds, street lights, recreational facilities, and other community facilities and infrastructure.

The growth of Community Associations has been explosive. In 1965 there were only 500 Community Associations in the United States. According to the U.S. Census, there were 130,000 Community Associations in 1990. Community Associations Institute (CAI), a national trade association, estimates there were more than 200,000 Community Associations in the year 2000, and that the number of Community Associations will continue to multiply.

The shift of responsibility for billions of dollars of community facilities and infrastructure from the local government and private sector to Community Associations has generated new and unanticipated problems. Although Community Associations have succeeded in solving many short term problems, many Associations have failed to properly plan for the tremendous expenses of replacing community facilities and infrastructure components. When inadequate replacement reserve funding results in less than timely replacements of failing components, home owners are exposed to the burden of special assessments, major increases in Association fees, and a decline in property values.

2. REPLACEMENT RESERVE STUDY

The purpose of a Replacement Reserve Study is to provide the Association with an inventory of the common community facilities and infrastructure components that require periodic replacement, a general view of the condition of these components, and an effective financial plan to fund projected periodic replacements. The Replacement Reserve Study consists of the following:

- Replacement Reserve Study Introduction. The introduction provides a description of the property, reviews the intent of the Replacement Reserve Study, and lists documents and site evaluations upon which the Replacement Reserve Study is based.
- Section A Replacement Reserve Analysis. Many components owned by the Association have a limited life and require periodic replacement. Therefore it is essential the Association have a financial plan that provides funding for the timely replacement of these components in order to protect the safety, appearance, and value of the community. In conformance with American Institute of Certified Public Accountant guidelines, Section A Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by two generally accepted accounting methods; the Cash Flow Method and the Component Method. Section A Replacement Reserve Analysis includes graphic and tabular presentations of these methods and current Association funding.
- Section B Replacement Reserve Inventory. The Replacement Reserve Inventory lists the commonly-owned components within the community that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about components excluded from the Replacement Reserve Inventory whose replacement is not scheduled for funding from Replacement Reserves.

Replacement Reserve Inventory includes estimates of the normal economic life and the remaining economic life for those components whose replacement is scheduled for funding from Replacement Reserves.
- Section C Projected Annual Replacements. The Calendar of Projected Annual Replacements provides a year-by-year listing of the Projected Replacements based on the data in the Replacement Reserve Inventory.
- Section D Condition Assessment. Several of the items listed in the Replacement Reserve Inventory are discussed in more detail. The Condition Assessment includes a narrative and photographs that document conditions at the property observed during our visual evaluation.
- Section E Attachments. The Appendix is provided as an attachment to the Replacement Reserve Study. Additional attachments may include supplemental photographs to document conditions at the property and additional information specific to the property cited in the Conditions Assessment (i.e. Consumer Product Safety Commission, Handbook for Public Playground Safety, information on segmental retaining walls, manufacturer recommendations for asphalt shingles or siding, etc).

3. METHODS OF ANALYSIS

The Replacement Reserve industry generally recognizes two different methods of accounting for Replacement Reserve Analysis. Due to the difference in accounting methodologies, these methods lead to different calculated values for the Minimum Annual Contribution to the Reserves. The results of both methods are presented in this report. The Association should obtain the advice of its accounting professional as to which method is more appropriate for the Association. The two methods are:

- **Component Method.** This method is a time tested mathematical model developed by HUD in the early 1980s. It treats each item in the replacement schedule as an individual line item budget. Generally, the Minimum Annual Contribution to Reserves is higher when calculated by the Component Method. The mathematical model for this method works as follows:

First, the total Current Objective is calculated, which is the reserve amount that would have accumulated had all of the items on the schedule been funded from initial construction at their current replacement costs. Next, the Reserves Currently on Deposit (as reported by the Association) are distributed to the components in the schedule in proportion to the Current Objective. The Minimum Annual Deposit for each component is equal to the Estimated Replacement Cost, minus the Reserves on Hand, divided by the years of life remaining.

- **Cash Flow Method.** The Cash Flow Method is sometimes referred to as the "Pooling Method." It calculates the minimum constant annual contribution to reserves (Minimum Annual Deposit) required to meet projected expenditures without allowing total reserves on hand to fall below the specified minimum level in any year. This method usually results in a calculated requirement for annual contribution somewhat less than that arrived at by the Component Method of analysis.

First, the Minimum Recommended Reserve Level to be Held on Account is determined based on the age, condition, and replacement cost of the individual components. The mathematical model then allocates the estimated replacement costs to the future years in which they are projected to occur. Based on these expenditures, it then calculates the minimum constant yearly contribution (Minimum Annual Deposit) to the reserves necessary to keep the reserve balance at the end of each year above the Minimum Recommended Reserve Level to be Held on Account. The Cash Flow Analysis assumes that the Association will have authority to use all of the reserves on hand for replacements as the need occurs. This method usually results in a Minimum Annual Deposit which is less than that arrived at by the Component Method.

- **Adjusted Cash Flow Analysis.** This program has the ability to modify the Cash Flow Method to take into account forecasted inflation and interest rates, thereby producing an Adjusted Cash Flow Analysis. Attempting to forecast future inflation and interest rates and the impact of changing technology is highly tenuous. Therefore, in most cases it is preferable to make a new schedule periodically rather than attempt to project far into the future. We will provide more information on this type of analysis upon request.

4. REPLACEMENT RESERVE STUDY DATA

- **Identification of Reserve Components.** The Reserve Analyst has only two methods of identifying Reserve Components; 1) information provided by the Association and 2) observations made at the site. It is important that the Reserve Analyst be provided with all available information detailing the components owned by the Association. It is our policy to request such information prior to bidding on a project and to meet with the individuals responsible for maintaining the community after acceptance of our proposal. After completion of the Study, the Study should be reviewed by the Board of Directors, individuals responsible for maintaining the community, and the Association's accounting professionals. We are dependent upon the Association for correct information, documentation, and drawings.

- **Unit Costs.** Unit costs are developed using nationally published standards and estimating guides and are adjusted by state or region. In some instances, recent data received in the course of our work is used to modify these figures.

Contractor proposals or actual cost experience may be available as part of the Association records. This is useful information which should be incorporated into your report. Please bring any such available data to our attention, preferably before the report is commenced.

- **Replacement vs. Repair and Maintenance.** A Replacement Reserve Study addresses the required funding for Capital Replacement Expenditures. This should not be confused with operational costs or cost of repairs or maintenance.

5. DEFINITIONS

Adjusted Cash Flow Analysis. Cash flow analysis adjusted to take into account annual cost increases due to inflation and interest earned on invested reserves. In this method, the annual contribution is assumed to grow annually at the inflation rate.

Annual Deposit if Reserves Were Fully Funded. Shown on the Summary Sheet A1 in the Component Method summary, this would be the amount of the Annual Deposit needed if the Reserves Currently on Deposit were equal to the Total Current Objective.

Cash Flow Analysis. See Cash Flow Method, above.

Component Analysis. See Component Method, above.

Contingency. An allowance for unexpected requirements. Roughly the same as the Minimum Recommended Reserve Level to be Held on Account used in the Cash Flow Method of analysis.

Critical Year. In the Cash Flow Method, a year in which the reserves on hand are projected to fall to the established minimum level. See Minimum Recommended Reserve Level to be Held on Account.

Current Objective. This is the reserve amount that would have accumulated had the item been funded from initial construction at its current replacement cost. It is equal to the estimated replacement cost divided by the estimated economic life, times the number of years expended (the difference between the Estimated Economic Life and the Estimated Life Left). The Total Current Objective can be thought of as the amount of reserves the Association should now have on hand based on the sum of all of the Current Objectives.

Cyclic Replacement Item. A component item that typically begins to fail after an initial period (Estimated Initial Replacement), but which will be replaced in increments over a number of years (the Estimated Replacement Cycle). The Reserve Analysis program divides the number of years in the Estimated Replacement Cycle into five equal increments. It then allocates the Estimated Replacement Cost equally over those five increments. (As distinguished from Normal Replacement Items, see below)

Estimated Economic Life. Used in the Normal Replacement Schedules. This represents the industry average number of years that a new item should be expected to last until it has to be replaced. This figure is sometimes modified by climate, region, or original construction conditions.

Estimated Economic Life Left. Used in the Normal Replacement Schedules. Number of years until the item is expected to need replacement. Normally, this number would be considered to be the difference between the Estimated Economic Life and the age of the item. However, this number must be modified to reflect maintenance practice, climate, original construction and quality, or other conditions. For the purpose of this report, this number is determined by the Reserve Analyst based on the present condition of the item relative to the actual age.

Estimated Initial Replacement. For a Cyclic Replacement Item (see above), the number of years until the replacement cycle is expected to begin.

Estimated Replacement Cycle. For a Cyclic Replacement Item, the number of years over which the remainder of the component's replacement occurs.

Minimum Annual Deposit. Shown on the Summary Sheet A1. The calculated requirement for annual contribution to reserves as calculated by the Cash Flow Method (see above).

Minimum Deposit in the Study Year. Shown on the Summary Sheet A1. The calculated requirement for contribution to reserves in the study year as calculated by the Component Method (see above).

Minimum Recommended Reserve Level to be Held on Account. Shown on the Summary Sheet A1, this number is used in the Cash Flow Method only. This is the prescribed level below which the reserves will not be allowed to fall in any year. This amount is determined based on the age, condition, and replacement cost of the individual components. This number is normally given as a percentage of the total Estimated Replacement Cost of all reserve components.

Normal Replacement Item. A component of the property that, after an expected economic life, is replaced in its entirety. (As distinguished from Cyclic Replacement Items, see above.)

Normal Replacement Schedules. The list of Normal Replacement Items by category or location. These items appear on pages designated.

Number of Years of the Study. The number of years into the future for which expenditures are projected and reserve levels calculated. This number should be large enough to include the projected replacement of every item on the schedule, at least once. This study covers a 40-year period.

One Time Deposit Required to Fully Fund Reserves. Shown on the Summary Sheet A1 in the Component Method summary, this is the difference between the Total Current Objective and the Reserves Currently on Deposit.

Reserves Currently on Deposit. Shown on the Summary Sheet A1, this is the amount of accumulated reserves as reported by the Association in the current year.

Reserves on Hand. Shown in the Cyclic Replacement and Normal Replacement Schedules, this is the amount of reserves allocated to each component item in the Cyclic or Normal Replacement schedules. This figure is based on the ratio of Reserves Currently on Deposit divided by the total Current Objective.

Replacement Reserve Study. An analysis of all of the components of the common property of the Association for which a need for replacement should be anticipated within the economic life of the property as a whole. The analysis involves estimation for each component of its estimated Replacement Cost, Estimated Economic Life, and Estimated Life Left. The objective of the study is to calculate a recommended annual contribution to the Association's Replacement Reserve Fund.

Total Replacement Cost. Shown on the Summary Sheet A1, this is total of the Estimated Replacement Costs for all items on the schedule if they were to be replaced once.

Unit Replacement Cost. Estimated replacement cost for a single unit of a given item on the schedule.

Unit (of Measure). Non-standard abbreviations are defined on the page of the Replacement Reserve Inventory where the item appears. The following standard abbreviations are used in this report:

EA: each FT: feet LS: lump sum PR: pair SF: square feet SY: square yard

6. LIST OF RECOMMENDED REPAIRS - PROCEDURES

A List of Recommended Repairs is offered as a supplemental report to the Replacement Reserve Study (at an additional fee) to assist the Association in understanding the financial implications of all items owned by the Association, not just the items included for funding by Replacement Reserves listed in the Replacement Reserve Inventory. The following information relates to the List of Recommended Repairs:

- Repair costs. Cost range estimates given in the repair list assume that all work by a given trade will be done together as a single project. If repairs are done piece-meal, the costs would be significantly higher. The costs of any repairs to be funded out of the Reserve Fund should be subtracted from the Reserves Currently on Deposit figure. The Board or Property Manager should coordinate this decision with the Reserve Analyst as part of the revision process.
- Completion of repairs. The Replacement Reserve Analysis assumes that all repairs cited in the Repair List will be completed within a twelve-month period of time. Estimated Life Left in the Replacement Reserve Study has been factored under this assumption. Any deletions or delays of the projects included in the List of Recommended Repairs may result in major inaccuracies in the Replacement Reserve Analysis.
- Safety issues. If safety issues have been cited, they should be given the highest priority and should be done immediately upon receipt of this report. The Board must recognize that from a liability standpoint, they have been made aware of the existence of these unsafe conditions, if any, once the report is delivered for their review.
- Unit costs. Nationally published standards and standard estimating manuals have been used in the development of this report. Contractor proposals or actual cost experience may be available as part of the Association records. We will adjust our figures to conform to your experience if the material or information is disclosed to us and/or made available for our use.