

# LEVEL 1 REPLACEMENT RESERVE REPORT FY 2021 SAMPLE PREPARATORY SCHOOL



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SAMPLE PREPARATORY SCHOOL

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# REPLACEMENT RESERVE REPORT

## SAMPLE PREPARATORY SCHOOL

SAMPLE, COLORADO  
March 30, 2021



**Description.** SAMPLE Preparatory School is a Educational Facility located in Sample, Colorado. Constructed between 2010 and 2018, the School consists of three Buildings. The survey examined the common elements of the property, including:

- Monument Signage, All Roadways, and Parking Areas
- Sidewalks, Curb & Gutters
- Fencing, Site Lighting, and Trash Corrals
- Tot Lot, Multi-Purpose Court, and Sport Field.
- Building exteriors, interiors, and furnishing
- HVAC and Elevators

### EXECUTIVE SUMMARY

This Reserve Study has been prepared for the SAMPLE Preparatory School for the Fiscal Year 2021 covering the period from January 1, 2021 to December 31, 2021. The Replacement Reserves Starting Balance as of January 1, 2021 are reported to be \$2,096,157. The reported Current Annual Funding for Reserves is \$0. The Recommended Annual Reserve Funding level for 2021 is \$165,351.

MillerDodson welcomes the opportunity to answer questions or to discuss this Reserve Study in more detail should the Board so desire.

### Section A

#### Replacement Reserve Analysis

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### Section B

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Replacement Reserve Inventory  
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### Section C

#### Projected Annual Replacements

Projected Annual Replacements  
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### Section D

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### Appendix

Overview, Standard Terms, and Definitions  
Video Answers to Frequently Asked Questions

**Current Funding.** The Starting Balance and Current Annual Reserve Funding figures have been supplied by the managing agent and/or Board of Directors. Confirmation or audit of these figures is beyond the scope of the study. For the purposes of this study, it is assumed that the annual contribution will be deposited at the end of each month.

**Level of Service.** This study has been performed as a Level 1 Full-Service Reserve Study with Site Visit/On-Site Review as defined by the Community Associations Institute's, National Reserve Study Standards. As such, a complete inventory of components, including their condition and cost for major repair or replacement, was established by the Analyst for the common and limited common elements of this facility based on information provided by the Community Manager and/or Board of Directors, or by those developed from visual assessments, field measurements, takeoffs from to-scale drawings, or review of provided historical data. The analysis, including fund status and funding plan, is developed from the inventory.

To aid in the understanding of this report and its concepts and practices, on our web site, we have developed [videos](#) addressing frequently asked topics. In addition, there are posted [links](#) covering a variety of subjects under the resources page of our web site at [mdareserves.com](http://mdareserves.com).

**Purpose.** The purpose of this Replacement Reserve Study is to provide SAMPLE Preparatory School (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 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 includes our estimates of the normal economic life and the remaining economic life for the projected replacements. Section C provides a year-by-year listing of the projected replacements. Section D 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 the Cash Flow Method. Section A, Replacement Reserve Analysis includes graphic and tabular presentations of the reported current funding and the recommended funding based on the Cash Flow Method. 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.
- Miller+Dodson performed a visual evaluation on December 21, 2020 to determine a remaining useful life and replacement cost for the commonly owned elements of this facility.
- This study contains additional recommendations to address inflation for the Cash Flow Method only. For this recommendation, Miller+Dodson uses the Producers Price Index (PPI), which gauges inflation in manufacturing and construction. Please see page A5 for further details.

**To-Scale Drawings.** Site and building plans were used in the development of this study. We recommend the Association assemble and maintain a library of site and building plans of the entire facility. Record drawings should be scanned into an electronic format for safe storage and ease of distribution. Upon request for a nominal fee, Miller+Dodson can provide scanning services.

**Acknowledgment.** Miller+Dodson Associates would like to acknowledge the assistance and input of Mark Ridenour, Director of Operations who provided very helpful insight into the current operations of the property.

**Analyst's Credentials.** Mr. Rick McKittrick holds a Bachelors Degree in Engineering from the University of Connecticut and a Masters Degree in Engineering from Boston University. Mr. McKittrick is a Registered Professional Engineer in the State of Ohio. He has managed the maintenance, repair, design, and construction of facilities and community infrastructure in the U.S. and overseas for private companies and government agencies. He is currently a Reserve Specialist for Miller+Dodson Associates.

Respectfully Submitted,



*Rick F. McKittrick*  
Rick F. McKittrick, RS

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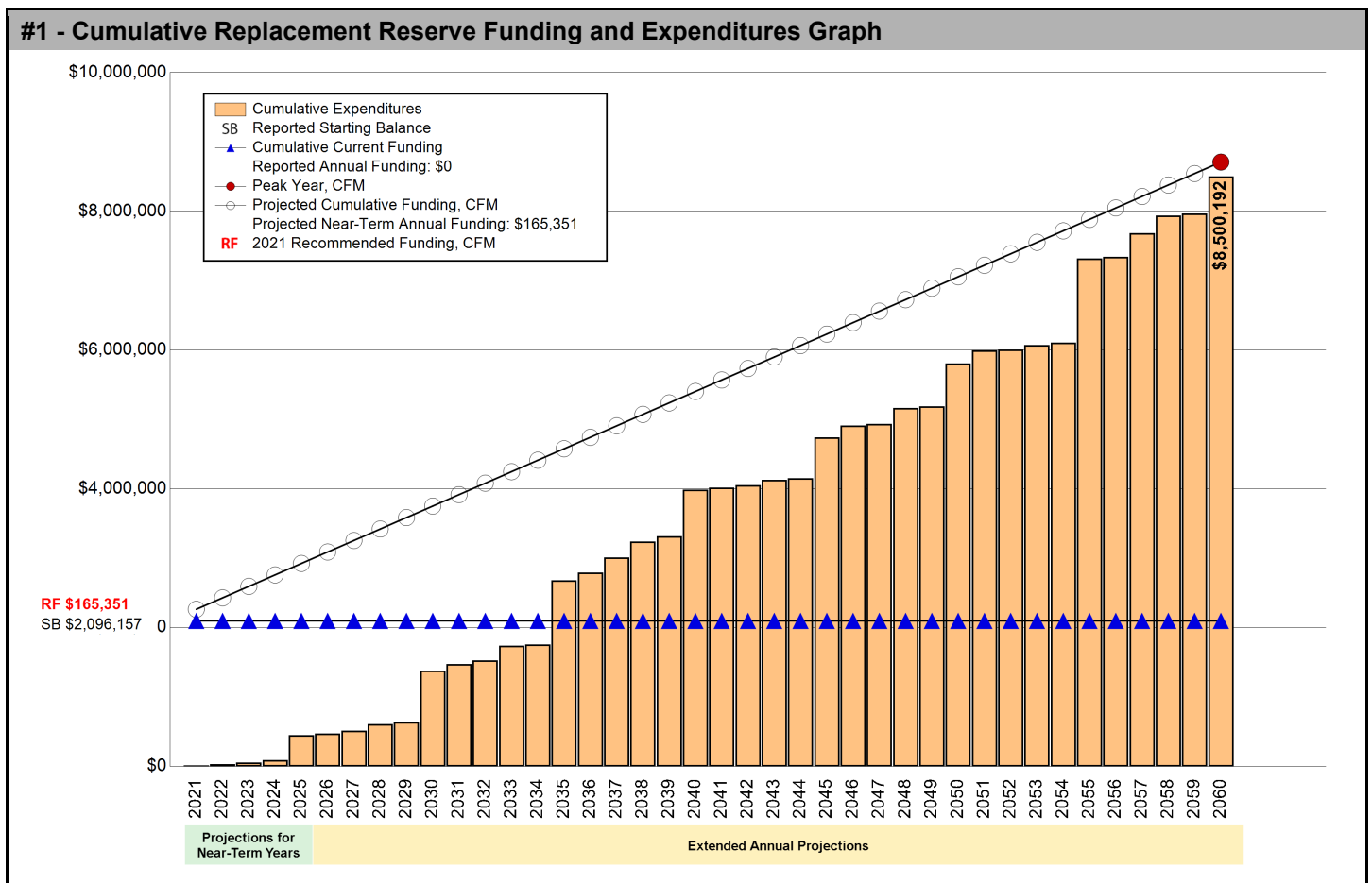
## SECTION A - FINANCIAL ANALYSIS

The SAMPLE Preparatory School Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 197 Projected Replacements identified in the Replacement Reserve Inventory.

**\$165,351** | RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2021

We recommend the Association adopt a Replacement Reserve Funding Plan based on the annual funding recommendation above. Inflation adjusted funding for subsequent years is shown on Page A.5.

SAMPLE Preparatory School reports a Starting Balance of \$2,096,157 and Annual Funding totaling \$0, which is inadequate to fund projected replacements starting in 2035. See Page A.3 for a more detailed evaluation.





**REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION**

The SAMPLE Preparatory School Replacement Reserve Analysis calculations of recommended funding of Replacement Reserves by the Cash Flow Method (CFM) and the evaluation of the Current Funding are based upon the same Study Year, Study Period, Beginning Balance, Replacement Reserve Inventory and Level of Service.

**2021 | 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, 2021.

**40 Years | STUDY PERIOD**

The Replacement Reserve Analysis evaluates the funding of Replacement Reserves over a 40-year Study Period

**\$2,096,157 | STARTING BALANCE**

The Association reports Replacement Reserves on Deposit totaling \$2,096,157 at the start of the Study Year.

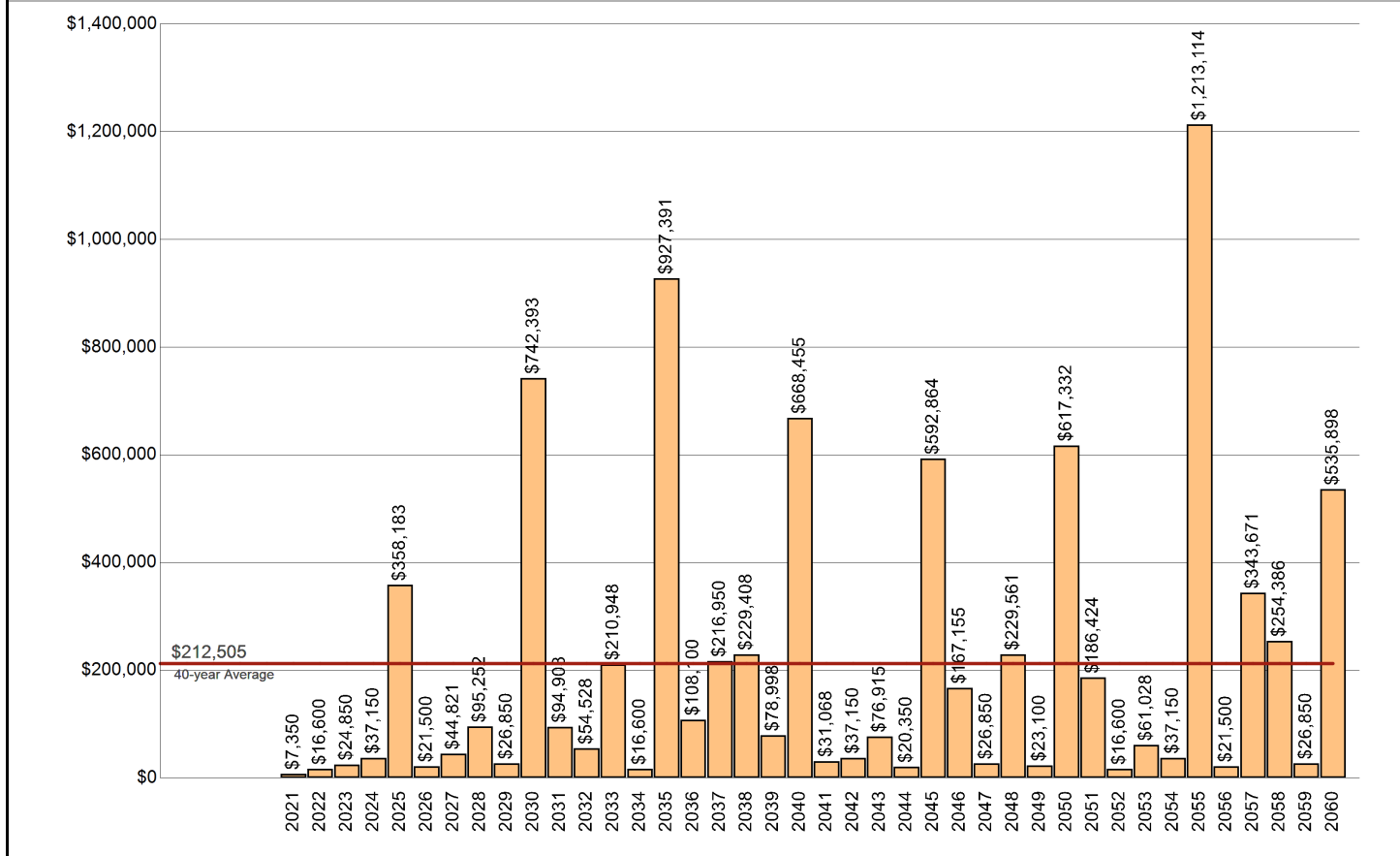
**Level One | LEVEL OF SERVICE**

The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

**\$8,500,192 | REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The SAMPLE Preparatory School Replacement Reserve Inventory identifies 197 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be \$8,500,192 over the 40-year Study Period. The Projected Replacements are divided into 5 major categories starting on Page B.3. Pages B.1-B.2 provide detailed information on the Replacement Reserve Inventory.

**#2 - Annual Expenditures for Projected Replacements Graph**  
 This graph shows annual expenditures for Projected Replacements over the 40-year Study Period. The red line shows the average annual expenditure of \$212,505. Section C provides a year by year Calendar of these expenditures.



**UPDATING OF THE FUNDING PLAN**

The Association has a responsibility to review the Funding Plan annually. The review should include a comparison and evaluation of actual reserve funding with recommended levels shown on Page A.4 and A.5. The Projected Replacements listed on Page C.2 should be compared with any replacements accomplished and funded from Replacement Reserves. Discrepancies should be evaluated and if necessary, the Reserve Study should be updated or a new study commissioned. We recommend annual increases in replacement reserve funding to account for the impact of inflation. Inflation Adjusted Funding is discussed on Page A.5.

**UPDATING OF THE REPLACEMENT RESERVE STUDY**

At a minimum, the Replacement Reserve Study should be professionally updated every three to five years or after completion of a major replacement project. Updating should also be considered if during the annual review of the Funding Plan, discrepancies are noted between projected and actual reserve funding or replacement costs. Updating may also be necessary if there is a meaningful discrepancy between the actual inflation rate and the inflation rate used for the Inflation Adjusted Funding of Replacement Reserves on Page A.5.

**ANNUAL EXPENDITURES AND CURRENT FUNDING**

The annual expenditures that comprise the \$8,500,192 of Projected Expenditures over the 40-year Study Period and the impact of the Association continuing to fund Replacement Reserves at the current level are detailed in Table 3.

<b>#3 - Table of Annual Expenditures and Current Funding Data - Years 1 through 40</b>										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Starting Balance	\$2,096,157									
Projected Replacements	(\$7,350)	(\$16,600)	(\$24,850)	(\$37,150)	(\$358,183)	(\$21,500)	(\$44,821)	(\$95,252)	(\$26,850)	(\$742,393)
Annual Deposit										
End of Year Balance	\$2,088,807	\$2,072,207	\$2,047,357	\$2,010,207	\$1,652,024	\$1,630,524	\$1,585,704	\$1,490,452	\$1,463,602	\$721,209
Cumulative Expenditures	(\$7,350)	(\$23,950)	(\$48,800)	(\$85,950)	(\$444,133)	(\$465,633)	(\$510,453)	(\$605,705)	(\$632,555)	(\$1,374,948)
Cumulative Receipts	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157
Year	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Projected Replacements	(\$94,903)	(\$54,528)	(\$210,948)	(\$16,600)	(\$927,391)	(\$108,100)	(\$216,950)	(\$229,408)	(\$78,998)	(\$668,455)
Annual Deposit										
End of Year Balance	\$626,306	\$571,778	\$360,831	\$344,231	(\$583,160)	(\$691,260)	(\$908,210)	(\$1,137,618)	(\$1,216,616)	(\$1,885,071)
Cumulative Expenditures	(\$1,469,851)	(\$1,524,379)	(\$1,735,326)	(\$1,751,926)	(\$2,679,317)	(\$2,787,417)	(\$3,004,367)	(\$3,233,775)	(\$3,312,773)	(\$3,981,228)
Cumulative Receipts	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157
Year	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Projected Replacements	(\$31,068)	(\$37,150)	(\$76,915)	(\$20,350)	(\$592,864)	(\$167,155)	(\$26,850)	(\$229,561)	(\$23,100)	(\$617,332)
Annual Deposit										
End of Year Balance	(\$1,916,139)	(\$1,953,289)	(\$2,030,204)	(\$2,050,554)	(\$2,643,418)	(\$2,810,573)	(\$2,837,423)	(\$3,066,984)	(\$3,090,084)	(\$3,707,416)
Cumulative Expenditures	(\$4,012,296)	(\$4,049,446)	(\$4,126,361)	(\$4,146,711)	(\$4,739,575)	(\$4,906,730)	(\$4,933,580)	(\$5,163,141)	(\$5,186,241)	(\$5,803,573)
Cumulative Receipts	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157
Year	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060
Projected Replacements	(\$186,424)	(\$16,600)	(\$61,028)	(\$37,150)	(\$1,213,114)	(\$21,500)	(\$343,671)	(\$254,386)	(\$26,850)	(\$535,898)
Annual Deposit										
End of Year Balance	(\$3,893,840)	(\$3,910,440)	(\$3,971,467)	(\$4,008,617)	(\$5,221,731)	(\$5,243,231)	(\$5,586,902)	(\$5,841,287)	(\$5,868,137)	(\$6,404,035)
Cumulative Expenditures	(\$5,989,997)	(\$6,006,597)	(\$6,067,624)	(\$6,104,774)	(\$7,317,888)	(\$7,339,388)	(\$7,683,059)	(\$7,937,444)	(\$7,964,294)	(\$8,500,192)
Cumulative Receipts	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157	\$2,096,157

**EVALUATION OF CURRENT FUNDING**

The evaluation of Current Funding (Starting Balance of \$2,096,157 & annual funding of \$0), is done in today's dollars with no adjustments for inflation or interest earned on Replacement Reserves. The evaluation assumes Replacement Reserves will only be used for the 197 Projected Replacements identified in the Replacement Reserve Inventory and that the Association will continue Annual Funding of \$0 throughout the 40-year Study Period.

Annual Funding of \$0 is approximately percent of the \$165,351 recommended Annual Funding calculated by the Cash Flow Method for 2021, the Study Year.

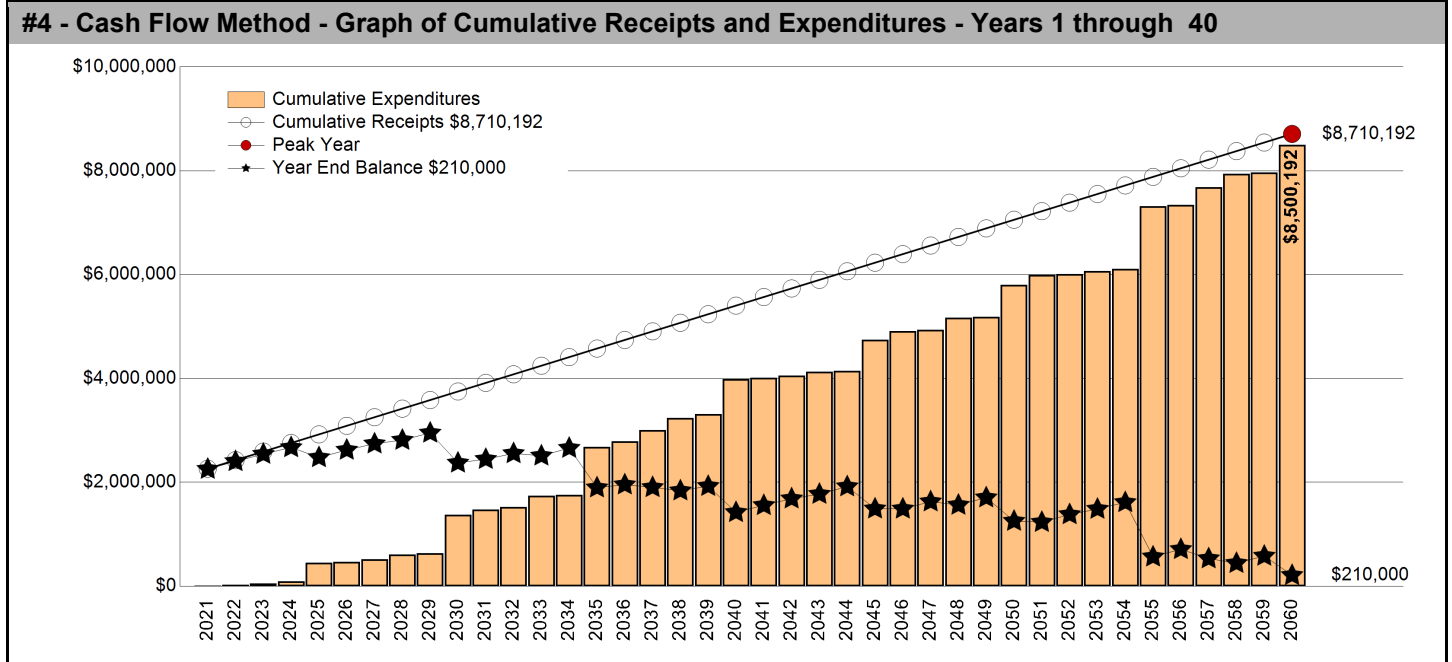
See the Executive Summary for the Current Funding Statement.

# CASH FLOW METHOD FUNDING

**\$165,351** RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2021

Recommended Replacement Reserve Funding has been calculated using the Cash Flow Method (also called the Straight Line or Threshold Method). This method calculates a constant annual funding between peaks in cumulative expenditures, while maintaining a Minimum Balance (threshold) in the Peak Years.

- Peak Years.** The First Peak Year occurs in 2060 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of \$8,500,192 of replacements from 2021 to 2060. Recommended funding is anticipated to decline in 2061. Peak Years are identified in Chart 4 and Table 5.
- Threshold (Minimum Balance).** The calculations assume a Minimum Balance of \$210,000 will always be held in reserve, which is calculated by rounding the 12-month 40-year average annual expenditure of \$212,505 as shown on Graph #2.
- Cash Flow Method Study Period.** Cash Flow Method calculates funding for \$8,500,192 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2060 and in 2060, the end of year balance will always be the Minimum Balance.



**#5 - Cash Flow Method - Table of Receipts & Expenditures - Years 1 through 40**

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Starting Balance	\$2,096,157									
Projected Replacements	(\$7,350)	(\$16,600)	(\$24,850)	(\$37,150)	(\$358,183)	(\$21,500)	(\$44,821)	(\$95,252)	(\$26,850)	(\$742,393)
Annual Deposit	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351
End of Year Balance	\$2,254,158	\$2,402,909	\$2,543,410	\$2,671,611	\$2,478,779	\$2,622,630	\$2,743,160	\$2,813,259	\$2,951,760	\$2,374,718
Cumulative Expenditures	(\$7,350)	(\$23,950)	(\$48,800)	(\$85,950)	(\$444,133)	(\$465,633)	(\$510,453)	(\$605,705)	(\$632,555)	(\$1,374,948)
Cumulative Receipts	\$2,261,508	\$2,426,859	\$2,592,210	\$2,757,561	\$2,922,911	\$3,088,262	\$3,253,613	\$3,418,964	\$3,584,315	\$3,749,666
Year	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Projected Replacements	(\$94,903)	(\$54,528)	(\$210,948)	(\$16,600)	(\$927,391)	(\$108,100)	(\$216,950)	(\$229,408)	(\$78,998)	(\$668,455)
Annual Deposit	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351
End of Year Balance	\$2,445,165	\$2,555,989	\$2,510,392	\$2,659,143	\$1,897,103	\$1,954,354	\$1,902,755	\$1,838,698	\$1,925,051	\$1,421,946
Cumulative Expenditures	(\$1,469,851)	(\$1,524,379)	(\$1,735,326)	(\$1,751,926)	(\$2,679,317)	(\$2,787,417)	(\$3,004,367)	(\$3,233,775)	(\$3,312,773)	(\$3,981,228)
Cumulative Receipts	\$3,915,017	\$4,080,368	\$4,245,719	\$4,411,069	\$4,576,420	\$4,741,771	\$4,907,122	\$5,072,473	\$5,237,824	\$5,403,175
Year	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Projected Replacements	(\$31,068)	(\$37,150)	(\$76,915)	(\$20,350)	(\$592,864)	(\$167,155)	(\$26,850)	(\$229,561)	(\$23,100)	(\$617,332)
Annual Deposit	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351
End of Year Balance	\$1,556,229	\$1,684,430	\$1,772,866	\$1,917,867	\$1,490,354	\$1,488,550	\$1,627,051	\$1,562,841	\$1,705,092	\$1,253,111
Cumulative Expenditures	(\$4,012,296)	(\$4,049,446)	(\$4,126,361)	(\$4,146,711)	(\$4,739,575)	(\$4,906,730)	(\$4,933,580)	(\$5,163,141)	(\$5,186,241)	(\$5,803,573)
Cumulative Receipts	\$5,568,526	\$5,733,876	\$5,899,227	\$6,064,578	\$6,229,929	\$6,395,280	\$6,560,631	\$6,725,982	\$6,891,333	\$7,056,684
Year	2051	2052	2053	2054	2055	2056	2057	2058	2059	1st Peak - 2060
Projected Replacements	(\$186,424)	(\$16,600)	(\$61,028)	(\$37,150)	(\$1,213,114)	(\$21,500)	(\$343,671)	(\$254,386)	(\$26,850)	(\$535,898)
Annual Deposit	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351	\$165,351
End of Year Balance	\$1,232,038	\$1,380,789	\$1,485,112	\$1,613,313	\$565,550	\$709,401	\$531,081	\$442,046	\$580,547	\$210,000
Cumulative Expenditures	(\$5,989,997)	(\$6,006,597)	(\$6,067,624)	(\$6,104,774)	(\$7,317,888)	(\$7,339,388)	(\$7,683,059)	(\$7,937,444)	(\$7,964,294)	(\$8,500,192)
Cumulative Receipts	\$7,222,034	\$7,387,385	\$7,552,736	\$7,718,087	\$7,883,438	\$8,048,789	\$8,214,140	\$8,379,491	\$8,544,842	\$8,710,192

## INFLATION ADJUSTED FUNDING

The Cash Flow Method calculations on Page A4 have been done in today's dollars with no adjustment for inflation. At Miller+Dodson, we believe that long-term inflation forecasting is effective at demonstrating the power of compounding, not at calculating appropriate funding levels for Replacement Reserves. We have developed this proprietary model to estimate the short-term impact of inflation on Replacement Reserve funding.

### **\$165,351** 2021 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2021 Study Year calculations have been made using current replacement costs (see Page B.2), modified by the Analyst for any project specific conditions.

### **\$169,154** 2022 - INFLATION ADJUSTED FUNDING

A new analysis calculates the 2022 funding based on three assumptions:

- Replacement Reserves on Deposit totaling \$2,254,158 on January 1, 2022.
- All 2021 Projected Replacements listed on Page C.2 accomplished at a cost to Replacement Reserves less than \$7,350.
- Construction Cost Inflation of 2.30 percent in 2021.

The \$169,154 inflation adjusted funding in 2022 is a 2.30 percent increase over the non-inflation adjusted funding of \$165,351.

### **\$173,044** 2023 - INFLATION ADJUSTED FUNDING

A new analysis calculates the 2023 funding based on three assumptions:

- Replacement Reserves on Deposit totaling \$2,249,328 on January 1, 2023.
- All 2022 Projected Replacements listed on Page C.2 accomplished at a cost to Replacement Reserves less than \$16,633.
- Construction Cost Inflation of 2.30 percent in 2022.

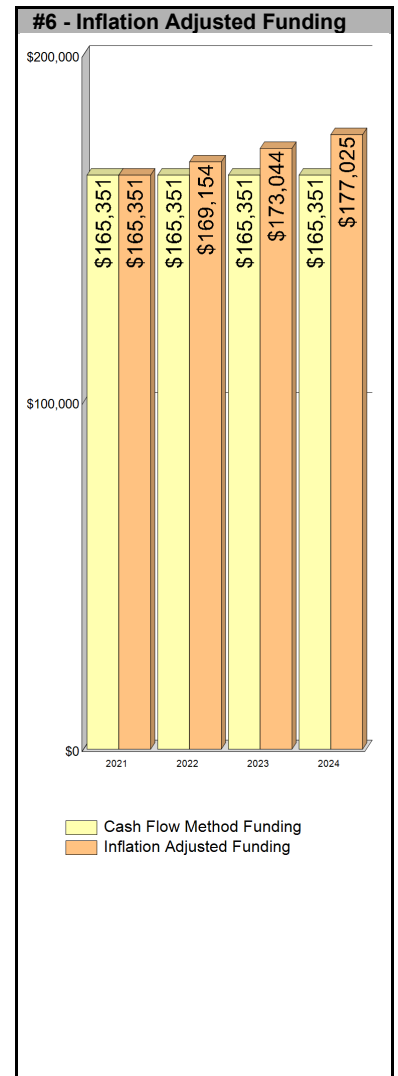
The \$173,044 inflation adjusted funding in 2023 is a 4.65 percent increase over the non-inflation adjusted funding of \$165,351.

### **\$177,025** 2024 - INFLATION ADJUSTED FUNDING

A new analysis calculates the 2024 funding based on three assumptions:

- Replacement Reserves on Deposit totaling \$2,266,218 on January 1, 2024.
- All 2023 Projected Replacements listed on Page C.2 accomplished at a cost to Replacement Reserves less than \$8,467.
- Construction Cost Inflation of 2.30 percent in 2023.

The \$177,025 inflation adjusted funding in 2024 is a 7.05 percent increase over the non-inflation adjusted funding of \$165,351.



### Year Four and Beyond

The inflation-adjusted funding calculations outlined above are not intended to be a substitute for periodic evaluation of common elements by an expSamplenced Reserve Analyst. Industry Standards, lender requirements, and many state and local statutes require a Replacement Reserve Study to be professionally updated every 3 to 5 years.

### Inflation Adjustment

Prior to approving a budget based upon the 2022, 2023 and 2024 inflation-adjusted funding calculations above, the 2.30 percent base rate of inflation used in our calculations should be compared to rates published by the Bureau of Labor Statistics. If there is a significant discrepancy (over 1 percentage point), contact Miller+Dodson Associates prior to using the Inflation Adjusted Funding.

### Interest on Reserves

The recommended funding calculations do not account for interest earned on Replacement Reserves. In 2021, based on a 1.00 percent interest rate, we estimate the Association may earn \$21,752 on an average balance of \$2,175,157, \$22,517 on an average balance of \$2,251,743 in 2022, and \$22,578 on \$2,257,773 in 2023. The Association may elect to attribute 100 percent of the earned interest to Reserves, resulting in a reduction in the 2021 funding from \$165,351 to

\$143,599 (a 13.15 percent reduction), \$169,154 to \$146,637 in 2022 (a 13.31 percent reduction), and \$173,044 to \$150,467 in 2023 (a 13.04 percent reduction).

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## SECTION B - REPLACEMENT RESERVE INVENTORY

- **PROJECTED REPLACEMENTS.** SAMPLE Preparatory School - Replacement Reserve Inventory identifies 197 items which 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 \$3,861,184. Cumulative Replacements totaling \$8,500,192 are scheduled in the Replacement Reserve Inventory over the 40-year Study Period. Cumulative Replacements include those components that are replaced more than once during the period of the study.

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.** Some of the items contained in the Replacement Reserve Inventory are 'Excluded Items'. Multiple categories of items 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, minor repairs, and capital improvements.

**Value.** Items with a replacement cost of less than \$1000 and/or a normal economic life of less than 3 years are typically excluded from funding from Replacement Reserves. This exclusion should reflect the Association policy on the administration of Replacement Reserves. If the Association has selected an alternative level, it will be noted in the Replacement Reserve Inventory - General Comments on Page B.2.

**Long-lived Items.** Items are excluded from the Replacement Reserve Inventory when items are properly maintained and are assumed to have a life equal to the property.

**Unit improvements.** Items 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.

- **CATEGORIES.** The 197 items included in the SAMPLE Preparatory School Replacement Reserve Inventory are divided into 5 major categories. Each category is printed on a separate page, beginning on page B.3.
- **LEVEL OF SERVICE.** This Replacement Reserve Inventory has been developed in compliance with the standards established for a Level One Study - Full Service, as defined by the National Reserve Study Standards, established in 1998 by Community Associations Institute, which states:

*A Level I - Full-Service Reserve Study includes the computation of complete component inventory information regarding commonly owned components provided by the Association, quantities derived from field measurements, and/or quantity takeoffs from to-scale engineering drawings that may be made available. The condition of all components is ascertained from a visual inspection of each component by the analyst. The remaining economic life and the value of the components are provided based on these observations and the funding status and funding plan are then derived from the analysis of this data.*

## REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (CONT'D)

- **INVENTORY DATA.** Each of the 197 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 identified each item included in the Inventory. Additional information may be included in the Comments section at the bottom of each page of the Inventory.
  - Units.** We have used standard abbreviations to identify the number of units including SF-square feet, LF-lineal feet, SY-square yard, LS-lump sum, EA-each, and PR-pair. Non-standard abbreviations are noted in the Comments section at the bottom of the page.
  - Number of Units.** The methods used to develop the quantities are discussed in "Level of Service" above.
  - Unit Replacement Cost.** We use four sources to develop the unit cost data shown in the Inventory; actual replacement cost data provided by the client, information provided by local contractors and suppliers, industry standard estimating manuals, and a cost database we have developed based upon our detailed interviews with contractors and service providers who are specialists in their respective lines of work.
  - Normal Economic Life (Years).** The number of years that a new and properly installed item should be expected to remain in service.
  - Remaining Economic Life (Years).** 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.
- **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 in the Comments section.
- **REMAINING ECONOMIC LIFE GREATER THAN 40 YEARS.** The calculations do not include funding for initial replacements beyond 40 years. These replacements are included in this Study for tracking and evaluation. They should be included for funding in future Studies, when they enter the 40-year window.
- **ACCURACY OF THE ANALYSIS.** The accuracy of the Replacement Reserve Analysis is dependent upon expenditures from Replacement Reserves being made ONLY for the 197 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B.1.



SITE ITEMS PROJECTED REPLACEMENTS						NEL- Normal Economic Life (yrs) REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)	
1	Asphalt pavement, mill and overlay	sf	60,000	\$1.75	24	12	\$105,000	
2	Asphalt pavement, seal coat	sf	60,000	\$0.22	6	3	\$13,200	
3	Asphalt pavement, crack sealing (5%)	ft	3,000	\$2.45	3	none	\$7,350	
4	Concrete drainpan (6%)	sf	118	\$11.20	6	6	\$1,322	
5	Concrete curb and gutter (6%)	ft	179	\$35.50	6	6	\$6,355	
6	Concrete sidewalk (3%)	sf	617	\$10.85	6	6	\$6,694	
7	Fence, 6' galvanized chain link	ft	810	\$15.50	45	39	\$12,555	
8	Site light, standard single head, LED	ea	23	\$650.00	20	14	\$14,950	
9	Site light, 15' steel pole	ea	6	\$2,690.00	40	34	\$16,140	
10	Site light, 20' steel pole	ea	17	\$3,550.00	40	34	\$60,350	
11	Entrance monument, stone sign	ea	1	\$3,000.00	30	20	\$3,000	
12	Entrance monument, repoint masonry (10%)	sf	8	\$8.50	10	10	\$68	
Replacement Costs - Page Subtotal							\$246,984	

COMMENTS
<ul style="list-style-type: none"> <li>Item #3: Asphalt pavement, crack sealing (5%) - Assume 5% of the total asphalt surface</li> <li>Item #4: Concrete drainpan (6%) - Total of 1,972 sf of drainpan</li> <li>Item #5: Concrete curb and gutter (6%) - Total of 2,978 lf of concrete curb and gutter</li> <li>Item #6: Concrete sidewalk (3%) - Total of 20,560 sf of concrete sidewalk</li> <li>Item #12: Entrance monument, repoint masonry (10%) - Total of 80 sf of brick</li> </ul>

EXTERIOR ITEMS - ORIGINAL 2010 BUILDING					NEL- Normal Economic Life (yrs)		REPLACEMENT COST (\$)
PROJECTED REPLACEMENTS					REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)
13	Roofing, flat membrane (EPDM), 2010 Bldg	sf	12,672	\$22.00	20	9	\$278,784
14	Skylight, over stairwell	sf	16	\$125.00	30	19	\$2,000
15	Downspouts, 6" aluminum	ft	210	\$18.50	30	19	\$3,885
16	Brick (10% repointing allowance)	sf	604	\$15.30	10	9	\$9,241
17	Stucco, repair (5% repair allowance)	sf	391	\$10.50	10	9	\$4,106
18	Stucco, recoating	sf	7,828	\$5.80	10	9	\$45,402
19	Siding and trim, cementitious	sf	430	\$14.20	50	39	\$6,106
20	Window, aluminum frame	sf	1,835	\$52.50	40	29	\$96,338
21	Store front, entry, replace	sf	183	\$73.60	80	69	\$13,469
22	Store front, entry, refurbish	sf	183	\$26.60	20	9	\$4,868
23	Entrance canopy, replace	sf	544	\$58.50	40	29	\$31,824
24	Entrance canopy, refurbish structure	sf	544	\$9.40	20	9	\$5,114
25	Exterior lighting, entry, LED	ea	5	\$235.00	20	9	\$1,175
Replacement Costs - Page Subtotal							\$502,311

COMMENTS
<ul style="list-style-type: none"> <li>Item #16: Brick (10% repointing allowance) - Total of 6,042 sf of brick</li> <li>Item #17: Stucco, repair (5% repair allowance) - Total of 7,828 sf of stucco</li> <li>Item #22: Store front, entry, refurbish - Gaskets, Caulking, Door Hinges, etc.</li> </ul>

EXTERIOR ITEMS - NEW 2015 BUILDING PROJECTED REPLACEMENTS					NEL- Normal Economic Life (yrs) REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)
26	Roofing, flat membrane (EPDM), 2015 Bldg	sf	15,824	\$22.00	20	14	\$348,128
27	Downspouts, 6" aluminum	ft	240	\$18.50	30	24	\$4,440
28	Brick (10% repointing allowance)	sf	672	\$15.30	10	14	\$10,282
29	Stucco, repair (5% repair allowance)	sf	427	\$10.50	10	14	\$4,484
30	Stucco, recoating	sf	8,550	\$5.80	10	14	\$49,590
31	Siding and trim, cementitious	sf	682	\$14.20	50	44	\$9,684
32	Window, aluminum frame	sf	1,995	\$52.50	40	34	\$104,738
33	Store front, entry, replace	sf	183	\$73.60	80	74	\$13,469
34	Store front, entry, refurbish	sf	183	\$26.60	20	14	\$4,868
35	Entrance canopy, replace	sf	544	\$58.50	40	34	\$31,824
36	Entrance canopy, refurbish structure	sf	544	\$9.40	20	14	\$5,114
37	Exterior lighting, entry, LED	ea	5	\$235.00	20	14	\$1,175
Replacement Costs - Page Subtotal							\$587,794

COMMENTS
<ul style="list-style-type: none"> <li>Item #28: Brick (10% repointing allowance) - Total of 6,720 sf of brick</li> <li>Item #29: Stucco, repair (5% repair allowance) - Total of 8,550 sf of stucco</li> <li>Item #34: Store front, entry, refurbish - Gaskets, Caulking, Door Hinges, etc.</li> </ul>

EXTERIOR ITEMS - 2018 GYM BUILDING						NEL- Normal Economic Life (yrs)		REPLACEMENT COST (\$)
PROJECTED REPLACEMENTS						REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)	
38	Roofing, flat membrane (EPDM), 2018 Bldg	sf	2,870	\$22.00	20	17	\$63,140	
39	Gym, roof, light tubes	ea	6	\$1,200.00	20	17	\$7,200	
40	Brick (10% repointing allowance)	sf	423	\$15.30	10	17	\$6,472	
41	Stucco, repair (5% repair allowance)	sf	260	\$10.50	10	17	\$2,730	
42	Stucco, recoating	sf	5,202	\$5.80	10	7	\$30,172	
43	Siding and trim, cementitious	sf	2,158	\$14.20	50	47	\$30,644	
44	Windows	sf	468	\$45.50	40	37	\$21,294	
45	Store front, entry, replace	sf	270	\$73.60	80	77	\$19,872	
46	Store front, entry, refurbish	sf	390	\$26.60	20	17	\$10,374	
47	Door, steel, flush (3' X 6'8")	ea	1	\$1,260.00	30	27	\$1,260	
48	Door, steel, flush (6' X 6'8")	ea	2	\$1,760.00	30	27	\$3,520	
49	Entrance canopy, replace	sf	84	\$88.50	40	37	\$7,434	
50	Entrance canopy, refurbish structure	sf	84	\$29.40	20	17	\$2,470	
51	Exterior lighting, entry, LED	ea	10	\$235.00	20	17	\$2,350	
Replacement Costs - Page Subtotal							\$208,931	

COMMENTS
<ul style="list-style-type: none"> <li>Item #40: Brick (10% repointing allowance) - Total of 4,234 sf of brick</li> <li>Item #41: Stucco, repair (5% repair allowance) - Total of 5,202 sf of stucco</li> <li>Item #46: Store front, entry, refurbish - Gaskets, Caulking, Door Hinges, etc. (Includes refurbish of interior storefront)</li> </ul>

INTERIOR ITEMS - ORIGINAL 2010 BUILDING						NEL- Normal Economic Life (yrs)		REPLACEMENT COST (\$)
PROJECTED REPLACEMENTS						REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)	
52	Flooring, carpet tile	sf	11,550	\$3.40	10	4	\$39,270	
53	Flooring, vinyl	sf	5,881	\$7.20	20	9	\$42,343	
54	Flooring, ceramic tile	sf	42	\$41.50	30	19	\$1,743	
55	Flooring, carpeted entry mat	sf	42	\$8.40	10	9	\$353	
56	Flooring, rubber, welded seam, restrooms	sf	940	\$8.85	20	19	\$8,319	
57	Rubber stair treads	ea	48	\$185.00	20	9	\$8,880	
58	Ceiling, suspended	sf	17,324	\$4.85	25	14	\$84,021	
59	Walls, painting	sf	42,472	\$1.85	15	4	\$78,573	
60	Interior lighting, 2'x4', LED	ea	176	\$290.00	25	14	\$51,040	
61	Interior lighting, 2'X2' LED	ea	12	\$190.00	25	14	\$2,280	
62	Interior lighting, surface, ceiling/wall LED	ea	35	\$135.00	25	14	\$4,725	
63	Emergency lighting - (LED)	ea	11	\$155.00	20	9	\$1,705	
64	Exit Sign, LED	ea	42	\$105.00	20	9	\$4,410	
65	Interior door, wood w/metal frame, sgl	ea	40	\$950.00	30	19	\$38,000	
66	Interior door, wood w/metal frame, dbl	ea	4	\$1,350.00	30	19	\$5,400	
67	Restroom countertop w/sink and faucet	lf	42	\$245.00	30	19	\$10,290	
68	Restroom, sink and faucet	ea	13	\$300.00	30	19	\$3,900	
69	Restroom, toilet	ea	17	\$375.00	30	19	\$6,375	
70	Restroom, urinal	ea	4	\$325.00	30	19	\$1,300	
71	Restroom, partition	ea	12	\$600.00	15	4	\$7,200	
72	Restroom, soap dispenser	ea	17	\$80.00	15	4	\$1,360	
73	Restroom, towel dispenser	ea	5	\$75.00	15	4	\$375	
74	Restroom, electric hand dryer	ea	8	\$400.00	15	4	\$3,200	
Replacement Costs - Page Subtotal								\$405,063

COMMENTS

INTERIOR ITEMS - ORIGINAL 2010 BUILDING - (cont.)					NEL- Normal Economic Life (yrs)		REPLACEMENT COST (\$)
PROJECTED REPLACEMENTS					REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)
75	Classroom, millwork counters	ft	75	\$200.00	30	19	\$15,000
76	Classroom, sink, w/faucet	ea	8	\$200.00	30	19	\$1,600
77	Classroom, teachers desk	ea	26	\$560.00	15	4	\$14,560
78	Classroom, teachers chair	ea	27	\$240.00	15	4	\$6,480
79	Classroom, table	ea	36	\$250.00	15	4	\$9,000
80	Classroom, chair	ea	76	\$90.00	15	4	\$6,840
81	Classroom, desk, single student	ea	190	\$100.00	15	4	\$19,000
82	Classroom, desk, four student	ea	17	\$200.00	15	4	\$3,400
83	Classroom, chair, student	ea	250	\$50.00	15	4	\$12,500
84	Classroom, stool, student	ea	44	\$50.00	15	4	\$2,200
85	Projectors, classroom	ea	16	\$2,500.00	20	9	\$40,000
86	Teacher doc cams	ea	18	\$300.00	20	9	\$5,400
87	White board	ea	19	\$300.00	20	9	\$5,700
88	File cabinet and storage shelf units	ea	16	\$260.00	20	9	\$4,160
89	Window covering	ea	69	\$450.00	15	4	\$31,050
Replacement Costs - Page Subtotal							\$176,890

COMMENTS

INTERIOR ITEMS - NEW 2015 BUILDING PROJECTED REPLACEMENTS						NEL- Normal Economic Life (yrs) REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)	
90	Flooring, carpet tile	sf	12,631	\$3.40	10	4	\$42,945	
91	Flooring, vinyl	sf	9,424	\$7.20	20	14	\$67,853	
92	Flooring, ceramic tile	sf	96	\$41.50	30	24	\$3,984	
93	Flooring, carpeted entry mat	sf	24	\$8.40	10	4	\$202	
94	Flooring, rubber, welded seam, restrooms	sf	1,000	\$8.85	20	14	\$8,850	
95	Rubber stair treads	ea	48	\$185.00	20	14	\$8,880	
96	Ceiling, suspended	sf	21,211	\$4.85	25	19	\$102,873	
97	Walls, painting	sf	46,104	\$1.85	15	9	\$85,292	
98	Interior lighting, 2'x4', LED	ea	208	\$290.00	25	19	\$60,320	
99	Interior lighting, 2'X2' LED	ea	12	\$190.00	25	19	\$2,280	
100	Interior lighting, surface, ceiling/wall LED	ea	38	\$135.00	25	19	\$5,130	
101	Exit sign, LED	ea	22	\$105.00	20	14	\$2,310	
102	Emergency lighting - (LED)	ea	21	\$155.00	20	14	\$3,255	
103	Interior door, wood w/metal frame, sgl	ea	46	\$950.00	30	24	\$43,700	
104	Interior door, wood w/metal frame, dbl	ea	1	\$1,350.00	30	24	\$1,350	
105	Locker, double high, metal	ea	271	\$90.00	25	19	\$24,390	
106	Water fountain	ea	4	\$1,450.00	25	19	\$5,800	
107	Restroom countertop w/sink and faucet	lf	42	\$245.00	30	24	\$10,290	
108	Restroom, sink and faucet	ea	3	\$300.00	30	24	\$900	
109	Restroom, toilet	ea	15	\$375.00	30	24	\$5,625	
110	Restroom, urinal	ea	4	\$325.00	30	24	\$1,300	
111	Restroom, partition	ea	12	\$600.00	15	9	\$7,200	
Replacement Costs - Page Subtotal							\$494,730	

COMMENTS

INTERIOR ITEMS - NEW 2015 BUILDING - (cont.)						NEL- Normal Economic Life (yrs)		REPLACEMENT COST (\$)
PROJECTED REPLACEMENTS						REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)	
112	Restroom, soap dispenser	ea	16	\$80.00	15	9	\$1,280	
113	Restroom, towel dispenser	ea	4	\$75.00	15	9	\$300	
114	Restroom, electric hand dryer	ea	8	\$400.00	15	9	\$3,200	
115	Classroom, millwork counters	ft	76	\$200.00	30	24	\$15,200	
116	Classroom, sink, w/faucet	ea	12	\$200.00	30	24	\$2,400	
117	Classroom, teachers desk	ea	36	\$560.00	15	9	\$20,160	
118	Classroom, teachers chair	ea	27	\$240.00	15	9	\$6,480	
119	Classroom, table	ea	33	\$250.00	15	9	\$8,250	
120	Classroom, chair	ea	144	\$90.00	15	9	\$12,960	
121	Classroom, desk, single student	ea	195	\$100.00	15	9	\$19,500	
122	Classroom, chair, student	ea	165	\$50.00	15	9	\$8,250	
123	Classroom, stool, student	ea	78	\$50.00	15	9	\$3,900	
124	Projectors, classroom	ea	24	\$2,500.00	20	14	\$60,000	
125	Teacher doc cams	ea	19	\$300.00	20	14	\$5,700	
126	White board	ea	46	\$300.00	20	14	\$13,800	
127	File cabinet and storage shelf units	ea	114	\$260.00	20	14	\$29,640	
128	Window covering	ea	82	\$450.00	15	9	\$36,900	
129	Cafeteria equipment	ls	1	\$30,000.00	20	14	\$30,000	
Replacement Costs - Page Subtotal							\$277,920	

COMMENTS
<ul style="list-style-type: none"> <li>Item #129: Cafeteria equipment - Stainless Steel Servicing Line and Commercial Refrigerator</li> </ul>



INTERIOR ITEMS - 2018 GYM BUILDING						NEL- Normal Economic Life (yrs)		REPLACEMENT COST (\$)
PROJECTED REPLACEMENTS						REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)	
130	Flooring, carpet tile	sf	1,509	\$3.40	10	7	\$5,131	
131	Flooring, gymnasium wood, replace	sf	6,510	\$17.70	28	25	\$115,227	
132	Flooring, gymnasium wood, refinish	sf	6,510	\$5.25	7	4	\$34,178	
133	Flooring, concrete, sealant	sf	2,665	\$1.40	15	12	\$3,731	
134	Ceiling, suspended	sf	2,400	\$4.85	25	22	\$11,640	
135	Walls, painting	sf	13,960	\$1.85	15	12	\$25,826	
136	Interior lighting, 2'x4', LED	ea	20	\$290.00	25	22	\$5,800	
137	Interior lighting, 2'X2' LED	ea	1	\$190.00	25	22	\$190	
138	Interior lighting, surface, ceiling/wall, LED	ea	24	\$135.00	25	22	\$3,240	
139	Interior lighting, gym, ceiling, LED	ea	24	\$435.00	25	22	\$10,440	
140	Exit Sign, LED	ea	8	\$105.00	20	17	\$840	
141	Interior door, wood w/metal frame, sgl	ea	8	\$950.00	30	27	\$7,600	
142	Interior door, aluminum frame, dbl	ea	2	\$1,850.00	30	27	\$3,700	
143	Water fountain	ea	2	\$1,450.00	25	22	\$2,900	
144	Restroom, sink and faucet	ea	2	\$300.00	30	27	\$600	
145	Restroom, toilet	ea	2	\$375.00	30	27	\$750	
146	Restroom, soap dispenser	ea	2	\$80.00	15	12	\$160	
147	Restroom, towel dispenser	ea	2	\$75.00	15	12	\$150	
148	Table	ea	6	\$250.00	15	12	\$1,500	
149	Chair	ea	19	\$90.00	15	12	\$1,710	
150	Classroom, teachers desk	ea	1	\$560.00	15	12	\$560	
151	Classroom, teachers chair	ea	1	\$240.00	15	12	\$240	
Replacement Costs - Page Subtotal							\$236,112	

COMMENTS

INTERIOR ITEMS - 2018 GYM BUILDING - (cont.)					NEL- Normal Economic Life (yrs)		REPLACEMENT COST (\$)
PROJECTED REPLACEMENTS					REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)
152	File cabinet and storage shelf units	ea	7	\$260.00	20	17	\$1,820
153	Gym, bleachers, repairs	ls	1	\$1,150.00	5	5	\$1,150
154	Gym, basketball backboard & net, retractable	ea	6	\$1,850.00	25	22	\$11,100
155	Gym, volleyball net	ea	2	\$750.00	15	12	\$1,500
156	Gym, dividing net	ea	1	\$4,900.00	25	22	\$4,900
157	Gym, climbing wall	ft	162	\$15.00	25	22	\$2,430
158	Gym, scoreboard	ea	1	\$1,175.00	25	22	\$1,175
159	Gym, public address system	ls	1	\$18,000.00	20	17	\$18,000
Replacement Costs - Page Subtotal							\$42,075

COMMENTS

INTERIOR ITEMS - CLASSROOM EQUIPMENT					NEL- Normal Economic Life (yrs)		REPLACEMENT COST (\$)
PROJECTED REPLACEMENTS					REL- Remaining Economic Life (yrs)		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)
160	Phones (10%)	ea	5	\$400.00	2	4	\$2,000
161	Desktop computer, computer lab	ea	51	\$850.00	10	7	\$43,350
162	Laptop, staff (10%)	ea	7	\$1,000.00	1	1	\$7,000
163	Laptop, chromebook, students (10%)	ea	31	\$300.00	1	1	\$9,300
164	Tablet, students (10%)	ea	2	\$150.00	1	1	\$300
165	Radio, staff (25%)	ea	15	\$250.00	3	2	\$3,750
Replacement Costs - Page Subtotal							\$65,700

COMMENTS
<ul style="list-style-type: none"> <li>Item #160: Phones (10%) - Total of 51 phones</li> <li>Item #162: Laptop, staff (10%) - Total of 70 staff laptops</li> <li>Item #163: Laptop, chromebook, students (10%) - Total of 309 student chromebook laptops</li> <li>Item #164: Tablet, students (10%) - Total of 23 student tablets</li> <li>Item #165: Radio, staff (25%) - Total of 59 staff radios</li> </ul>

BUILDING SYSTEMS - ORIGINAL 2010 BUILDING PROJECTED REPLACEMENTS						NEL- Normal Economic Life (yrs)	REL- Remaining Economic Life (yrs)	
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)	
166	Elevator cab and door, passenger (2010)	ea	1	\$9,800.00	30	19	\$9,800	
167	Elevator, hydraulic passenger controls (2010)	ea	1	\$31,860.00	30	19	\$31,860	
168	Elevator, hydraulic passenger piston (2010)	ea	1	\$16,000.00	30	19	\$16,000	
169	Roof top unit (20 tons) (2010)	ea	1	\$18,000.00	30	19	\$18,000	
170	Chiller, compressor replace, 20 ton (2010)	ea	1	\$14,000.00	15	4	\$14,000	
171	AC split system (2010)	ea	2	\$3,100.00	20	9	\$6,200	
172	Exhaust fan (2010)	ea	2	\$490.00	20	9	\$980	
173	Water heater, commercial gas (2010)	ea	1	\$8,750.00	15	4	\$8,750	
Replacement Costs - Page Subtotal								\$105,590

COMMENTS
<ul style="list-style-type: none"> <li>Item #166: Elevator cab and door, passenger (2010) - Original building elevator</li> <li>Item #167: Elevator, hydraulic passenger controls (2010) - Original building elevator</li> <li>Item #168: Elevator, hydraulic passenger piston (2010) - Original building elevator</li> <li>Item #169: Roof top unit (20 tons) (2010) - Original 2010 building</li> <li>Item #170: Chiller, compressor replace, 20 ton (2010) - Original 2010 building</li> <li>Item #171: AC split system (2010) - Original 2010 building</li> <li>Item #172: Exhaust fan (2010) - Original 2010 building</li> <li>Item #173: Water heater, commercial gas (2010) - Original 2010 building</li> </ul>

<b>BUILDING SYSTEMS - NEW 2015 BUILDING</b>						<b>NEL- Normal Economic Life (yrs)</b>		<b>REPLACEMENT COST (\$)</b>
<b>PROJECTED REPLACEMENTS</b>						<b>REL- Remaining Economic Life (yrs)</b>		
<b>ITEM #</b>	<b>ITEM DESCRIPTION</b>	<b>UNIT</b>	<b>NUMBER OF UNITS</b>	<b>UNIT REPLACEMENT COST (\$)</b>	<b>NEL</b>	<b>REL</b>	<b>REPLACEMENT COST (\$)</b>	
174	Elevator cab and door, passenger (2015)	ea	1	\$9,800.00	30	24	\$9,800	
175	Elevator, hydraulic passenger controls (2015)	ea	1	\$31,860.00	30	24	\$31,860	
176	Elevator, hydraulic passenger piston (2015)	ea	1	\$16,000.00	30	24	\$16,000	
177	Roof top unit (20 tons) (2015)	ea	1	\$18,000.00	30	24	\$18,000	
178	Chiller, compressor replace, 20 ton (2015)	ea	1	\$14,000.00	15	9	\$14,000	
179	AC split system (2015)	ea	2	\$3,100.00	20	14	\$6,200	
180	Exhaust fan (2015)	ea	2	\$490.00	20	14	\$980	
181	Water heater, commercial gas (2015)	ea	1	\$8,750.00	15	9	\$8,750	
<b>Replacement Costs - Page Subtotal</b>							<b>\$105,590</b>	

<b>COMMENTS</b>
<ul style="list-style-type: none"> <li>Item #174: Elevator cab and door, passenger (2015) - Middle School building elevator</li> <li>Item #175: Elevator, hydraulic passenger controls (2015) - Middle School building elevator</li> <li>Item #176: Elevator, hydraulic passenger piston (2015) - Middle School building elevator</li> <li>Item #177: Roof top unit (20 tons) (2015) - Middle School building</li> <li>Item #178: Chiller, compressor replace, 20 ton (2015) - Middle School building</li> <li>Item #179: AC split system (2015) - Middle School building</li> <li>Item #180: Exhaust fan (2015) - Middle School building</li> <li>Item #181: Water heater, commercial gas (2015) - Middle School building</li> </ul>

<b>BUILDING SYSTEMS - 2018 GYM BUILDING</b>						<b>NEL- Normal Economic Life (yrs)</b>		<b>REPLACEMENT COST (\$)</b>
<b>PROJECTED REPLACEMENTS</b>						<b>REL- Remaining Economic Life (yrs)</b>		
<b>ITEM #</b>	<b>ITEM DESCRIPTION</b>	<b>UNIT</b>	<b>NUMBER OF UNITS</b>	<b>UNIT REPLACEMENT COST (\$)</b>	<b>NEL</b>	<b>REL</b>		
182	Roof top unit (40 tons) (2018)	ea	1	\$26,000.00	30	27	\$26,000	
183	Chiller, compressor replace, 40 ton (2018)	ea	1	\$22,000.00	15	12	\$22,000	
184	Exhaust fan (2018)	ea	1	\$510.00	20	17	\$510	
185	Water heater, commercial gas (2018)	ea	1	\$3,750.00	15	12	\$3,750	
<b>Replacement Costs - Page Subtotal</b>								<b>\$52,260</b>

<b>COMMENTS</b>
<ul style="list-style-type: none"> <li>Item #182: Roof top unit (40 tons) (2018) - Gym building</li> <li>Item #183: Chiller, compressor replace, 40 ton (2018) - Gym building</li> <li>Item #184: Exhaust fan (2018) - Gym building</li> <li>Item #185: Water heater, commercial gas (2018) - Gym building</li> </ul>

<b>BUILDING SYSTEMS</b>						<b>NEL- Normal Economic Life (yrs)</b>		
<b>PROJECTED REPLACEMENTS</b>						<b>REL- Remaining Economic Life (yrs)</b>		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)	
186	Building entry control system	ea	1	\$13,700.00	15	15	\$13,700	
187	Fire annunciator system	ea	1	\$14,500.00	20	17	\$14,500	
188	Building security/CCTV system	ea	1	\$56,100.00	15	15	\$56,100	
189	Building wireless internet system (10%)	ea	5	\$900.00	2	2	\$4,500	
Replacement Costs - Page Subtotal								\$88,800

<b>COMMENTS</b>
<ul style="list-style-type: none"> <li>Item #186: Building entry control system - System components move and updated in 2018</li> <li>Item #187: Fire annunciator system - System components move and updated in 2018</li> <li>Item #188: Building security/CCTV system - System components move and updated in 2018</li> <li>Item #189: Building wireless internet system (10%) - Total of 49 wireless connection points</li> </ul>

<b>RECREATION ITEMS</b>					<b>NEL- Normal Economic Life (yrs)</b>		
<b>PROJECTED REPLACEMENTS</b>					<b>REL- Remaining Economic Life (yrs)</b>		
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)
190	Tot lot, ADA MP structure, original bldg (2010)	ea	1	\$35,350.00	20	10	\$35,350
191	Tot lot surfacing, poured EPDM	sf	2,430	\$14.50	20	10	\$35,235
192	Tot lot, ADA MP structure, Middle School (2018)	ea	1	\$48,500.00	20	16	\$48,500
193	Tot lot surfacing, poured EPDM	sf	4,800	\$14.50	20	16	\$69,600
194	MP court, asphalt overlay	sf	4,800	\$5.80	20	16	\$27,840
195	Basketball pole and backboard	ea	3	\$1,850.00	20	16	\$5,550
196	Play surface, artificial turf	ft	20,200	\$1.80	20	16	\$36,360
197	Storage Shed, playground equipment	ea	2	\$3,000.00	20	16	\$6,000
Replacement Costs - Page Subtotal							\$264,435

<b>COMMENTS</b>



VALUATION EXCLUSIONS							
Excluded Items							
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	REPLACEMENT COST (\$)	UNIT REL	REL	REPLACEMENT COST (\$)
	Miscellaneous signage						EXCLUDED
	Bench						EXCLUDED
	Picnic table						EXCLUDED
	Fire extinguisher cabinet						EXCLUDED
	Sprinkler head						EXCLUDED
	Signage						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 \$1000 have not been scheduled for funding from Replacement Reserve. Examples of items excluded 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.

LONG-LIFE EXCLUSIONS							
Excluded Items							
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	REPLACEMENT COST (\$)	UNIT REL	REL	REPLACEMENT COST (\$)
	Building foundation(s)						EXCLUDED
	Concrete floor slabs (interior)						EXCLUDED
	Wall, floor, and roof structure						EXCLUDED
	Common element electrical services						EXCLUDED
	Electrical wiring						EXCLUDED
	Water piping at common facilities						EXCLUDED
	Waste piping at common facilities						EXCLUDED
	Gas services at common facilities						EXCLUDED

**LONG-LIFE EXCLUSIONS**  
 Comments

- Long Life Exclusions. Components that when properly maintained, can be assumed to have a life equal to the property as a whole, are normally excluded from the Replacement Reserve Inventory. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- Exterior masonry is generally assumed to have an unlimited economic life, but periodic repointing is required, and we have included this for funding in the Replacement Reserve Inventory.
- 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	REPLACEMENT COST (\$)	UNIT REL	REL	REPLACEMENT COST (\$)
	Primary electric feeds						EXCLUDED
	Electric transformers						EXCLUDED
	Telephone cables and structures						EXCLUDED
	Gas mains and meters						EXCLUDED
	Water mains and meters						EXCLUDED
	Sanitary sewers						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 (\$)	NEL	REL	REPLACEMENT COST (\$)
	Cleaning of asphalt pavement						EXCLUDED
	Striping of parking spaces						EXCLUDED
	Landscaping and site grading						EXCLUDED
	Janitorial service						EXCLUDED
	Repair services						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 are listed above. The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

GOVERNMENT EXCLUSIONS							
Excluded Items							
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NEL	REL	REPLACEMENT COST (\$)
	Government, roadways and parking						EXCLUDED
	Government, sidewalks and curbs						EXCLUDED
	Government, lighting						EXCLUDED

**GOVERNMENT EXCLUSIONS**  
 Comments

- Government Exclusions. We have assumed that some of the improvements installed on property owned by the Association will be maintained by the state, county, or local government, or other association or other responsible entity. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- Excluded rights-of-way, including adjacent properties and adjacent roadways.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

IRRIGATION SYSTEM EXCLUSIONS								
Excluded Items								
ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	REPLACEMENT COST (\$)	UNIT REL	REL	REPLACEMENT COST (\$)	
	Subsurface irrigation pipe							EXCLUDED
	Subsurface irrigation valve							EXCLUDED
	Subsurface irrigation control wiring							EXCLUDED
	Irrigation control system							EXCLUDED
	Irrigation system electrical service							EXCLUDED

**IRRIGATION SYSTEM EXCLUSIONS**  
 Comments

- Irrigation System Exclusions. We have assumed that the maintenance, repair, and periodic replacement of the components of the extensive irrigation systems at the property will not be funded from Replacement Reserves. These systems should be inspected each spring when the systems are brought online and again each fall when they are winterized. Repair(s) and or replacement(s) should be made in conjunction with these semiannual inspections.

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## SECTION C - CALENDAR OF PROJECTED ANNUAL REPLACEMENTS

**GENERAL STATEMENT.** The 197 Projected Replacements in the SAMPLE Preparatory School 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 C.2.

### REPLACEMENT RESERVE ANALYSIS AND INVENTORY POLICIES, PROCEDURES, AND ADMINISTRATION

- **REVIEW OF THE REPLACEMENT RESERVE STUDY.** For this study to be effective, it should be reviewed by the 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.
- **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. We acknowledge that there are instances in which multiple revisions are necessary. However, unnecessary multiple revisions drain on our time and manpower resources. Therefore, Miller Dodson will exercise its sole discretion as to whether additional charges are incurred.
- **TAX CODE.** The United States Tax Code grants favorable tax status to a common interest development (CID) meeting certain guidelines for their Replacement Reserve. If a CID files their taxes as a 'Corporation' on Form 1120 (IRC Section 277), these guidelines typically require maintenance activities, partial replacements, minor replacements, capital improvements, and one-time only replacements to be excluded from Reserves. A CID cannot co-mingle planning for maintenance activities with capital replacement activities in the Reserves (Revenue Ruling 75-370). Funds for maintenance activities and capital replacements activities must be held in separate accounts. If a CID files taxes as an "Exempt Homeowners Association" using Form 1120H (IRC Section 528), the CID does not have to segregate these activities. However, because the CID may elect to change their method of filing from year to year within the Study Period, we advise using the more restrictive approach. We further recommend that the CID consult with their Accountant and consider creating separate and independent accounts and reserves for large maintenance items, such as painting.
- **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.
- **EXPSAMPLENCE WITH FUTURE REPLACEMENTS.** The Calendar of Annual Projected Replacements, lists replacements we have projected to occur over the Study Period, begins on Page C2. Actual expense 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.



**PROJECTED REPLACEMENTS**

Item	2021 - Study Year	\$	Item	2022 - YEAR 1	\$
3	Asphalt pavement, crack sealing (5%)	\$7,350	162	Laptop, staff (10%)	\$7,000
			163	Laptop, chromebook, students (10%)	\$9,300
			164	Tablet, students (10%)	\$300
Total Scheduled Replacements		\$7,350	Total Scheduled Replacements		\$16,600

**PROJECTED REPLACEMENTS**

2023 - YEAR 2			2024 - YEAR 3		
Item		\$	Item		\$
162	Laptop, staff (10%)	\$7,000	2	Asphalt pavement, seal coat	\$13,200
163	Laptop, chromebook, students (10%)	\$9,300	3	Asphalt pavement, crack sealing (5%)	\$7,350
164	Tablet, students (10%)	\$300	162	Laptop, staff (10%)	\$7,000
165	Radio, staff (25%)	\$3,750	163	Laptop, chromebook, students (10%)	\$9,300
189	Building wireless internet system (10%)	\$4,500	164	Tablet, students (10%)	\$300
Total Scheduled Replacements		\$24,850	Total Scheduled Replacements		\$37,150

**PROJECTED REPLACEMENTS**

2025 - YEAR 4			2026 - YEAR 5		
Item		\$	Item		\$
52	Flooring, carpet tile	\$39,270	153	Gym, bleachers, repairs	\$1,150
59	Walls, painting	\$78,573	162	Laptop, staff (10%)	\$7,000
71	Restroom, partition	\$7,200	163	Laptop, chromebook, students (10%)	\$9,300
72	Restroom, soap dispenser	\$1,360	164	Tablet, students (10%)	\$300
73	Restroom, towel dispenser	\$375	165	Radio, staff (25%)	\$3,750
74	Restroom, electric hand dryer	\$3,200			
77	Classroom, teachers desk	\$14,560			
78	Classroom, teachers chair	\$6,480			
79	Classroom, table	\$9,000			
80	Classroom, chair	\$6,840			
81	Classroom, desk, single student	\$19,000			
82	Classroom, desk, four student	\$3,400			
83	Classroom, chair, student	\$12,500			
84	Classroom, stool, student	\$2,200			
89	Window covering	\$31,050			
90	Flooring, carpet tile	\$42,945			
93	Flooring, carpeted entry mat	\$202			
132	Flooring, gymnasium wood, refinish	\$34,178			
160	Phones (10%)	\$2,000			
162	Laptop, staff (10%)	\$7,000			
163	Laptop, chromebook, students (10%)	\$9,300			
164	Tablet, students (10%)	\$300			
170	Chiller, compressor replace, 20 ton (2010)	\$14,000			
173	Water heater, commercial gas (2010)	\$8,750			
189	Building wireless internet system (10%)	\$4,500			
Total Scheduled Replacements		\$358,183	Total Scheduled Replacements		\$21,500

**PROJECTED REPLACEMENTS**

2027 - YEAR 6			2028 - YEAR 7		
Item		\$	Item		\$
3	Asphalt pavement, crack sealing (5%)	\$7,350	42	Stucco, recoating	\$30,172
4	Concrete drainpan (6%)	\$1,322	130	Flooring, carpet tile	\$5,131
5	Concrete curb and gutter (6%)	\$6,355	161	Desktop computer, computer lab	\$43,350
6	Concrete sidewalk (3%)	\$6,694	162	Laptop, staff (10%)	\$7,000
160	Phones (10%)	\$2,000	163	Laptop, chromebook, students (10%)	\$9,300
162	Laptop, staff (10%)	\$7,000	164	Tablet, students (10%)	\$300
163	Laptop, chromebook, students (10%)	\$9,300			
164	Tablet, students (10%)	\$300			
189	Building wireless internet system (10%)	\$4,500			
Total Scheduled Replacements		\$44,821	Total Scheduled Replacements		\$95,252

**PROJECTED REPLACEMENTS**

2029 - YEAR 8			2030 - YEAR 9		
Item		\$	Item		\$
160	Phones (10%)	\$2,000	2	Asphalt pavement, seal coat	\$13,200
162	Laptop, staff (10%)	\$7,000	3	Asphalt pavement, crack sealing (5%)	\$7,350
163	Laptop, chromebook, students (10%)	\$9,300	13	Roofing, flat membrane (EPDM), 2010 Bldg	\$278,784
164	Tablet, students (10%)	\$300	16	Brick (10% repointing allowance)	\$9,241
165	Radio, staff (25%)	\$3,750	17	Stucco, repair (5% repair allowance)	\$4,106
189	Building wireless internet system (10%)	\$4,500	18	Stucco, recoating	\$45,402
			22	Store front, entry, refurbish	\$4,868
			24	Entrance canopy, refurbish structure	\$5,114
			25	Exterior lighting, entry, LED	\$1,175
			53	Flooring, vinyl	\$42,343
			55	Flooring, carpeted entry mat	\$353
			57	Rubber stair treads	\$8,880
			63	Emergency lighting - (LED)	\$1,705
			64	Exit Sign, LED	\$4,410
			85	Projectors, classroom	\$40,000
			86	Teacher doc cams	\$5,400
			87	White board	\$5,700
			88	File cabinet and storage shelf units	\$4,160
			97	Walls, painting	\$85,292
			111	Restroom, partition	\$7,200
			112	Restroom, soap dispenser	\$1,280
			113	Restroom, towel dispenser	\$300
			114	Restroom, electric hand dryer	\$3,200
			117	Classroom, teachers desk	\$20,160
			118	Classroom, teachers chair	\$6,480
			119	Classroom, table	\$8,250
			120	Classroom, chair	\$12,960
			121	Classroom, desk, single student	\$19,500
			122	Classroom, chair, student	\$8,250
			123	Classroom, stool, student	\$3,900
			128	Window covering	\$36,900
			162	Laptop, staff (10%)	\$7,000
			163	Laptop, chromebook, students (10%)	\$9,300
			164	Tablet, students (10%)	\$300
			171	AC split system (2010)	\$6,200
			172	Exhaust fan (2010)	\$980
			178	Chiller, compressor replace, 20 ton (2015)	\$14,000
			181	Water heater, commercial gas (2015)	\$8,750
Total Scheduled Replacements		\$26,850	Total Scheduled Replacements		\$742,393

**PROJECTED REPLACEMENTS**

Item	2031 - YEAR 10	\$	Item	2032 - YEAR 11	\$
12	Entrance monument, repoint masonry (10%)	\$68	132	Flooring, gymnasium wood, refinish	\$34,178
153	Gym, bleachers, repairs	\$1,150	162	Laptop, staff (10%)	\$7,000
160	Phones (10%)	\$2,000	163	Laptop, chromebook, students (10%)	\$9,300
162	Laptop, staff (10%)	\$7,000	164	Tablet, students (10%)	\$300
163	Laptop, chromebook, students (10%)	\$9,300	165	Radio, staff (25%)	\$3,750
164	Tablet, students (10%)	\$300			
189	Building wireless internet system (10%)	\$4,500			
190	Tot lot, ADA MP structure, original bldg (2010)	\$35,350			
191	Tot lot surfacing, poured EPDM	\$35,235			
Total Scheduled Replacements		\$94,903	Total Scheduled Replacements		\$54,528

**PROJECTED REPLACEMENTS**

2033 - YEAR 12		\$	2034 - YEAR 13		\$
1	Asphalt pavement, mill and overlay	\$105,000	162	Laptop, staff (10%)	\$7,000
3	Asphalt pavement, crack sealing (5%)	\$7,350	163	Laptop, chromebook, students (10%)	\$9,300
4	Concrete drainpan (6%)	\$1,322	164	Tablet, students (10%)	\$300
5	Concrete curb and gutter (6%)	\$6,355			
6	Concrete sidewalk (3%)	\$6,694			
133	Flooring, concrete, sealant	\$3,731			
135	Walls, painting	\$25,826			
146	Restroom, soap dispenser	\$160			
147	Restroom, towel dispenser	\$150			
148	Table	\$1,500			
149	Chair	\$1,710			
150	Classroom, teachers desk	\$560			
151	Classroom, teachers chair	\$240			
155	Gym, volleyball net	\$1,500			
160	Phones (10%)	\$2,000			
162	Laptop, staff (10%)	\$7,000			
163	Laptop, chromebook, students (10%)	\$9,300			
164	Tablet, students (10%)	\$300			
183	Chiller, compressor replace, 40 ton (2018)	\$22,000			
185	Water heater, commercial gas (2018)	\$3,750			
189	Building wireless internet system (10%)	\$4,500			
Total Scheduled Replacements		\$210,948	Total Scheduled Replacements		\$16,600

**PROJECTED REPLACEMENTS**

Item	2035 - YEAR 14	\$	Item	2036 - YEAR 15	\$
8	Site light, standard single head, LED	\$14,950	2	Asphalt pavement, seal coat	\$13,200
26	Roofing, flat membrane (EPDM), 2015 Bldg	\$348,128	3	Asphalt pavement, crack sealing (5%)	\$7,350
28	Brick (10% repointing allowance)	\$10,282	153	Gym, bleachers, repairs	\$1,150
29	Stucco, repair (5% repair allowance)	\$4,484	162	Laptop, staff (10%)	\$7,000
30	Stucco, recoating	\$49,590	163	Laptop, chromebook, students (10%)	\$9,300
34	Store front, entry, refurbish	\$4,868	164	Tablet, students (10%)	\$300
36	Entrance canopy, refurbish structure	\$5,114	186	Building entry control system	\$13,700
37	Exterior lighting, entry, LED	\$1,175	188	Building security/CCTV system	\$56,100
52	Flooring, carpet tile	\$39,270			
58	Ceiling, suspended	\$84,021			
60	Interior lighting, 2'x4', LED	\$51,040			
61	Interior lighting, 2'X2' LED	\$2,280			
62	Interior lighting, surface, ceiling/wall LED	\$4,725			
90	Flooring, carpet tile	\$42,945			
91	Flooring, vinyl	\$67,853			
93	Flooring, carpeted entry mat	\$202			
94	Flooring, rubber, welded seam, restrooms	\$8,850			
95	Rubber stair treads	\$8,880			
101	Exit sign, LED	\$2,310			
102	Emergency lighting - (LED)	\$3,255			
124	Projectors, classroom	\$60,000			
125	Teacher doc cams	\$5,700			
126	White board	\$13,800			
127	File cabinet and storage shelf units	\$29,640			
129	Cafeteria equipment	\$30,000			
160	Phones (10%)	\$2,000			
162	Laptop, staff (10%)	\$7,000			
163	Laptop, chromebook, students (10%)	\$9,300			
164	Tablet, students (10%)	\$300			
165	Radio, staff (25%)	\$3,750			
179	AC split system (2015)	\$6,200			
180	Exhaust fan (2015)	\$980			
189	Building wireless internet system (10%)	\$4,500			
Total Scheduled Replacements		\$927,391	Total Scheduled Replacements		\$108,100



**PROJECTED REPLACEMENTS**

2037 - YEAR 16			2038 - YEAR 17		
Item		\$	Item		\$
160	Phones (10%)	\$2,000	38	Roofing, flat membrane (EPDM), 2018 Bldg	\$63,140
162	Laptop, staff (10%)	\$7,000	39	Gym, roof, light tubes	\$7,200
163	Laptop, chromebook, students (10%)	\$9,300	40	Brick (10% repointing allowance)	\$6,472
164	Tablet, students (10%)	\$300	41	Stucco, repair (5% repair allowance)	\$2,730
189	Building wireless internet system (10%)	\$4,500	42	Stucco, recoating	\$30,172
192	Tot lot, ADA MP structure, Middle School (2018)	\$48,500	46	Store front, entry, refurbish	\$10,374
193	Tot lot surfacing, poured EPDM	\$69,600	50	Entrance canopy, refurbish structure	\$2,470
194	MP court, asphalt overlay	\$27,840	51	Exterior lighting, entry, LED	\$2,350
195	Basketball pole and backboard	\$5,550	130	Flooring, carpet tile	\$5,131
196	Play surface, artificial turf	\$36,360	140	Exit Sign, LED	\$840
197	Storage Shed, playground equipment	\$6,000	152	File cabinet and storage shelf units	\$1,820
			159	Gym, public address system	\$18,000
			161	Desktop computer, computer lab	\$43,350
			162	Laptop, staff (10%)	\$7,000
			163	Laptop, chromebook, students (10%)	\$9,300
			164	Tablet, students (10%)	\$300
			165	Radio, staff (25%)	\$3,750
			184	Exhaust fan (2018)	\$510
			187	Fire annunciator system	\$14,500
Total Scheduled Replacements		\$216,950	Total Scheduled Replacements		\$229,408

**PROJECTED REPLACEMENTS**

2039 - YEAR 18			2040 - YEAR 19		
Item		\$	Item		\$
3	Asphalt pavement, crack sealing (5%)	\$7,350	14	Skylight, over stairwell	\$2,000
4	Concrete drainpan (6%)	\$1,322	15	Downspouts, 6" aluminum	\$3,885
5	Concrete curb and gutter (6%)	\$6,355	16	Brick (10% repointing allowance)	\$9,241
6	Concrete sidewalk (3%)	\$6,694	17	Stucco, repair (5% repair allowance)	\$4,106
132	Flooring, gymnasium wood, refinish	\$34,178	18	Stucco, recoating	\$45,402
160	Phones (10%)	\$2,000	54	Flooring, ceramic tile	\$1,743
162	Laptop, staff (10%)	\$7,000	55	Flooring, carpeted entry mat	\$353
163	Laptop, chromebook, students (10%)	\$9,300	56	Flooring, rubber, welded seam, restrooms	\$8,319
164	Tablet, students (10%)	\$300	59	Walls, painting	\$78,573
189	Building wireless internet system (10%)	\$4,500	65	Interior door, wood w/metal frame, sgl	\$38,000
			66	Interior door, wood w/metal frame, dbl	\$5,400
			67	Restroom countertop w/sink and faucet	\$10,290
			68	Restroom, sink and faucet	\$3,900
			69	Restroom, toilet	\$6,375
			70	Restroom, urinal	\$1,300
			71	Restroom, partition	\$7,200
			72	Restroom, soap dispenser	\$1,360
			73	Restroom, towel dispenser	\$375
			74	Restroom, electric hand dryer	\$3,200
			75	Classroom, millwork counters	\$15,000
			76	Classroom, sink, w/faucet	\$1,600
			77	Classroom, teachers desk	\$14,560
			78	Classroom, teachers chair	\$6,480
			79	Classroom, table	\$9,000
			80	Classroom, chair	\$6,840
			81	Classroom, desk, single student	\$19,000
			82	Classroom, desk, four student	\$3,400
			83	Classroom, chair, student	\$12,500
			84	Classroom, stool, student	\$2,200
			89	Window covering	\$31,050
			96	Ceiling, suspended	\$102,873
			98	Interior lighting, 2'x4', LED	\$60,320
			99	Interior lighting, 2'X2' LED	\$2,280
			100	Interior lighting, surface, ceiling/wall LED	\$5,130
			105	Locker, double high, metal	\$24,390
			106	Water fountain	\$5,800
			162	Laptop, staff (10%)	\$7,000
			163	Laptop, chromebook, students (10%)	\$9,300
			164	Tablet, students (10%)	\$300
			166	Elevator cab and door, passenger (2010)	\$9,800
			167	Elevator, hydraulic passenger controls (2010)	\$31,860
			168	Elevator, hydraulic passenger piston (2010)	\$16,000
			169	Roof top unit (20 tons) (2010)	\$18,000
			170	Chiller, compressor replace, 20 ton (2010)	\$14,000
			173	Water heater, commercial gas (2010)	\$8,750
Total Scheduled Replacements		\$78,998	Total Scheduled Replacements		\$668,455

**PROJECTED REPLACEMENTS**

2041 - YEAR 20			2042 - YEAR 21		
Item		\$	Item		\$
11	Entrance monument, stone sign	\$3,000	2	Asphalt pavement, seal coat	\$13,200
12	Entrance monument, repoint masonry (10%)	\$68	3	Asphalt pavement, crack sealing (5%)	\$7,350
153	Gym, bleachers, repairs	\$1,150	162	Laptop, staff (10%)	\$7,000
160	Phones (10%)	\$2,000	163	Laptop, chromebook, students (10%)	\$9,300
162	Laptop, staff (10%)	\$7,000	164	Tablet, students (10%)	\$300
163	Laptop, chromebook, students (10%)	\$9,300			
164	Tablet, students (10%)	\$300			
165	Radio, staff (25%)	\$3,750			
189	Building wireless internet system (10%)	\$4,500			
Total Scheduled Replacements		\$31,068	Total Scheduled Replacements		\$37,150

**PROJECTED REPLACEMENTS**

Item	2043 - YEAR 22	\$	Item	2044 - YEAR 23	\$
134	Ceiling, suspended	\$11,640	162	Laptop, staff (10%)	\$7,000
136	Interior lighting, 2'x4', LED	\$5,800	163	Laptop, chromebook, students (10%)	\$9,300
137	Interior lighting, 2'X2' LED	\$190	164	Tablet, students (10%)	\$300
138	Interior lighting, surface, ceiling/wall, LED	\$3,240	165	Radio, staff (25%)	\$3,750
139	Interior lighting, gym, ceiling, LED	\$10,440			
143	Water fountain	\$2,900			
154	Gym, basketball backboard & net, retractable	\$11,100			
156	Gym, dividing net	\$4,900			
157	Gym, climbing wall	\$2,430			
158	Gym, scoreboard	\$1,175			
160	Phones (10%)	\$2,000			
162	Laptop, staff (10%)	\$7,000			
163	Laptop, chromebook, students (10%)	\$9,300			
164	Tablet, students (10%)	\$300			
189	Building wireless internet system (10%)	\$4,500			
Total Scheduled Replacements		\$76,915	Total Scheduled Replacements		\$20,350

**PROJECTED REPLACEMENTS**

2045 - YEAR 24			2046 - YEAR 25		
Item		\$	Item		\$
3	Asphalt pavement, crack sealing (5%)	\$7,350	131	Flooring, gymnasium wood, replace	\$115,227
4	Concrete drainpan (6%)	\$1,322	132	Flooring, gymnasium wood, refinish	\$34,178
5	Concrete curb and gutter (6%)	\$6,355	153	Gym, bleachers, repairs	\$1,150
6	Concrete sidewalk (3%)	\$6,694	162	Laptop, staff (10%)	\$7,000
27	Downspouts, 6" aluminum	\$4,440	163	Laptop, chromebook, students (10%)	\$9,300
28	Brick (10% repointing allowance)	\$10,282	164	Tablet, students (10%)	\$300
29	Stucco, repair (5% repair allowance)	\$4,484			
30	Stucco, recoating	\$49,590			
52	Flooring, carpet tile	\$39,270			
90	Flooring, carpet tile	\$42,945			
92	Flooring, ceramic tile	\$3,984			
93	Flooring, carpeted entry mat	\$202			
97	Walls, painting	\$85,292			
103	Interior door, wood w/metal frame, sgl	\$43,700			
104	Interior door, wood w/metal frame, dbl	\$1,350			
107	Restroom countertop w/sink and faucet	\$10,290			
108	Restroom, sink and faucet	\$900			
109	Restroom, toilet	\$5,625			
110	Restroom, urinal	\$1,300			
111	Restroom, partition	\$7,200			
112	Restroom, soap dispenser	\$1,280			
113	Restroom, towel dispenser	\$300			
114	Restroom, electric hand dryer	\$3,200			
115	Classroom, millwork counters	\$15,200			
116	Classroom, sink, w/faucet	\$2,400			
117	Classroom, teachers desk	\$20,160			
118	Classroom, teachers chair	\$6,480			
119	Classroom, table	\$8,250			
120	Classroom, chair	\$12,960			
121	Classroom, desk, single student	\$19,500			
122	Classroom, chair, student	\$8,250			
123	Classroom, stool, student	\$3,900			
128	Window covering	\$36,900			
160	Phones (10%)	\$2,000			
162	Laptop, staff (10%)	\$7,000			
163	Laptop, chromebook, students (10%)	\$9,300			
164	Tablet, students (10%)	\$300			
174	Elevator cab and door, passenger (2015)	\$9,800			
175	Elevator, hydraulic passenger controls (2015)	\$31,860			
176	Elevator, hydraulic passenger piston (2015)	\$16,000			
177	Roof top unit (20 tons) (2015)	\$18,000			
178	Chiller, compressor replace, 20 ton (2015)	\$14,000			
181	Water heater, commercial gas (2015)	\$8,750			
189	Building wireless internet system (10%)	\$4,500			
Total Scheduled Replacements		\$592,864	Total Scheduled Replacements		\$167,155



**PROJECTED REPLACEMENTS**

Item	2049 - YEAR 28	\$	Item	2050 - YEAR 29	\$
160	Phones (10%)	\$2,000	13	Roofing, flat membrane (EPDM), 2010 Bldg	\$278,784
162	Laptop, staff (10%)	\$7,000	16	Brick (10% repointing allowance)	\$9,241
163	Laptop, chromebook, students (10%)	\$9,300	17	Stucco, repair (5% repair allowance)	\$4,106
164	Tablet, students (10%)	\$300	18	Stucco, recoating	\$45,402
189	Building wireless internet system (10%)	\$4,500	20	Window, aluminum frame	\$96,338
			22	Store front, entry, refurbish	\$4,868
			23	Entrance canopy, replace	\$31,824
			24	Entrance canopy, refurbish structure	\$5,114
			25	Exterior lighting, entry, LED	\$1,175
			53	Flooring, vinyl	\$42,343
			55	Flooring, carpeted entry mat	\$353
			57	Rubber stair treads	\$8,880
			63	Emergency lighting - (LED)	\$1,705
			64	Exit Sign, LED	\$4,410
			85	Projectors, classroom	\$40,000
			86	Teacher doc cams	\$5,400
			87	White board	\$5,700
			88	File cabinet and storage shelf units	\$4,160
			162	Laptop, staff (10%)	\$7,000
			163	Laptop, chromebook, students (10%)	\$9,300
			164	Tablet, students (10%)	\$300
			165	Radio, staff (25%)	\$3,750
			171	AC split system (2010)	\$6,200
			172	Exhaust fan (2010)	\$980
Total Scheduled Replacements			Total Scheduled Replacements		
		\$23,100			\$617,332

**PROJECTED REPLACEMENTS**

Item	2051 - YEAR 30	\$	Item	2052 - YEAR 31	\$
3	Asphalt pavement, crack sealing (5%)	\$7,350	162	Laptop, staff (10%)	\$7,000
4	Concrete drainpan (6%)	\$1,322	163	Laptop, chromebook, students (10%)	\$9,300
5	Concrete curb and gutter (6%)	\$6,355	164	Tablet, students (10%)	\$300
6	Concrete sidewalk (3%)	\$6,694			
12	Entrance monument, repoint masonry (10%)	\$68			
153	Gym, bleachers, repairs	\$1,150			
160	Phones (10%)	\$2,000			
162	Laptop, staff (10%)	\$7,000			
163	Laptop, chromebook, students (10%)	\$9,300			
164	Tablet, students (10%)	\$300			
186	Building entry control system	\$13,700			
188	Building security/CCTV system	\$56,100			
189	Building wireless internet system (10%)	\$4,500			
190	Tot lot, ADA MP structure, original bldg (2010)	\$35,350			
191	Tot lot surfacing, poured EPDM	\$35,235			
Total Scheduled Replacements		\$186,424	Total Scheduled Replacements		\$16,600



**PROJECTED REPLACEMENTS**

Item	2053 - YEAR 32	\$	Item	2054 - YEAR 33	\$
132	Flooring, gymnasium wood, refinish	\$34,178	2	Asphalt pavement, seal coat	\$13,200
160	Phones (10%)	\$2,000	3	Asphalt pavement, crack sealing (5%)	\$7,350
162	Laptop, staff (10%)	\$7,000	162	Laptop, staff (10%)	\$7,000
163	Laptop, chromebook, students (10%)	\$9,300	163	Laptop, chromebook, students (10%)	\$9,300
164	Tablet, students (10%)	\$300	164	Tablet, students (10%)	\$300
165	Radio, staff (25%)	\$3,750			
189	Building wireless internet system (10%)	\$4,500			
Total Scheduled Replacements		\$61,028	Total Scheduled Replacements		\$37,150

**PROJECTED REPLACEMENTS**

2055 - YEAR 34			2056 - YEAR 35		
Item		\$	Item		\$
8	Site light, standard single head, LED	\$14,950	153	Gym, bleachers, repairs	\$1,150
9	Site light, 15' steel pole	\$16,140	162	Laptop, staff (10%)	\$7,000
10	Site light, 20' steel pole	\$60,350	163	Laptop, chromebook, students (10%)	\$9,300
26	Roofing, flat membrane (EPDM), 2015 Bldg	\$348,128	164	Tablet, students (10%)	\$300
28	Brick (10% repointing allowance)	\$10,282	165	Radio, staff (25%)	\$3,750
29	Stucco, repair (5% repair allowance)	\$4,484			
30	Stucco, recoating	\$49,590			
32	Window, aluminum frame	\$104,738			
34	Store front, entry, refurbish	\$4,868			
35	Entrance canopy, replace	\$31,824			
36	Entrance canopy, refurbish structure	\$5,114			
37	Exterior lighting, entry, LED	\$1,175			
52	Flooring, carpet tile	\$39,270			
59	Walls, painting	\$78,573			
71	Restroom, partition	\$7,200			
72	Restroom, soap dispenser	\$1,360			
73	Restroom, towel dispenser	\$375			
74	Restroom, electric hand dryer	\$3,200			
77	Classroom, teachers desk	\$14,560			
78	Classroom, teachers chair	\$6,480			
79	Classroom, table	\$9,000			
80	Classroom, chair	\$6,840			
81	Classroom, desk, single student	\$19,000			
82	Classroom, desk, four student	\$3,400			
83	Classroom, chair, student	\$12,500			
84	Classroom, stool, student	\$2,200			
89	Window covering	\$31,050			
90	Flooring, carpet tile	\$42,945			
91	Flooring, vinyl	\$67,853			
93	Flooring, carpeted entry mat	\$202			
94	Flooring, rubber, welded seam, restrooms	\$8,850			
95	Rubber stair treads	\$8,880			
101	Exit sign, LED	\$2,310			
102	Emergency lighting - (LED)	\$3,255			
124	Projectors, classroom	\$60,000			
125	Teacher doc cams	\$5,700			
126	White board	\$13,800			
127	File cabinet and storage shelf units	\$29,640			
129	Cafeteria equipment	\$30,000			
160	Phones (10%)	\$2,000			
162	Laptop, staff (10%)	\$7,000			
163	Laptop, chromebook, students (10%)	\$9,300			
164	Tablet, students (10%)	\$300			
170	Chiller, compressor replace, 20 ton (2010)	\$14,000			
173	Water heater, commercial gas (2010)	\$8,750			
179	AC split system (2015)	\$6,200			
180	Exhaust fan (2015)	\$980			
189	Building wireless internet system (10%)	\$4,500			
Total Scheduled Replacements		\$1,213,114	Total Scheduled Replacements		\$21,500

**PROJECTED REPLACEMENTS**

Item	2057 - YEAR 36	\$	Item	2058 - YEAR 37	\$
1	Asphalt pavement, mill and overlay	\$105,000	38	Roofing, flat membrane (EPDM), 2018 Bldg	\$63,140
3	Asphalt pavement, crack sealing (5%)	\$7,350	39	Gym, roof, light tubes	\$7,200
4	Concrete drainpan (6%)	\$1,322	40	Brick (10% repointing allowance)	\$6,472
5	Concrete curb and gutter (6%)	\$6,355	41	Stucco, repair (5% repair allowance)	\$2,730
6	Concrete sidewalk (3%)	\$6,694	42	Stucco, recoating	\$30,172
160	Phones (10%)	\$2,000	44	Windows	\$21,294
162	Laptop, staff (10%)	\$7,000	46	Store front, entry, refurbish	\$10,374
163	Laptop, chromebook, students (10%)	\$9,300	49	Entrance canopy, replace	\$7,434
164	Tablet, students (10%)	\$300	50	Entrance canopy, refurbish structure	\$2,470
189	Building wireless internet system (10%)	\$4,500	51	Exterior lighting, entry, LED	\$2,350
192	Tot lot, ADA MP structure, Middle School (2018)	\$48,500	130	Flooring, carpet tile	\$5,131
193	Tot lot surfacing, poured EPDM	\$69,600	140	Exit Sign, LED	\$840
194	MP court, asphalt overlay	\$27,840	152	File cabinet and storage shelf units	\$1,820
195	Basketball pole and backboard	\$5,550	159	Gym, public address system	\$18,000
196	Play surface, artificial turf	\$36,360	161	Desktop computer, computer lab	\$43,350
197	Storage Shed, playground equipment	\$6,000	162	Laptop, staff (10%)	\$7,000
			163	Laptop, chromebook, students (10%)	\$9,300
			164	Tablet, students (10%)	\$300
			184	Exhaust fan (2018)	\$510
			187	Fire annunciator system	\$14,500
Total Scheduled Replacements		\$343,671	Total Scheduled Replacements		\$254,386

**PROJECTED REPLACEMENTS**

2059 - YEAR 38			2060 - YEAR 39		
Item		\$	Item		\$
160	Phones (10%)	\$2,000	2	Asphalt pavement, seal coat	\$13,200
162	Laptop, staff (10%)	\$7,000	3	Asphalt pavement, crack sealing (5%)	\$7,350
163	Laptop, chromebook, students (10%)	\$9,300	7	Fence, 6' galvanized chain link	\$12,555
164	Tablet, students (10%)	\$300	16	Brick (10% repointing allowance)	\$9,241
165	Radio, staff (25%)	\$3,750	17	Stucco, repair (5% repair allowance)	\$4,106
189	Building wireless internet system (10%)	\$4,500	18	Stucco, recoating	\$45,402
			19	Siding and trim, cementitious	\$6,106
			55	Flooring, carpeted entry mat	\$353
			56	Flooring, rubber, welded seam, restrooms	\$8,319
			58	Ceiling, suspended	\$84,021
			60	Interior lighting, 2'x4', LED	\$51,040
			61	Interior lighting, 2'X2' LED	\$2,280
			62	Interior lighting, surface, ceiling/wall LED	\$4,725
			97	Walls, painting	\$85,292
			111	Restroom, partition	\$7,200
			112	Restroom, soap dispenser	\$1,280
			113	Restroom, towel dispenser	\$300
			114	Restroom, electric hand dryer	\$3,200
			117	Classroom, teachers desk	\$20,160
			118	Classroom, teachers chair	\$6,480
			119	Classroom, table	\$8,250
			120	Classroom, chair	\$12,960
			121	Classroom, desk, single student	\$19,500
			122	Classroom, chair, student	\$8,250
			123	Classroom, stool, student	\$3,900
			128	Window covering	\$36,900
			132	Flooring, gymnasium wood, refinish	\$34,178
			162	Laptop, staff (10%)	\$7,000
			163	Laptop, chromebook, students (10%)	\$9,300
			164	Tablet, students (10%)	\$300
			178	Chiller, compressor replace, 20 ton (2015)	\$14,000
			181	Water heater, commercial gas (2015)	\$8,750
Total Scheduled Replacements		\$26,850	Total Scheduled Replacements		\$535,898

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## SECTION D - CONDITION ASSESSMENT

**General Comments.** Miller+Dodson Associates conducted a Reserve Study at SAMPLE Preparatory School in December 2020. SAMPLE Preparatory School is in generally good condition for a educational facility constructed between 2010 and 2018. 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.

**IMPORTANT NOTE:** This Condition Assessment is based upon visual and apparent conditions of the common elements of the community which were observed by the Reserve Analyst at the time of the site visit. This Condition Assessment does not constitute, nor is it a substitute for, a professional Structural Evaluation of the buildings, amenities, or systems. Miller Dodson strongly recommends that the Association retain the services of a Structural Engineer to conduct thorough and periodic evaluations of the buildings, balconies, and any other structural components of the buildings and amenities of the Association.

### General Condition Statements.

**Excellent.** 100% to 90% of Normal Economic Life expected, with no appreciable wear or defects.

**Good.** 90% to 60% of Normal Economic Life expected, minor wear or cosmetic defects found. Normal maintenance should be expected. If performed properly, normal maintenance may increase the useful life of a component. Otherwise, the component is wearing normally.

**Fair.** 60% to 30% of Normal Economic Life expected, moderate wear with defects found. Repair actions should be taken to extend the life of the component or to correct repairable defects and distress. Otherwise, the component is wearing normally.

**Marginal.** 30% to 10% of Normal Economic Life expected, with moderate to significant wear or distress found. Repair actions are expected to be cost-effective for localized issues, but normal wear and use are evident. The component is reaching the end of the Normal Economic Life.

**Poor.** 10% to 0% of Normal Economic Life expected, with significant distress and wear. Left unattended, additional damage to underlying structures is likely to occur. Further maintenance is unlikely to be cost-effective.

### SITE ITEMS

**Asphalt Pavement.** The Prep School is responsible for the entry and exit drives and parking areas; other roadways are maintained by the City, County, or other municipality. In general, the Prep School asphalt pavements are in good to fair condition, with some wide cracks and distress in other locations.

As a rule of thumb, asphalt should be overlaid when approximately 5% of the surface area is cracked or otherwise deteriorated. The normal service life of asphalt pavement is typically 20 to 25 years. The study assumes a cycle of crack sealing every 3 years, with seal coating every 6 years, and after three cycles of seal coat the asphalt would be milled and overlaid at the end of the next cycle.



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

- **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 patched if deterioration has penetrated the asphalt. This is a maintenance activity, and we have assumed that it will not be funded from Reserves.
- **Crack Repair.** All cracks should be repaired with an appropriate compound to prevent water infiltration through the asphalt into the base. This repair should be done annually. Crack repair is normally considered a maintenance activity and is not funded from Reserves. Areas of extensive cracking or deterioration that cannot be made watertight should be cut out and patched.
- **Seal Coating.** The asphalt should be seal coated every five to seven years. For this maintenance, activity to be effective in extending the life of the asphalt, cleaning and crack repair should be performed first.

The pricing used is based on recent contracts for a two-inch overlay, which reflects the current local market for this work. The school maintains the original driveway and parking lot that have both reached the end of useful life and require a mill/overlay. A few years ago there were a number of building additions and the parking lot was expanded at that time. The parking lot expansion is in good condition and should be seal coated and crack sealed regularly until a mill/overlay is required.

For seal coating, several different products are available. The older, more traditional seal coating products are simply paints. They coat the surface of the asphalt and they are minimally effective. However, the newer coating materials, such as those from Total Asphalt Management, Asphalt Restoration Technologies, Inc., and others, are penetrating. They are engineered, so to speak, to 'remoisturize' the pavement. Asphalt pavement is intended to be flexible. Over time, the volatile chemicals in the pavement dry, the pavement becomes brittle, and degradation follows in the forms of cracking and potholes. Remoisturizing the pavement can return its flexibility and extend the life of the pavement.

Lastly, the resource links provided on our website may provide insight into the general terms and concerns, including maintenance related advantages and disadvantages, which may help the Association better manage the asphalt pavements throughout the community: <http://mdareserves.com/resources/links/site-components>.

**Concrete Work.** The concrete work includes the school's curbs, sidewalks, and other parking lot drain pans. We have modeled for curb replacement when the asphalt pavement is overlaid. The overall condition of the concrete work is good.



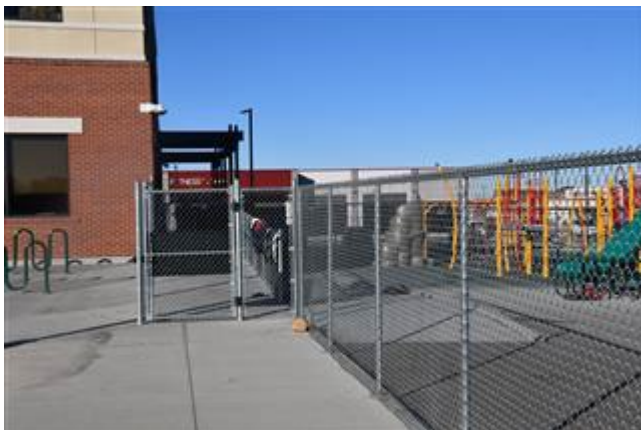
The standards we use for recommending replacement are as follows:

- Trip hazard, ½ inch height difference.
- Severe cracking.
- Severe spalling and scale.
- Uneven riser heights on steps.
- Steps with risers in excess of 8¼ inches.

Because it is highly unlikely that all of the concrete components will fail and require replacement in the period of the study, we have programmed funds for the replacement of these inventories and spread the funds over an extended timeframe to reflect the incremental nature of this work.

The relevant links on our web site may provide useful information related to concrete terminology, maintenance, and repair. Please see <http://mdareserves.com/resources/links/site-components>.

**Fencing.** The Association maintains chain line fencing in good condition.



Chain link fencing can have a useful life of 40 years or more. The Prep School maintains steel fence posts and fasteners that are embedded in concrete.

As part of normal maintenance, we recommend the following:

- Lift or remove ornamental base covers, if applicable
- Remove existing caulk completely
- Clean, prime, and paint all posts
- Apply an appropriate caulk around each post base



- Tool and shape caulking to shed water from post
- Reinstall base covers, and seal and paint all joints

Fence posts can have an extended useful life if these simple maintenance activities are performed. If left unattended, the pressure from expansive post rust can crack and damage the supporting material.

**Site Lighting.** The Prep School is responsible for the operation of the school's walkway and parking lot poled streetlights, and building mounted lights. The lighting system was not on at the time of our site visit. We understand that the lighting system is in operating condition.



For the pole lights the study assumes replacement of the light fixtures every 15 to 20 years, and pole replacement every 30 to 40 years. When the light poles are replaced, we assume that the underground wiring will also be replaced.

When a whole-scale lighting replacement project is called for, we recommend consulting with a lighting design expert. Many municipalities have design codes, guidelines, and restrictions when it comes to exterior illumination.

In addition, new technology such LED and LIFI among others should be evaluated when considering replacement.

**Monument Sign.** The Prep School maintains a single entry monument with brick columns and stone sign in good condition.

The monument lettering is engrave/carved stone with painted accent. The stone monument should have a useful life of 20 to 30 years with some interim painting.



We recommend repointing and replacement of defective areas of the masonry as needed. The School may want to consider applying a coating of Siloxane or other appropriate breathable sealants to mitigate water penetration and further degradation of the masonry work.

## EXTERIOR ITEMS

**Building Roofing.** The school building(s) are roofed in flat roofing systems. The EDPM flat roofs are in excellent to good condition.



Flat roofing systems can have a variety of configurations that will greatly affect the cost of replacement including insulation, ballast, the height of the building, and the density of installed mechanical equipment. Flat roofing systems typically have a useful life of 15 to 25 years.

Annual inspections are recommended, with cleaning, repair, and mitigation of vegetation performed as needed. Access, inspection, and repair work should be performed by contractors and personnel with the appropriate access equipment who are expanded in the types of roofing used for the facility.

The original building and Middle School building have exterior gutters used to remove water from the roofs. These gutters are in good condition and should last 20 to 25 years.

For additional information on roofs and roof maintenance, please see the appropriate links on our web site at <http://mdareserves.com/resources/links/building-exterior>.

**Skylights/Light Tubes.** The school maintains one skylight over the staircase in the original building and six light tubes over the gym in the new building. The skylight and light tubes are in good condition. The normal life expectancy of these items are 20 to 30 years.



It is recommended that the skylight and light tubes be inspected once each year for structural integrity and weather tightness. If the wall and ceiling area beneath them shows signs of moisture damage, it is important to identify and correct the source of water penetration in order to prevent damage to the building's roof. Closely examine the flashing and roof area immediately surrounding the skylight and light tubes, as these often are the source of leaks attributed to skylights and light tubes.

**Siding and Trim.** The exterior of the school building is clad in stucco, brick, and some cementitious siding. The exterior materials are in generally good condition.

Brick is used as a main exterior cladding of the building. As the brick mortar joints weather, the joints will become damaged by water penetration. As additional water gains access to the joints, repeated freeze-thaw cycles gradually increase the damage to the mortar joints. If allowed to progress, even the masonry units such as brick, block, and stone can have their surfaces affected and masonry units can become loose.



In general, masonry is considered a long-life item and is therefore excluded from reserve funding. However, because weather and other conditions result in the slow deterioration of the mortar in masonry joints, we have included funding in this study for repointing. Repointing is the process of raking and cutting out damaged sections of mortar and replacing them with new mortar.

Periodic repointing and local replacement of damaged masonry units will limit the damage done by moisture penetration. For this study, we assume that 10% of the masonry will require repointing every 10 years after approximately 20 years. For additional information about masonry and repointing, please view the relevant links at <http://mdareserves.com/resources/links/building-exterior>.

Stucco is another main exterior cladding for the buildings. Most stucco is a Portland cement plaster applied directly to the building's exterior surfaces. While it is a long lasting and durable material, it does require periodic inspection and maintenance to preserve its appearance.

It is recommended that all stucco surfaces be inspected annually for water seepage, cracks, efflorescence, blistering, and peeling. It is particularly important that all roofs, gutters, and downspouts in stucco installations be water tight and free of debris.

We have included two items in the reserve analysis for the stucco; recoating the stucco on a ten year cycle, and repair of five percent of the stucco surfaces at the time of the recoating.

Cementitious siding is an accent to all three buildings and is in good condition. Cementitious materials typically have an extended useful life and require repainting and recaulking every 10 to 15 years. Following the manufacturer's recommendations for cleaning, painting, and caulking, we expect cementitious products to have a useful life in excess of 50 years.

**Windows and Doors.** The Prep School is responsible for the windows and exterior doors of the school. The windows and doors are in generally good condition.



Window and door units play an integral part in a facility's overall comfort, efficiency, and energy use. The quality of the installed units and the care taken in their installation and maintenance are major factors in their effectiveness and useful

life. These units can have a useful life of 30 to 40 years or more depending on their use and other factors mentioned above. The aluminum storefront systems can last 75 years or more with proper maintenance.

In general, we recommend coordinating the replacement of these units with other exterior work, such as siding and roof replacements. The weather tightness of the building envelope often requires transitional flashing and caulking that should be performed in coordination with each other. Warranties and advantages in 'economy of scale' can often result in lower overall replacement costs and results that are more reliable. Lastly, coordinated replacements offer the opportunity to correct initial construction defects and improve the effectiveness of details with improved construction techniques and materials.

For more information, please see our links at <http://mdareserves.com/resources/links/building-exterior>.

**Entry Canopies.** There are a number of entry canopies over the doorways of each building. They are made of a combination of wood and metal and are in generally good condition.



The study assumes a refurbishment midway through the life expectancy with a full replacement after approximately 40 years.

## INTERIOR ITEMS

**Common Interiors.** The Prep School maintains the lobby, halls, classrooms, offices, auditorium, gymnasiums, cafeteria, restrooms, and other interior spaces that are in generally good condition.



We have assumed that the school will want to maintain these areas in a commercially acceptable condition. Typically, replacement cycles for common interior spaces vary between 10 to 20 years depending on the aesthetic tastes of the school, usage, and construction. Material selection and the school's preferences are the major factors in selecting the reserve cycles for items such as refurbishing and interior refurbishment. The school will need to establish these cycles as these components age. Maintaining historical records and incorporating these trends and preferences into a future Reserve Study update is the best way to adjust for these cycles.

**Flooring.** The school has carpet, vinyl tile, ceramic tile, wood, and rubberized flooring.



- **Carpet.** The carpet in the school's classrooms and offices is in good condition. The school is utilizing carpet tiles which are easier to maintain and can be spot repaired. Commercial carpet of this construction in this type of application has a typical service life of 10 to 15 years.
- **Vinyl Tile.** The school has a large quantity of vinyl tile in the classrooms, hallways, and storage areas. The overall condition of the vinyl tile is good. The school has maintained the vinyl tile very well and the tile is expected to last past its normal useful life.
- **Ceramic Tile.** The school maintains ceramic tile mainly in the entry lobbies. The overall condition of the ceramic tile is good. With regular maintenance the ceramic tile should last 25 to 35 years.
- **Wood Flooring.** The school maintains wood flooring in the gymnasium/auditorium. The overall condition of the wood flooring is good. Periodic refinishing will ensure the floor reaches or exceeds the useful life of 25 to 30 years.
- **Rubber Flooring.** The school installed a rubberized floor with welded seams in the restrooms. This floor is in excellent condition. This floor should have a 15 to 25 year useful life.

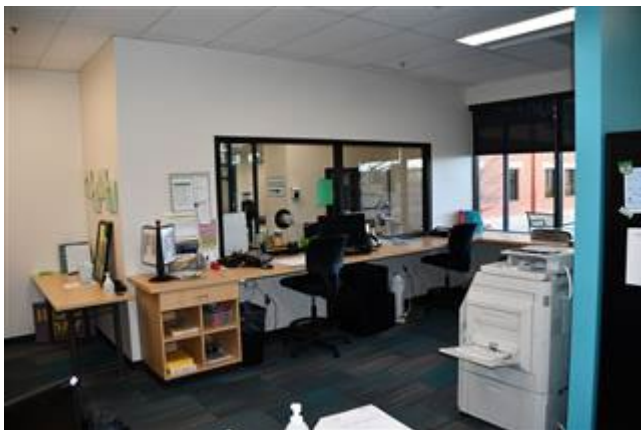
To help maintain the condition of the vinyl and ceramic tiles, we recommend that the school continue with a program of daily sweeping and wet mopping. The tiles can further be protected by the use of dirt catching, walk-off mats like those already placed at the building entrances. To extend the life of the carpet, it is important that the school continue with a comprehensive maintenance program that includes regular vacuuming, spot and spill removal, interim cleaning of high traffic areas, and regular scheduled cleanings.

**Ceiling Tile.** Acoustical ceiling tiles are installed in nearly all of the school. There are exceptions in a few spaces or rooms. The ceiling tiles are in good condition. We have assumed a service life of 25 years for the tile. At that time the tile will be discolored or it may be impossible to obtain matching replacement tiles.

**Interior Lights.** The school has a variety of wall and ceiling installed light fixtures to include exit and emergency lights. The lights are in good condition and should have a 20 to 30 year useful life. Lights should always be replaced with long-life, low energy consuming bulbs.

**Interior Doors.** The school has interior wood and metal doors that are in good condition. Interior doors have an expected useful life of 30 to 40 years.

**Furnishings.** The study includes an extensive amount of tables, desks, and chairs for the classrooms and offices. Also included are the large rolling tables for the cafeteria. These items are in good condition and have an expected useful life of 20 to 25 years.

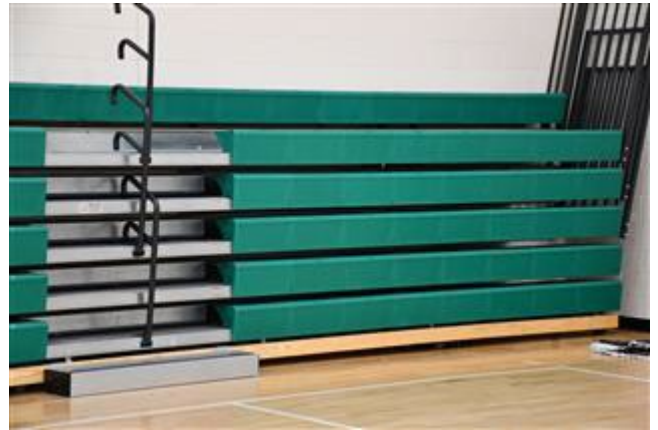


**Restrooms.** The school restrooms consist of toilets, urinals, partitions, and sinks. We have assumed a service life of 30 years for the fixtures and that all fixtures will be replaced at the same time as part of a major renovation of the restroom. A mid-term renovation is planned for the partitions mirrors, dispensers, and other miscellaneous fixtures.



**Lockers.** The school maintains lockers in the hallways for students. The overall condition of the lockers is good. The lockers have an expected useful life of 25 years.

**Gym/Auditorium.** The school gymnasium/auditorium has retractable seating, along with stage lighting and sound system. There are basketball backboards, tennis nets, and a climbing structure. These items were recently constructed and in like new condition.



**Kitchen Equipment.** The school kitchen equipment consists of stainless serving line and commercial refrigerator along with other miscellaneous serving items. It appears the majority of the lunches are prepared outside the school environment and this equipment is mainly for food serving.

**Communication Equipment.** The school maintains an extensive amount of phones, computers, tablets, and radios. These items fail periodically and also need technology refresh. The study has a percentage of new components purchased to replace the ones which fail.

## RECREATION ITEMS

**Basketball Court.** The School maintains a three half basketball courts outside and a number of backstops inside the gymnasium. The overall condition of the components is good.



Replacement of the nets, hoops, and backstops is part of this study and these items are expected to have a 20 year useful life. The nets may require interim replacement under the operating budget.

**Tot Lots.** The School maintains two large playground areas and each have tot lots. These tot lots include play structures, miscellaneous play equipment, concrete borders, and a poured rubberized safety surface. The equipment is in generally good condition with minor wear. It is assumed the safety surface will have the same life expectancy as the play structures and be replaced at the same time.



The safety of each individual piece of playground equipment as well as the layout of the entire play area should be considered when evaluating a playground for safety. The installation and maintenance of the protective surfacing under and around all equipment is crucial. Please note that the evaluation of the equipment and these facilities for safety is beyond the scope of this work. Information for playground design and safety can be found in the "Public Playground Safety Handbook", U.S. Consumer Product Safety Commission (Pub Number 325). For a link to this handbook, please see our web site at [www.mdareserves.com/resources/links/recreation](http://www.mdareserves.com/resources/links/recreation).

Our estimates for playground equipment are based on comparing photos of the existing equipment with equipment of a similar size in manufacturers' catalogs. We use the pricing that is quoted by manufacturers for comparable equipment and add 30% for the disposal of the old equipment and installation of new equipment.

**Artificial Turf.** There is an artificial turf surface for fitness and playground games. The turf is in good condition. Next to the artificial turf field and the basketball courts are two wooden storage sheds used to store the sporting equipment for activities in these areas.



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 and limited common elements of the property to ascertain their remaining useful life and replacement cost. 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



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## **1. COMMON INTEREST DEVELOPMENTS - AN OVERVIEW**

Over the past 40 years, the responsibility for many services, facilities and infrastructure around 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 homeowner 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, streetlights, recreational facilities, and other community facilities and infrastructure.

The growth of Community Associations has been explosive. In 1965, there were only approximately 500 Community Associations in the United States. According to the 1990 U.S. Census, there were roughly 130,000 Community Associations. The Community Associations Institute (CAI), a national trade association, estimates in 2020 that there were more than 350,000 communities with over 75 million residents.

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 issues. Although Community Associations have succeeded in solving many short-term issues, many Associations still fail to properly plan for the significant 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 invariably exposed to the burden of special assessments, major increases in Association fees, and often 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 major repair or replacement, a general view of the physical condition of these components, and an effective financial plan to fund projected periodic replacements or major repairs. The Replacement Reserve Study consists of the following:

**Replacement Reserve Study Introduction.** The introduction provides a description of the property, an Executive Summary of the Funding Recommendations, Level of Reserve Study service, and a statement of the Purpose of the Replacement Reserve Study. It also lists documents and site evaluations upon which the Replacement Reserve Study is based, and provides the Credentials of the Reserve Analyst.

**Section A Replacement Reserve Analysis.** Many components that are owned by the Association have a limited life and require periodic replacement. Therefore, it is essential that the Association have a financial plan that provides funding for the timely replacement of these components in order to protect the safety, appearance, and ultimately, the property value of the home in the community. In conformance with National Reserve Study Standards, a Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves using the Threshold Cash Flow Method. See definition below.

**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. Replacement Reserve Inventory includes estimates of the Normal Economic Life (NEL) and the Remaining Economic Life (REL) for those components whose replacement is scheduled for funding from Replacement Reserves.

The Replacement Reserve Inventory also provides information about those components which are excluded from the Replacement Reserve Inventory and whose replacement is not 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.** The observed condition of the major 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 at the time of our visual evaluation.

**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, the Cash Flow Method and the Component Method. Due to the difference in accounting methodologies, these methods lead to different calculated values for the Recommended Annual Funding to the Reserves. A brief description is included below:

**Cash Flow Threshold Method.** This Reserve Study uses the Threshold Cash Flow Method, sometimes referred to as the "Pooling Method." It calculates the minimum constant annual funding to reserves (Minimum Annual Deposit) required to meet projected expenditures without allowing total reserves on hand to fall below the predetermined Minimum Balance, or Threshold, in any year.

**Component Method.** The Component Method of calculating Reserve Funding needs is based upon an older mathematical model. Instead of calculating total funding based on yearly funding requirements, the Component method treats each component as its own "line item" budget that can only be used for that component. As a result, the Component Method is typically more conservative requiring greater Annual Reserve Funding levels.

### 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 parties responsible for maintaining the community after acceptance of our proposal. Upon submission of the initial Study, the Study should be reviewed by the Board of Directors and the individuals responsible for maintaining the community. We depend upon the Association for correct information, documentation, and drawings. We also look to the Association representative to help us fashion the Reserve Study so that it reflects what the community hopes to accomplish in the coming years.

**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 expense 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 regular 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 Threshold Method, above.

**Component Analysis.** See Component Method, above.

**Contingency.** An allowance for unexpected requirements. The "Threshold" used in the Cash Flow Method is a predetermined minimum balance that serves the same purpose as a "contingency". However, IRS Guidelines do not allow for a "contingency" line item in the inventory. Therefore, it is built into the mathematical model as a "Threshold".

**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 Normal Economic Life (NEL).** 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 Remaining Economic Life (REL).** 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.

**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 Balance.** Otherwise referred to as the Threshold, this amount is used in the Cash Flow Threshold Method only. Normally derived using the average annual expenditure over the study period, this is the minimum amount held in reserves in the Peak Year.

**National Reserve Study Standards.** A set of Standards developed by the Community Associations Institute in 1995 (and updated in 2017) which establishes the accepted methods of Reserve Calculation and stipulates what data must be included in the Reserve Study for each component listed in the inventory. These Standards can be found at [CALonline.org](http://CALonline.org).

**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.)

**Number of Years of the Study.** The numbers 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. The Reserve Study must cover a minimum of 20 years to comply with the National Reserve Study Standards. However, your study covers a 40-year period.

**Peak Year.** In the Cash Flow Threshold Method, a year in which the reserves on hand are projected to fall to the established threshold level. See Minimum Balance, above.

**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.

**Replacement Reserve Study.** An analysis of all of the components of the common property of a Community Association for which 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, Normal Economic Life, and Remaining Economic Life. The objective of the study is to calculate a Recommended Annual Funding 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:

<b>ea</b>	each	<b>ls</b>	lump sum	<b>sy</b>	square yard
<b>ft or lf</b>	linear foot	<b>pr</b>	pair	<b>cy</b>	cubic yard
<b>sf</b>	square foot				

What is a Reserve Study?  
Who are we?



<https://youtu.be/m4BcOE6q3Aw>

What kind of property uses a Reserve Study?  
Who are our clients?



<https://youtu.be/40SodajTW1q>

Who conducts a Reserve Study?  
Reserve Specialist (RS) what does this mean?



<https://youtu.be/pYSMZ013VjQ>

When should a Reserve Study be updated?  
What are the different types of Reserve Studies?



<https://youtu.be/Qx8WHB9Cgnc>

What's in a Reserve Study and what's out?  
Improvement/Component, what's the difference?



<https://youtu.be/ZfBoAEhtf3E>

What is my role as a Community Manager?  
Will the report help me explain Reserves?



<https://youtu.be/1J2h7FIU3qw>

What is my role as a community Board Member?  
Will a Reserve Study meet my needs?



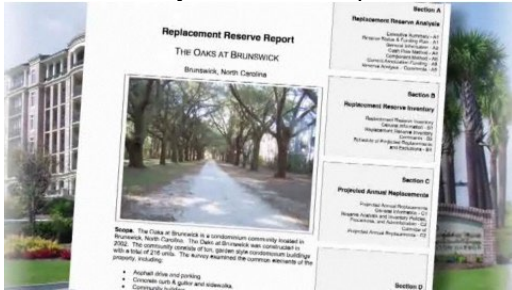
<https://youtu.be/aARD1B1Oa3o>

Community dues, how can a Reserve Study help?  
Will a study keep my property competitive?



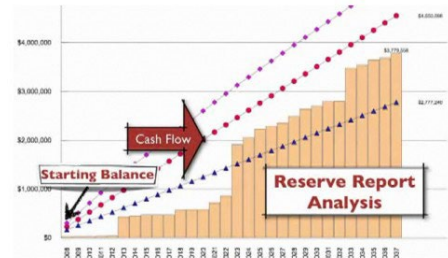
<https://youtu.be/diZfM1IyJYU>

How do I read the report?  
Will I have a say in what the report contains?



<https://youtu.be/qCeVJhFf9ag>

Where do the numbers come from?  
Cumulative expenditures and funding, what?



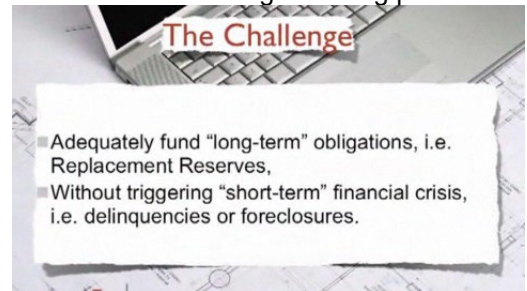
<https://youtu.be/SePdWVDvHWI>

How are interest and inflation addressed?  
Inflation, what should we consider?



<https://youtu.be/W8CDLwRlv68>

A community needs more help, where do we go?  
What is a strategic funding plan?



<https://youtu.be/hIxV9X1tlcA>

