

# RESERVE STUDY

## Wynfield

### Property Owners Association, Inc.



Huntersville, North Carolina  
April 20, 2020



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Long-term thinking. Everyday commitment.

Wynfield Property Owners Association, Inc.  
Huntersville, North Carolina

Dear Board of Directors of Wynfield Property Owners Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Wynfield Property Owners Association, Inc. in Huntersville, North Carolina and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, April 20, 2020.

This *Reserve Study* exceeds the Association of Professional Reserve Analysts (APRA) standards fulfilling the requirements of a "Level II Reserve Study Update."

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Wynfield Property Owners Association, Inc. plan for a successful future.

As part of our long-term thinking and everyday commitment to our clients, we are available to answer any questions you may have regarding this study.

Respectfully submitted on May 4, 2020 by

*Reserve Advisors Engineering, PLLC (P-1327)*

Visual Inspection and Report by: Colin Niemeyer, RS<sup>1</sup>  
Review by: Alan M. Ebert, P.E. (NC-043524) RS, PRA<sup>2</sup>, Director of Quality Assurance



<sup>1</sup> RS (Reserve Specialist) is the reserve provider professional designation of the Community Associations Institute (CAI) representing America's more than 300,000 condominium, cooperative and homeowners associations.

<sup>2</sup> PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at <http://www.apra-usa.com>.



Long-term thinking. Everyday commitment.

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# 1. RESERVE STUDY EXECUTIVE SUMMARY

**Client:** Wynfield Property Owners Association, Inc. (Wynfield)

**Location:** Huntersville, North Carolina

**Reference:** 101477

**Property Basics:** Wynfield Property Owners Association, Inc. is a homeowners association which is responsible for the common elements shared by 374 single family homes. The community was built in 1990. The community contains a clubhouse and pool.

**Reserve Components Identified:** 38 Reserve Components.

**Inspection Date:** April 20, 2020. We conducted previous inspections in 2010 and 2015.

**Funding Goal:** The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures. Our recommended Funding Plan recognizes this threshold funding year in 2037 due to replacement of the water slide and pool finishes.

**Cash Flow Method:** We use the Cash Flow Method to compute the Reserve Funding Plan. This method offsets future variable Reserve Expenditures with existing and future stable levels of reserve funding. Our application of this method also considers:

- Current and future local costs of replacement
- 2.2% anticipated annual rate of return on invested reserves
- 3.0% future Inflation Rate for estimating Future Replacement Costs

**Sources for Local Costs of Replacement:** Our proprietary database, historical costs and published sources, i.e., R.S. Means, Incorporated.

**Cash Status of Reserve Fund:**

- \$146,398 as of March 31, 2020
- 2020 budgeted Reserve Contributions of \$88,845

**Project Prioritization:** We note anticipated Reserve Expenditures for the next 30 years in the **Reserve Expenditures** tables and include a **Five-Year Outlook** table following the **Reserve Funding Plan** in Section 3. We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

- Tennis and Basketball Courts, Surface Replacements

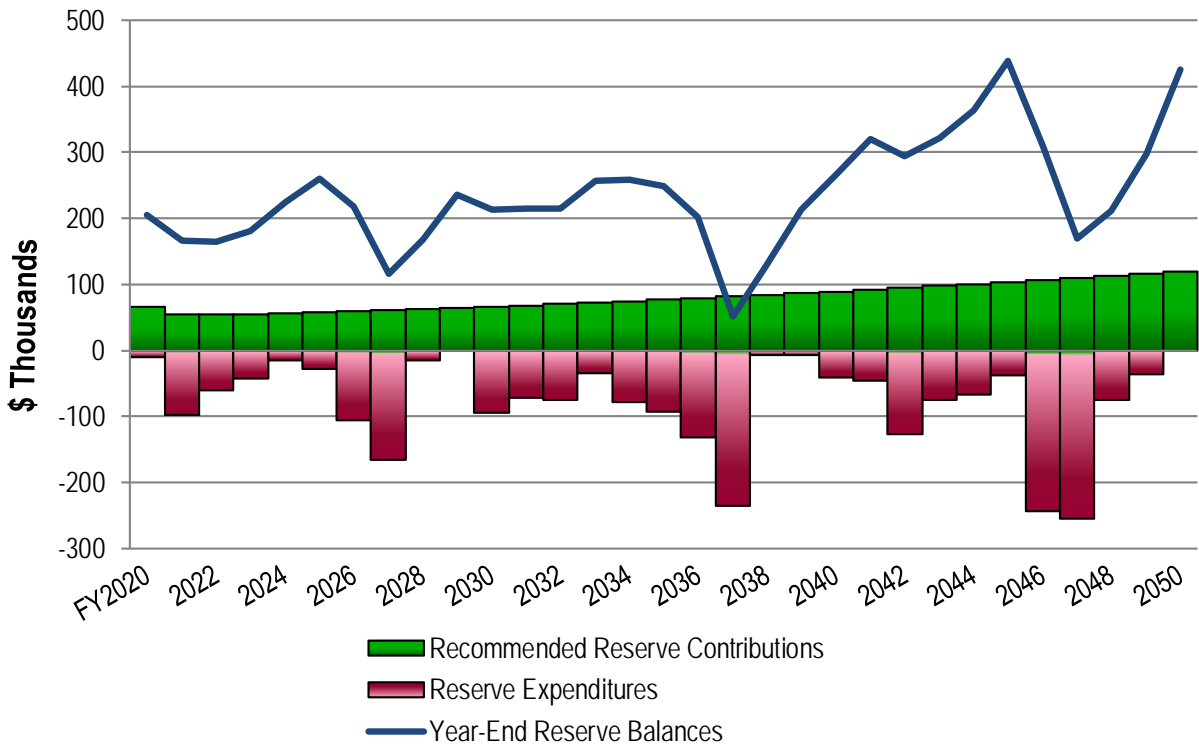
**Recommended Reserve Funding:** We recommend the following in order to achieve a stable and equitable Funding Plan:

- Reduced reserve budget of \$54,000 in 2021
- Stable contributions of \$54,000 from 2022 through 2023
- Inflationary increases from 2024 through 2050, the limit of this study's Cash Flow Analysis
- 2021 Reserve Contribution of \$54,000 is equivalent to an average monthly contribution of \$12.03 per homeowner.



### Wynfield Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2021	54,000	167,045	2031	68,400	214,431	2041	92,000	320,179
2022	54,000	164,713	2032	70,500	214,604	2042	94,800	294,050
2023	54,000	180,504	2033	72,600	257,092	2043	97,600	322,565
2024	55,600	224,756	2034	74,800	258,851	2044	100,500	363,447
2025	57,300	260,088	2035	77,000	249,178	2045	103,500	437,979
2026	59,000	218,533	2036	79,300	201,596	2046	106,600	309,000
2027	60,800	116,809	2037	81,700	50,843	2047	109,800	169,414
2028	62,600	167,299	2038	84,200	130,376	2048	113,100	211,154
2029	64,500	236,189	2039	86,700	213,605	2049	116,500	297,844
2030	66,400	212,932	2040	89,300	267,502	2050	120,000	425,717







## 2. RESERVE STUDY REPORT

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of

**Wynfield Property Owners Association, Inc.**

**Huntersville, North Carolina**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, April 20, 2020. We conducted previous inspections in 2010 and 2015.

We present our findings and recommendations in the following report sections and spreadsheets:

- **Identification of Property** - Segregates all property into several areas of responsibility for repair or replacement
- **Reserve Expenditures** - Identifies reserve components and related quantities, useful lives, remaining useful lives and future reserve expenditures during the next 30 years
- **Reserve Funding Plan** - Presents the recommended Reserve Contributions and year-end Reserve Balances for the next 30 years
- **Five-Year Outlook** - Identifies reserve components and anticipated reserve expenditures during the first five years
- **Reserve Component Detail** - Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology** - Lists the national standards, methods and procedures used to develop the Reserve Study
- **Definitions** - Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions** - Describes Assumptions and Professional Service Conditions
- **Credentials and Resources**

## IDENTIFICATION OF PROPERTY



Our investigation includes Reserve Components or property elements as set forth in your Declaration. The Expenditure tables in Section 3 list the elements contained in this study. Our analysis begins by segregating the property elements into several areas of responsibility for repair and replacement.

Our process of identification helps assure that future boards and the management team understand whether reserves, the operating budget or Homeowners fund certain replacements and assists in preparation of the annual budget. We derive these segregated classes of property from our review of the information provided by the Association and through conversations with Management. These classes of property include:

- Reserve Components
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements
- Property Maintained by Homeowners
- Property Maintained by Others

We advise the Board conduct an annual review of these classes of property to confirm its policy concerning the manner of funding, i.e., from reserves or the operating budget. The Reserve Study identifies Reserve Components as set forth in your Declaration or which were identified as part of your request for proposed services. Reserve Components are defined by CAI as property elements with:

- Wynfield responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

Long-Lived Property Elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the 30-year scope of the study. The operating budget should fund infrequent repairs. Funding untimely or unexpected replacements from reserves will necessitate increases to Reserve Contributions. Periodic updates of this Reserve Study will help determine the merits of adjusting the Reserve Funding Plan. We identify the following Long-Lived Property Elements as excluded from reserve funding at this time:

- Electrical Systems, Common
- Foundations, Clubhouse and Pool House
- Inlet/Outlet Structures, Concrete, Storm Water Management System
- Pipes, Interior Building, Domestic Water, Sanitary Waste, Vent, Building Heating and Cooling, Clubhouse and Pool House
- Pipes, Subsurface Utilities
- Pool Structures
- Structural Frames

The operating budget provides money for the repair and replacement of certain Reserve Components. The Association may develop independent criteria for use of operating and reserve funds. For purposes of calculating appropriate Reserve Contributions, we identify the following list of Operating Budget Funded Repairs and Replacements:

- General Maintenance to the Common Elements
- Expenditures less than \$3,500 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Catch Basins, Landscape
- Concrete Sidewalks, Clubhouse Area, Partial Replacements
- Deck, Clubhouse, Interim Deck Repairs and Replacements
- Light Fixtures, Exterior Clubhouse and Pool House
- Paint Finishes, Touch Up
- Playground, Mulch Replenishments
- Site Furniture
- Tennis and Basketball Courts, Standards
- Water Heater, Clubhouse
- Other Repairs normally funded through the Operating Budget





**Trip hazards evident at the sidewalks – we recommend the Association fund these repairs through the operating budget**



**Basketball hoop**

Certain items have been designated as the responsibility of the homeowners to repair or replace at their cost. Property Maintained by Homeowners, including items billed back to Homeowners, relates to:

- Homes and Lots

Certain items have been designated as the responsibility of others to repair or replace. Property Maintained by Others relates to:

- Light Poles and Fixtures (Duke Energy)
- Signage, Street and Traffic (Municipality)
- Street Systems (Municipality)

### **3. RESERVE EXPENDITURES and FUNDING PLAN**

The tables following this introduction present:

#### **Reserve Expenditures**

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
  - useful life
  - remaining useful life
- 2020 local cost of replacement
  - Per unit
  - Per phase
  - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

#### **Reserve Funding Plan**

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end

#### **Five-Year Outlook**

- Line item numbers
- Reserve component inventory of only the expenditures anticipated to occur within the first five years
- Schedule of estimated future costs for each reserve component anticipated to occur within the first five years

The purpose of a Reserve Study is to provide an opinion of reasonable annual Reserve Contributions. Prediction of exact timing and costs of minor Reserve Expenditures typically will not significantly affect the 30-year cash flow analysis. Adjustments to the times and/or costs of expenditures may not always result in an adjustment in the recommended Reserve Contributions.

Financial statements prepared by your association, by you or others might rely in part on information contained in this section. For your convenience, we have provided an electronic data file containing the tables of ***Reserve Expenditures*** and ***Reserve Funding Plan***.





## RESERVE EXPENDITURES

Wynfield  
Property Owners Association, Inc.  
Huntersville, North Carolina

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2036	17 2037	18 2038	19 2039	20 2040	21 2041	22 2042	23 2043	24 2044	25 2045	26 2046	27 2047	28 2048	29 2049	30 2050		
						Useful	Remaining	Unit (2020)	Per Phase (2020)	Total (2020)																		
<u>Property Site Elements</u>																												
4.020	1,870	1,870	Square Yards	Asphalt Pavement, Crack Repair, Patch, Seal Coat and Striping	2023	3 to 5	3	2.20	4,114	4,114	1.7%				7,214			8,119						9,138				
4.040	1,870	1,870	Square Yards	Asphalt Pavement, Mill and Overlay	2035	15 to 20	15	14.00	26,180	26,180	1.7%																	
4.420	1	1	Allowance	Irrigation System, Inspections and Partial Replacements	2022	to 5	2	15,000.00	15,000	15,000	6.0%		24,793					28,742						33,319				
4.500	1	1	Allowance	Landscape, Partial Replacements	2022	to 5	2	7,500.00	7,500	7,500	3.0%		12,396					14,371						16,660				
4.660	1	1	Allowance	Playground Equipment	2027	15 to 20	7	30,000.00	30,000	30,000	4.4%													66,639				
4.800	1	1	Allowance	Signage, Monuments, Renovation	2026	15 to 20	6	33,000.00	33,000	33,000	4.5%								67,082									
4.830	1,850	1,850	Square Yards	Tennis and Basketball Courts, Color Coat	2026	4 to 6	6	9.50	17,575	17,575	4.5%	28,203					32,695											
4.840	360	360	Linear Feet	Tennis Court, Fence	2021	to 25	1	43.00	15,480	15,480	2.1%													33,384				
4.850	4	4	Each	Tennis Court, Light Poles and Fixtures	2026	to 35	6	4,500.00	18,000	18,000	0.9%																	
4.860	1,850	1,850	Square Yards	Tennis and Basketball Courts, Surface	2021	to 25	1	42.50	78,625	78,625	10.6%														169,562			
<u>Exterior Building Elements</u>																												
5.198	1	1	Allowance	Crawlspace, Mold Removal	2020	N/A	0	10,000.00	10,000	10,000	0.4%																	
5.201	400	400	Square Feet	Deck, Composite, Clubhouse	2036	20 to 25	16	48.00	19,200	19,200	1.3%	30,810																
5.310	1	1	Allowance	Exterior Renovations, Clubhouse and Pool House, Partial	2023	to 10	3	12,000.00	12,000	12,000	2.3%								23,683									
5.551	510	510	Linear Feet	Gutters and Downspouts, Aluminum, Clubhouse and Pool House	2023	15 to 20	3	7.00	3,570	3,570	0.5%								7,046									
5.600	52	52	Squares	Roofs, Asphalt Shingles, Clubhouse and Pool House	2023	15 to 20	3	360.00	18,720	18,720	2.4%								36,946									
5.620	2	1	Allowance	Security System	2027	10 to 15	7 to 14	7,000.00	7,000	14,000	2.0%						13,022							16,015				
5.696	1,100	1,100	Square Feet	Soffit and Fascia, Aluminum, Pool House	2025	to 35	5	5.00	5,500	5,500	0.3%																	
5.765	2,000	2,000	Square Feet	Walls, Siding, Composite Hardboard, Clubhouse (Replace with Fiber Cement)	2030	to 35	10	10.00	20,000	20,000	1.1%																	
5.800	590	590	Square Feet	Windows and Doors	2030	to 40	10	55.00	32,450	32,450	1.8%																	
<u>Interior Building Elements</u>																												
6.070	2	2	Each	Air Handling and Condensing Units, Split Systems, Clubhouse	2031	to 20	11	7,500.00	15,000	15,000	2.4%														35,348			
6.420	1,300	1,300	Square Feet	Floor Coverings, Wood, Refinishing, Clubhouse	2022	to 8	2	3.00	3,900	3,900	1.0%			6,639										8,411				
6.451	2	1	Allowance	Furnishings, Clubhouse, Phased	2028	to 20	8 to 13	12,000.00	12,000	24,000	2.5%													27,455				
6.501	1	1	Allowance	Interior Renovations, Pool House	2034	to 25	14	45,000.00	45,000	45,000	2.9%																	
6.521	1	1	Allowance	Kitchen, Renovation, Clubhouse	2026	to 25	6	20,000.00	20,000	20,000	1.0%																	
6.561	20	20	Each	Light Fixtures, Clubhouse	2035	to 25	15	150.00	3,000	3,000	0.2%																	
6.802	4,800	4,800	Square Feet	Paint Finishes, Clubhouse	2022	8 to 12	2	1.00	4,800	4,800	0.9%							9,197										
6.890	2	2	Each	Rest Rooms, Renovation, Clubhouse	2035	to 25	15	6,000.00	12,000	12,000	0.8%																	
<u>Pool Elements</u>																												
7.201	10,200	10,200	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2022	8 to 12	2	1.50	15,300	15,300	2.8%							29,316										
7.301	4,800	4,800	Square Feet	Cover, Vinyl	2025	8 to 10	5	3.75	18,000	18,000	3.7%								37,688									
7.401	570	570	Linear Feet	Fences, Aluminum	2036	to 25	16	55.00	31,350	31,350	2.1%	50,308																
7.501	2	1	Allowance	Furniture	2024	to 12	4 to 10	14,000.00	14,000	28,000	4.9%	22,466						26,825						32,031				
7.561	3	3	Each	Light Poles and Fixtures	2027	to 25	7	4,500.00	13,500	13,500	0.7%																	
7.601	3	1	Allowance	Mechanical Equipment	2022	to 15	2 to 12	10,000.00	10,000	30,000	4.0%		16,528					19,161						22,213				
7.801	4,800	4,800	Linear Feet	Pool Finish, Plaster	2027	8 to 12	7	10.00	48,000	48,000	10.3%							79,337						106,622				
7.802	680	680	Linear Feet	Pool Finish, Tile	2037	15 to 25	17	35.00	23,800	23,800	1.7%			39,338														
7.851	3	3	Each	Shade Structures, Aluminum	2040	to 25	20	7,500.00	22,500	22,500	1.7%					40,638												
7.951	1	1	Allowance	Water Features	2031	to 15	11	15,000.00	15,000	15,000	2.2%													32,349				
7.980	1	1	Allowance	Water Slide, Replacement	2037	to 20	17	38,000.00	38,000	38,000	2.6%			62,808														
<b>Anticipated Expenditures, By Year (\$2,370,679 over 30 years)</b>												131,787	235,200	6,639	7,214	40,638	45,717	127,612	75,794	67,082	37,688	243,706	254,591	75,501	35,348	0		

# RESERVE FUNDING PLAN

## CASH FLOW ANALYSIS

Wynfield

Property Owners Association, Inc.

Huntersville, North Carolina

### Individual Reserve Budgets & Cash Flows for the Next 30 Years

	FY2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Reserves at Beginning of Year (Note 1)	146,398	205,915	167,045	164,713	180,504	224,756	260,088	218,533	116,809	167,299	236,189	212,932	214,431	214,604	257,092	258,851
<b>Total Recommended Reserve Contributions (Note 2)</b>	<b>66,634</b>	<b>54,000</b>	<b>54,000</b>	<b>54,000</b>	<b>55,600</b>	<b>57,300</b>	<b>59,000</b>	<b>60,800</b>	<b>62,600</b>	<b>64,500</b>	<b>66,400</b>	<b>68,400</b>	<b>70,500</b>	<b>72,600</b>	<b>74,800</b>	<b>77,000</b>
Plus Estimated Interest Earned, During Year (Note 3)	2,883	4,058	3,610	3,756	4,409	5,275	5,208	3,649	3,091	4,390	4,887	4,650	4,668	5,132	5,614	5,528
Less Anticipated Expenditures, By Year	(10,000)	(96,928)	(59,942)	(41,965)	(15,757)	(27,243)	(105,763)	(166,173)	(15,201)	0	(94,544)	(71,551)	(74,995)	(35,244)	(78,655)	(92,201)
<b>Anticipated Reserves at Year End</b>	<b><u>\$205,915</u></b>	<b><u>\$167,045</u></b>	<b><u>\$164,713</u></b>	<b><u>\$180,504</u></b>	<b><u>\$224,756</u></b>	<b><u>\$260,088</u></b>	<b><u>\$218,533</u></b>	<b><u>\$116,809</u></b>	<b><u>\$167,299</u></b>	<b><u>\$236,189</u></b>	<b><u>\$212,932</u></b>	<b><u>\$214,431</u></b>	<b><u>\$214,604</u></b>	<b><u>\$257,092</u></b>	<b><u>\$258,851</u></b>	<b><u>\$249,178</u></b>

(continued)

### Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued

	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Reserves at Beginning of Year	249,178	201,596	50,843	130,376	213,605	267,502	320,179	294,050	322,565	363,447	437,979	309,000	169,414	211,154	297,844
<b>Total Recommended Reserve Contributions</b>	<b>79,300</b>	<b>81,700</b>	<b>84,200</b>	<b>86,700</b>	<b>89,300</b>	<b>92,000</b>	<b>94,800</b>	<b>97,600</b>	<b>100,500</b>	<b>103,500</b>	<b>106,600</b>	<b>109,800</b>	<b>113,100</b>	<b>116,500</b>	<b>120,000</b>
Plus Estimated Interest Earned, During Year	4,905	2,747	1,972	3,743	5,235	6,394	6,683	6,709	7,464	8,720	8,127	5,205	4,141	5,538	7,873
Less Anticipated Expenditures, By Year	(131,787)	(235,200)	(6,639)	(7,214)	(40,638)	(45,717)	(127,612)	(75,794)	(67,082)	(37,688)	(243,706)	(254,591)	(75,501)	(35,348)	0
<b>Anticipated Reserves at Year End</b>	<b><u>\$201,596</u></b>	<b><u>\$50,843</u></b>	<b><u>\$130,376</u></b>	<b><u>\$213,605</u></b>	<b><u>\$267,502</u></b>	<b><u>\$320,179</u></b>	<b><u>\$294,050</u></b>	<b><u>\$322,565</u></b>	<b><u>\$363,447</u></b>	<b><u>\$437,979</u></b>	<b><u>\$309,000</u></b>	<b><u>\$169,414</u></b>	<b><u>\$211,154</u></b>	<b><u>\$297,844</u></b>	<b><u>\$425,717</u></b>
		(NOTE 5)													(NOTE 4)

**Explanatory Notes:**

- 1) Year 2020 starting reserves are as of March 31, 2020; FY2020 starts January 1, 2020 and ends December 31, 2020.
- 2) Reserve Contributions for 2020 are the remaining budgeted 9 months; 2021 is the first year of recommended contributions.
- 3) 2.2% is the estimated annual rate of return on invested reserves; 2020 is a partial year of interest earned.
- 4) Accumulated year 2050 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

## FIVE-YEAR OUTLOOK

**Wynfield  
Property Owners Association, Inc.**  
Huntersville, North Carolina

Line Item	Reserve Component Inventory	RUL = 0 FY2020	1 2021	2 2022	3 2023	4 2024	5 2025
<b><u>Property Site Elements</u></b>							
4.020	Asphalt Pavement, Crack Repair, Patch, Seal Coat and Striping				4,495		
4.420	Irrigation System, Inspections and Partial Replacements			15,914			
4.500	Landscape, Partial Replacements			7,957			
4.840	Tennis Court, Fence		15,944				
4.860	Tennis and Basketball Courts, Surface		80,984				
<b><u>Exterior Building Elements</u></b>							
5.198	Crawlspace, Mold Removal	10,000					
5.310	Exterior Renovations, Clubhouse and Pool House, Partial				13,113		
5.551	Gutters and Downspouts, Aluminum, Clubhouse and Pool House				3,901		
5.600	Roofs, Asphalt Shingles, Clubhouse and Pool House				20,456		
5.696	Soffit and Fascia, Aluminum, Pool House						6,376
<b><u>Interior Building Elements</u></b>							
6.420	Floor Coverings, Wood, Refinishing, Clubhouse			4,138			
6.802	Paint Finishes, Clubhouse			5,092			
<b><u>Pool Elements</u></b>							
7.201	Concrete Deck, Inspections, Partial Replacements and Repairs			16,232			
7.301	Cover, Vinyl						20,867
7.501	Furniture					15,757	
7.601	Mechanical Equipment			10,609			
<b>Anticipated Expenditures, By Year (\$2,370,679 over 30 years)</b>		10,000	96,928	59,942	41,965	15,757	27,243



## 4. RESERVE COMPONENT DETAIL

The Reserve Component Detail of this *Reserve Study* includes enhanced solutions and procedures for select significant components. This section describes the Reserve Components, documents specific problems and condition assessments, and may include detailed solutions and procedures for necessary capital repairs and replacements for the benefit of current and future board members. We advise the Board use this information to help define the scope and procedures for repair or replacement when soliciting bids or proposals from contractors. *However, the Report in whole or part is not and should not be used as a design specification or design engineering service.*

### Property Site Elements

#### Asphalt Pavement, Crack Repair, Patch, Seal Coat and Striping

**Line Item:** 4.020

**Quantity:** Approximately 1,870 square yards at the parking lot

**History:** The association completed a total replacement of the parking lot in 2015

**Condition:** Good to fair overall

**Useful Life:** Three- to five-years

**Component Detail Notes:** Proposals for seal coat applications should include crack repairs and patching. The contractor should only apply seal coat applications after repairs are completed. A seal coat does not bridge or close cracks; therefore, unrepaired cracks render the seal coat applications useless.

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost includes an allowance for crack repairs and patching of up to two percent (2%) of the pavement.

#### Asphalt Pavement, Repaving

**Line Item:** 4.040

**Quantity:** Approximately 1,870 square yards at the parking lot

**History:** The association completed a total replacement of the parking lot in 2015

**Condition:** Good to fair overall



**Parking lot overview**



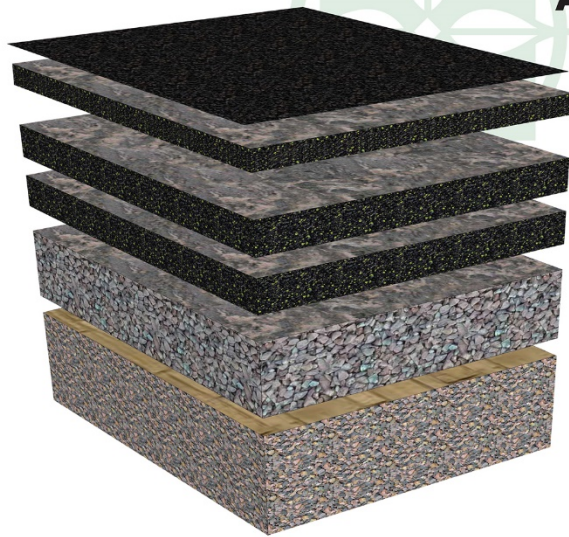
**Parking lot overview**



**Parking lot overview**

**Useful Life:** 15- to 20-years with the benefit of timely crack repairs and patching

**Component Detail Notes:** The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish. The following diagram depicts the typical components although it may not reflect the actual configuration at Wynfield:



## ASPHALT DIAGRAM

**Sealcoat or Wearing Surface**

**Asphalt Overlay** Not to Exceed 1.5 inch Thickness per Lift or Layer

**Original Pavement** Inspected and milled until sound pavement is found, usually comprised of two layers

**Compacted Crushed Stone or Aggregate Base**

**Subbase of Undisturbed Native Soils** Compacted to 95% dry density

© Reserve Advisors

The manner of repaving is either a mill and overlay or total replacement. A mill and overlay is a method of repaving where cracked, worn and failed pavement is mechanically removed or milled until sound pavement is found. A new layer of asphalt is overlaid atop the remaining base course of pavement. Total replacement includes the removal of all existing asphalt down to the base course of aggregate and native soil followed by the application of two or more new lifts of asphalt. We recommend mill and overlay on asphalt pavement that exhibits normal deterioration and wear. We recommend total replacement of asphalt pavement that exhibits severe deterioration, inadequate drainage, pavement that has been overlaid multiple times in the past or where the configuration makes overlayment not possible. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the mill and overlay method of repaving at Wynfield.

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost for milling and overlayment includes area patching of up to ten percent (10%).

## Irrigation System

---

**Line Item:** 4.420

**History:** Varies

**Condition:** Management does not report any issues at this time

**Useful Life:** At the request of the Association we include an allowance every five years

**Component Detail Notes:** Irrigation systems typically include the following components:

- Electronic controls (timer)
- Impact rotors
- Network of supply pipes
- Pop-up heads
- Valves

Wynfield should anticipate interim and partial replacements of the system network supply pipes and other components as normal maintenance to maximize the useful life of the irrigation system. The Association should fund these ongoing seasonal repairs through the operating budget.

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Landscape

---

**Line Item:** 4.500

**Component Detail Notes:** The Association contains a large quantity of trees, shrubbery and other landscape elements. Replacement of these elements is an ongoing need. Many associations budget for these replacements as normal maintenance. Other associations fund ongoing replacements from reserves. Large amounts of landscape may need replacement due to disease, drought or other forces of nature. If the cost of removal and replacement is substantial, funding from reserves is logical. The Association may also desire to periodically update the appearance of the community through major improvements to the landscape.

**Useful Life:** At the request of Management, we include a landscape allowance for partial replacements every five years.

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Playground Equipment

---

**Line Item:** 4.660

**History:** Repairs conducted in 2014



**Condition:** Fair overall with finish deterioration evident. The Association informs us of plans to refinish and move the playground through means other than reserves overall



**Playground equipment**



**Finish deterioration evident**

**Useful Life:** 15- to 20-years

**Component Detail Notes:** Safety is the major purpose for maintaining playground equipment. We recommend an annual inspection of the playground equipment to identify and repair as normal maintenance loose connections and fasteners or damaged elements. We suggest the Association learn more about the specific requirements of playground equipment at [PlaygroundSafety.org](http://PlaygroundSafety.org). We recommend the use of a specialist for the design or replacement of the playground equipment environment.

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We include an allowance in the unit cost for replacement of the safety surface and border.

## **Signage, Monuments**

---

**Line Item:** 4.800

**Quantity:** Property identification signs at the main entrance and subdivisions

**History:** Minor repairs made as necessary

**Condition:** Good to fair overall



**Typical subdivision monument**



**Main entrance monument**

**Useful Life:** 15- to 20-years

**Component Detail Notes:** Community signage contributes to the overall aesthetic appearance of the property to owners and potential buyers. Renovation or replacement of community signs is often predicated upon the desire to "update" the perceived identity of the community rather than for utilitarian concerns. Therefore, the specific times for replacement or renovation are discretionary. The signage includes the following elements:

- Light fixtures
- Fences
- Masonry, Stone Veneer

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost for renovation includes repointing and repairs to the masonry and replacement of the remaining components listed above.

## **Tennis and Basketball Courts, Color Coat**

---

**Line Item:** 4.830

**Quantity:** 1,850 square yards comprising two tennis courts and one basketball court

**History:** The tennis courts were last color coated in 2017

**Condition:** Poor overall with severe cracks and settlement evident throughout





**Tennis court overview**



**Settlement evident**



**Severe cracks evident**



**Basketball court overview**



**Cracks evident**

***Useful Life:*** Four- to six-years

**Component Detail Notes:** Prior to the application of the color coat, the Association should require the contractor to rout and fill all cracks with hot emulsion. This deters water infiltration and further deterioration of the asphalt playing surface.

**Priority/Criticality:** Not recommended to defer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Tennis Courts, Fence

---

**Line Item:** 4.840

**Quantity:** 360 linear feet

**History:** Repairs made as necessary

**Condition:** Fair overall



Tennis court fence

**Useful Life:** Up to 25 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Tennis Courts, Light Poles and Fixtures

---

**Line Item:** 4.850

**Quantity:** Four each



**History:** Original

**Condition:** Good to fair overall



**Light pole and fixture at the Tennis Courts**

**Useful Life:** Up to 35 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Tennis and Basketball Courts, Surface**

---

**Line Item:** 4.860

**Quantity:** 1,850 square yards of asphalt comprising two tennis courts and one basketball court

**History:** Original

**Condition:** Poor overall with severe cracks and settlement evident throughout

**Useful Life:** Up to 25 years

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.



## Exterior Building Elements

### Crawlspace, Mold Removal

---

**Line Item:** 5.198

**Quantity:** At the request of the association we include a near term allowance for mold removal and moisture barrier repairs at the crawlspaces

**History:** N/A

**Condition:** Mold is reported to be growing in the crawl spaces due to leaks in the moisture barrier.

**Useful Life:** N/A

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost estimate for this project is based on information provided by the Association.

### Deck, Composite

---

**Line Item:** 5.201

**Quantity:** One composite deck with wood frames which comprise a total of 400 square feet

**History:** Replaced in 2014

**Condition:** Good to fair overall



Deck railings



Deck boards and railings



**Staircase**



**Deck structure**

**Useful Life:** 20- to 25-years

**Component Detail Notes:** Deck construction includes the following:

- Deck boards fastened with screws
- Aluminum railings with vertical pickets
- Wood column supported frames
- Exposed concrete footings
- Wood frames fastened with bolts
- Cross bracing does not exist to stabilize the frames

The wood components in the composite material will absorb moisture. When dispelled, black mold spots can appear that will require chemical cleaning. However, these spots will reappear resulting in the need for cleaning every other month as needed during humid months. The Association should fund these expenses through the operating budget.

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Exterior Renovations

---

**Line Item:** 5.310

**History:** Exterior finishes vary in age

**Condition:** Good to fair overall





**Composite hardboard siding at the clubhouse**



**Masonry wall at the pool house**



**Rear elevation of the pool house**



**Paint finishes and sealants at the clubhouse**

**Useful Life:** Exterior renovations every 10years

**Component Detail Notes:**

- 3,400 square feet of brick
- 2,000 square feet of siding
- 500 linear feet of joint sealants
- Light fixtures

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Complete renovations should include the following:

- Inspection of the brick veneer including partial repointing of up to five percent (5%)
- Application of paint finish including partial replacement of up to four percent (4%) of the wood siding and trim
- Replacement of the window and door joint sealant as needed

## **Gutters and Downspouts, Aluminum**

---

**Line Item:** 5.551

**Quantity:** Approximately 510 linear feet of aluminum five-inch seamless gutters and two-inch by three-inch downspouts

**History:** Unknown

**Condition:** Good to fair overall



**Downspout at the clubhouse**

**Useful Life:** 15- to 20-years

**Component Detail Notes:** The useful life of gutters and downspouts coincides with that of the asphalt shingle roofs. Coordinated replacement will result in the most economical unit price and minimize the possibility of damage to other roof components as compared to separate replacements.

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Roofs, Asphalt Shingles**

---

**Line Item:** 5.600

**Quantity:** 52 squares<sup>1</sup>

**History:** Unknown

<sup>1</sup> We quantify the roof area in squares where one square is equal to 100 square feet of surface area.



**Condition:** Good to fair overall



**Asphalt shingle roof at the clubhouse**



**Asphalt shingle roof at the clubhouse**



**Asphalt shingle roof at the pool house**



**Asphalt shingle roof at the pool house**

**Useful Life:** 15- to 20-years

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Security System**

---

**Line Item:** 5.620

**Quantity:** Wynfield utilizes the following security system components:

- Automated card reading system (3 access points)
- Cameras

**History:** Components vary in age

**Condition:** Reported in satisfactory operational condition



**Security cameras**

**Useful Life:** 10- to 15-years

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Monthly:
  - Check cameras for proper focus, fields of view are unobstructed and camera and lenses are clean and dust-free
  - Check recording equipment for proper operation
  - Verify monitors are free from distortion with correct brightness and contrast
- Annually:
  - Check exposed wiring and cables for wear, proper connections and signal transmission
  - Check power connections, and if applicable, functionality of battery power supply systems

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The Association should anticipate replacement of all of the security system components per event.

## **Soffit and Fascia, Aluminum**

---

**Line Item:** 5.696

**Quantity:** Approximately 1,100 square feet at the pool house

**History:** Original

**Condition:** Good to fair overall



**Vinyl soffit at the pool house**

**Useful Life:** Up to 40 years

**Component Detail Notes:** Consideration of appearance largely governs the decision to replace the aluminum soffits and fascia, in whole or partially, prior to the end of their useful life. Maintenance and partial replacements of the soffits and fascia may extend the useful life. Normal deterioration mainly relates to fading of the exterior finish from exposure to sunlight, weathering and air pollutants. The lack of replacement pieces matching the color and profile of the existing soffits and fascia may result in the need for a premature replacement.

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Walls, Siding, Composite Hardboard**

---

**Line Item:** 5.765

**Quantity:** Approximately 2,000 square feet of the exterior walls at the clubhouse

**History:** Original

**Condition:** Good to fair overall





**Rear elevation of the clubhouse**



**Side elevation of the clubhouse**

**Useful Life:** Up to 35 years. However, failure to conduct paint applications and repairs in a timely manner will reduce the remaining useful life of the siding.

**Component Detail Notes:** Composite siding consists of compressed wood chips held together with a glue binder and finished with a factory applied color coated hard wax surface that resists the penetration of water. Delamination and rotting of this type of siding are common problems as the siding ages, but generally are not uniform.

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend Wynfield consider fiber cement siding as a replacement material. This type of siding requires less frequent paint applications than composite siding and has a longer useful life.

## Windows and Doors

---

**Line Item:** 5.800

**Quantity:** 590 square feet

**History:** Original

**Condition:** Good to fair overall

**Useful Life:** Up to 40 years

**Component Detail Notes:** Construction of the windows and doors at the clubhouse includes the following:

- Wood and vinyl frames
- Dual pane glass
- Double hung windows

- Hinged doors

**Priority/Criticality:** Not recommended to defer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Interior Building Elements

### Air Handling and Condensing Units, Split Systems

---

**Line Item:** 6.070

**Quantity:** Two *Trane* split systems serve the clubhouse

**History:** Installed in 2013

**Condition:** Reported in satisfactory operational condition



**Condensing units**

**Useful Life:** 15- to 20-years

**Component Detail Notes:** A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior air handling unit. The condensing unit has a cooling capacity of five-tons. The split system uses HCFC-22 refrigerant.

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. We also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:



- Semi-annually:
  - Lubricate motors and bearings
  - Change or clean air filters as needed
  - Inspect condenser base and piping insulation
  - Inspect base pan, coil, cabinet and clear obstructions as necessary
- Annually:
  - Clean coils and drain pans, clean fan assembly, check refrigerant charge, inspect fan drive system and controls
  - Inspect and clean accessible ductwork as needed
  - Clean debris from inside cabinet, inspect condenser compressor and associated tubing for damage

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The condensing unit may require replacement prior to replacement of the related interior forced air unit. For purposes of this Reserve Study, we assume coordination of replacement of the interior forced air unit, evaporator coil, refrigerant lines and exterior condensing unit.

## Floor Coverings, Wood, Refinish

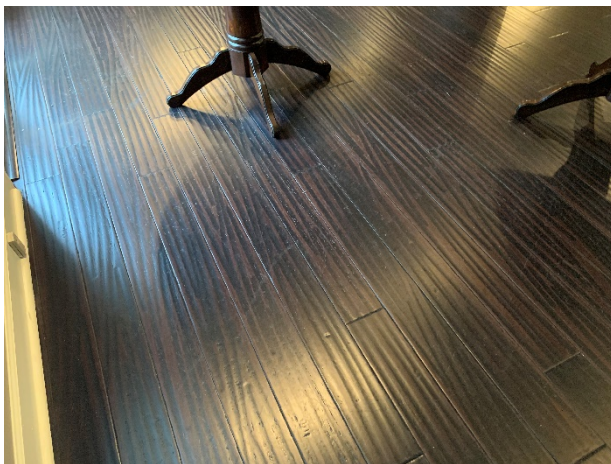
---

**Line Item:** 6.420

**Quantity:** 1,300 square feet at the clubhouse

**History:** Installed in 2012

**Condition:** Good to fair overall with scuffs evident



**Wood flooring – scuffs evident**



**Wood flooring**

**Useful Life:** Refinish every eight years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Furnishings, Clubhouse**

---

**Line Item:** 6.451

**History:** Replaced in 2014

**Condition:** Good to fair overall



**Seating area**



**Seating area**



**Table and chairs**

**Useful Life:** Varies significantly up to 20 years

**Component Detail Notes:** Furnishings in the clubhouse include but are not limited to the following elements:

- Chairs
- Pictures/decorations



- Sofas
- Tables
- Television

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate the present replacement cost of these elements at approximately \$24,000. Due to varied uses, ages and useful lives, we recommend the Association budget \$12,000 plus inflation for phased replacements of up to fifty percent (50%) of the furnishings per event.

## **Interior Renovations, Pool House**

---

**Line Item:** 6.501

**History:** The Association last renovated the pool house interior in 2012.

**Condition:** Reported in good condition

**Useful Life:** Complete interior renovation every 25 years.

**Component Detail Notes:** The clubhouse interior comprises approximately 1,000 square feet of finished area which includes:

- Tile floor and wall coverings
- Paint finishes on the walls and ceilings
- Plumbing fixtures
- Light fixtures
- Cabinets and countertops
- Furnishings and appliances

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Kitchen, Clubhouse**

---

**Line Item:** 6.521

**History:** Countertops and cabinets are original and the appliances were replaced in 2012

**Condition:** Good to fair overall





**Kitchen appliances and finishes**



**Kitchen appliances and finishes**

**Useful Life:** Renovation every 25 years

**Component Detail Notes:** Components of the kitchen include:

- Appliances
- Cabinets and countertops
- Light fixtures

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Light Fixtures, Clubhouse**

---

**Line Item:** 6.561

**Quantity:** Approximately 20 interior wall and ceiling mounted light fixtures located throughout the clubhouse

**History:** Installed in 2012

**Condition:** Reported in satisfactory operational condition



**Ceiling and can light fixtures**

**Useful Life:** Up to 30 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Paint Finishes, Clubhouse**

---

**Line Item:** 6.802

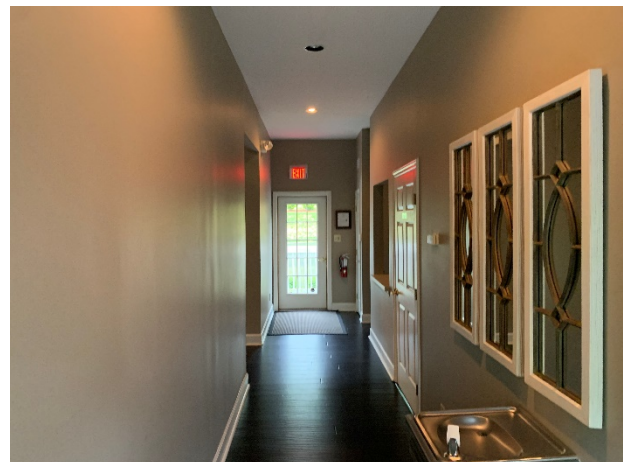
**Quantity:** Approximately 4,800 square feet on walls and ceilings at the clubhouse

**History:** Paint finishes applied in 2012

**Condition:** Good to fair overall



**Paint finishes at the ceiling**



**Paint finishes at the hallway**

**Useful Life:** 8- to 12-years



**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Rest Rooms, Clubhouse**

---

**Line Item:** 6.890

**Quantity:** Two common located at the clubhouse

**History:** Rest rooms were renovated in 2012

**Condition:** Good overall



**Clubhouse rest room**

**Useful Life:** Renovation every 25 years

**Component Detail Notes:** Components include:

- Tile floor coverings
- Paint finishes
- Light fixtures
- Plumbing fixtures

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Pool Elements



**Main pool and pool house**



**Water slide**



**Kiddie pool and water features**

### Concrete Deck

---

**Line Item:** 7.201

**Quantity:** 10,200 square feet

**History:** Mostly original. A section was added with the kiddie pool in 2017.

**Condition:** Fair overall with cracks evident throughout





**Cracks evident**



**Concrete pool deck**



**Cracks evident**



**Textured coating at the kiddie pool**

**Useful Life:** The useful life of a concrete pool deck is up to 60 years or more with timely repairs. We recommend the Association conduct inspections, partial replacements and repairs to the deck every 8- to 12-years in conjunction with coating replacements

**Component Detail Notes:** We recommend the Association budget for the following:

- Selective cut out and replacements of up to ten percent (10%) of concrete
- Crack repairs as needed
- Mortar joint repairs
- Caulk replacement
- Partial coating replacements

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Covers, Vinyl

---

**Line Item:** 7.301

**Quantity:** 4,800 square feet

**History:** Unknown

**Condition:** Reported in good condition



**Pool cover stored away**

**Useful Life:** 8- to 10-years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Fences, Aluminum

---

**Line Item:** 7.401

**Quantity:** 570 linear feet

**History:** Replaced in 2013 with a section added at the kiddie pool in 2017

**Condition:** Good overall





**Aluminum pool fence**

**Useful Life:** Up to 25 years

**Priority/Criticality:** Not recommended to defer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Furniture**

---

**Line Item:** 7.501

**Quantity:** The pool furniture includes the following:

- Chairs (45)
- Lounges (30)
- Tables (10)
- Ladders and life safety equipment
- Lifeguard chairs
- Trash receptacles
- Umbrellas
- Benches
- Race lane dividers

**History:** Varies

**Condition:** Fair overall



**Lounges at pool side**

**Useful Life:** Up to 12 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend interim re-strapping, refinishing, cushion replacements, reupholstering and other repairs to the furniture as normal maintenance to maximize its useful life.

## **Light Poles and Fixtures**

---

**Line Item:** 7.561

**Quantity:** Three metal poles with seven total light fixtures

**History:** Assumed original

**Condition:** Good to fair overall

**Useful Life:** Up to 25 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## **Mechanical Equipment**

---

**Line Item:** 7.601

**Quantity:** The mechanical equipment includes the following:

- Automatic chlorinators

- Controls
- Filters
- Interconnected pipe, fittings and valves
- Pumps

**History:** Varies

**Condition:** Reported in satisfactory operational condition

**Useful Life:** Up to 15 years

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to fifty percent (50%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

## Pool Finishes, Plaster and Tile

---

**Line Items:** 7.801 and 7.802

**Quantity:** 4,800 square feet of plaster based on the horizontal surface area and approximately 680 linear feet of tile

**History:** The plaster finish and tile are from 2017. The Association installed the kiddie pool at this time

**Condition:** Good to fair overall with staining at the drains evident



**Main pool overview**



**Stains around the drains evident**

**Useful Life:** 8- to 12-years for the plaster and 15- to 25-years for the tile



**Component Detail Notes:** Removal and replacement provides the opportunity to inspect the pool structure and to allow for partial repairs of the underlying concrete surfaces as needed. To maintain the integrity of the pool structure, we recommend the Association budget for the following:

- Removal and replacement of the plaster finish
- Partial replacements of the scuppers and coping as needed
- Replacement of tiles as needed
- Replacement of joint sealants as needed
- Concrete structure repairs as needed

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for full tile replacement every other plaster replacement event.

## Shade Structure

---

**Line Item:** 7.851

**Quantity:** Three aluminum shade structures which comprise 575 square feet

**History:** Installed in 2015

**Condition:** Good overall



**Shade structure overview**



**Shade structure**

**Useful Life:** Up to 25 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.



## Water Features

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**Line Item:** 7.951

**History:** Installed in 2017

**Conditions:** Good overall

**Useful Life:** Up to 15 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Water Slide

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**Line Items:** 7.980

**Quantity:** One plastic water slide

**History:** Installed in 2017

**Conditions:** Good overall



**Water slide overview**

**Useful Life:** Replacement at 20 years

**Component Detail Notes:** Safety is the major purpose for maintaining the water slide. We recommend an annual inspection of the water slide to identify and repair as normal maintenance loose connections and fasteners or damaged elements. We recommend the use of a specialist for the design or replacement of the water slide environment.

**Priority/Criticality:** Defer only upon opinion of independent professional or engineer



**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

## Reserve Study Update

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. Many variables change after the study is conducted that may result in significant overfunding or underfunding the reserve account. Variables that may affect the Reserve Funding Plan include, but are not limited to:

- Deferred or accelerated capital projects based on Board discretion
- Changes in the interest rates on reserve investments
- Changes in the *local* construction inflation rate
- Additions and deletions to the Reserve Component Inventory
- The presence or absence of maintenance programs
- Unusually mild or extreme weather conditions
- Technological advancements

Periodic updates incorporate these variable changes since the last Reserve Study or Update. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.

## 5.METHODOLOGY

Reserves for replacement are the amounts of money required for future expenditures to repair or replace Reserve Components that wear out before the entire facility or project wears out. Reserving funds for future repair or replacement of the Reserve Components is also one of the most reliable ways of protecting the value of the property's infrastructure and marketability.

Wynfield can fund capital repairs and replacements in any combination of the following:

1. Increases in the operating budget during years when the shortages occur
2. Loans using borrowed capital for major replacement projects
3. Level monthly reserve assessments annually adjusted upward for inflation to increase reserves to fund the expected major future expenditures
4. Special assessments

We do not advocate special assessments or loans unless near term circumstances dictate otherwise. Although loans provide a gradual method of funding a replacement, the costs are higher than if the Association were to accumulate reserves ahead of the actual replacement. Interest earnings on reserves also accumulate in this process of saving or reserving for future replacements, thereby defraying the amount of gradual reserve collections. We advocate the third method of *Level Monthly Reserve Assessments* with relatively minor annual adjustments. The method ensures that Homeowners pay their "fair share" of the weathering and aging of the commonly owned property each year. Level reserve assessments preserve the property and enhance the resale value of the homes.

This Reserve Study is in compliance with and exceeds the National standards<sup>1</sup> set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level II Reserve Study Update." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- Local<sup>2</sup> costs of material, equipment and labor
- Current and future costs of replacement for the Reserve Components
- Costs of demolition as part of the cost of replacement
- Local economic conditions and a historical perspective to arrive at our estimate of long term future inflation for construction costs in Huntersville,

<sup>1</sup> Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".

<sup>2</sup> See Credentials for additional information on our use of published sources of cost data.

North Carolina at an annual inflation rate<sup>3</sup>. Isolated or regional markets of greater construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

- The past and current maintenance practices of Wynfield and their effects on remaining useful lives
- Financial information provided by the Association pertaining to the cash status of the reserve fund and budgeted reserve contribution
- The anticipated effects of appreciation of the reserves over time in accord with a return or yield on investment of your cash equivalent assets. (We did not consider the costs, if any, of Federal and State Taxes on income derived from interest and/or dividend income).
- The Funding Plan excludes necessary operating budget expenditures. It is our understanding that future operating budgets will provide for the ongoing normal maintenance of Reserve Components.

Updates to this Reserve Study will continue to monitor historical facts and trends concerning the external market conditions.

<sup>3</sup> Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.





## 6. CREDENTIALS

### HISTORY AND DEPTH OF SERVICE

Reserve Advisors is the leading provider of reserve studies and other engineering consulting services.

The **architectural engineering consulting firm** was formed to take a leadership role in helping fiduciaries, boards, and property managers manage their property like a business with a long-range master plan known as a Reserve Study.

Reserve Advisors employs the **largest staff of Reserve Specialists** with bachelor's degrees in engineering dedicated to Reserve Study services. Our principals are founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our principals is a Past President of the Association of Professional Reserve Analysts (APRA). Our vast experience with a variety of building types and ages, on-site examination and historical analyses are keys to determining accurate remaining useful life estimates of building components.

**No Conflict of Interest** - As consulting specialists, our **independent opinion** eliminates any real or perceived conflict of interest because we do not conduct or manage capital projects.

### TOTAL STAFF INVOLVEMENT

Several staff members participate in each assignment. The responsible advisor involves the staff through a Team Review, exclusive to Reserve Advisors, and by utilizing the experience of other staff members, each of whom has served hundreds of clients. We conduct Team Reviews, an internal quality assurance review of each assignment, including: the inspection; building component costing; lifing; and technical report phases of the assignment. Due to our extensive experience with building components, we do not have a need to utilize subcontractors.

### OUR GOAL

To help our clients fulfill their fiduciary responsibilities to maintain property in good condition.

### VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

Reserve Advisors has conducted reserve studies for a multitude of different communities and building types, and routinely inspects buildings with various types of mechanical systems such as simple electric heat, to complex systems with air handlers, chillers, boilers, elevators, and life safety and security systems.

We're familiar with all types of building exteriors as well. Our well-versed staff regularly identifies optimal repair and replacement solutions for such building exterior surfaces such as adobe, brick, stone, concrete, stucco, EIFS, wood products, stained glass and aluminum siding, and window wall systems.

### OLD TO NEW

Reserve Advisors' experience includes ornate and vintage buildings as well as modern structures. Our specialists are no strangers to older buildings. We're accustomed to addressing the unique challenges posed by buildings that date to the 1800's. We recognize and consider the methods of construction employed into our analysis. We recommend appropriate replacement programs that apply cost effective technologies while maintaining a building's character and appeal.

**COLIN A. NIEMEYER**  
**Responsible Advisor**

**CURRENT CLIENT SERVICES**

Colin Niemeyer, a Chemical Engineer, is an Engineer for Reserve Advisors. Mr. Niemeyer is responsible for the inspection and analysis of the condition of clients' properties, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analyses and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes and homeowner associations.



The following is a partial list of clients served by Colin Niemeyer demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

**Heron Lake Villas at Homeowners Association, Inc.** - This apartment community located in Myrtle Beach, South Carolina was constructed in 1995 and comprises three buildings constructed with fiber cement siding, asphalt shingle roofs, and wood decks. The property is situated in the middle of a golf course allowing for wonderful views.

**Brookhaven Citizens Assembly, Inc.** - This single family home community contains over 550 residential homes and is located in Matthews, North Carolina. The Master Association maintains the shared common elements including a luxurious clubhouse, a pool featuring a massive waterslide, as well as multiple recreational courts.

**Rozzelles Landing Homeowners Association, Inc.** - This townhome and single family home community in Huntersville, North Carolina comprises 157 townhome units in 27 buildings in addition to 129 single family homes. Expenditures of this property include large quantities parking areas and streets, large retaining walls, a pool with an adjoining pool house, and retention pond. The townhomes comprise a combination of brick and vinyl siding construction, featuring multiple different styles. Several of the townhomes feature attached garages.

**Del Webb Carolina Orchards Community Association** - A lavish single family home community located just outside of Rock Hill, South Carolina. Features of this property include an extravagant amenities center, including multiple conference rooms, a spa, yoga and fitness rooms. This property includes both an indoor and outdoor pool with pool house.

**The Cape Townhomes Owners Association, Inc.** - This townhome community built in the early 2000's is located in Hickory, NC that is adjacent to a public park. The property contains 12 units comprising 8 buildings, featuring multiple different style units, ranging from single family homes to triplexes.

**Atlantic Towers Condominium** - Located next to the sandy beaches of Carolina Beach, North Carolina, this apartment building contains 137 residential units. The townhomes are comprised of brick, fiber cement siding, asphalt shingle roofs and wood balconies at the unit rears. The community includes a pool, pool house, ponds, and a large quantity of stone retaining walls.

**PRIOR RELEVANT EXPERIENCE**

Before joining Reserve Advisors, Mr. Niemeyer successfully completed the bachelors program in Chemical Engineering at West Virginia University. In the past, he has worked for multiple engineering companies covering a wide variety of roles but with a concentration in improving efficiency and optimization with a focus on Lean and Six Sigma strategies. He has also spent time working in design engineering for one of the Nation's leading construction companies.

**EDUCATION**

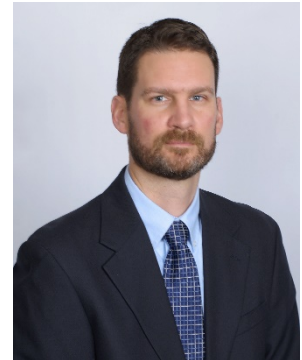
West Virginia University - B.S. in Chemical Engineering

**ALAN M. EBERT, P.E., PRA, RS**  
**Director of Quality Assurance**

**CURRENT CLIENT SERVICES**

Alan M. Ebert, a Professional Engineer, is the Director of Quality Assurance for Reserve Advisors. Mr. Ebert is responsible for the management, review and quality assurance of reserve studies. In this role, he assumes the responsibility of stringent report review analysis to assure report accuracy and the best solution for Reserve Advisors' clients.

Mr. Ebert has been involved with thousands of Reserve Study assignments. The following is a partial list of clients served by Alan Ebert demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.



**Brownsville Winter Haven** Located in Brownsville, Texas, this unique homeowners association contains 525 units. The Association maintains three pools and pool houses, a community and management office, landscape and maintenance equipment, and nine irrigation canals with associated infrastructure.

**Rosemont Condominiums** This unique condominium is located in Alexandria, Virginia and dates to the 1940's. The two mid-rise buildings utilize decorative stone and brick masonry. The development features common interior spaces, multi-level wood balconies and common asphalt parking areas.

**Stillwater Homeowners Association** Located in Naperville, Illinois, Stillwater Homeowners Association maintains four tennis courts, an Olympic sized pool and an upscale ballroom with commercial-grade kitchen. The community also maintains three storm water retention ponds and a detention basin.

**Birchfield Community Services Association** This extensive Association comprises seven separate parcels which include 505 townhome and single family homes. This Community Services Association is located in Mt. Laurel, New Jersey. Three lakes, a pool, a clubhouse and management office, wood carports, aluminum siding, and asphalt shingle roofs are a few of the elements maintained by the Association.

**Oakridge Manor Condominium Association** Located in Londonderry, New Hampshire, this Association includes 104 units at 13 buildings. In addition to extensive roads and parking areas, the Association maintains a large septic system and significant concrete retaining walls.

**Memorial Lofts Homeowners Association** This upscale high rise is located in Houston, Texas. The 20 luxury units include large balconies and decorative interior hallways. The 10-story building utilizes a painted stucco facade and TPO roof, while an on-grade garage serves residents and guests.

**PRIOR RELEVANT EXPERIENCE**

Mr. Ebert earned his Bachelor of Science degree in Geological Engineering from the University of Wisconsin-Madison. His relevant course work includes foundations, retaining walls, and slope stability. Before joining Reserve Advisors, Mr. Ebert was an oilfield engineer and tested and evaluated hundreds of oil and gas wells throughout North America.

**EDUCATION**

University of Wisconsin-Madison - B.S. Geological Engineering

**PROFESSIONAL AFFILIATIONS/DESIGNATIONS**

*Professional Engineering License* – Wisconsin, North Carolina, Illinois, Colorado

*Reserve Specialist (RS)* - Community Associations Institute

*Professional Reserve Analyst (PRA)* - Association of Professional Reserve Analysts





## RESOURCES

Reserve Advisors utilizes numerous resources of national and local data to conduct its Professional Services. A concise list of several of these resources follows:

**Association of Construction Inspectors**, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at [www.iami.org](http://www.iami.org).

**American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.**, (ASHRAE) the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., devoted to the arts and sciences of heating, ventilation, air conditioning and refrigeration; recognized as the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines, found on the web at [www.ashrae.org](http://www.ashrae.org). Reserve Advisors actively participates in its local chapter and holds individual memberships.

**Community Associations Institute**, (CAI) America's leading advocate for responsible communities noted as the only national organization dedicated to fostering vibrant, responsive, competent community associations. Their mission is to assist community associations in promoting harmony, community, and responsible leadership.

**Marshall & Swift / Boeckh**, (MS/B) the worldwide provider of building cost data, co-sourcing solutions, and estimating technology for the property and casualty insurance industry found on the web at [www.marshallswift.com](http://www.marshallswift.com).

**R.S. Means CostWorks**, North America's leading supplier of construction cost information. As a member of the Construction Market Data Group, Means provides accurate and up-to-date cost information that helps owners, developers, architects, engineers, contractors and others to carefully and precisely project and control the cost of both new building construction and renovation projects found on the web at [www.rsmeans.com](http://www.rsmeans.com).

Reserve Advisors' library of numerous periodicals relating to reserve studies, condition analyses, chapter community associations, and historical costs from thousands of capital repair and replacement projects, and product literature from manufacturers of building products and building systems.

## 7. DEFINITIONS

Definitions are derived from the standards set forth by the Community Associations Institute (CAI) representing America's 305,000 condominium and homeowners associations and cooperatives, and the Association of Professional Reserve Analysts, setting the standards of care for reserve study practitioners.

**Cash Flow Method** - A method of calculating Reserve Contributions where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different Reserve Funding Plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

**Component Method** - A method of developing a Reserve Funding Plan with the total contribution is based on the sum of the contributions for individual components.

**Current Cost of Replacement** - That amount required today derived from the quantity of a *Reserve Component* and its unit cost to replace or repair a Reserve Component using the most current technology and construction materials, duplicating the productive utility of the existing property at current *local* market prices for *materials, labor* and manufactured equipment, contractors' overhead, profit and fees, but without provisions for building permits, overtime, bonuses for labor or premiums for material and equipment. We include removal and disposal costs where applicable.

**Fully Funded Balance** - The Reserve balance that is in direct proportion to the fraction of life "used up" of the current Repair or Replacement cost similar to Total Accrued Depreciation.

**Funding Goal (Threshold)** - The stated purpose of this Reserve Study is to determine the adequate, not excessive, minimal threshold reserve balances.

**Future Cost of Replacement** - *Reserve Expenditure* derived from the inflated current cost of replacement or current cost of replacement as defined above, with consideration given to the effects of inflation on local market rates for materials, labor and equipment.

**Long-Lived Property Component** - Property component of Wynfield responsibility not likely to require capital repair or replacement during the next 30 years with an unpredictable remaining Useful Life beyond the next 30 years.

**Percent Funded** - The ratio, at a particular point of time (typically the beginning of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.

**Remaining Useful Life** - The estimated remaining functional or useful time in years of a *Reserve Component* based on its age, condition and maintenance.

**Reserve Component** - Property elements with: 1) Wynfield responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

**Reserve Component Inventory** - Line Items in *Reserve Expenditures* that identify a *Reserve Component*.

**Reserve Contribution** - An amount of money set aside or *Reserve Assessment* contributed to a *Reserve Fund* for future *Reserve Expenditures* to repair or replace *Reserve Components*.

**Reserve Expenditure** - Future Cost of Replacement of a Reserve Component.

**Reserve Fund Status** - The accumulated amount of reserves in dollars at a given point in time, i.e., at year end.

**Reserve Funding Plan** - The portion of the Reserve Study identifying the *Cash Flow Analysis* and containing the recommended Reserve Contributions and projected annual expenditures, interest earned and reserve balances.

**Reserve Study** - A budget planning tool that identifies the current status of the reserve fund and a stable and equitable Funding Plan to offset the anticipated future major common area expenditures.

**Useful Life** - The anticipated total time in years that a *Reserve Component* is expected to serve its intended function in its present application or installation.



## 8. PROFESSIONAL SERVICE CONDITIONS

**Our Services** - Reserve Advisors Engineering, PLLC (RA) performs its services as an independent contractor in accordance with our professional practice standards and its compensation is not contingent upon our conclusions. The purpose of our reserve study is to provide a budget planning tool that identifies the current status of the reserve fund, and an opinion recommending an annual funding plan to create reserves for anticipated future replacement expenditures of the property.

Our inspection and analysis of the subject property is limited to visual observations, is noninvasive and is not meant to nor does it include investigation into statutory, regulatory or code compliance. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. The report is based upon a "snapshot in time" at the moment of inspection. RA may note visible physical defects in our report. The inspection is made by employees generally familiar with real estate and building construction but in the absence of invasive testing RA cannot opine on, nor is RA responsible for, the structural integrity of the property including its conformity to specific governmental code requirements for fire, building, earthquake, and occupancy, or any physical defects that were not readily apparent during the inspection.

RA is not responsible for conditions that have changed between the time of inspection and the issuance of the report. RA does not investigate, nor assume any responsibility for any existence or impact of any hazardous materials, such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials or structural defects that are latent or hidden defects which may or may not be present on or within the property. RA does not make any soil analysis or geological study as part of its services; nor does RA investigate water, oil, gas, coal, or other subsurface mineral and use rights or such hidden conditions. RA assumes no responsibility for any such conditions. The Report contains opinions of estimated costs and remaining useful lives which are neither a guarantee of the actual costs of replacement nor a guarantee of remaining useful lives of any property element.

RA assumes, without independent verification, the accuracy of all data provided to it. You agree to indemnify and hold RA harmless against and from any and all losses, claims, actions, damages, expenses or liabilities, including reasonable attorneys' fees, to which we may become subject in connection with this engagement, because of any false, misleading or incomplete information which we have relied upon supplied by you or others under your direction, or which may result from any improper use or reliance on the Report by you or third parties under your control or direction. Your obligation for indemnification and reimbursement shall extend to any director, officer, employee, affiliate, or agent of RA. Liability of RA and its employees, affiliates, and agents for errors and omissions, if any, in this work is limited to the amount of its compensation for the work performed in this engagement.

**Report** - RA completes the services in accordance with the Proposal. The Engineering Report represents a valid opinion of RA's findings and recommendations and is deemed complete. RA, however, considers any additional information made available to us within 6 months of issuing the Report if a timely request for a revised Engineering Report is made. RA retains the right to withhold a revised Report if payment for services was not tendered in a timely manner. All information received by RA and all files, work papers or documents developed by RA during the course of the engagement shall remain the property of RA and may be used for whatever purpose it sees fit.

**Your Obligations** - You agree to provide us access to the subject property for an on-site visual inspection. You agree to provide RA all available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete the Report. You agree to pay actual attorneys' fees and any other costs incurred to collect on any unpaid balance for RA's services.

**Use of Our Report and Your Name** - Use of this Engineering Report is limited to only the purpose stated herein. You hereby acknowledge that any use or reliance by you on the Engineering Report for any unauthorized purpose is at your own risk and you shall hold RA harmless from any consequences of such use. Use by any unauthorized third party is unlawful. The Engineering Report in whole or in part ***is not and cannot be used as a design specification for design engineering purposes or as an appraisal.*** You may show our Engineering Report in its entirety to the following third parties: members of your organization, your accountant, attorney, financial institution and property manager who need to review the information contained herein. Without the written consent of RA, you shall not disclose the Engineering Report to any other third party. The Engineering Report contains intellectual property developed by RA and ***shall not be reproduced or distributed to any party that conducts reserve studies without the written consent of RA.***

RA will include your name in our client lists. RA reserves the right to use property information to obtain estimates of replacement costs, useful life of property elements or otherwise as RA, in its sole discretion, deems appropriate.

**Payment Terms, Due Dates and Interest Charges** - Retainer payment is due upon authorization and prior to inspection. The balance is due net 30 days from the report shipment date. Any balance remaining 30 days after delivery of the Engineering Report shall accrue an interest charge of 1.5% per month. Any litigation necessary to collect an unpaid balance shall be venued in Milwaukee County Circuit Court for the State of Wisconsin.