### CAPITAL RESERVE ANALYSIS FOR CEDAR MILL Dallas, Georgia

PREPARED FOR:

CEDAR MILL COMMUNITY ASSOCIATION, INC. C/O ALL-IN-ONE COMMUNITY MANAGEMENT 200 DALLAS HIGHWAY, SUITE 200 Powder Springs, Georgia 30127

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#### I. CAPITAL RESERVE DETERMINATION

#### A. METHODOLOGY AND ASSUMPTIONS

A Capital Reserve Analysis is a report giving an estimate of the amount of money which must be put aside to replace or restore the common elements and building components that will require replacement before the community's use expires. Typically, the items included are limited to those with a useful life of 30 years or less.

The commonly accepted guidelines as established by governing statutes, the Community Associations Institute, and our engineering judgment and experience have been used as a basis for the reserve schedule in this report. The schedule, when implemented in conjunction with a well-planned preventive maintenance program, will provide adequate funds for the replacement of the community's common elements as they reach the end of their useful lives. In order to assure that this schedule remains current, a reassessment of the existing condition and replacement costs for each item is necessary at a regular interval as recommended within the report. Updating of the schedule, reduction of the useful lives, and inflation of the replacement costs may be executed with the benefit of re-inspection. The schedule must also be adjusted as common elements are added or modified.

It is important to note that a reserve item is a common element component which will require replacement on a recurring basis using a similar cost item. If an upgrade is necessitated due to a cost change or other extraordinary reason, the cost over and above the replacement cost is considered to be a capital improvement rather than a capital replacement. Capital improvements should not be funded from the reserves. After it has been upgraded, the item will then become part of the reserve schedule.

#### Method of Accounting

The Method used in the Capital Reserve Analysis is the "Cash Flow" Method and the funding plan utilized is the Baseline Funding. The goal of this funding method is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance does not drop below zero during the projected period.

#### Level of Service

This reserve analysis was completed utilizing a Level I, Full-Service Study as defined under the National Reserve Standards that have been adopted by the Community Association Institute. The common component inventory was established based on information provided by the association's representative, field measurements and/or drawing take-offs. The Full-Service Study includes a review of the common property components and preparation of this report.

#### B. SUMMARY OF REPLACEMENT RESERVE NEEDS

#### 1. TECHNICAL DEFINITIONS

This page is a summary of each of the different categories within the detailed schedule. It shows the total dollar amounts for each category and is based on the full funding of each item.

Following are descriptions of the different variables, which are shown on the reserve schedule in the order in which they appear.

#### **Description**

This column on the schedule lists all of the components for which we recommend that reserves be accumulated. The basis for the selection of these items includes:

- Review of the governing documents regarding the common and limited common elements.
- Review of all available maintenance contracts.
- The type of component and its anticipated full useful life and condition.
- A review of applicable statutes dealing with reserve requirements.

#### <u>Quantity</u>

The quantities which are used as a basis for this report are calculated from field measurements and drawings which have been supplied to Ray Engineering, Inc. Ray Engineering, Inc. has not made extensive as-built measurements, and the quantities used are based primarily on the reference materials provided.

#### <u>Unit Cost</u>

The construction and replacement costs used in this report are based primarily on the various publications written by the R.S. Means Company and construction related experience of Ray Engineering. The publications are listed in the Bibliography.

#### Reserve Requirements Present Dollars

This is calculated by multiplying the "quantity" by the "unit costs".

#### Existing Reserve Fund

This is an allocation of the total existing reserve funds to the individual line items using a weighing factor which is based on the total "reserve requirement present dollars", the "estimated remaining life", and other factors. An existing balance was submitted to Ray Engineering, Inc. This balance was used in developing our Reserve Analysis.

#### Estimated Useful Life

The useful life values that are part of this report come from a variety of sources, some of which are listed in the Bibliography. In order to ensure that all items attain their anticipated useful lives, it is imperative that a well-planned maintenance schedule be adhered to. If an existing item is replaced with an upgraded product, the estimated remaining life has been listed for the new product.

#### Estimated Remaining Life

The estimated remaining life is based on both the age of the component and the results of the field inspections conducted in December 2022.

#### Annual Reserve Funding

The reserve requirement present value was converted to the future value for the time in which each replacement will occur. A 3% compounded inflation rate has been assumed. The future value was then converted to an annual reserve fund value. The arithmetic calculations and formulas are indicated later in this report.

#### C. EXECUTIVE SUMMARY

Cedar Mill consists of 373 single-family homes with amenities within the property. It is the Consultant's understanding that the property is approximately 18 years old. The property is located off Cedarcrest Road in Dallas, Georgia. The common elements consist of private parking areas, concrete curbs, sidewalks, entry monuments, signage, common area fencing, landscaping, retaining walls, common area drainage, mailboxes, and irrigation.

The clubhouse consists of a single-story, wood-framed structure constructed over a full basement. The foundation consists of perimeter concrete footings with cast-in-place concrete foundation walls. Exterior finishes consist of siding, stone veneer and wood trim, soffit and fascia. The roof consists of a moderately steep-sloped roof with architectural shingles installed. Pavilions consist of wood frames with concrete footings and pitched roof with metal roofing.

This reserve analysis was completed utilizing the "full" level of service, which included the property review and preparation of this report. This Reserve Analysis is prepared for the fiscal year starting January 1, 2023. It is our understanding that the reserve account for the community has a balance of approximately \$180,000.00 with an annual contribution of \$20,000.00 for 2022. Based on our analysis and review of the property, the current annual contribution has been found to be inadequate to provide for the future expenses as provided by this analysis. It is our recommendation that the annual contribution be \$70,000.00 in 2023, and then increased by \$5,000.00 every five years, for the remainder of the reserve analysis, which is equivalent to an average contribution of \$187.67 per year, per residential home for the first five years. For a review of the funding requirements for the next 20 years, please refer to the "Cost and Funding Recap" included as a part of this report.

D. REPLACEMENT RESERVE REQUIREMENTS

#### SCHEDULE I

Sitework

#### SCHEDULE II

Exterior/Interior Building Maintenance

#### SCHEDULE III

Electrical/Mechanical/Plumbing Maintenance

### YEAR BY YEAR FUNDING RECAP - ALL ITEMS

COST AND FUNDING RECAP

ITEMIZED PROJECT COSTS BY YEAR



PROJECT NAME	CEDAR MILL
INFLATION RATE	3.00%
YIELD ON RESERVE FUNDS	0.00%
BEGINNING YEAR OF FUNDING	2023
PLANNING HORIZON	20 yrs

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#### SCHEDULE Ia CEDAR MILL SITEWORK ITEMS - PRELIMINARY DATA

ſ	Sitework	Units	Number	Cost	Total Cost	Estimated	Estimated	
	Item	of	of	per	in Current	Useful	Remaining	Notes
	Description	Measure	Units	Unit	Dollars	Life	Life	
1	Asphalt Private Parking Area - Sealcoat/Restripe	S.Y.	1575	\$3.75	\$5,906	6	7	2
2	Asphalt Private Parking Area - Mill/1-1/2" Overlay	S.Y.	1575	\$26.00	\$40,950	20	0	2
3	Concrete Curbs/Sidewalks - Repair/Partial Replace	Allow.	1	\$3,000.00	\$3,000	6	3	3
4	Entry Monuments Signages - Repair/Paint/Maintain	Allow.	1	\$4,000.00	\$4,000	10	3	4
5	Entry Wood Water Wheel - Repair/Replace	Allow.	1	\$5,000.00	\$5,000	8	5	4
6	Entry Wood Fence - Repair/Paint/Partial Replace	L.F.	500	\$12.00	\$6,000	8	5	4
7	Landscaping - Upgrade/Remove Trees,Shrubs/Trim	Allow.	1	\$35,000.00	\$35,000	5	1	5
8	Masonry Retaining Wall - Repair/Maintain	Allow.	1	\$5,000.00	\$5,000	12	2	6
9	Drainage/Slope Erosion/Storm System - Repair/Maintain	Allow.	1	\$8,000.00	\$8,000	7	0	7
10	Detention Pond - Clean Structure/Add Rip-Rap	Ea.	2	\$4,000.00	\$8,000	10	3	8
11	Detention Pond - Remove Silt/Vegetation/Debris	Ea.	2	\$12,000.00	\$24,000	15	0	8
12	Metal Fence @ Detention Pond - Repair/Paint	L.F.	680	\$10.00	\$6,800	10	7	8
13	Retaining Walls @ Detention Ponds - Repair/Maintain	Allow.	1	\$6,000.00	\$6,000	10	4	8
14	Swimming Pool Surface - Re-plaster/Resurface/Rep. Tiles	S.F.	4235	\$11.00	\$46,585	10	0	9
15	Swimming Pool Mushroom - Repair/Replace	Allow.	1	\$2,000.00	\$2,000	6	0	9
16	Swimming Pool Deck - Repair/Seal Cracks	Allow.	1	\$2,000.00	\$2,000	6	3	9
17	Swimming Pool Deck - Partial Replacement	Allow.	1	\$4,000.00	\$4,000	10	6	9
18	Swimming Pool Metal Fence - Repair/Paint	L.F.	350	\$10.00	\$3,500	10	6	9
19	Swimming Pool Furniture - Partial Replacement	Allow.	1	\$4,000.00	\$4,000	8	4	9
20	Swimming Pool Cover - Replace	Allow.	1	\$8,000.00	\$8,000	8	2	9
21	Tennis Court - Resurface	Ea.	4	\$7,000.00	\$28,000	6	8	10
22	Tennis Court - Replace	Ea.	4	\$20,000.00	\$80,000	25	1	10
23	Tennis Court Metal Fence - Repair/Replace	L.F.	855	\$20.00	\$17,100	20	6	10
24	Tennis Court Light Poles/Fence - Paint	Allow.	1	\$4,000.00	\$4,000	8	3	10
25	Tennis Court Equipment/Benches - Partial Replace	Allow.	1	\$1,000.00	\$1,000	8	2	10
26	Tennis Court Wood Bleachers - Repair/Replace	Allow.	1	\$1,000.00	\$1,000	6	5	10
27	Playground Equipment - Repair/Replace	Allow.	1	\$4,000.00	\$4,000	5	0	11
28	Playground Equipment - Upgrade	L.S.	1	\$30,000.00	\$30,000	25	10	11
29	Common Area Benches - Replace	Allow.	1	\$2,000.00	\$2,000	8	7	1
30	Mailboxes - Paint/Repair/Partial Replace	Allow.	1	\$1,500.00	\$1,500	8	6	1

#### SCHEDULE Ib CEDAR MILL SITEWORK ITEMS - REPLACEMENT COST & FUNDING DATA

Γ		First Repl	acement		Second R	eplacement		Third Rep	lacement		Fourth Re	placement		Fifth Replace	ement	
	Sitework		Adjusted	Annual		Adjusted	Annual		Adjusted	Annual		Adjusted	Annual		Adjusted	Annual
	Item		Cost if	Funding		Cost if	Funding		Cost if	Funding		Cost if	Funding		Cost if	Funding
	Description	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr
		Replaced	3.00%	Replaced	Replaced	3.00%	Replaced	Replaced	3.00%	Replaced	Replaced	3.00%	Replaced	Replaced	3.00%	Replaced
1 A	Asphalt Private Parking Area - Sealcoat/Restripe	2030	7264	908	2036	8674	1446	2042	10357	1726	2048			2054		
2 A	Asphalt Private Parking Area - Mill/1-1/2" Overlay	2023	40950	40950	2043			2063			2083			2103		
30	Concrete Curbs/Sidewalks - Repair/Partial Replace	2026	3278	820	2032	3914	652	2038	4674	779	2044			2050		
4 E	Entry Monuments Signages - Repair/Paint/Maintain	2026	4371	1093	2036	5874	587	2046			2056			2066		
5 E	Entry Wood Water Wheel - Repair/Replace	2028	5796	966	2036	7343	918	2044			2052			2060		
6 E	Entry Wood Fence - Repair/Paint/Partial Replace	2028	6956	1159	2036	8811	1101	2044			2052			2060		
7 I	andscaping - Upgrade/Remove Trees, Shrubs/Trim	2024	36050	18025	2029	41792	8358	2034	48448	9690	2039	56165	11233	2044		
8 N	Masonry Retaining Wall - Repair/Maintain	2025	5305	1768	2037	7563	630	2049			2061			2073		
9 E	Orainage/Slope Erosion/Storm System - Repair/Mainta	2023	8000	8000	2030	9839	1406	2037	12101	1729	2044			2051		
10 E	Detention Pond - Clean Structure/Add Rip-Rap	2026	8742	2185	2036	11748	1175	2046			2056			2066		
11 E	Detention Pond - Remove Silt/Vegetation/Debris	2023	24000	24000	2038	37391	2493	2053			2068			2083		
12 N	Metal Fence @ Detention Pond - Repair/Paint	2030	8363	1045	2040	11239	1124	2050			2060			2070		
13 F	Retaining Walls @ Detention Ponds - Repair/Maintain	2027	6753	1351	2037	9076	908	2047			2057			2067		
14 S	wimming Pool Surface - Re-plaster/Resurface/Rep. T	2023	46585	46585	2033	62606	6261	2043			2053			2063		
15 S	wimming Pool Mushroom - Repair/Replace	2023	2000	2000	2029	2388	398	2035	2852	475	2041	3405	567	2047		
16 S	wimming Pool Deck - Repair/Seal Cracks	2026	2185	546	2032	2610	435	2038	3116	519	2044			2050		
$17  \mathrm{S}$	wimming Pool Deck - Partial Replacement	2029	4776	682	2039	6419	642	2049			2059			2069		
$18  \mathrm{S}$	Swimming Pool Metal Fence - Repair/Paint	2029	4179	597	2039	5616	562	2049			2059			2069		
19 S	Swimming Pool Furniture - Partial Replacement	2027	4502	900	2035	5703	713	2043			2051			2059		
20 S	Swimming Pool Cover - Replace	2025	8487	2829	2033	10751	1344	2041	13619	1702	2049			2057		
21 Т	Cennis Court - Resurface	2031	35470	3941	2037	42353	7059	2043			2049			2055		
22 T	Cennis Court - Replace	2024	82400	41200	2049			2074			2099			2124		
23 T	Cennis Court Metal Fence - Repair/Replace	2029	20418	2917	2049			2069			2089			2109		
24 T	Cennis Court Light Poles/Fence - Paint	2026	4371	1093	2034	5537	692	2042	7014	877	2050			2058		
25 т	Cennis Court Equipment/Benches - Partial Replace	2025	1061	354	2033	1344	168	2041	1702	213	2049			2057		
26 T	Cennis Court Wood Bleachers - Repair/Replace	2028	1159	193	2034	1384	231	2040	1653	275	2046			2052		
27 P	Playground Equipment - Repair/Replace	2023	4000	4000	2028	4637	927	2033	5376	1075	2038	6232	1246	2043		
28 P	Playground Equipment - Upgrade	2033	40317	3665	2058			2083			2108			2133		
29 C	Common Area Benches - Replace	2030	2460	307	2038	3116	389	2046			2054			2062		
30 N	Aailboxes - Paint/Repair/Partial Replace	2029	1791	256	2037	2269	284	2045			2053			2061		

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#### SCHEDULE IIa CEDAR MILL EXTERIOR/INTERIOR BUILDING MAINTENANCE ITEMS PRELIMINARY DATA

	Exterior/Interior Building	Units	Number	Cost	Total Cost	Estimated	Estimated	
	Maintenance Item	of	of	per	in Current	Useful	Remaining	Notes
	Description	Measure	Units	Unit	Dollars	Life	Life	
1	Clubhouse Roof - Replace Shingles	Sq.	42	\$430.00	\$18,060	25	24	12
2	Clubhouse Roof - Replace Gutters/Downspouts	L.F.	310	\$10.00	\$3,100	30	12	12
3	Clubhouse Ext. Siding/Veneer/Finish Repair/Paint/Tuck Poir	Allow.	1	\$8,000.00	\$8,000	8	1	12
4	Clubhouse Concrete Patio - Repair/Seal Cracks	Allow.	1	\$1,000.00	\$1,000	6	2	12
5	Clubhouse Concrete Patio - Partial Replacement	Allow.	1	\$2,000.00	\$2,000	10	8	12
6	Clubhouse Wood Deck/Balcony - Maintain/Repair	Allow.	1	\$7,000.00	\$7,000	8	0	12
7	Clubhouse Wood Stairway/Railing - Maintain/Repair	Allow.	1	\$3,000.00	\$3,000	8	0	12
8	Clubhouse Wood Arbors - Repair/Replace	Allow.	1	\$2,000.00	\$2,000	8	4	12
9	Clubhouse Interior Finishes - Repair/Paint	Allow.	1	\$6,000.00	\$6,000	6	3	12
10	Clubhouse Flooring - Repair/Partial Replacement	Allow.	1	\$6,000.00	\$6,000	15	4	12
11	Clubhouse Furniture - Partial Replacement	Allow.	1	\$4,000.00	\$4,000	10	5	12
12	Clubhouse Fireplace - Maintain/Repair	Allow.	1	\$1,500.00	\$1,500	7	5	12
13	Clubhouse Bathrooms - Repair/Paint	Ea.	2	\$3,000.00	\$6,000	8	2	12
14	Clubhouse Bathrooms - Upgrade	Ea.	2	\$7,500.00	\$15,000	25	7	12
15	Clubhouse Kitchen Appliances - Partial Replacement	Allow.	1	\$8,000.00	\$8,000	12	5	12
16	Clubhouse Kitchen Cabinets/Counters - Partial Repl.	Allow.	1	\$5,000.00	\$5,000	20	10	12
17	Fitness Center Equipment - Partial Replacement	Allow.	1	\$15,000.00	\$15,000	10	9	12
18	Fitness Center Finishes/Floors - Replace/Repair/Paint	Allow.	1	\$5,000.00	\$5,000	8	7	12
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#### SCHEDULE IIb CEDAR MILL EXTERIOR/INTERIOR BUILDING MAINTENANCE ITEMS - REPLACEMENT COST & FUNDING DATA

		First Replacement			Second Re	placement		Third Re	placement		Fourth Re	placement		Fifth Replacement		
	Exterior/Interior Building		Adjusted	Annual		Adjusted	Annual		Adjusted	Annual		Adjusted	Annual		Adjusted	Annual
	Maintenance Item		Cost if	Funding		Cost if	Funding		Cost if	Funding		Cost if	Funding		Cost if	Funding
	Description	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr
		Replaced	3.00%	Replaced	Replaced	3.00%	Replaced	Replaced	3.00%	Replaced	Replaced	3.00%	Replaced	Replaced	3.00%	Replaced
1	Clubhouse Roof - Replace Shingles	2047			2072			2097			2122			2147		
2	Clubhouse Roof - Replace Gutters/Downspouts	2035	4420	340	2065			2095			2125			2155		
3	Clubhouse Ext. Siding/Veneer/Finish Repair/Paint/Tuc	2024	8240	4120	2032	10438	1305	2040	13223	1653	2048			2056		
4	Clubhouse Concrete Patio - Repair/Seal Cracks	2025	1061	354	2031	1267	211	2037	1513	252	2043			2049		
5	Clubhouse Concrete Patio - Partial Replacement	2031	2534	282	2041	3405	340	2051			2061			2071		
6	Clubhouse Wood Deck/Balcony - Maintain/Repair	2023	7000	7000	2031	8867	1108	2039	11233	1404	2047			2055		
7	Clubhouse Wood Stairway/Railing - Maintain/Repair	2023	3000	3000	2031	3800	475	2039	4814	602	2047			2055		
8	Clubhouse Wood Arbors - Repair/Replace	2027	2251	450	2035	2852	356	2043			2051			2059		
9	Clubhouse Interior Finishes - Repair/Paint	2026	6556	1639	2032	7829	1305	2038	9348	1558	2044			2050		
10	Clubhouse Flooring - Repair/Partial Replacement	2027	6753	1351	2042	10521	701	2057			2072			2087		
11	Clubhouse Furniture - Partial Replacement	2028	4637	773	2038	6232	623	2048			2058			2068		
12	Clubhouse Fireplace - Maintain/Repair	2028	1739	290	2035	2139	306	2042	2630	376	2049			2056		
13	Clubhouse Bathrooms - Repair/Paint	2025	6365	2122	2033	8063	1008	2041	10215	1277	2049			2057		
14	Clubhouse Bathrooms - Upgrade	2030	18448	2306	2055			2080			2105			2130		
15	Clubhouse Kitchen Appliances - Partial Replacement	2028	9274	1546	2040	13223	1102	2052			2064			2076		
16	Clubhouse Kitchen Cabinets/Counters - Partial Repl.	2033	6720	611	2053			2073			2093			2113		
17	Fitness Center Equipment - Partial Replacement	2032	19572	1957	2042	26303	2630	2052			2062			2072		
18	Fitness Center Finishes/Floors - Replace/Repair/Paint	2030	6149	769	2038	7790	974	2046			2054			2062		
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#### SCHEDULE IIIa CEDAR MILL ELECTRICAL/MECHANICAL/PLUMBING ITEMS - PRELIMINARY DATA

	Electrical	Units	Number	Cost	Total Cost	Estimated	Estimated	
	Mechanical	of	of	per	in Current	Useful	Remaining	Notes
	Item Description	Measure	Units	Unit	Dollars	Life	Life	
1	Swimming Pool Equipment - Replace Pumps/Motors	Allow.	1	\$3,000.00	\$3,000	8	7	9
2	Swimming Pool Filtration System - Replace Filters	Allow.	1	\$4,000.00	\$4,000	8	7	9
3	Swimming Pool Mushroom - Replace Pump/Motors	Allow.	1	\$2,000.00	\$2,000	8	7	9
4	Entry Water Wheel Equipment - Replace	Allow.	1	\$2,000.00	\$2,000	8	5	4
5	Clubhouse HVAC System - Replace	Ea.	4	\$7,000.00	\$28,000	12	4	12
6	Exterior Lighting - Repair/Replace	Allow.	1	\$5,000.00	\$5,000	7	2	1
7	Interior Lighting - Repair/Replace	Allow.	1	\$4,000.00	\$4,000	7	3	1
8	Tennis Court Light Fixtures - Replace	Ea.	24	\$500.00	\$12,000	15	5	10
9	Security System - Repair/Upgrade	L.S.	1	\$10,000.00	\$10,000	15	3	1
10	Vehicular Gates - Replace	Ea.	2	\$4,000.00	\$8,000	30	19	1
11	Irrigation - Controls and Valves - Repair/Maintain	Allow.	1	\$4,000.00	\$4,000	5	2	13
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#### SCHEDULE IIIb CEDAR MILL ELECTRICAL/MECHANICAL/PLUMBING ITEMS - REPLACEMENT COST & FUNDING DATA

		First Repla	acement		Second Replacement 7			Third Replacement			Fourth Replacement			Fifth Replacement		
	Electrical		Adjusted	Annual		Adjusted	Annual		Adjusted	Annual		Adjusted	Annual		Adjusted	Annual
	Mechanical		Cost if	Funding		Cost if	Funding		Cost if	Funding		Cost if	Funding		Cost if	Funding
	Item Description	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr	Yr	Inflation is	Thru Yr
		Replaced	3.00%	Replaced	Replaced	3.00%	Replaced	Replaced	3.00%	Replaced	Replaced	3.00%	Replaced	Replaced	3.00%	Replaced
1	Swimming Pool Equipment - Replace Pumps/Motors	2030	3690	461	2038	4674	584	2046			2054			2062		
2	Swimming Pool Filtration System - Replace Filters	2030	4919	615	2038	6232	779	2046			2054			2062		
3	Swimming Pool Mushroom - Replace Pump/Motors	2030	2460	307	2038	3116	389	2046			2054			2062		
4	Entry Water Wheel Equipment - Replace	2028	2319	386	2036	2937	367	2044			2052			2060		
5	Clubhouse HVAC System - Replace	2027	31514	6303	2039	44932	3744	2051			2063			2075		
6	Exterior Lighting - Repair/Replace	2025	5305	1768	2032	6524	932	2039	8024	1146	2046			2053		
7	Interior Lighting - Repair/Replace	2026	4371	1093	2033	5376	768	2040	6611	944	2047			2054		
8	Tennis Court Light Fixtures - Replace	2028	13911	2319	2043			2058			2073			2088		
9	Security System - Repair/Upgrade	2026	10927	2732	2041	17024	1135	2056			2071			2086		
10	Vehicular Gates - Replace	2042	14028	701	2072			2102			2132			2162		
11	Irrigation - Controls and Valves - Repair/Maintain	2025	4244	1415	2030	4919	984	2035	5703	1141	2040	6611	1322	2045		
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CEDAR MILL					_
COST & FUNDING RECAI	P (RECOMMENDED FUNDI	NG)		Total Units:	
[	T	1		373	
Year	Annual Funds	Future Expenses	Net Accumulated Funds	Projected Annual Contribution per unit	Projected Monthly Contribution per unit
Current Funds			\$180,000		
2023	\$70,000	\$135,535	\$114,465	\$187.67	\$15.64
2024	\$70,000	\$126,690	\$57,775	\$187.67	\$15.64
2025	\$70,000	\$31,827	\$95,948	\$187.67	\$15.64
2026	\$70,000	\$44,802	\$121,146	\$187.67	\$15.64
2027	\$70,000	\$51,773	\$139,373	\$187.67	\$15.64
2028	\$75,000	\$50,428	\$163,944	\$201.07	\$16.76
2029	\$75,000	\$75,345	\$163,600	\$201.07	\$16.76
2030	\$75,000	\$68,512	\$170,088	\$201.07	\$16.76
2031	\$75,000	\$51,938	\$193,150	\$201.07	\$16.76
2032	\$75,000	\$50,886	\$217,264	\$201.07	\$16.76
2033	\$80,000	\$140,553	\$156,711	\$214.48	\$17.87
2034	\$80,000	\$55,369	\$181,341	\$214.48	\$17.87
2035	\$80,000	\$23,668	\$237,674	\$214.48	\$17.87
2036	\$80,000	\$45,387	\$272,287	\$214.48	\$17.87
2037	\$80,000	\$74,873	\$277,414	\$214.48	\$17.87
2038	\$85,000	\$91,920	\$270,494	\$227.88	\$18.99
2039	\$85,000	\$137,202	\$218,291	\$227.88	\$18.99
2040	\$85,000	\$52,561	\$250,731	\$227.88	\$18.99
2041	\$85,000	\$49,371	\$286,360	\$227.88	\$18.99
2042	\$85,000	\$70,853	\$300,508	\$227.88	\$18.99
			*Formulas		
1/9/2023 14:49	Page 6h	1	Single Payment Compound Amount	(F/P, i %, n)	$(1+i)^n$
			Uniform Series Sinking Fund	(A/F, i %, n)	i/[(1+i) <sup>n-1</sup> ]

#### **CEDAR MILL** Total Units: **COST & FUNDING RECAP (CURRENT FUNDING)** 373 Year Annual Funds Future Expenses Net Accumulated Funds Projected Annual Contribution Projected Monthly Contribution per unit per unit \$180,000 Current Funds \$135,535 \$64,465 2023 \$20,000 \$53.62 \$4.47 -\$42,225 2024 \$20,000 \$126,690 \$53.62 \$4.47 2025 \$20,000 \$31,827 -\$54,052 \$53.62 \$4.47 \$20,000 \$44,802 -\$78,854 \$53.62 \$4.47 2026 \$51,773 2027 \$20,000 -\$110,627 \$53.62 \$4.47 \$20,000 \$53.62 \$4.47 2028 \$50,428 -\$141,056 2029 \$20,000 \$75,345 -\$196,400 \$53.62 \$4.47 2030 \$20,000 \$68,512 -\$244,912 \$53.62 \$4.47 \$20.000 \$51,938 -\$276,850 \$53.62 \$4.47 2031 \$20,000 \$50,886 -\$307,736 \$53.62 \$4.47 2032 \$20,000 \$140,553 -\$428,289 \$4.47 2033 \$53.62 \$20,000 \$55,369 -\$463,659 \$53.62 \$4.47 2034 \$20,000 \$23,668 -\$467,326 \$53.62 \$4.47 2035 2036 \$20,000 \$45,387 -\$492,713 \$53.62 \$4.47 \$20,000 \$74,873 -\$547,586 \$53.62 \$4.47 2037 \$20,000 \$91,920 \$4.47 2038 -\$619,506 \$53.62 \$20,000 \$137,202 -\$736,709 \$53.62 \$4.47 2039 2040 \$20,000 \$52,561 -\$769,269 \$53.62 \$4.47 2041 \$20,000 \$49,371 -\$798,640 \$53.62 \$4.47 2042 \$20,000 \$70,853 -\$849,492 \$53.62 \$4.47 \*Formulas Single Payment (F/P, i %, n) $(1+i)^n$ **Compound Amount** 1/9/2023 14:49 Page 6i Uniform Series Sinking (A/F, i %, n) $i/[(1+i)^{n-1}]$ Fund

#### CEDAR MILL ITEMIZED PROJECTED COSTS BY YEAR

Year Item	Cost
Grand Total	\$1,429,492
2023 Total	\$135,535
2023 Asphalt Private Parking Area - Mill/1-1/2" Overlay	\$40,950
2023 Clubhouse Wood Deck/Balcony - Maintain/Repair	\$7,000
2023 Clubhouse Wood Stairway/Railing - Maintain/Repair	\$3,000
2023 Detention Pond - Remove Silt/Vegetation/Debris	\$24,000
2023 Drainage/Slope Erosion/Storm System - Repair/Maintain	\$8,000
2023 Playground Equipment - Repair/Replace	\$4,000
2023 Swimming Pool Mushroom - Repair/Replace	\$2,000
2023 Swimming Pool Surface - Re-plaster/Resurface/Rep. Tiles	\$46,585
2024 Total	\$126,690
2024 Clubhouse Ext. Siding/Veneer/Finish Repair/Paint/Tuck F	Po \$8,240
2024 Landscaping - Upgrade/Remove Trees.Shrubs/Trim	\$36.050
2024 Tennis Court - Replace	\$82.400
2025 Total	\$31.827
2025 Clubhouse Bathrooms - Repair/Paint	\$6,365
2025 Clubhouse Concrete Patio - Repair/Seal Cracks	\$1,061
2025 Exterior Lighting - Renair/Replace	\$5,305
2025 Irrigation - Controls and Valves - Repair/Maintain	\$4 244
2025 Masonry Retaining Wall - Repair/Maintain	\$5,305
2025 Swimming Pool Cover - Replace	\$8,487
2025 Tennis Court Equipment/Benches - Partial Replace	\$1.061
2026 Total	\$44.802
2026 Clubbouse Interior Finishes - Renair/Paint	\$6 556
2026 Concrete Curbs/Sidewalks - Renair/Partial Replace	\$3,278
2026 Detention Pond - Clean Structure/Add Rin-Ran	\$8.742
2020 Determion Fond - Clean Structure/Add Nip-Nap 2026 Entry Monuments Signages - Renair/Paint/Maintain	\$4,371
2020 Entry Monuments Olynayes - Repain/Lanowaintain	\$4,371
2020 Interior Lighting - Repair/Replace	\$4,371 \$10 027
2020 Security System - Repair/Opgrade	\$2 185
2020 Swithining Fool Deck - Repair/Sear Clacks	φ2,105 ¢4 371
2020 Terrins Court Light Foles/Tence - Faint	\$4,571 \$51 773
2027 Clubbourg Flooring Pongir/Partial Ponlacoment	¢6 752
2027 Clubhouse HVAC System - Replace	φ0,733 ¢21,514
2027 Clubhouse HVAC System - Replace	¢01,014 ¢0.051
2027 Edubriouse Wood Arbors - Repair/Replace	φ2,201 ¢6,752
2027 Relating Walls @ Detertion Ponds - Repair/Maintain	Φ0,700 Φ4,500
2027 Swimming Pool Furniture - Partial Replacement	\$4,302 \$50,439
2020 Total 2029 Clubbourg Eiroplang Maintain/Panair	<b>\$30,428</b>
2028 Clubhouse Fileplace - Maintain/Repair	\$1,739 \$4,637
2028 Clubhouse Furniture - Partial Replacement	\$4,037 \$0,074
2028 Glubhouse Kitchen Appliances - Parliai Replacement	\$9,274 \$2,240
2020 Entry Water Wheel Equipment - Replace	¢∠,319
	\$0,950 #5.700
2028 Entry wood water wheel - Repair/Replace	\$5,796 \$4,007
2028 Playground Equipment - Repair/Replace	\$4,637
2028 Tennis Court Light Fixtures - Replace	\$13,911 Page 6j
2028 Tennis Court Wood Bleachers - Repair/Replace	\$1,159
2029 Total	\$75,345

2029 Landscaping - Upgrade/Remove Trees,Shrubs/Trim	\$41,792	
2029 Mailboxes - Paint/Repair/Partial Replace	\$1,791	
2029 Swimming Pool Deck - Partial Replacement	\$4,776	
2029 Swimming Pool Metal Fence - Repair/Paint	\$4,179	
2029 Swimming Pool Mushroom - Repair/Replace	\$2,388	
2029 Tennis Court Metal Fence - Repair/Replace	\$20,418	
2030 Total	\$68,512	
2030 Asphalt Private Parking Area - Sealcoat/Restripe	\$7,264	
2030 Clubhouse Bathrooms - Upgrade	\$18,448	
2030 Common Area Benches - Replace	\$2,460	
2030 Drainage/Slope Erosion/Storm System - Repair/Maintain	\$9,839	
2030 Fitness Center Finishes/Floors - Replace/Repair/Paint	\$6,149	
2030 Irrigation - Controls and Valves - Repair/Maintain	\$4,919	
2030 Metal Fence @ Detention Pond - Repair/Paint	\$8,363	
2030 Swimming Pool Equipment - Replace Pumps/Motors	\$3,690	
2030 Swimming Pool Filtration System - Replace Filters	\$4,919	
2030 Swimming Pool Mushroom - Replace Pump/Motors	\$2,460	
2031 Total	\$51,938	
2031 Clubhouse Concrete Patio - Partial Replacement	\$2,534	
2031 Clubhouse Concrete Patio - Repair/Seal Cracks	\$1,267	
2031 Clubhouse Wood Deck/Balcony - Maintain/Repair	\$8,867	
2031 Clubhouse Wood Stairway/Railing - Maintain/Repair	\$3,800	
2031 Tennis Court - Resurface	\$35,470	
2032 Total	\$50,886	
2032 Clubhouse Ext. Siding/Veneer/Finish Repair/Paint/Tuck Po	\$10,438	
2032 Clubhouse Interior Finishes - Repair/Paint	\$7,829	
2032 Concrete Curbs/Sidewalks - Repair/Partial Replace	\$3,914	
2032 Exterior Lighting - Repair/Replace	\$6,524	
2032 Fitness Center Equipment - Partial Replacement	\$19,572	
2032 Swimming Pool Deck - Repair/Seal Cracks	\$2,610	
2033 Total	\$140,553	
2033 Clubhouse Bathrooms - Repair/Paint	\$8,063	
2033 Clubhouse Kitchen Cabinets/Counters - Partial Repl.	\$6,720	
2033 Interior Lighting - Repair/Replace	\$5,376	
2033 Playground Equipment - Repair/Replace	\$5,376	
2033 Playground Equipment - Upgrade	\$40,317	
2033 Swimming Pool Cover - Replace	\$10,751	
2033 Swimming Pool Surface - Re-plaster/Resurface/Rep. Tiles	\$62,606	
2033 Tennis Court Equipment/Benches - Partial Replace	\$1,344	
2034 Total	\$55,369	
2034 Landscaping - Upgrade/Remove Trees,Shrubs/Trim	\$48,448	
2034 Tennis Court Light Poles/Fence - Paint	\$5,537	
2034 Tennis Court Wood Bleachers - Repair/Replace	\$1,384	
2035 Total	\$23,668	
2035 Clubhouse Fireplace - Maintain/Repair	\$2,139	
2035 Clubhouse Roof - Replace Gutters/Downspouts	\$4,420	
2035 Clubhouse Wood Arbors - Repair/Replace	\$2,852	
2035 Irrigation - Controls and Valves - Repair/Maintain	\$5,703	Page 6k
2035 Swimming Pool Furniture - Partial Replacement	\$5,703	
2035 Swimming Pool Mushroom - Repair/Replace	\$2,852	
	\$45,387	
2036 Asphalt Private Parking Area - Sealcoat/Restripe	\$8,674	
2036 Detention Pond - Clean Structure/Add Rip-Rap	\$11,748	
2036 Entry Monuments Signages - Repair/Paint/Maintain	\$5,874	

2036 Entry Water Wheel Equipment - Replace	\$2,937	
2036 Entry Wood Fence - Repair/Paint/Partial Replace	\$8,811	
2036 Entry Wood Water Wheel - Repair/Replace	\$7,343	
2037 Total	\$74,873	
2037 Clubhouse Concrete Patio - Repair/Seal Cracks	\$1,513	
2037 Drainage/Slope Erosion/Storm System - Repair/Maintain	\$12,101	
2037 Mailboxes - Paint/Repair/Partial Replace	\$2,269	
2037 Masonry Retaining Wall - Repair/Maintain	\$7,563	
2037 Retaining Walls @ Detention Ponds - Repair/Maintain	\$9,076	
2037 Tennis Court - Resurface	\$42,353	
2038 Total	\$91,920	
2038 Clubhouse Furniture - Partial Replacement	\$6,232	
2038 Clubhouse Interior Finishes - Repair/Paint	\$9,348	
2038 Common Area Benches - Replace	\$3,116	
2038 Concrete Curbs/Sidewalks - Repair/Partial Replace	\$4.674	
2038 Detention Pond - Remove Silt/Vegetation/Debris	\$37.391	
2038 Fitness Center Finishes/Floors - Replace/Repair/Paint	\$7,790	
2038 Playground Equipment - Repair/Replace	\$6,232	
2038 Swimming Pool Deck - Repair/Seal Cracks	\$3 116	
2038 Swimming Pool Equipment - Replace Pumps/Motors	\$4 674	
2038 Swimming Pool Eiltration System - Replace Filters	\$6,232	
2000 Swimming Pool Mushroom - Replace Pump/Motors	\$3,116	
2039 Total	\$137 202	
2039 Clubbouse HVAC System - Replace	\$44 932	
2009 Clubhouse Wood Deck/Balcony - Maintain/Renair	\$11 233	
2039 Clubhouse Wood Stairway/Railing - Maintain/Repair	\$4 814	
2009 Exterior Lighting - Renair/Renlace	\$8 024	
2009 Exterior Eighting - Repair/Repiace 2039 Landscaping - Upgrade/Remove Trees Shrubs/Trim	\$56 165	
2009 Eandscaping Pool Deck - Partial Replacement	\$6 419	
2039 Swimming Pool Metal Fence - Renair/Paint	\$5,415 \$5,616	
2039 Swimming Fool Metal Fence - Repair/Fanc	¢52 561	
2040 Clubbouse Ext Siding/Veneer/Einish - Repair/Paint/Tuck Po	\$13,001 \$13,003	
2040 Clubhouse Kitchen Appliances - Partial Replacement	\$13,223	
2040 Elabilitational Penair/Penlace	¢10,220 ¢6,611	
2040 Interior Lighting - Repair/Replace	\$0,011 \$6,611	
2040 Metal Eence @ Detention Pond _ Repair/Maintain	¢11 220	
2040 Metal Fence @ Detention Fond - Repair/Pant	¢1,239 ¢1,653	
	¢1,000	
2041 Olubhausa Bathraama Banair/Daint	\$43,371 \$10,215	
2041 Clubhouse Concrete Patia Partial Poplacement	\$10,215 \$2,405	
2041 Security System Repair/Lipgrade	\$3,405 \$17.02 <i>1</i>	
2041 Security System - Repair/Opgrade	\$17,024 \$12,610	
2041 Swimming Pool Cover - Replace	\$13,019 \$2,405	
2041 Tonnin Court Equipment/Renches Partial Poplace	\$3,405 ¢1,702	
2041 Terrins Court Equipment/Benches - Partial Replace	φ1,702 ¢70,952	
2042 Acabalt Drivata Darking Area Scalaget/Destring	\$10,055 \$10,257	Daga 6
2042 Aspitali Fitvale Falking Alea - Sealoual/Resulpe	φ IU,307 Φο 6ο0	Faye of
2042 Clubhouse Filepiace - Malillalli/Repair 2042 Clubhouse Fleering - Pensir/Pertial Penlessment	₽∠,030 ¢10 ⊑01	
2042 Subliques Flooring - Repair/Faillar Replacement	φ10,021 ¢06 202	
2042 Filliess Genier Equipment - Partial Replacement	Φ∠0,3U3 ¢7 ∩4 4	
2042 Tennis Court Light Poles/Fence - Paint 2042 Vehicular Cates - Banlass	ቅ/,U14 ¢14 000	
2042 Venicular Gales - Replace	<b>⊅14,0∠</b> 8	

#### E. Notes

The accompanying notes are an integral part of the reserve schedule contained in this report. When reviewing the schedule, please be sure to read all notes pertaining to a particular line item. This will provide the most complete explanation of each line item and will provide any clarification where necessary.

- 1. These items were found to be in good condition and well maintained. The useful life reflects the age and overall condition of the respective item.
- 2. <u>Private Parking Areas</u> The asphalt parking areas appear to consist of a graded aggregate base, asphalt base course, and asphalt surface course. Perimeters of the parking areas are surrounded by concrete curbs and gutters. From our review, the asphalt pavement appeared to be in generally poor condition at the clubhouse parking lot. It should be noted that we did observe "alligatored" cracks, linear cracks, and settled sections of asphalt (reference photographs 1-3). We recommend that the asphalt be milled and overlayed within a year.

In order to prolong the useful life of the asphalt pavement, we recommend that the cracks be filled, and the pavement be sealcoated and striped every six to eight years. The useful life of asphalt pavement is approximately 20 years, after which, a new layer of asphalt should be installed. Prior to overlay, any settled areas should be removed, the base then re-compacted, and a new layer of asphalt course installed. It is recommended that a budget be allocated for the resurfacing of the asphalt with a 1-1/2" mill and overlay every 20 years. We recommend that the asphalt surface be inspected approximately every ten years to determine if the condition of asphalt is adequate and if the useful life can be prolonged.

3. <u>Concrete Curb/Sidewalks</u> – The concrete curbs at the amenities area appeared to be in generally good to fair condition with cracks and spalling concrete observed (reference photograph 4). The concrete sidewalks at the amenities area connect the clubhouse, tennis courts and playground. The sidewalks appeared to be in good condition with a few sections observed to be settled and cracked, which could result in a potential trip hazard (reference photographs 5 & 6).

Any sections of sidewalk or curb that are settling should be monitored, and if they continue to settle, these sections should be replaced. The budget is provided for the replacement of damaged, deteriorated, or settled sections of sidewalks and curbs at the property. The budget is provided every six years and the funding can be used when necessary, during the estimated useful life. The budget is not for complete replacement of the concrete sidewalks or curbs, only replacement of the sections that become trip hazards or safety concerns. Any vertical displacement at cracks that could potentially represent a trip hazard and liability should be replaced. If a tree is uprooting a section of concrete.

4. <u>Entry Monuments and Signage</u> – The entry monument and signage generally consist of brick and stone veneer monument at the entrance to the property with painted inset signage. There is a mill at the entrance composed of a wood wheel, a pump, and a filtration system. From our review, the entry monument and signage appeared to be in good condition and well maintained (reference photograph 7).

Any mildew growth on the monuments and grout joints may be power washed as part of regular maintenance for a better appearance. Additionally, a budget has been allotted for the cleaning, repair, tuck pointing and painting of the entry monuments and signage every ten years. Also, we have included a budget for the mill and its components, as well as the wood fence at the entrance.

5. Landscaping – The landscaping at the common areas consists of small and large trees, shrubs, and common landscaped areas. From our review, the common area landscaping appeared to be in generally good condition; however, we observed a fallen tree at the playground (reference photograph 8). The appearance of the community is very subjective, as is the allocation of funds for the upgrade of the landscape materials. From our experience with similar communities, upgrading of the community landscaping is typically done every five years.

We recommend that the fallen tree at the playground be removed. A budget has been allocated for the replacement of any uprooting, damaged or diseased shrubs and trees, trimming of trees, and upgrade of the landscaping every five years. This is not designed for yearly or routine landscaping, or annual flower installation. All trees that are located within 10' of a structure should be removed or monitored to prevent any damage.

6. <u>**Retaining Wall**</u> – The retaining wall at the amenity area consist of modular block retaining wall. From our review, the modular block retaining wall at the amenity area are in generally fair to poor condition with blocks missing and displaced, caused by hydrostatic pressure behind the wall (reference photograph 9). We recommend that the modular block retaining wall be repair in order to avoid a severe damaged and a full replacement will be required at that point.

We have provided a budget for the repair and partial replacement of the modular block retaining wall every 12 years.

7. Drainage – The drainage at the amenity areas generally consists of surface flow to drain inlets and grassed swales located at the landscaped areas. From our review, the overall drainage at the property appeared to function properly; however, we observed exposed soil, erosion and silt accumulation (reference photographs 10-12). In addition, temporary erosion controls were left in the property such as silt fences (reference photograph 13).

It is recommended that swales and river rock be installed to improve the surface flow of water, as needed. It should be noted that it is possible to install French drains in landscaped areas to further improve the drainage. Other forms of poor drainage may be remediated by redirecting the water flow by creating proper slopes or extending existing drainage lines. A budget has been allotted for the maintenance and repair of the storm water drainage every seven years. The budget for the drainage may decrease over time as a result of proper maintenance.

8. **Detention Ponds** – The detention ponds are located at the rear of the property. The ponds consist of above-ground pond that is surrounded by a painted chainlink fence. At the time of our review, it had not rained in 48 hours, and the ponds had standing water, which is an indication that the pond may not be draining properly. Silt accumulation and exposed soils were observed at the slopes and maintenance entrance. We also observed some rill erosion along the bank of the detention pond and rip rap displaced that should be remediated (reference photographs 14-19).

We could not determine if the detention pond has been reviewed or accepted by local authorities, and if not, it is recommended that the detention pond be inspected and approved by local authorities before the property is turned over. Typically, a county requires that all storm water management facilities that serve a single lot, commercial, industrial development, or is located within an area controlled by a residential Homeowners Association be privately owned and maintained. The owners shall maintain a perpetual non-exclusive easement, which allows for access maintenance and prohibits the diminution of storm water quality provided by the approval and design. As a result of these regulations, once the ponds are turned over by the Developer, it is the Homeowners Association's responsibility to maintain the detention pond in accordance with the original design, which would incorporate the cleaning and maintenance of the detention pond basin and the removal of all brushy, silt and debris. Subsequently, in the schedule of values and budgeting in the Capital Reserve Analysis, we have only included the maintenance of the detention pond once they are properly cleaned of all silt, brush, and debris and turned over by the Developer.

9. <u>Swimming Pool Area</u> – The swimming pool consists of an in-ground concrete pool with plaster finish and water level tile (reference photographs 20 & 21). The swimming pool deck consists of a concrete slab-on-grade surrounded by metal fencing. From our review, the swimming pool deck appeared to be in generally good condition with minor cracks observed (reference photograph 22). The swimming pool furniture and pool equipment appeared to be properly maintained (reference photograph 23).

We recommend replastering the swimming pool surface including the mushroom and kiddie pool within a year to prevent further damage. Following is the estimated useful life of the components of the swimming pool:

Swimming Pool Surface – Re-plaster/Resurface/Rep. Tile ...... Every 8-10 years Swimming Pool Mushroom – Repair/Replace ...... Every 6-8 years

Swimming Pool Deck – Partial Replacement	Every 8-10 years
Swimming Pool Fence – Repair/Paint	Every 8-10 years
Swimming Pool Furniture – Replace	Every 8-10 years
Swimming Pool Cover – Partial Replacement	Every 6-8 years
Swimming Pool Equipment – Replace	Every 6-8 years
Swimming Pool Filtration System – Replace	Every 6-8 years
Swimming Pool Mushroom – Replace Equipment	Every 6-8 years

We have provided budgets for each of the referenced items above and have included them in the reserve.

10. <u>Tennis Courts</u> – The tennis courts located in the amenity area are hard surfaced, lighted, and surrounded by metal chain-link fencing. The tennis courts also have typical accessories such as netting and benches. Upon our review, it appeared that the tennis court is in poor condition where we observed several cracks across the courts (reference photographs 24 & 25).

We recommend that the tennis courts be replaced within the next year. Following is the estimated useful life of the components of the tennis courts.

Tennis Courts – Recoat Surface	Every 5-7 years
Tennis Courts – Replace Surface	Every 20-25 years
Tennis Courts Fencing – Replace	Every 20-25 years
Tennis Courts Accessories – Partial Replace	Every 10-12 years
Tennis Courts Fence/Light Poles – Repair/Paint	Every 8-10 years
Tennis Courts Lighting Fixtures – Replace	Every 12-15 years

We have provided budgets for each of the referenced items above and have included them in the reserve.

11. <u>Playground</u> – The playground area is located adjacent to the tennis courts in the amenity area and consists of typical playground equipment, swings, and a wood chip base. Upon review of the playground and their components, they were found to be in generally good condition (reference photograph 26). It is our

understanding that the slide will be replace soon.

We have provided two budgets for the playground. A budget has been allotted for the repair and partial replacement of the playground every five years. Another budget has been allotted for the replacement and upgrade of the playground every 25 years.

12. <u>The Clubhouse</u> – The clubhouse consists of a single-story, wood-framed structure constructed on a cast-in-place concrete slab-on-grade foundation with a basement. The exterior is a combination of stone veneer and fiber cementitious siding with wood trim, soffit, and fascia. The roof system is a moderately steep-sloped roof clad with asphalt based architectural shingles. The roof runoff is collected by metal gutters installed around the perimeter eave of the roof with connected downspouts that direct the runoff to the storm drains. From our review, it appeared that the exterior of the clubhouse was in generally good condition, with the exception of damaged trim, soffit, and fascia observed (reference photographs 27 & 28).

The clubhouse interior finishes consist of painted gypsum board walls and ceiling in combination with wood doors, smooth concrete finish floors and tile. At the clubhouse is a kitchen, a main room, fitness room, office, restrooms, storage room and additional rooms. From our review, it appeared that the interior of the clubhouse and its components were in generally good condition (reference photographs 29-32).

At the exterior of the clubhouse there is a wood deck facing the swimming pool with a stair leading to the swimming pool deck. From our review, the deck and stair are structurally compromised and should be replaced (reference photographs 33 & 34). It is our understanding that the Association is in the process to replace the deck and there is no current access to the deck. The arbor located at the swimming pool is in poor condition with a compromised column and fading paint observed (reference photograph 35). In addition, the clubhouse mechanical, plumbing, and electrical equipment appeared to be functioning properly (reference photograph 36).

We recommend that the exterior finishes be repaired, replaced and painted, as well as the arbor and deck repaired and replaced within a year to prevent further damage. The following are the estimated useful lives of the clubhouse components:

Clubhouse Roof – Replace Shingles	. Every 20-25 years
Clubhouse Roof – Replace Gutters & Downspouts	. Every 25-30 years
Clubhouse Ext. Finishes/Veneer – Repair/Paint/Tuck Point	Every 6-8 years
Clubhouse Wood Deck/Balcony - Maintain/Repair	Every 6-8 years
Clubhouse Wood Stairway/Railing - Maintain/Repair	Every 6-8 years
Clubhouse Wood Arbors - Repair/Replace	Every 6-8 years
Clubhouse Interior Finishes – Repair/Paint	Every 8-10 years
Clubhouse Flooring – Repair	. Every 12-15 years
Clubhouse Fireplace – Replace	Every 5-7 years
Clubhouse Kit. Appliances – Partial Replace	. Every 10-12 years
Clubhouse Kit. Cabinets/Countertops – Replace	. Every 17-20 years
Clubhouse Furniture – Partial Replace	Every 9-10 years
Clubhouse Restrooms – Upgrade	Every 6-8 years
Fitness Center Finishes/Floors - Replace/Repair/Paint	Every 6-8 years
Fitness Center Equipment - Partial Replacement	Every 8-10 years
Clubhouse HVAC System – Replace	. Every 10-12 years
Clubhouse Electrical Fixtures – Partial Replace	. Every 12-15 years

We have provided budgets for each of the referenced items above and have included them in the reserve.

13. <u>Irrigation</u> – It should be noted that we did not operate or test each zone, as it was not part of the scope of work; however, we did visually observe all the irrigated areas to identify any obvious deficiencies. Our general observation found no evidence that would indicate any major problems with the system and the system appears to be properly maintained. Therefore, we would assume that it is functioning adequately.

It is recommended that \$5,000 be allocated for the general repair and

maintenance of the irrigation system, as needed, every four to five years.

#### II. RESERVE CASH FLOW ANALYSIS

#### A. INTRODUCTION

The enclosed chart and graph contain a 20-year cash flow projection of the reserve requirements for the Association. The budget should be adjusted at the end of the 20year period to readjust for changes in remaining life, inflation, and current costs of replacements. This cash flow analysis is based on the assumption that all of the items that make up the schedule are fully funded. By this, we mean that each item will accumulate its full replacement cost during its life span. At the end of this life, each item would be replaced, and the funding would start aging for items with a long life. For items with a short useful life, the funding for the first replacement is budgeted in addition to future replacements due to the short life span. The future replacement funding is started in the first year; however, payments are less than the first replacement due to the extended time period allowed to accumulate funds. Taking all of the components that make up the reserve schedule, using this full funding analysis, there is typically an ongoing surplus in the reserve fund. This ensures that the Association will have a surplus at the end of the 10-year period. This is called the "pooling effect" and is represented by the upper line on the cash flow chart, which is designated as the "Net Cumulative Fund." The "Net Cumulative Fund" is calculated by taking the existing amount in the reserve fund at the time the reserve schedule is prepared, adding to it the yearly contribution, and subtracting from it the annual expenditures.

The annual reserve funding required has been calculated by estimating the useful remaining life based on the current condition, age, and all other known factors of each item description. The present value replacement cost was estimated by either past quotations or other listed methods of estimation. The present value replacement cost was then converted to future value using a 3% annual compounded inflation rate. The future cost was calculated for the projected time when replacement will be required.

The future cost was then broken down into annual installments while still considering the 3% compounded annual inflation rate. The monthly reserve funding was calculated by a further breakdown of the annual reserve funding required.

### 1. Formulas

The following economic formulas were used in our calculations:

DISCOUNTING FACTOR	FUNCTIONAL NOTATION	FORMULA
Single Payment Compound Amount	(F/P, i %, n)	(1+i) <sup>n</sup>
Uniform Series Sinking Fund	(A/F, i %, n)	i/[(1+i) <sup>n-1</sup> ]

### 2. <u>Definitions</u>

Definitions of the above-mentioned terms are as follows:

TERM	DEFINITION
Single Payment Compound Amount	Conversion of present worth to future value
Uniform Series Sinking Fund	Conversion of future value to annual value
F	Future worth of item in <i>n</i> years from present
Р	Present Worth
А	Annual worth
Ι	Interest Rate (0.0% used)
N	# of years until each calculated replacement

#### B. PROJECTED CASH FLOW GRAPH AND CHART

The projected cash flow for the Capital Reserve Analysis is illustrated by the bar graph and line chart on the following pages.



#### **CEDAR MILL - PROJECTED CASH FLOW (RECOMMENDED FUNDING)**



#### **CEDAR MILL - PROJECTED CASH FLOW (CURRENT FUNDING)**

Annual Funds Future Expenses Net Accumulated Funds

#### 350,000 300,000 250,000 200,000 150,000 100,000 50,000 Current 2023 Funds ----- Annual Funds Future Expenses - Net Accumulated Funds

#### **CEDAR MILL - PROJECTED CASH FLOW (RECOMMENDED FUNDING)**

#### CEDAR MILL - PROJECTED CASH FLOW (CURRENT FUNDING)



Annual Funds - Future Expenses - Annual Funds

### C. RECOMMENDATIONS AND CONCLUSIONS

Based on our review, we would make the following recommendations. The Association should set aside the following amount for the specified year into the reserve fund:

Year	Annual Funds	Future Expenses	Net Accumulated Funds
Current Funds			\$180,000
2023	\$70,000	\$135,535	\$114,465
2024	\$70,000	\$126,690	\$57,775
2025	\$70,000	\$31,827	\$95,948
2026	\$70,000	\$44,802	\$121,146
2027	\$70,000	\$51,773	\$139,373
2028	\$75,000	\$50,428	\$163,944
2029	\$75,000	\$75,345	\$163,600
2030	\$75,000	\$68,512	\$170,088
2031	\$75,000	\$51,938	\$193,150
2032	\$75,000	\$50,886	\$217,264
2033	\$80,000	\$140,553	\$156,711
2034	\$80,000	\$55,369	\$181,341
2035	\$80,000	\$23,668	\$237,674
2036	\$80,000	\$45,387	\$272,287
2037	\$80,000	\$74,873	\$277,414
2038	\$85,000	\$91,920	\$270,494
2039	\$85,000	\$137,202	\$218,291
2040	\$85,000	\$52,561	\$250,731
2041	\$85,000	\$49,371	\$286,360
2042	\$85,000	\$70,853	\$300,508

#### COST AND FUNDING RECAP

The Association should update the reserve schedule a minimum of once every two years. It is especially important to update the schedule when using average contribution due to the fact that even a minor change in the estimated useful life can have a significant impact on adequate funding.

The Association should review each of the individual line items that make up the reserve schedule to make sure that there is no overlap between what is indicated in the schedule and any other portion of the budget. For example, we may show on the reserve schedule the replacement of fencing, but at the same time, the Association may be replacing the fencing out of their operating budget. If duplication like this exists, the item should either be removed from the reserve schedule or the operation budget. It should not be funded in two different locations.

The Association should review the items on the schedule to assure that their replacement is not covered under a maintenance contract. An example would be reserving for the replacement of mechanical equipment components while the Association has a maintenance contract for the item at the same time. The reserve schedule should be carefully reviewed to be sure that it does not fund the replacement of any portion of any item whose replacement is covered under a maintenance contract.

The Association should review the items on the schedule to be sure that they are all the Association's responsibility. As an example, if we have included site lighting on the reserve schedule, but at the same time the local municipality is responsible for the maintenance and repair of these connections, they should be removed from the schedule.

The Association should review the individual line items on the reserve schedule carefully to determine if a number of the smaller individual components can be consolidated into one line item which can be continuously funded.

For example, if there are five or six components with a total replacement cost of \$1,000 each, rather than reserving the full \$5,000 or \$6,000 for all of these items, the Association may want to consider funding all six components under one line item for a total of \$1,000. Should one of these six items have to be replaced, that line item would have to be brought current within a year or so after its expenditure. By doing this rather than

funding the full \$6,000, only a portion of the total would be funded. This would reduce the overall yearly contribution to reserves.

Depending on the size of the overall operating budget, the Association may decide that any line item of less than the given amount will be funded directly through the operating budget rather than through the reserve schedule. If this is the case, any item with the given value or less should be removed from the schedule. The schedule would then be footnoted accordingly.

#### III. RECOMMENDED MAINTENANCE SCHEDULE

The following guidelines are intended to ensure that a program of preventive maintenance is implemented in order to assure that, as a minimum, the predicted useful lives of the major common elements is attained. A preventive maintenance program is made up of "a system of periodic inspections of existing facilities to uncover conditions leading to breakdown or harmful depreciation and the correction of these conditions while they are still minor". It should be noted that experience has shown that a proper maintenance program can add 50% to the expected useful life of some items.

In any case, the proper determination of the useful lives of the items which make up your common elements is critical to the proper updating of the reserve schedule. The items included will only attain their anticipated useful lives if a proper maintenance program is implemented. For this reason, it is recommended that the reserve schedule be updated every two years to assure that all items are being properly maintained.

#### A. ASPHALT PAVEMENT

The early detection and repair of minor defects is the most important consideration in the preventive maintenance of pavements. Cracks and other surface breaks, which in their first stages are almost unnoticeable, may develop into serious defects if not repaired in a timely manner. For this reason, walking inspections of the pavement should be conducted in the fall and spring of each year, as a minimum.

The inspections should note small cracks or other surface breaks in the pavement. In addition, there are other signs, such as mud or water on the pavement surface or soil erosion along the edges of the pavement, which may indicate possible future problem areas.

Most small cracks or surface breaks can be repaired by sealing them with a good commercial-grade caulk. Areas which have settled and pose a possible trip hazard should be cut out and replaced to prevent a potential liability problem, as well as to prevent further deterioration of the surface. If large areas are observed to be cracking or breaking up, this may be an indication of a problem with the base material and/or subsoils and would require further investigation to determine the cause and proper method of repair.

#### B. CONCRETE CURBING

Any soil erosion behind the curbing should be noted, and potential problems such as broken pipes, malfunctioning sprinkler heads, and/or improper grading should be investigated, and any necessary repairs made.

#### C. SIDEWALKS

Sidewalks should be inspected at least twice a year (spring and fall). The inspection should note any cracked sections, uneven settlement between sections (which may result in tripping hazards), and surface damage. Undermining of sidewalks (caused by soil erosion) should also be noted. Proper replacement of any sections with the above noted problems is necessary to eliminate safety hazards and potential liability problems. These repairs will also allow the curbing to achieve its full useful life.

#### D. STORM DRAINAGE SYSTEMS

All storm drainage systems should be routinely inspected to ensure proper operation. Inspections should be scheduled for all facilities after major storms for routine maintenance. In addition, bi-annual structural inspections should be performed. The following are the recommended maintenance schedules for each individual section of a storm system:

#### 1. Catch Basins

All catch basins should be routinely inspected after a major storm to ensure that they are working properly. During these inspections, any sediment buildup or debris should be removed from catch basins to ensure that they continue to function properly.

#### 2. Drainage Swales

The five most prevalent maintenance problems with swales are:

- Weed growth
- Grass maintenance
- Sediment control
- Soil deterioration
- Mosquito control

Drainage swales should be inspected on a routine basis to ensure that they are functioning properly. The grass located within the swales should be mowed on a weekly basis to prevent the accumulation of debris, which may impede the flow of the drainage. The trash racks attached to the outlet structures should be periodically checked and cleaned of debris to prevent blockage. The outlet structures should also be checked for deterioration and/or cracking of concrete.

#### E. LANDSCAPING

A discussion regarding the preventive maintenance of the landscaped areas of the development would require an entire report. For this reason, it is recommended that a professional service specializing in this area be consulted. It should be noted that landscaping is not included as a reserve schedule item since, with proper maintenance, large-scale replacement should not become necessary.

#### F. LAWN SPRINKLER SYSTEM

The preventive maintenance of the lawn sprinkler system would require an extensive report concerning the operation and servicing of the control valve,

pumps, sprinkler heads, and water lines. For this reason, it is recommended that a professional sprinkler system contractor be consulted to provide the necessary services to properly maintain the sprinkler system.

#### G. WOODEN FENCES AND OTHER WOODEN SITE FURNISHINGS

Wooden fences constructed of treated lumber should last a number of years with minimal maintenance. However, these items should be checked at least once a year to ensure that excessive weathering is not occurring. If excessive weathering is occurring, deteriorated members should be replaced, and the entire item should be treated with a preservative material.

Wooden site furnishings constructed of non-treated lumber should be regarded the same as exterior trim. Periodic application of a sealant to all surfaces is vital to preserve the wood. These items should be checked at least once a year to detect any peeling or deterioration. Deteriorated members should be replaced at this time, and resealing should be done, as necessary.

#### H. TOT LOTS

Tot lots should be looked at a minimum of twice a year, with one inspection in the spring and one in the fall. Any splintering or cracking wood should be repaired or replaced as necessary to prevent any injury. Exposed bolts must not have sharp edges. The bolts should not be protruding excessively so as to cause unnecessary injuries.

### I. ROOFS • PITCHED

The standard asphalt/fiberglass shingles available on the market today have an expected useful life of approximately 20 years. Proper maintenance in order to achieve this useful life requires periodic inspections to detect the need for repair or changes in the roof surface. In order to reduce maintenance and replacement

costs, it is vital to detect problems when they are minor and prevent them from escalating into major problems.

Roof inspections should be conducted at least twice a year. These inspections should preferably occur in the early fall to prepare for winter and in the spring to assess any winter damage and prepare for the hot summer sun. In addition to these seasonal inspections, the roofs should be carefully checked after violent rain or windstorms or nearby fires or after workmen have been on the roof.

The roof inspections should include:

- Examination of exterior walls for settlement.
- Checking interior walls and the underside of roofs for leakage. This is necessary since the majority of roof problems may not be detected by inspecting the outside roof surface.
- Inspection of the roof surface for missing, loose, lifted, cracked, or deteriorated shingles.
- A review of the roof drainage, including any change in the roof and the condition and operation of roof drains, gutters, and scuppers.
- Examination of flashed areas. Most water infiltration problems are caused by flashing defects. Lifted, loose, torn, or missing flashing require immediate repair.
- A review of ventilation since improper ventilation can cause ice damming conditions and accelerates the deterioration of the roof shingle.

#### J. GUTTERS AND DOWNSPOUTS

The key to maintaining gutters and downspouts is to make sure they are kept clear of debris. A buildup of leaves and other plant material will block downspouts and prevent proper drainage. If this occurs, trapped water could weigh down the gutters and cause them to loosen or fall. Blocked gutters will also overflow along their length, resulting in the washing away of the mulch and/or soils adjacent to the sides of a building, which could result in premature deterioration of a building's exterior finish over time. Ice damming will also be evident in the winter if gutters are not able to drain.

At least twice a year, the gutters should be cleaned and inspected for damage. This should be done in late spring and late fall. Any loose or misaligned gutters should be corrected at this time to prevent further damage. Splash blocks and downspout extension pipes should also be adjusted to prevent erosion and to direct water away from the building.

As the gutters age, the paint coating will oxidize and dull. When this occurs, an aluminum paint product should be used to restore the finish, or the gutters should be power washed to prevent deterioration.

#### K. CONCRETE PATIOS

Concrete patios should be inspected twice a year in the fall and spring. Minor cracks or cracks with vertical displacement should be noted and repaired where necessary. Sections should also be inspected for signs of surface deterioration.

<u>Note</u>: Salts used to eliminate ice during winter months can cause concrete to deteriorate. Only products rated safe for use on concrete should be applied for deicing purposes.

#### L. BALCONIES/ DECKS

Deck surfaces should be inspected every spring as part of a preventive maintenance program. Areas should be checked for signs of major cracking. Railings and handrails should be inspected for signs of damage. They should also be checked to ensure that they are still sturdy and safe.

#### M. WOOD RAILINGS

All exterior wood surfaces should be inspected every spring as part of a preventive maintenance program. Areas should be checked for signs of major cracking, splitting, and warping. Railings and handrails should be inspected for signs of damage. They should also be checked to ensure that they are still sturdy and safe.

#### N. STONE VENEER

Stone veneer is subject to cracking and loosening from a variety of environmental and construction causes. Veneers on all buildings should be thoroughly inspected in early spring and late fall. The inspections should include checking for chipped, loose, cracked, deteriorated, and missing stones. Cracked and missing stones should be replaced. Cracked mortar should be re-pointed and caulked at intersections. Other surfaces should be repaired where necessary. Any evidence of moisture on an interior wall surface may indicate water absorption through the stone veneer. This condition may be corrected by applying a sealant to the exterior stone face.

Excessive settlement of the foundation may be evidenced by open cracks, especially around window and doorframes. Significant amounts of loose stone or bulging wall areas may indicate structural deficiencies or that large amounts of differential settlement have taken place at the foundation. These conditions should be investigated by a professional and the appropriate action taken to correct uncovered problems.

#### DISCLOSURES

Ray Engineering, Inc. does not have any other involvement with the association, which could result in actual or perceived conflicts of interest.

During our review of the property, visual review, and field measurements, as needed, of each common element was performed. No destructive testing or drawing take-offs were performed.

Material issues which, if not disclosed, would cause a distortion of the association's situation.

Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues will be deemed reliable by the consultant.

The Reserve Analysis will be a reflection of information provided to the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.

Ray Engineering, Inc. did not perform an audit of the current or past budgets of the association.

Information provided to Ray Engineering, Inc. by the association representative about reserve projects will be considered reliable. Any on-site inspection(s) by Ray Engineering, Inc. should not be considered a project audit or quality inspection.

#### BIOGRAPHY

### RAFAEL E. PEREZ, P.E., R.S. Director of Engineering

Mr. Perez graduated from Kennesaw State University (f/k/a Southern Polytechnic State University) with a Bachelor of Science Degree in Civil Engineering in 2013. Mr. Perez has over 9 years of experience in the fields of civil, structural and construction engineering. Mr. Perez has previously worked in United Consulting for two years, Fugro for one and a half years, and Primoris Heavy Civil for three years. Mr. Perez professional experience includes building design evaluations, forensic engineering, Property Condition Assessments and Capital Reserve Analyses for residential and multifamily. Mr. Perez provides consulting services for civil/structural and construction related problems for various condominium, apartment, single-family, residential, and commercial properties, as well as design and specifications for restoration of civil and structural deficiencies.

#### LIMITATION OF RESPONSIBILITY

The report represents a statement of the physical condition of the common elements of the property based upon our visual observation, professional analysis, and judgment. The report applies only to those portions of the property and/or items and equipment which were capable of being visually observed. Unless specifically stated otherwise, no intrusive testing was performed nor were any materials removed or excavations made for further inspection. Drawings and specifications were available only to the extent described in the report.

The following activities are not included in the scope and are excluded from the scope of the reserve analysis described in the National Reserve Study Standards:

- Utilities Operating condition of any underground system or infrastructure; accessing manholes or utility pits; the reserve analysis does not include any infrastructure with an estimated useful life of more than 30 years, unless specified otherwise in the report;
- Structural Frame and Building Envelope Unless specifically defined in the proposal, entering of crawl, attic or confined space areas (however, the field observer will observe conditions to the extent easily visible from the point of access to the crawl or confined space if the access is at the exterior of the building or common space); determination of previous substructure flooding or water penetration unless easily visible or unless such information is provided;
- *Roofs* Walking on pitched roofs or any roof areas that appear to be unsafe or roofs with no built-in access; determining roofing design criteria;
- *Plumbing* Verifying the condition of any pipes underground, behind walls or ceilings; determining adequate pressure and flow rate, verifying pipe size, or verifying the point of discharge for underground systems;
- *HVAC* Observation of fire connections, interiors of chimneys, flues or boiler stacks, or tenant owned or tenant-maintained equipment;
- *Electrical* Removal of any electrical panels or device covers, except if removed by building staff; providing common equipment or tenant owned equipment.

- Vertical Transportation Examining of cable, shears, controllers, motors, inspection tags or entering elevator/escalator pits;
- Life Safety/Fire Protection Determining NFPA hazard classifications; classifying or testing fire rating of assemblies;
- Preparing engineering calculations to determine any system's components or equipment's adequacy or compliance with any specific or commonly accepted design requirements or building codes; preparing designs or specifications to remedy any physical deficiencies;
- Reporting on the presence or absence of pests or insects unless evidence of such presence is readily apparent during the field observer's walk-through survey or such information is provided to the Consultant;
- Entering or accessing any area of the property deemed by the engineer to pose a threat to the safety of any individual or to the integrity of the building system or material;
- Providing an opinion on the operation of any system or component that is shut down or not properly operating;
- Evaluating any acoustical or insulating characteristics of the property;
- Providing an opinion on matters regarding security and protection of its occupants or users;
- Providing an environmental assessment or opinion of the presence of any environmental issues such as asbestos, hazardous wastes, toxic materials, radon, or the location of designated wetlands, unless specifically defined within the scope of work;
- Any representations regarding the status of ADA Title III Compliance.

The report is not a compliance inspection or certification for past or present governmental codes or regulations of any kind. Any reference made to codes in this report is to assist in identification of a specific problem.

### **GLOSSARY OF TERMS**

Abbreviation	Definition	Abbreviation	Definition
Allow.	Allowance	L.F.	Linear Foot
Avg.	Average	Lg.	Long Length
B.F.	Board Feet	L.S.	Lump Sum
Bit/Bitum.	Bituminous	Maint.	Maintenance
Bldg.	Building	Mat., Mat'l	Material
Brk.	Brick	Max	Maximum
Cal	Calculated	MBF	Thousand Board Feet
C.C.F.	Hundred Cubic Feet	M.C.F.	Thousand Cubic Feet
C.F.	Cubic Feet	Min.	Minimum
C.L.F.	Hundred Linear Feet	Misc.	Miscellaneous
Col.	Column	M.L.F.	Thousand Linear Feet
Conc.	Concrete	M.S.F.	Thousand Square Feet
Cont.	Continuous, continued	M.S.Y.	Thousand Square Yards
C.S.F.	Hundred Square Feet	NA	Not applicable/available
Cu. Ft.	Cubic Feet	No.	Number
C.Y.	Cubic Yard, 27 cubic feet	O.C.	On Center
DHW	Domestic Hot Water	P.E.	Professional Engineer
Diam.	Diameter	Ply.	Plywood
Ea.	Each	Pr.	Pair
Est.	Estimated	PVC	Polyvinyl Chloride
Ext.	Exterior	Pvmt.	Pavement
Fig.	Figure	Quan. Qty.	Quantity
Fin.	Finished	R.C.P.	Reinforced Concrete Pipe
Fixt	Fixture	Reinf.	Reinforced
Flr.	Floor	Req'd	Required
FRP	Fiberglass Reinforced Plastic	Sch., Sched.	Schedule
Ft.	Foot, Feet	S.F.	Square Foot
Galv.	Galvanized	Sq.	Square, 100 Square Feet
Ht.	Height	Std.	Standard
Htrs.	Heaters	Sys.	System
HVAC	Heating, Ventilation, A/C	S.Y.	Square Yard
HW	Hot Water	T&G	Tongue & Groove
In.	Inch	Th, Thk.	Thick
Int.	Interior	Tot.	Total
Inst.	Installation	Unfin.	Unfinished
Insul.	Insulation	V.C.T.	Vinyl Composition Tile
lb.	Pound	Vent.	Ventilator
		Yd.	Yard

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Site Work Cost Data by R.S. Means Company, Inc.

Mechanical Cost Data by R.S. Means Company, Inc.

Electrical Cost Data by R.S. Means Company, Inc.

Open Shop Cost Data by R.S. Means Company, Inc. **Photographs** 



1. View of loose aggregates at the private parking lot.



2. View of settlement and loose aggregates at the private parking lot.



3. View of a typical "alligator" cracked at the private parking lot.



4. View of a typical crack with cracks and spalling concrete observed.



5. View of typical crack at the sidewalks.



6. View of a settled sidewalk.



7. View of the entry monument and mill.



8. View of a fallen tree at the playground.



9. View of loose and displaced modular blocks at the retaining wall.



10. View of exposed filter fabric, displaced river rock and exposed soil.



11. View of silt accumulation above the retaining wall displacing the blocks.



12. View of a sinkhole behind the concrete curb at the entrance of the clubhouse.



13. View of a silt fence left after construction was complete.



14. View of water ponding and heavy silt accumulation at the detention pond.



15. View of displace rip rap and water ponding at the outlet culvert of the detention pond.



16. View of heavy silt accumulation and lack of rip rap at the detention pond.



17. View of rill erosion at the detention pond.



18. View of exposed soil at the maintenance road and slopes of the detention pond.



19. View of rill erosion from the maintenance road at the detention pond.



20. View of the swimming pool.



21. View of the kiddie pool and mushroom.



22. View of a crack at the swimming pool deck.



23. View of the swimming pool furniture.



24. View of a typical crack at the tennis court.



25. View of typical cracks at the tennis court.



26. View of the playground.



27. View of a typical damage soffit at the clubhouse.



28. View of a typical damaged trim and fascia at the clubhouse.



29. View of the main room.



30. View of the kitchen.



31. View of at typical sink.



32. View of the fatness center.



33. View of the deck that is structurally compromised.



34. View of the stair that is structurally compromised.



35. View of a damaged column and fading paint at the arbor.



36. View of the typical HVAC units.