Water Glades
T300

Riviera Beach, FL • November 30, 2022

FULL RESERVE STUDY

RESERVE™ ADVISORS

Long-term thinking. Everyday commitment.

RESERVE ADVISORS
Long-term thinking. Everyday commitment.

Corporate Office
Reserve Advisors, LLC
735 N. Water Street, Suite 175
Milwaukee, WI 53202

Water Glades T300
Riviera Beach, Florida

Dear Board of Directors of Water Glades T300:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Water Glades T300 in Riviera Beach, Florida and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, November 30, 2022.

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

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 Water Glades T300 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 January 6, 2023 by

Reserve Advisors, LLC

Visual Inspection and Report by: Tyler C. Gidden, RS[1]
Review by: Nicole L. Lowery, RS, PRA[2], Associate Director of Quality Assurance

[1] 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.
[2] 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.

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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Water Glades T300 (T300)
Location: Riviera Beach, Florida
Reference: 221801

Property Basics: Water Glades T300 is a highrise style development which consists of 100 units in a 26-story building. The building was built in 1976.

Reserve Components Identified: 29 Reserve Components.

Inspection Date: November 30, 2022.

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 2051 due to replacement of the building cooling pipes.

Methodology: 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
- 1.3% anticipated annual rate of return on invested reserves
- 3.5% 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.

Unaudited Cash Status of Reserve Fund:

- $256,956 as of February 28, 2023
- 2022 budgeted Reserve Contributions of $122,400[1]
- A potential deficit in reserves might occur by 2030 based upon continuation of the most recent annual reserve contribution of $122,400 and the identified Reserve Expenditures.

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:

- Pump, Fire Suppression, 100-HP
- Walls, Stucco, Paint Finishes and Capital Repairs
- Pipes, Domestic Water, Waste and Vent
- Roof, Modified Bitumen
- Generator, Emergency, 185-kW

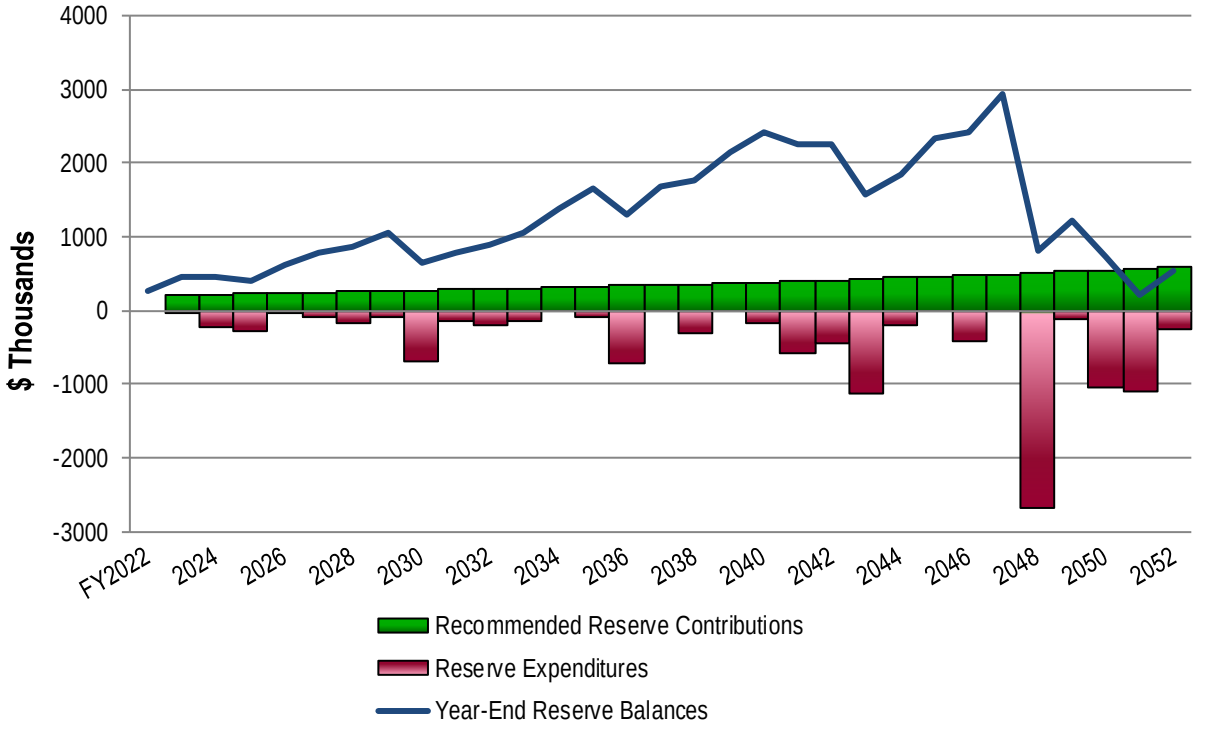
[1] The Fiscal Year (FY 2022) for T300 begins March 1, 2022 and ends February 28, 2023. For brevity, we refer to the Fiscal Year by its beginning year, i.e. Fiscal Year 2022-23 is FY 2022 or simply 2022.

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

- Increase to $215,000 in 2023
- Inflationary increases thereafter through 2052, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of $92,600 represents an average monthly increase of $77.17 per unit owner and about a nine percent (8.7%) adjustment in the 2022 total Operating Budget of $1,069,250.

T300
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2023	215,000	449,609	2033	303,200	1,063,740	2043	427,800	1,572,723
2024	222,500	444,944	2034	313,800	1,393,408	2044	442,800	1,845,764
2025	230,300	396,919	2035	324,800	1,660,514	2045	458,300	2,331,038
2026	238,400	609,689	2036	336,200	1,310,799	2046	474,300	2,415,861
2027	246,700	779,252	2037	348,000	1,678,101	2047	490,900	2,941,358
2028	255,300	874,501	2038	360,200	1,758,277	2048	508,100	798,982
2029	264,200	1,053,184	2039	372,800	2,156,358	2049	525,900	1,211,286
2030	273,400	638,812	2040	385,800	2,404,438	2050	544,300	719,989
2031	283,000	794,780	2041	399,300	2,245,482	2051	563,400	204,609
2032	292,900	901,148	2042	413,300	2,256,869	2052	583,100	539,906



2. RESERVE STUDY REPORT

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

Water Glades T300

Riviera Beach, Florida

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, November 30, 2022.

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 Unit Owners 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 Unit Owners
- Property Maintained by Water Glades POA

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:

- T300 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 the 30-year Reserve Expenditures at this time.

- Foundation
- Pipes, Interior Building, Sprinkler, Fire Standpipes, Common
- Pipes, Subsurface Utilities
- Structural Frame
- Windows and Doors, Glass, Common (2014-2015)

Common windows and doors

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 $10,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Air Handling Units, Common (Excl. Hallway Split System)
- Awnings, Entrances
- Concrete Sidewalk, Repairs and Partial Replacements
- Doors, Interior and Miscellaneous Exterior
- Duct Cleaning

- Exercise Equipment
- Exercise Room, Renovations
- Exhaust Fans, Less than 5,000-CFM (cubic feet per minute)
- Expansion Tanks
- Fence, Wood
- Floor Coverings, Tile, Penthouse Floor
- Intercom, Entrance
- Library, Renovations
- Light Fixtures, Recessed
- Light Fixtures, Stairwells
- Motors
- Paint Finishes, Stairwells (Per Management)
- Paint Finishes, Touch Up
- Pipes, Common, Interim Repairs and Waste Rodding
- Pump, Fire Suppression, Controller
- Pumps Less Than Five-HP (horsepower)
- Staff, Storage and Service Areas
- Valves, Small Diameter (We assume replacement as needed in lieu of an aggregate replacement of all small diameter valves as a single event.)
- Water Heater, Common
- Other Repairs normally funded through the Operating Budget

Frame rust at entrance awning

Exercise room and equipment

Library

Wood fence

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

- Electrical Systems (Including Circuit Protection Panels)
- Air Handling Units
- Balconies, Floor Coverings
- Interiors
- Pipes (Within Units)
- Water Heater
- Windows and Doors

Certain items have been designated as the responsibility of Water Glades POA to repair or replace. Property Maintained by Water Glades POA relates to:

- Clubhouse
- Pools
- Site Elements

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
- 2022 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
- Predicted reserves based on current funding level

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***.

Years 2022 to 2037

RESERVE EXPENDITURES

Water Glades
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Explanatory Notes:

1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.

2) FY2022 is Fiscal Year beginning March 1, 2022 and ending February 28, 2023.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Life Analysis, Years Remaining	Costs, $ Unit (2022)	Costs, $ Per Phase (2022)	Costs, $ Total (2022)	Percentage of Future Expenditures	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027	6 2028	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037
				Exterior Building Elements																							
1.060	24,000	6,000	Square Feet	Balconies, Concrete, Repairs and Waterproof Coating Applications, F	2030	to 25	8 to 26	13.00	78,000	312,000	5.1%									102,711						126,258	
1.105	6,000	6,000	Linear Feet	Balconies, Railings, Aluminum	2030	to 50	8	55.00	330,000	330,000	3.8%									434,547							
1.500	8,190	8,190	Square Feet	Roof, Modified Bitumen	2025	15 to 20	3	31.25	255,938	255,938	7.2%				283,762												
1.540	18,600	6,200	Linear Feet	Sealants, Windows and Doors, Phased	2024	to 20	2 to 14	3.00	18,600	55,800	1.4%			19,925						24,493						30,108	
1.880	52,000	52,000	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs	2024	5 to 7	2	2.00	104,000	104,000	7.8%			111,407						136,948						168,344	
				Interior Building Elements																							
2.100	2	2	Each	Elevator Cab Finishes	2043	to 25	21	25,000.00	50,000	50,000	0.9%																
2.200	930	930	Square Yards	Floor Coverings, Carpet, Hallways	2028	8 to 12	6	45.00	41,850	41,850	2.0%							51,444									
2.560	150	150	Each	Light Fixtures	2038	to 20	16	236.00	35,400	35,400	0.5%																
2.600	1	1	Allowance	Lobby, Renovation, Complete (Incl. Rest Room)	2036	to 20	14	145,000.00	145,000	145,000	2.1%															234,711	
2.605	1	1	Allowance	Lobby, Renovation, Partial (Incl. Rest Room)	2026	to 10	4	28,000.00	28,000	28,000	0.8%					32,131											
2.800	8,800	8,800	Square Feet	Paint Finishes, Hallways	2028	8 to 12	6	0.80	7,040	7,040	0.3%							8,654									
2.980	30,000	30,000	Square Feet	Wall Coverings, Hallways	2038	to 20	16	3.00	90,000	90,000	1.4%																
				Building Services Elements																							
3.070	1	1	Each	Air Handling and Condensing Units, Split System, Hallways	2032	15 to 20	10	50,000.00	50,000	50,000	1.7%											70,530					
3.105	1	1	Each	Boiler, Emergency Building Heat, 1,200-MBH, Common	2035	18 to 25	13	49,500.00	49,500	49,500	0.7%													77,416			
3.260	1	1	Each	Cooling Tower, Capital Repairs	2029	10 to 15	7	77,000.00	77,000	77,000	0.9%								97,966								
3.265	1	1	Each	Cooling Tower, Replacement	2041	25 to 35	19	306,000.00	306,000	306,000	5.2%																
3.300	1	1	Allowance	Electrical System, Main Panels	2046	to 70+	24	142,000.00	142,000	142,000	2.9%																
3.360	2	2	Each	Elevators, Traction, Controls and Equipment	2048	to 25	26	357,000.00	714,000	714,000	15.4%																
3.440	1	1	Each	Generator, Emergency, 185-kW (Incl. Transfer Switch)	2027	to 30	5	72,500.00	72,500	72,500	0.8%						86,107										
3.555	1	1	Allowance	Life Safety System, Control Panels	2033	to 15	11	40,000.00	40,000	40,000	1.4%												58,399				
3.560	1	1	Allowance	Life Safety System, Emergency Devices	2043	to 25	21	246,000.00	246,000	246,000	4.5%																
3.600	100	50	Units	Pipes, Building Cooling, Phased	2050	to 80+	28 to 29	8,000.00	400,000	800,000	18.8%																
3.605	100	10	Units	Pipes, Domestic Water, Waste and Vent, Partial	2024	to 80+	2 to 30+	9,000.00	90,000	900,000	11.6%			96,410				110,633				126,954				145,683	
3.700	2	2	Each	Pumps, Cooling Tower, 25-HP	2033	to 20	11	13,500.00	27,000	27,000	0.3%												39,419				
3.701	2	2	Each	Pumps, Domestic Cold Water, 25-HP (Incl. Controls)	2033	to 20	11	19,000.00	38,000	38,000	0.5%												55,479				
3.770	1	1	Each	Pump, Fire Suppression, 100-HP (2023 Budgeted)	2023	to 50	1	26,000.00	26,000	26,000	0.2%		26,910														
3.820	1	1	Allowance	Security System	2031	10 to 15	9	14,000.00	14,000	14,000	0.5%										19,081						
3.880	1	1	Each	Trash Chute and Doors	2031	to 55	9	86,000.00	86,000	86,000	1.0%										117,209						
3.900	1	1	Each	Trash Compactor	2042	to 25	20	16,000.00	16,000	16,000	0.3%																
		1	Allowance	Reserve Study Update with Site Visit	2024	2	2	5,200.00	5,200	5,200	0.0%			5,200													
				Anticipated Expenditures, By Year ($11,322,790 over 30 years)								0	26,910	232,942	283,762	32,131	86,107	170,731	97,966	698,699	136,290	197,484	153,297	0	77,416	705,104	0

Years 2038 to 2052

RESERVE EXPENDITURES

Water Glades
T300
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Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Unit (2022)	Costs, $ Per Phase (2022)	Total (2022)	Percentage of Future Expenditures	16 2038	17 2039	18 2040	19 2041	20 2042	21 2043	22 2044	23 2045	24 2046	25 2047	26 2048	27 2049	28 2050	29 2051	30 2052
				Exterior Building Elements																						
1.060	24,000	6,000	Square Feet	Balconies, Concrete, Repairs and Waterproof Coating Applications, F	2030	to 25	8 to 26	13.00	78,000	312,000	5.1%					155,204						190,785				
1.105	6,000	6,000	Linear Feet	Balconies, Railings, Aluminum	2030	to 50	8	55.00	330,000	330,000	3.8%															
1.500	8,190	8,190	Square Feet	Roof, Modified Bitumen	2025	15 to 20	3	31.25	255,938	255,938	7.2%						527,086									
1.540	18,600	6,200	Linear Feet	Sealants, Windows and Doors, Phased	2024	to 20	2 to 14	3.00	18,600	55,800	1.4%					37,010						45,495				
1.880	52,000	52,000	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs	2024	5 to 7	2	2.00	104,000	104,000	7.8%					206,938						254,380				
				Interior Building Elements																						
2.100	2	2	Each	Elevator Cab Finishes	2043	to 25	21	25,000.00	50,000	50,000	0.9%						102,972									
2.200	930	930	Square Yards	Floor Coverings, Carpet, Hallways	2028	8 to 12	6	45.00	41,850	41,850	2.0%	72,567										102,363				
2.560	150	150	Each	Light Fixtures	2038	to 20	16	236.00	35,400	35,400	0.5%	61,383														
2.600	1	1	Allowance	Lobby, Renovation, Complete (Incl. Rest Room)	2036	to 20	14	145,000.00	145,000	145,000	2.1%															
2.605	1	1	Allowance	Lobby, Renovation, Partial (Incl. Rest Room)	2026	to 10	4	28,000.00	28,000	28,000	0.8%									63,933						
2.800	8,800	8,800	Square Feet	Paint Finishes, Hallways	2028	8 to 12	6	0.80	7,040	7,040	0.3%	12,207										17,220				
2.980	30,000	30,000	Square Feet	Wall Coverings, Hallways	2038	to 20	16	3.00	90,000	90,000	1.4%	156,059														
				Building Services Elements																						
3.070	1	1	Each	Air Handling and Condensing Units, Split System, Hallways	2032	15 to 20	10	50,000.00	50,000	50,000	1.7%												126,578			
3.105	1	1	Each	Boiler, Emergency Building Heat, 1,200-MBH, Common	2035	18 to 25	13	49,500.00	49,500	49,500	0.7%															
3.260	1	1	Each	Cooling Tower, Capital Repairs	2029	10 to 15	7	77,000.00	77,000	77,000	0.9%															
3.265	1	1	Each	Cooling Tower, Replacement	2041	25 to 35	19	306,000.00	306,000	306,000	5.2%				588,285											
3.300	1	1	Allowance	Electrical System, Main Panels	2046	to 70+	24	142,000.00	142,000	142,000	2.9%									324,233						
3.360	2	2	Each	Elevators, Traction, Controls and Equipment	2048	to 25	26	357,000.00	714,000	714,000	15.4%											1,746,414				
3.440	1	1	Each	Generator, Emergency, 185-kW (Incl. Transfer Switch)	2027	to 30	5	72,500.00	72,500	72,500	0.8%															
3.555	1	1	Allowance	Life Safety System, Control Panels	2033	to 15	11	40,000.00	40,000	40,000	1.4%											97,838				
3.560	1	1	Allowance	Life Safety System, Emergency Devices	2043	to 25	21	246,000.00	246,000	246,000	4.5%						506,620									
3.600	100	50	Units	Pipes, Building Cooling, Phased	2050	to 80+	28 to 29	8,000.00	400,000	800,000	18.8%													1,048,069	1,084,751	
3.605	100	10	Units	Pipes, Domestic Water, Waste and Vent, Partial	2024	to 80+	2 to 30+	9,000.00	90,000	900,000	11.6%			167,174				191,836				220,136				252,611
3.700	2	2	Each	Pumps, Cooling Tower, 25-HP	2033	to 20	11	13,500.00	27,000	27,000	0.3%															
3.701	2	2	Each	Pumps, Domestic Cold Water, 25-HP (Incl. Controls)	2033	to 20	11	19,000.00	38,000	38,000	0.5%															
3.770	1	1	Each	Pump, Fire Suppression, 100-HP (2023 Budgeted)	2023	to 50	1	26,000.00	26,000	26,000	0.2%															
3.820	1	1	Allowance	Security System	2031	10 to 15	9	14,000.00	14,000	14,000	0.5%									31,967						
3.880	1	1	Each	Trash Chute and Doors	2031	to 55	9	86,000.00	86,000	86,000	1.0%															
3.900	1	1	Each	Trash Compactor	2042	to 25	20	16,000.00	16,000	16,000	0.3%					31,837										
		1	Allowance	Reserve Study Update with Site Visit	2024	2	2	5,200.00	5,200	5,200	0.0%															
				Anticipated Expenditures, By Year ($11,322,790 over 30 years)								302,216	0	167,174	588,285	430,989	1,136,678	191,836	0	420,133	0	2,674,631	126,578	1,048,069	1,084,751	252,611

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
Water Glades
T300
Riviera Beach, Florida

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Reserves at Beginning of Year	*(Note 1)*	N/A	256,956	449,609	444,944	396,919	609,689	779,252	874,501	1,053,184	638,812	794,780	901,148	1,063,740	1,393,408	1,660,514	1,310,799
Total Recommended Reserve Contributions	*(Note 2)*	N/A	215,000	222,500	230,300	238,400	246,700	255,300	264,200	273,400	283,000	292,900	303,200	313,800	324,800	336,200	348,000
Estimated Interest Earned, During Year	*(Note 3)*	N/A	4,563	5,777	5,437	6,501	8,970	10,680	12,449	10,927	9,258	10,952	12,689	15,868	19,722	19,189	19,302
Anticipated Expenditures, By Year		N/A	(26,910)	(232,942)	(283,762)	(32,131)	(86,107)	(170,731)	(97,966)	(698,699)	(136,290)	(197,484)	(153,297)	0	(77,416)	(705,104)	0
Anticipated Reserves at Year End		$256,956	$449,609	$444,944	$396,919	$609,689	$779,252	$874,501	$1,053,184	$638,812	$794,780	$901,148	$1,063,740	$1,393,408	$1,660,514	$1,310,799	$1,678,101
Predicted Reserves based on 2022 funding level of:	$122,400	256,956	356,407	249,780	90,616	182,650	221,553	175,788	202,666	(374,744)	(393,596)						

(continued)

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

	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Reserves at Beginning of Year	1,678,101	1,758,277	2,156,358	2,404,438	2,245,482	2,256,869	1,572,723	1,845,764	2,331,038	2,415,861	2,941,358	798,982	1,211,286	719,989	204,609
Total Recommended Reserve Contributions	360,200	372,800	385,800	399,300	413,300	427,800	442,800	458,300	474,300	490,900	508,100	525,900	544,300	563,400	583,100
Estimated Interest Earned, During Year	22,192	25,281	29,454	30,029	29,076	24,732	22,077	26,974	30,656	34,597	24,155	12,982	12,472	5,971	4,808
Anticipated Expenditures, By Year	(302,216)	0	(167,174)	(588,285)	(430,989)	(1,136,678)	(191,836)	0	(420,133)	0	(2,674,631)	(126,578)	(1,048,069)	(1,084,751)	(252,611)
Anticipated Reserves at Year End	$1,758,277	$2,156,358	$2,404,438	$2,245,482	$2,256,869	$1,572,723	$1,845,764	$2,331,038	$2,415,861	$2,941,358	$798,982	$1,211,286	$719,989	$204,609	$539,906
														(NOTE 5)	*(NOTE 4)*

Explanatory Notes:

1) Year 2022 ending reserves are projected by Management as of February 28, 2023; FY2022 starts March 1, 2022 and ends February 28, 2023.
2) 2023 is the first year of recommended contributions.
3) 1.3% is the estimated annual rate of return on invested reserves
4) Accumulated year 2052 ending reserves consider the age, size, overall condition and complexity of the property.
5) Threshold Funding Year (reserve balance at critical point).

*Refer to the Reserve Expenditures pages for the full list of reserve elements

FIVE-YEAR OUTLOOK

Water Glades
T300
Riviera Beach, Florida

Line Item	Reserve Component Inventory	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027
	Exterior Building Elements						
1.500	Roof, Modified Bitumen				283,762		
1.540	Sealants, Windows and Doors, Phased			19,925			
1.880	Walls, Stucco, Paint Finishes and Capital Repairs			111,407			
	Interior Building Elements						
2.605	Lobby, Renovation, Partial (Incl. Rest Room)					32,131	
	Building Services Elements						
3.440	Generator, Emergency, 185-kW (Incl. Transfer Switch)						86,107
3.605	Pipes, Domestic Water, Waste and Vent, Partial			96,410			
3.770	Pump, Fire Suppression, 100-HP (2023 Budgeted)		26,910				
	Reserve Study Update with Site Visit			5,200			
	Anticipated Expenditures, By Year ($11,322,790 over 30 years)	0	26,910	232,942	283,762	32,131	86,107

4. RESERVE COMPONENT DETAIL

The Reserve Component Detail of this *Full 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*.

Exterior Building Elements

Building overview

Balconies, Concrete

Line Item: 1.060

Quantity: 100 concrete balconies comprising approximately 24,000 square feet of horizontal surface area. The balconies comprise reinforced concrete with a waterproof coating.

History: Original; Most of the balconies were waterproofed within the last 10 years. The building is currently getting almost the entire "D" stack of balconies waterproofed.

Condition: Reported satisfactory overall

Concrete balconies

Previous repair under second floor balcony

Crack with rust stain below second floor balcony

Signs of water intrusion under balconies at floors four and five

Useful Life: Capital repairs including a close-up visual inspection, patching of delaminated concrete, routing and filling of cracked concrete, and waterproof coating applications every up to 25 years for balconies covered with tile.

Component Detail Notes: A waterproof coating application minimizes storm water penetration into the concrete and therefore minimizes future concrete deterioration. *Failure to maintain a waterproof coating on the balconies will result in increased concrete repairs and replacements as the balconies age*. Capital repairs may also include replacement of the caulked joint between the balcony and the building, and repair or replacement of the metal railings and railing fastener attachments 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. The tile floor coverings are the responsibility of the unit owners. Our cost is based on information provided by the Association and includes the following activities per event:

- Partial depth replacement of less than one percent (<1%) of the concrete topsides, edges and undersides
- Crack repairs as necessary
- Repairs to the railings as necessary
- Replacement of perimeter sealants as needed
- Application of a waterproof coating (Urethane based elastomeric)

The Association should coordinate both balcony and facade capital repairs and maintenance to allow for the possible use of a single contractor and combine any applicable staging or mobilization costs. Also, coordinated repairs will reduce disruption to unit owners.

Balconies, Railings, Aluminum

Line Item: 1.105

Quantity: 6,000 linear feet of aluminum railings at the balconies

History: Original

Condition: Good to fair overall

Aluminum railings overview

Typical aluminum railings

Useful Life: Up to 50 years (The useful life of the finish is indeterminate. Future updates of this Reserve Study will again consider the need to refinish the railings based on condition.)

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 is based on coordination with the exterior painting. We defer replacement based on the current condition.

Roof, Modified Bitumen

Line Item: 1.500

Quantity: Approximately 8,190 square feet

History: The age was unavailable at the time of our inspection. The Association conducts inspections of the roof annually. We concur with this preventive maintenance practice and recommend the Association continue to fund these inspections through the operating budget.

Condition: Fair overall with periodic evidence of standing water, bulges in the coating and patches evident. Management does not report history of leaks

Modified bitumen roof overview

Cracks in coating

Bulges in coating

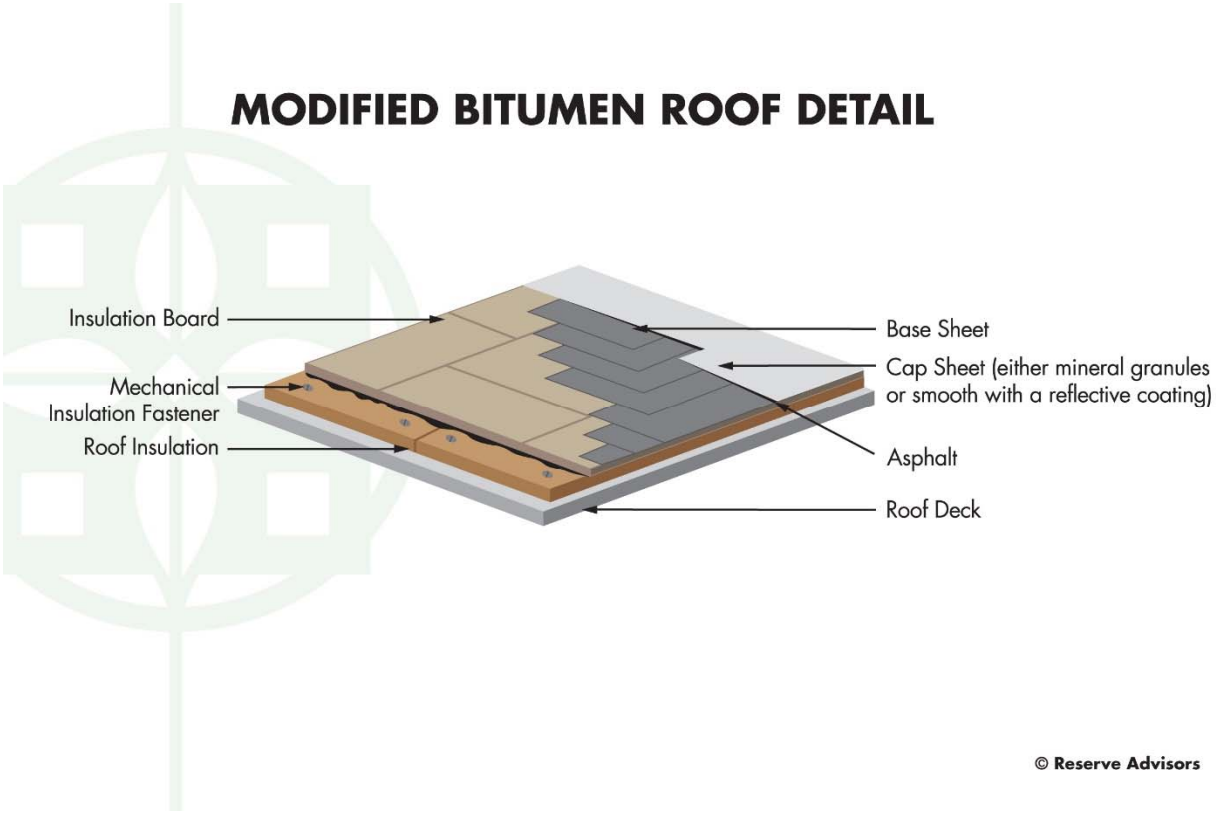
Cracks, bulges and previous repairs

Modified bitumen roof overview

Coating cracks

Useful Life: 15- to 20-years

Component Detail Notes: Modified bitumen roofing systems are composed of factory manufactured sheets of polymer-modified bitumen with polyester and/or fiberglass reinforcements. The bitumen adds a waterproof characteristic to the system and the reinforcements add strength and puncture resistance. These factory assembled roofing systems offer the advantages of a built-up roofing system through a less labor intensive installation. The following detail depicts a typical modified bitumen roof although it may not reflect the actual configuration at T300:



Contractors can install a new modified bitumen roof in one of two ways: *tear-off* or an *overlay*. An overlay is the application of a new roof membrane over an existing roof. This method, although initially more economical, often covers up problems with the deck, flashing and saturated insulation. The tear-off method of replacement includes removal of the existing roofing, flashings and insulation, and installation of a new roofing system.

The contractor should follow the manufacturer's directions and specifications upon installation of the roof. The contractor should remove the original insulation if saturated or compacted and apply a new layer of insulation per the manufacturer's instructions. The insulation should fit loosely with gaps no greater than ¼ inch. Gaps will cause failure of the membrane later. Mechanical fastening of the insulation is the best manner of installation. The contractor applies the base sheet of roofing over the insulation board. This sheet is normally 30-pound material. The contractor should start the installation of a roof membrane from the lowest points of the roof. Mechanical fastening and embedding the base sheet in a flood coat of hot asphalt is the best manner of installation. The membrane and plies are either torch applied (thermoset) or hot asphalt applied. We recommend the contractor use the torch method to install a modified bitumen membrane roof system.

Preventative Maintenance Notes: We recommend the Association maintain a service and inspection contract with a qualified professional and record all documentation of repairs conducted. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
    - Note drainage issues with water ponding after 48 hours of rainfall event. Verify scuppers and drains are free of debris. Replace damaged or missing drain covers.
    - Inspect perimeter flashing for loose fasteners, deflections, and sealant damage
    - Verify membrane surface is free of ruptures or damage, and areas of extensive blistering or bubbling
    - Remove oil spills or contaminants from mechanical equipment
    - In areas of possible foot traffic, remove any sharp debris or trash and note areas of crushed insulation
    - If frequency of leaks increase or location of water infiltration is unknown, we recommend the consideration of a thermal image inspection

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.

Sealants, Windows and Doors

Line Item: 1.540

Quantity: Approximately 18,600 linear feet of exterior sealants or *caulk*[1]

History: Varied ages.

Condition: Reported satisfactory overall

Useful Life: Up to 20 years

Component Detail Notes: The rate of deterioration of the sealants is not uniform due to the different exposures to sunlight and weather. The Association should anticipate gradual dispersed deterioration as the sealants age.

Correct preparation of the joint surfaces before re-application of a sealant is important to ensure proper adhesion. The surfaces must be removed of all contaminants, including the previous sealant material, paint, rust and other corrosion, water, grease, etc. The surfaces should also be dry and free from dust and grit, which can be removed using dry compressed air or brushes. The Association should ensure the manufacturer's instructions are followed in determining if the substrate is compatible with the sealant and that the chemical cleaners and solvents used to prepare the surfaces are also compatible with the sealant.

Several types of caulk are available with significantly different weathering and elongation properties. We recommend a silicone-based or polyurethane-based caulk. The major advantage of polyurethane-based caulks is their ability to bond to most construction surfaces without special preparation, such as primer application, as is required for alternate materials like silicone caulk. With proper surface preparation, i.e., removing surface contaminants, silicone-based caulks perform better than most other caulk materials. The weathering and elongation properties of silicone-based caulk give it a much longer useful life than other caulk materials.

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 T300 replace up to thirty-three percent (33.3%), or 6,200 linear feet of joint sealant per event.

[1] The terms sealant and caulk are used interchangeably throughout this text and throughout the industry.

Walls, Stucco

Line Item: 1.880

Quantity: Approximately 52,000 square feet of the building exteriors

History: Applied paint finishes and repaired from 2018 through 2019.

Condition: Fair overall with isolated bulges, cracks, previous repairs and rust evident.

Paint bulges at first floor column

Stucco crack with minor rust stain below second floor balcony

Stucco crack

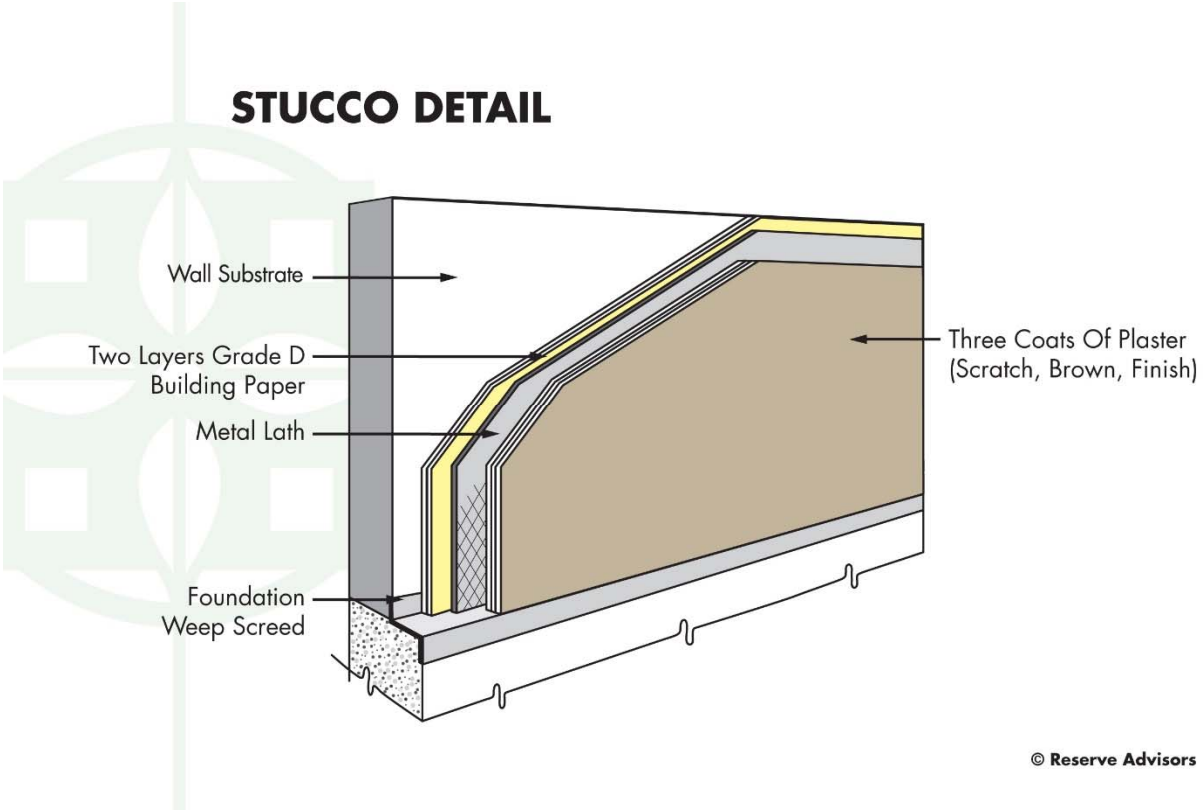
Small hole in stucco

Stucco walls

Typical stucco wall finishes

Useful Life: We recommend inspections, repairs and paint finish applications every five- to seven-years.

Component Detail Notes: The following graphic details the typical components of a stucco wall system on frame construction although it may not reflect the actual configuration at T300:



Correct and complete preparation of the surface before application of the paint finish maximizes the useful life of the paint finish and surface. The contractor should remove all loose, peeled or blistered paint before application of the new paint finish. The

contractor should then power wash the surface to remove all dirt and biological growth. Water-soluble cleaners that will not attack Portland cement are acceptable for removing stains.

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 is based on information provided by the Association and anticipates the following in coordination with each paint finish application:

- Complete inspection of the stucco
- Crack repairs as needed (Each paint product has the limited ability to cover and seal cracks but we recommend repair of all cracks which exceed the ability of the paint product to bridge.)
- Replacement of less than one percent (<1%), of the stucco walls (The exact amount of area in need of replacement will be discretionary based on the actual future conditions and the desired appearance.)

Interior Building Elements

Elevator Cab Finishes

Line Item: 2.100

Quantity: Two elevators; the cab finishes consist of:

- Tile floor coverings
- Mirror wall coverings
- Metal ceiling finishes

History: The elevators are planned to be replaced in 2023. The cost of the replacements is accounted for in the projected year-end reserve balance.

Condition: Unsatisfactory overall

Elevator cab finishes

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. Our cost is based on information provided by the Association.

Floor Coverings, Carpet, Hallways

Line Item: 2.200

Quantity: Approximately 930 square yards at the hallways (Contractor measurements will vary from the actual floor area due to standard roll lengths, patterns and installation waste.)

History: Replaced in 2018.

Condition: Good to fair overall with isolated stains evident.

Carpet floor coverings

Carpet stain at floor 12

Carpet stains at floor 26

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. Our cost is based on information provided by the Association.

Light Fixtures, Hallways

Line Item: 2.560

Quantity: Approximately 150 interior wall mounted light fixtures located throughout the hallways

History: Replaced in 2018.

Condition: Reported good to fair overall

Light fixture

Light fixture

Useful Life: Up to 20 years

Priority/Criticality: Per Board discretion

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

Lobby

Line Items: 2.600 and 2.605

Quantity: The lobby components include:

- Tile floor coverings
- Vinyl wall coverings, tile wall coverings and paint finishes
- Paint finishes at the ceilings
- Furnishings
- Light fixtures

History: Renovated in 2016.

Condition: Good to fair overall

Lobby overview

Lobby overview

Wall covering separation at lobby

Lobby rest room

Useful Life: Complete renovation up to every 20 years and partial renovation up to every 10 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The complete renovation should include replacement of all components listed above and the partial renovations should include the following:

- Application of paint finishes
- Replacement of up to fifty percent (50%) of the furnishings

Paint Finishes, Hallways

Line Item: 2.800

Quantity: Approximately 8,800 square feet on the ceilings at the hallways

History: Applied paint finishes in 2018.

Condition: Good to fair overall

Ceiling paint

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.

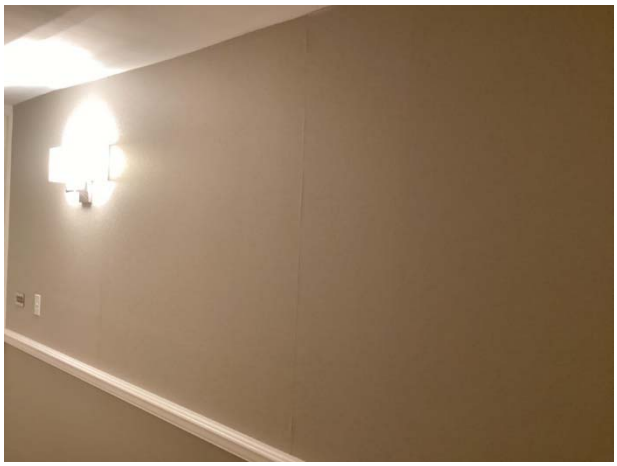
Wall Coverings, Hallways

Line Item: 2.980

Quantity: Approximately 30,000 square feet of wall coverings at the hallways

History: Installed in 2018

Condition: Fair overall with isolated peeling seams evident.



Peeling seem at floor 12

Useful Life: Up to 20 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost is based on information provided by the Association. We coordinate paint finishes with replacement of wall coverings.

Building Services Elements

Air Handling and Condensing Units, Split System

Line Item: 3.070

Quantity: One split system

History: The compressor was replaced within that last three years. The age of the air handler was unavailable at the time of our inspection.

Condition: Reported satisfactory without operational deficiencies

Split system air handling unit

Split system condensing unit

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 20-tons.

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.

Boiler, Emergency Building Heat

Line Item: 3.105

Quantity: One *Laars* gas-fired boiler

History: The age was unavailable at the time of our inspection. One of the two boilers is being removed through the operating budget and will not be replaced.

Condition: Reported satisfactory without operational deficiencies

Building heat boiler

Useful Life: 18- to 25-years

Component Detail Notes: The boiler has an *input* capacity of 1,200-MBH (thousand British Thermal Units per hour) and an efficiency of eighty-two percent (82%). The lack of replacement parts, increased efficiencies of new units, increased maintenance costs and corrosion of components will eventually justify complete replacement.

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The Association has a current preventative maintenance contract in place. 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:

- Weekly:
  - Inspect for leaking water around boilers
  - Check temperature readings
  - Verify vent is unobstructed
  - Conduct boiler blowdown to minimize corrosion and remove suspended solids in system
  - Clean pilot and burner assemblies
- Monthly:

- Check water and pressure levels
- Check controls and switches for proper operating
- Check and inspect condensate drain
- Check all gaskets for tight sealing

- Annually:
  - Conduct full inspection of burners and flues
  - Clean and inspect tubes to reduce scaling
  - Inspect any pressure relief valves
  - Clean and recondition feed water pumps
  - Inspect electrical terminals and controls
  - Seal doors/access panels
  - Adjust air/fuel ratios 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. Our estimate of cost includes an allowance for replacement of the controls.

Cooling Tower

Line Items: 3.260 and 3.265

Quantity: One cooling tower

History: The age was unavailable at the time of our inspection.

Condition: Reported satisfactory without operational deficiencies

Cooling tower

Useful Life: Replacement every 25- to 35-years with capital repairs every 10- to 15-years

Component Detail Notes: Proper maintenance includes the following:

- Keeping all areas free of debris and build-up
- Effective water treatment program
- Seasonal testing of valves and controls for proper operation
- Inspection, adjustment and repairs of mechanical components as recommended by the manufacturer
- Annual inspection of components for corrosion or decay
- Capital repairs every 10- to 15-years

Capital repairs include a complete inspection of the cooling tower, pumps, motor drives and controls, replacement of the fill media, spray nozzles and any corroded areas, application of an internal protective coating and structural repairs. In addition, capital repairs may include partial or complete replacement of the motors, pumps, controls and valves.

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:

- Daily:
    - Routine visual and audial assessments to determine if any unusual noises or vibrations are coming from the unit
    - Check basin water and operating oil levels and adjust as needed
    - Check surroundings and ensure paths to the cooling tower are clear of obstructions and trip hazards
- Weekly:
    - Inspect air inlet louvers/shields for blockages
    - Check for water leakage
- Monthly:
    - Inspect for fill media for displacement, damage, dry spots and obstructions. Dry spots may indicate cracks or clogs with the spray nozzles.
    - Check oil seals and oil static levels
    - Check make-up valve, bleed rate and belt condition
    - Conduct water treatment analysis
- Quarterly:
    - Inspect cold water basin and spray nozzles
    - Inspect the fill media for scale buildups. Descaling will increase energy conservations.
    - Flush water distribution system, drain basin and piping
    - Adjust belt tension
    - Lubricate fan shaft bearings and motor base
    - Check motor voltage and current
    - Clean fan motor exterior

- Check fan drain holes for obstructions
- Check fan clearance and balance

- Annually:
  - Complete inspection of components for corrosion or decay
  - Check drive alignment
  - Coat steel shafts with corrosion inhibitor as needed
  - Pressure wash components including fill and basin
- Seasonal
  - Drain and sanitize

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.

Electrical System

Line Item: 3.300

History: Primarily original to construction

Condition: Reported satisfactory without operational deficiencies.

Electrical system main panels on roof

Electrical system main panels on first floor

Useful Life: Up to and sometimes beyond 70 years

Component Detail Notes: The system includes breaker type circuit protection panels for low ampacity circuits.

We give a brief overview of electrical system components in the following sections of this narrative:

Primary Switchgear - The primary switchgear is located where the electric supply comes into the building. Switchgear can include associated controls, regulating,

metering and protective devices, and is used for the transmission, distribution and conversion of electric power for use within the building. Switchgear components have a useful life of up to and sometimes beyond 70 years. Replacement is often determined by a desired upgrade of the entire electrical system.

Transformer - A transformer is an electric device with two or more coupled windings used to convert a power supply from one voltage to another voltage. Transformers within a building lower the supplied electrical voltage to a level that can be utilized by the building's equipment and unit owners. Transformers do not utilize mechanical components and therefore have a long useful life. However, the Association should anticipate periodic replacement of a limited quantity of transformers.

Distribution Panel - The distribution panel is an electric switchboard or panel used to control, energize or turn off electricity in total or for individual circuits. The panel also distributes electricity to individual and controllable circuits. One or more distribution panels may exist and further distribute electricity to individual panel boards for each unit. The distribution panel is enclosed in a box and contains circuit breakers, fuses and switches. Distribution panels have a useful life of up to and sometimes beyond 70 years.

Circuit Protection - Once electricity is distributed throughout the building and is at a usable voltage level, the electricity is divided into circuits. Each circuit requires circuit protection. Circuit protection is necessary to prevent injury and fires, and minimize damage to electrical components and disturbances to the electrical system. Abnormalities in the circuit can include overloads, short circuits and surges. Circuit protection devices are commonly referred to as circuit breakers and fuses. For the protection of the circuits in the units and common areas, we recommend the use of only circuit breakers as they are safer than fuses. However, the use of fuses is common for equipment like emergency systems and individual items of equipment. Fuses with a low capacity rating can easily be replaced with fuses of a higher rating resulting in an unprotected, overloaded and unsafe circuit. The circuit protection panels have a useful life of up to and sometimes beyond 70 years.

Conductors - Conductors are the electrical wires that convey electricity to the units, light fixtures, receptacles and appliances.

Conductor Insulation and Conduit - Conductor insulation provides protection against the transfer of electricity. Conductor insulation can eventually become brittle and damaged from rodents or heat from many years of service. Conductor conduit is a pipe or tube used to enclose insulated electric wires to protect them from damage. Steel conductor conduit, although galvanized, will eventually rust if used in damp conditions. The useful life of conductor insulation and conduit is indeterminate.

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:

- Annually:
  - Inspect system for signs of electrical overheating, deterioration, and/or panel corrosion
  - Clean and vacuum exterior and interior switchboards
- Five-Year Cycles:
  - Check power meters, lamps, indicators, and transformers for deficiencies
  - Inspect wiring, relays, power supply units, and timers
  - Verify surge protection is intact
- As-needed:
  - Test outlets and ground-fault circuit interrupters (GFCI's) for faulty components
  - Examine the insulation at switchgears for signs of deterioration or cracking
  - Ensure all conductors are clean and dry with no moisture build-up
  - Check and inspect for loose wire connections
  - Clean and clear dust and debris away from system components
  - Check for flickering or dimming light fixtures as these could indicate a short in the wiring, arcing, or an over-extension of the electrical system
  - Conduct thermal image scanning if system experiences numerous or consistent outages
  - Keep an accurate record of all repairs to the electrical system

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 to replace the main switchgear, distribution and circuit protection panels. Updates of this Reserve Study will consider possible changes in the scope and times of component replacements based on the conditions, including the need for replacement of the wires.

We recommend the Association conduct thermoscans of the distribution panels and circuit protection panels, and inspections of the transformers for any indications of arcing, burning or overheating on a regular basis, funded through the operating budget. Verification of the integrity of all connection points minimizes the potential for arcing and fires.

Elevators, Traction

Line Item: 3.360

Quantity: Two traction elevators

History: The elevators are planned to be replaced in 2023. The cost of the replacements is accounted for in the projected year-end reserve balance.

Condition: Reported unsatisfactory

Traction elevator equipment

Traction elevator hoists and motors

Useful Life: Up to 25 years however, the scarcity of parts, and the potential frequency and duration of service interruption makes controls replacement more desirable as the components age.

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:

- Ongoing:
  - Maintain a maintenance contract with a qualified professional for the elevator(s) and follow the manufacturer's specific recommended maintenance plan adhering to local, state, and/or federal inspection guidelines
- As-needed:
  - Keep an accurate log of all repairs and inspection dates
  - Inspect and adjust misaligned door operators
  - Clear and remove any items located in the elevator machine room(s) not associated with the elevator components (These rooms should never be used for storage)
  - Inspect electrical components for signs of overheating or failure
  - Inspect controls
  - Lubricate the hoist cables
  - Inspect hoist cables and motors for signs of wear or deterioration
  - Ensure air temperature and humidity of machine/pump housing room meets the designated specified range for proper operation
  - Ensure all call buttons are in working condition

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 is based on information provided by the Association. We anticipate replacement of the following traction elevator system components:

- Cab control panels
- Door operators
- Hallway panels/buttons
- Hoists and motors
- Microprocessor based controllers

Generator, Emergency

Line Item: 3.440

Quantity: One *Cummins* 185-kW (kilowatt) diesel generator

History: The age was unavailable at the time of our inspection.

Condition: Reported satisfactory without operational deficiencies

Emergency generator

Transfer switch

Useful Life: Up to 30 years

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The Association conducts quarterly load tests. We also recommend the Association maintain a maintenance contract with a qualified professional. As a reference, the Association may consult the following document: *NFPA 110, Standard for Emergency and Standby Power Systems*. 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:

- Weekly:
  - Check fuel and oil levels
  - Inspect cooling and exhaust systems
  - Check battery, electrical components and transfer switches
  - Run generator without load and look for unusual conditions such as leaks
- Monthly:
  - Exercise generator under load test for minimum of 30 minutes
  - Check oil levels before running and after 10 minutes of run time
- Annually:
  - Complete full inspection and necessary repairs
  - Change fuel and air filters
  - Change oil and replace oil filter
  - Change spark plugs
  - Flush cooling system

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 estimate of cost includes replacement of the transfer switch. We recognize that the transfer switch may require replacement prior to the replacement of the generator. For purposes of this Reserve Study, we assume coordination of replacement with the generator.

Life Safety System

Line Items: 3.555 and 3.560

Quantity: The life safety system at T300 includes the following components:

- Audio/visual fixtures
- Control panel
- Detectors
- Exit light fixtures
- Pull stations
- Wiring

History: Installed in 2018.

Conditions: Reported satisfactory without operational deficiencies.

Control panel and voice communication system

Secondary panel at lobby

Useful Life: Up to 25 years for the devices and up to 15 years for the control panels

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. In accordance with *NFPA 72* (National Fire Alarm and Signaling Code) 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 age of the components, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
  - Inspect and test all components and devices, including, but not limited to, control panels, annunciators, detectors, audio/visual fixtures, signal transmitters and magnetic door holders
  - Test backup batteries
- As-needed:
  - Ensure clear line of access to components such as pull stations
  - Ensure detectors are properly positioned and clean of debris

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. Changes in technology or building codes may make a replacement desirable prior to the end of the functional life. Our estimate of future cost considers only that amount necessary to duplicate the same functionality. Local codes or ordinances at the actual time of replacement may require a betterment as compared to the existing system. A betterment could result in a higher, but at this time unknown, cost of replacement.

Pipes

Line Items: 3.600 and 3.605

Quantity: Based on the layout and configuration of the units, we have estimated the quantity of the interior building plumbing. Future updates of this Reserve Study will incorporate additional information if it becomes available.

History:

- Building Cooling – Original
- Domestic Water – Primarily original. Some of the pipes have been replaced.
- Sanitary Waste Disposal and Vent – The Association has historically replaced sections of sanitary waste pipes as needed.

Condition: Reported satisfactory without operational deficiencies

Component Detail Notes:

Building Cooling - The building cooling system at T300 have a useful life of up to and sometimes beyond 80 years.

Domestic Water - Copper piping is the predominant type of pipe used in new construction for domestic water piping. With low mineral content in the water, the useful life of copper domestic water pipes is up to and sometimes beyond 80 years. However, there is recent evidence that copper piping prematurely develops pinhole leaks. In the event that numerous pinhole leaks develop or occur throughout the system of pipes, the Association should also consider “in-place” pipe restoration technology. This process includes drying, sandblasting away interior pipe occlusions and applying an epoxy lining to the interior surfaces of the pipes. Future updates of this study will consider the possibility of the pipe restoration process in lieu of pipe replacement at the Association. Restoration technology can extend the useful life of a pipe system thus avoiding a system pipe replacement.

Sanitary Waste Disposal and Vent- The cast iron pipes typically deteriorate from the inside out as a result of sewer gases, condensation and rust.

Valves - The piping systems include various valves. Identification of a typical useful life and remaining useful life for individual valves is difficult. Associations typically replace valves on an as needed basis in our experience.

Pipes, Remaining - We anticipate a useful life of up to and sometimes beyond 100 years for the remaining pipes, which may include fire standpipes, gas supply lines, interior sprinkler pipes, among others. Therefore, we do not foresee the need to budget for replacement of these pipes within the 30-year scope of this study. Future updates of this study will revisit the need to include partial replacement of these pipes.

Preventative Maintenance Notes: The required preventative maintenance may vary in frequency and scope based on the building's age and demands of the piping systems. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Quarterly:
  - Inspect all visible piping for corrosion and leaks, including common areas or areas immediately surrounding pipes such as insulation, ceiling tiles or the floor for moisture, water accumulation, mold or mildew
- Annually:
  - Verify system pressure is sufficient (pressurized piping systems)
  - Check accessible valves for proper operation
  - Test backflow prevention devices
  - Inspect and obtain certification for pressure relief valves
  - Test drain line flow rates
  - Mechanically or chemically clean waste lines 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. Our cost for a single riser section assumes replacement of all pipes located within each wall opening, associated branch piping, fittings and minimal interior finishes. However, the cost does not include temporary housing for affected residents, pipes within the units or significant interior finishes.

We recommend the Association budget the following expenditures:

- Building cooling - Our estimate provides funds to replace approximately one hundred percent (100%) of the riser sections during the next 30 years.
- Domestic water, waste and vent - Our estimate provides funds to replace approximately eighty percent (80%) of the riser sections during the next 30 years.

An invasive analysis of the piping systems will provide various replacement options. Replacement of the systems as an aggregate event will likely require the use of special assessments or loans to fund the replacements.

Although it is likely that the times of replacement and extent of repair costs may vary from the budgetary allowance, T300 could budget sufficient reserves for the beginning of these pipe replacements and have the opportunity to adjust its future reserves up or down to meet any changes to these budgetary estimates. Updates of this Reserve Study would incorporate changes to budgetary costs through a continued historical analysis of the rate of deterioration and actual pipe replacements to budget sufficient reserves.

We recommend the Association budget for replacement of the following items through the operating budget:

- Replacement of valves on an as-needed basis

- Minor pipe repairs and replacements
- Invasive investigation of the condition of the piping system prior to beginning more aggregate replacements
- Rodding of waste pipe systems

Pumps

Line Items: 3.700 and 3.701

Quantity, History and Conditions:

- Cooling Tower - 25-HP, two each, reported satisfactory; The age was unavailable at the time of our inspection. Most of the pumps have been rebuilt.
- Domestic Cold Water - 25-HP, two each, reported satisfactory; The age was unavailable at the time of our inspection. Most of the pumps have been rebuilt.
-

Cooling pumps

Domestic water pumps

Domestic water pump control

Useful Lives:

- Cooling Tower, useful life of up to 20 years
- Domestic Cold Water, useful life of up to 20 years

Component Detail Notes: Major pumps included in this Reserve Study are those with a motor drive of at least five-HP. The Association should replace or repair all pumps with motor drives less than five-HP as needed and fund this ongoing maintenance activity through the operating budget. The Association may choose to rebuild pumps prior to complete replacement. However, this activity becomes less desirable as pumps age due to the scarcity of parts. We regard interim replacements of motors and component parts as normal maintenance and base our estimates on complete replacements. An exact replacement time for each individual pump is difficult, if not impossible, to estimate.

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. Valuable motor information to note in a preventative maintenance plan or schedule includes age of unit and last time of repair, horsepower and rpm (revolutions per minute), bearing type and conditions surrounding motor/pump. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
  - Check/adjust controls
  - Check/adjust pressure levels
  - Check for leaks
  - Conduct churn tests
- Quarterly:
  - Inspect/clean motors
  - Inspect mountings and connections for proper alignment, torque and condition

- Inspect/replace pump packing as needed, consider replacement with mechanical seals
- Check for appropriate oil levels

- Semi-annually:
  - Lubricate pumps, motors and motor bearings
- Annually:
  - Inspect belts for wear and/or replace belts
  - Clean filters if present
  - Assess proper internal component performance and replace damaged or malfunction components as necessary, and tighten fittings
  - Access temperature and vibration performance of motors in accordance with the intended design

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 costs include an allowance for replacement of the variable frequency drives (VFD) and controls.

Pump, Fire Suppression

Line Item: 3.770

Quantity: One 100-HP electric fire suppression pump

History: Original; The Association plans to replace the fire suppression pump in the near term.

Condition: Reported unsatisfactory with operational deficiencies.

Fire suppression pump

Fire suppression pump controls

Useful Life: Up to 50 years

Component Detail Notes: Prior to replacement, the Association should schedule periodic inspections to maintain its correct operation in the event of an emergency. T300 should also anticipate, as normal maintenance, interim repairs and component replacements to maximize its remaining useful life.

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The Association conducts quarterly churn tests. In accordance with *NFPA 25* (National Fire Protection Systems Code), 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. Valuable motor information to note in a preventative maintenance plan or schedule includes age of unit and last time of repair, horsepower and rpm (revolutions per minute), bearing type and conditions surrounding motor/pump. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
  - Check/adjust controls
  - Check/adjust pressure levels
  - Check for leaks
  - Conduct churn tests
- Quarterly:
  - Inspect/clean motors
  - Inspect mountings and connections for proper alignment, torque and condition
  - Inspect/replace pump packing as needed, consider replacement with mechanical seals
  - Check for appropriate oil levels
- Semi-annually:
  - Lubricate pumps, motors and motor bearings
- Annually:
  - Inspect belts for wear and/or replace belts
  - Clean filters if present
  - Assess proper internal component performance and replace damaged or malfunction components as necessary, and tighten fittings
  - Access temperature and vibration performance of motors in accordance with the intended design

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 is based on information provided by the Association and includes replacement of the pump, motor, and motor controller.

Security System

Line Item: 3.820

Quantity: T300 utilizes the following security system components:

- Automated proximity reader system (6 access points)
- Cameras (12)

History: Upgraded in 2016.

Condition: Reported satisfactory without operational deficiencies

Access point at entrance

Security system camera

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.

Trash Chute and Doors

Line Item: 3.880

Quantity: One trash chute

History: Original

Condition: Reported satisfactory without operational deficiencies

Trash chute door

Useful Life: Up to 55 years.

Component Detail Notes: Damaged doors or poor door operation will result in a decreased useful life. The Association should fund interim repairs and partial replacements of the doors through the operating budget.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
  - Clean doors and latches
  - In accordance with *NFPA 82* and fire code, ensure all trash chute doors self-latch and self-close
- Monthly:
  - Check operation of discharge door
  - Inspect fusible link and replace if necessary
  - If applicable, inspect, reinforce and/or replace discharge elbow
- Quarterly:
  - If applicable, check vent cap for damage and tighten fasteners
- Semi-annually:

- Lubricate and/or replace doors, hinges and latches
- Clear obstructions, clean and scrape trash chute and doors. The frequency of this activity may vary based upon occupancy and usage rates. This activity may also be based upon limitation of unwanted odors, prevention of harmful bacteria, pest infiltration and debris removal to further prevent fire hazards.

Priority/Criticality: Per Board discretion

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

Trash Compactor

Line Item: 3.900

Quantity: One each

History: Installed in 2017.

Condition: Reported satisfactory without operational deficiencies

Trash compactor enclosure

Trash compactor controls

Useful Life: Up to 25 years

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:

- Weekly:
  - Check hydraulic oil level with cylinder fully retracted to make sure oil is at appropriate level

- Check hydraulic hoses for kinks, leaks or other damage
- Check to make sure all safety guards and access covers are secure and in place

- Monthly:
  - Make sure lower door hinges and lock assembly are properly greased
  - Check all nut and bolt connections to make sure they are tight and secure
  - Clean the power unit and keep unit clear of debris
- Annually:
  - Have all electrical connections inspected by a licensed electrician to ensure proper connectivity and safe connections. The motor draw should be checked and recorded to help prevent failure.
  - The hydraulic system should be inspected and repaired, including draining and refilling the hydraulic fluid reservoir.
  - The oil filter should be changed after a maximum of 250 hours of operation. The oil filter should be changed more frequently for compactors located in hotter environments with more dust present.

Priority/Criticality: Per Board discretion

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

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. The Association can expense the fee for an Update with site visit from the reserve account. This fee is included in the Reserve Funding Plan. We base this budgetary amount on updating the same property components and quantities of this Reserve Study report. 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.

T300 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 quarterly 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 Unit Owners 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[1] set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level I Full Reserve Study." 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[2] 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 Riviera

[1] Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".
[2] See Credentials for additional information on our use of published sources of cost data.

Beach, Florida at an annual inflation rate[3]. 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 T300 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.

[3] Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.

6. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Founded in 1991, Reserve Advisors is the leading provider of reserve studies, insurance appraisals, developer turnover transition studies, expert witness services, and other engineering consulting services. Clients include community associations, resort properties, hotels, clubs, non-profit organizations, apartment building owners, religious and educational institutions, and office/commercial building owners in 48 states, Canada and throughout the world.

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 founders are also founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our founders 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. We've analyzed thousands of buildings, from as small as a 3,500-square foot day care center to a 2,600,000-square foot 98-story highrise. We also routinely inspect 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.

TYLER C. GIDDEN, E.I., RS
Responsible Advisor

CURRENT CLIENT SERVICES

Tyler C. Gidden, an Engineering Intern (E.I.) in environmental engineering, is an Advisor for Reserve Advisors. Mr. Gidden is responsible for the inspection and analysis of the condition of clients' property, 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 Analysis and Capital Replacement Forecast services and the preparation of Reserve Study Reports for apartments, condominiums, townhomes, and homeowners associations.

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

The Estates at Traditions Neighborhood Association - A 147 home community in Port St. Lucie, FL. This property was constructed in 2006 as part of a master association in Tradition. It includes single-family homes, gated entrances, and a pool with pool house.

Gateway at Riverwalk Condominium Association - Located in Sanford, Florida is this six-story, 72-unit building. This waterfront mixed-used mid-rise contains a parking garage, commercial space, and luxury club room.

Three Palms Pointe Condominium Association - A community built in 1970 with two 13-story buildings. Located in Clearwater, Florida, these high-rise buildings have a seawall, docks, pool, and community building.

Woodside Village Condo Association - Built in 1973, these 288 units compose 35 buildings in a wide variety of designs. This large community in Clearwater, Florida includes phased road projects and 3 different pools with community buildings.

Ancient Oaks RV Condominium Association - In the rural area of Okeechobee, Florida is this community built in 1983. It includes aspects like a seawall, docks, a water plant, and a wastewater plant.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Gidden was a Regional Consulting Manager for an environmental firm. He was responsible for the supervision of a team of environmental analysts who provided field inspections and consulting services for storm water controls in residential and commercial construction projects.

EDUCATION

University of Central Florida - B.S. Civil and Environmental Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Engineering Intern (E.I.) – Florida
Reserve Specialist (RS) – Community Associations Institute

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

NICOLE L. LOWERY, PRA, RS
Associate Director of Quality Assurance

CURRENT CLIENT SERVICES

Nicole L. Lowery, a Civil Engineer, is an Associate Director of Quality Assurance for Reserve Advisors. Ms. Lowery is responsible for the management, review and quality assurance of reserve studies. In this role, she assumes the responsibility of stringent report review analysis to assure report accuracy and the best solution for Reserve Advisors' clients.

Ms. Lowery has been involved with hundreds of Reserve Study assignments. The following is a partial list of clients served by Nicole Lowery demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

Amelia Surf & Racquet Club This oceanfront condominium community comprises 156 units in three mid rise buildings. This Fernandina Beach, Florida development contains amenities such as clay tennis courts, two pools and boardwalks.

Ten Museum Park This boutique, luxury 50-story high rise building in downtown Miami, Florida consists of 200 condominium units. The amenities comprise six pools including resistance and plunge pools, a full-service spa and a state-of-the-art fitness center. The property also contains a multi-level parking garage.

3 Chisolm Street Homeowners Association This historic Charleston, South Carolina community was constructed in 1929 and 1960 and comprises brick and stucco construction with asphalt shingle and modified bitumen roofs. The unique buildings were originally the Murray Vocational School. The buildings were transformed in 2002 to 27 high-end condominiums. The property includes a courtyard and covered parking garage.

Lakes of Pine Run Condominium Association This condominium community comprises 112 units in 41 buildings of stucco construction with asphalt shingle roofs. Located in Ormond Beach, Florida, it has a domestic water treatment plant and wastewater treatment plant for the residents of the property.

Rivertowne on the Wando Homeowners Association This exclusive river front community is located on the Wando River in Mount Pleasant, South Carolina. This unique Association includes several private docks along the Wando River, a pool and tennis courts for use by its residents.

Biltmore Estates Homeowners Association This private gated community is located in Miramar, Florida, just northwest of Miami, Florida and consists of 128 single family homes. The lake front property maintains a pool, a pool house and private streets.

Bellavista at Miromar Lakes Condominium Association Located in the residential waterfront resort community of Miromar Lakes Beach & Golf Club in Fort Myers, Florida, this property comprises 60 units in 15 buildings. Amenities include a clubhouse and a pool.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Ms. Lowery was a project manager with Kipcon in New Brunswick, New Jersey and the Washington, D.C. Metro area for eight years, where she was responsible for preparing reserve studies and transition studies for community associations. Ms. Lowery successfully completed the bachelors program in Civil Engineering from West Virginia University in Morgantown, West Virginia.

EDUCATION

West Virginia University - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Reserve Specialist (RS) - Community Associations Institute
Professional Reserves 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.

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. 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.

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.

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 T300 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) T300 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, LLC ("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 the Report. The inspection is made by employees generally familiar with real estate and building construction. Except to the extent readily apparent to RA, RA cannot and shall not opine on the structural integrity of or other physical defects in the property under any circumstances. Without limitation to the foregoing, RA cannot and shall not opine on, nor is RA responsible for, the property's conformity to specific governmental code requirements for fire, building, earthquake, and/or occupancy.

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 vapor, water, oil, gas, coal, or other subsurface mineral and use rights or such hidden conditions, and RA assumes no responsibility for any such conditions. The Report contains opinions of estimated replacement costs or deferred maintenance expenses and remaining useful lives, which are neither a guarantee of the actual costs or expenses of replacement or deferred maintenance 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.

RA assumes, without independent verification, the accuracy of all data provided to it. Except to the extent resulting from RA's willful misconduct in connection with the performance of its obligations under this agreement, you agree to indemnify, defend, and hold RA and its affiliates, officers, managers, employees, agents, successors and assigns (each, an "RA Party") harmless from and against (and promptly reimburse each RA Party for) any and all losses, claims, actions, demands, judgments, orders, damages, expenses or liabilities, including, without limitation, reasonable attorneys' fees, asserted against or to which any RA Party may become subject in connection with this engagement, including, without limitation, as a result of any false, misleading or incomplete information which RA relied upon that was 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. NOTWITHSTANDING ANY OTHER PROVISION HEREIN TO THE CONTRARY, THE AGGREGATE LIABILITY (IF ANY) OF RA WITH RESPECT TO THIS AGREEMENT AND RA'S OBLIGATIONS HEREUNDER IS LIMITED TO THE AMOUNT OF THE FEES ACTUALLY RECEIVED BY RA FROM YOU FOR THE SERVICES AND REPORT PERFORMED BY RA UNDER THIS AGREEMENT, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE. YOUR REMEDIES SET FORTH HEREIN ARE EXCLUSIVE AND ARE YOUR SOLE REMEDIES FOR ANY FAILURE OF RA TO COMPLY WITH ITS OBLIGATIONS HEREUNDER OR OTHERWISE. RA SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, ANY LOST PROFITS AND LOST SAVINGS, LOSS OF USE OR INTERRUPTION OF BUSINESS, HOWEVER CAUSED, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), BREACH OF WARRANTY, STRICT LIABILITY OR OTHERWISE, EVEN IF RA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL RA BE LIABLE FOR THE COST OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES. RA DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED OR OF ANY NATURE, WITH REGARD TO THE SERVICES AND THE REPORT, INCLUDING, WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Report - RA completes the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations and is deemed complete. RA will consider any additional information made available to RA within 6 months of issuing the Report and issue a revised Report based on such additional information if a timely request for a revised Report is made by you. 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. RA reserves the right to, and you acknowledge and agree that RA may, use any data provided by you in connection with the services, or gathered as a result of providing such services, including issuant any Report, in a de-identified and aggregated form for RA's business purposes.

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 the Report is limited to only the purpose stated herein. You acknowledge that RA is the exclusive owner of all intellectual property rights in and relating to the Report. You hereby acknowledge that any use or reliance by you on the Report for any unauthorized purpose is at your own risk and that you will be liable for the consequences of any unauthorized use or distribution of the Report. Use or possession of the Report by any unauthorized third party is prohibited. The 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 the Report in its entirety to the following third parties: members of your organization (including your directors, officers, tenants and prospective purchasers), your accountants, attorneys, financial institutions and property managers who need to review the information contained herein, and any other third party who has a right to inspect the Report under applicable law. Without the written consent of RA, you shall not disclose the Report to any other third party. By engaging our services, you agree that the Report contains intellectual property developed (and owned solely) by RA and agree that you will not reproduce or distribute the Report ***to any party that conducts reserve studies without the written consent of RA***.

RA will include (and you hereby agree that RA may include) your name in our client lists. RA reserves the right to use (and you hereby agree that RA may 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 - The 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 Report shall accrue an interest charge of 1.5% per month. Unless this agreement is earlier terminated by RA in the event you breach or otherwise fail to comply with your obligations under this agreement, RA's obligations under this agreement shall commence on the date you execute and deliver this agreement and terminate on the date that is 6 months from the date of delivery of the Report by RA. Notwithstanding anything herein to the contrary, each provision that by its context and nature should survive the expiration or early termination of this agreement shall so survive, including, without limitation, any provisions with respect to payment, intellectual property rights, limitations of liability and governing law.

Miscellaneous – Neither party shall be liable for any failures or delays in performance due to fire, flood, strike or other labor difficulty, act of God, act of any governmental authority, riot, embargo, fuel or energy shortage, pandemic, wrecks or delays in transportation, or due to any other cause beyond such party's reasonable control; provided, however, that you shall not be relieved from your obligations to make any payment(s) to RA as and when due hereunder. In the event of a delay in performance due to any such cause, the time for completion or date of delivery will be extended by a period of time reasonably necessary to overcome the effect of such delay. You may not assign or otherwise transfer this agreement, in whole or in part, without the prior written consent of RA. RA may freely assign or otherwise transfer this agreement, in whole or in part, without your prior consent. This agreement shall be governed by the laws of the State of Wisconsin without regard to any principles of conflicts of law that would apply the laws of another jurisdiction. Any dispute with respect to this agreement shall be exclusively venued in Milwaukee County Circuit Court or in the United States District Court for the Eastern District of Wisconsin. Each party hereto agrees and hereby waives the right to a trial by jury in any action, proceeding or claim brought by or on behalf of the parties hereto with respect to any matter related to this agreement.