

August 25, 2023

Janette Barcena  
The Landing Condominium Association, Inc.  
953 Salt Pond Place  
Altamonte Springs, Florida 32714

Re: The Landing Condominiums – Building 4  
Structural Integrity Reserve Study (SIRS)  
631 Buoy Lane  
Altamonte Springs, FL 32714  
UES Project No: 0811.2300006.0000

Dear Ms. Barcena:

UES Milestone Inspections, LLC (UES) has completed the mandatory Structural Integrity Reserve Study (“SIRS”) as required for condominiums and cooperative buildings for the above referenced property. UES’s assessment was performed in general accordance with Florida Statute (FS)718.112(2)(g) (or 719.106(3)(k) for Cooperatives) (effective May 26, 2022) and local requirements of the Authority Having Jurisdiction (AHJ).

Please contact the undersigned if you have any questions concerning UES’s Structural Integrity Reserve Study. UES appreciates this opportunity to provide professional services to The Landing Condominium Association, Inc. Pursuant to FS 553.899; UES provides herein a Summary of Material Findings and Recommendations.

Respectfully Submitted,  
UES Milestone Inspections, LLC  
Registry #36640

This item has been digitally signed and sealed by Miguel A. Santiago P.E., S.I. and digitally signed by Ricardo Solis, P.E. on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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## 1.0 INTRODUCTION

Per authorization of UES proposal 2211.0223.00049, sent June 20, 2023, by The Landing Condominium Association, Inc., UES has conducted a Structural Integrity Reserve Study (SIRS) of the 12-unit residential condominium building located at 631 Buoy Lane, Altamonte Springs, Florida 32714.

This report must be reviewed in its entirety to understand UES findings and their limitations. The Appendices are an integral part of this report and must be included during review. Please refer to the Appendices for definitions of common terms of reference used within.

UES has conducted the reserve study in general accordance with the National Reserve Study Standards published by the Association of Professional Reserve Analysts (APRA) and in general accordance with Florida Statute 718.112(2)(g)(or 719.106(3)(k) for Cooperatives) (effective May 26, 2022) and local requirements of the Authority Having Jurisdiction (AHJ).

This study was conducted by a Florida licensed Professional Engineer(s). Please refer to **Appendix D** for the qualifications of the project team.

UES's professionals Ricardo Solis, P.E. and Justin Szafranski, E.I. performed this study and visited the site on July 19, 2023. This report is principally based on UES's visual inspection of The Landing Condominium Building 4 and a review of relevant association documents.

In reviewing the engineering assumptions, cost estimates and projected fund values herein, UES understands their accuracy will likely vary beyond Year 5. Long-term physical plant maintenance projections are intended only to indicate the pattern of reserve expenditures and to guide financial planning. UES agrees with the Association of Professional Reserve Analyst recommendations that reserve studies should be updated regularly to allow periodic adjustment of facility plans and funding strategies.

PLEASE NOTE THAT PURSUANT TO FS 718.112(2)(G) (OR 719.106(3)(K) FOR COOPERATIVES) AN ASSOCIATION MUST HAVE A STRUCTURAL INTEGRITY RESERVE STUDY COMPLETED AT LEAST EVERY 10 YEARS AFTER THE CONDOMINIUM'S CREATION FOR EACH BUILDING ON THE CONDOMINIUM PROPERTY THAT IS THREE STORIES OR HIGHER IN HEIGHT. AS A RESULT, THE NEXT SIRS WILL NEED TO BE COMPLETED BY:

**AUGUST 25, 2023**

## 2.0 EXECUTIVE SUMMARY

In summary, as a result of UES's site inspection, we find the common area components to be in fair general condition. UES observed some deficiencies which are noted in subsequent sections herein. UES has included an inventory of "common area" components the Association has responsibility over which will require periodic repair or replacement over the term of this evaluation. UES has developed the opinions of the remaining useful life of each component and has estimated their current cost of required reserve expenditures for their repair or replacement. UES's projections have been included as annual reserves over its estimated remaining useful life.

### 3.0 PURPOSE AND SCOPE OF SERVICES

An association must have a **Structural Integrity Reserve Study (SIRS)** completed at least every 10 years after the condominium's creation for each building on the condominium property that is three stories or higher in height which includes, at a minimum, a study of the following items as related to the structural integrity and safety of the building:

- Roof.
- Structure, including load-bearing walls and other primary structural members and primary structural systems as those terms are defined in s. 627.706.
- Fireproofing and fire protection systems.
- Plumbing.
- Electrical systems.
- Waterproofing and exterior painting.
- Windows and exterior doors.
- Any other item that has a deferred maintenance expense or replacement cost that exceeds \$10,000 and the failure to replace or maintain such item negatively affects the items listed above as determined by the visual inspection portion of the structural integrity reserve study.

Integration into any existing association reserve fund summaries is NOT included in this scope.

The assessment was based on non-intrusive, non-destructive observations of the readily accessible areas of the property and the information available at the time of UES's site visit. Therefore, UES's descriptions, conclusions and recommendations were based solely on the observations of the various components and experience with similar projects. UES makes no representations that this report is a building code, safety, regulatory, environmental, or all-encompassing compliance inspection report.

The intent of this reserve study is to determine a structural integrity reserve needs plan for the Association, evaluate the current rate of contribution to the reserve fund, and, if required, to suggest alternate funding strategies. This study is in addition to the full reserve study required by (FS)718.301(4)(p).

This report is intended to be used as a tool by the Association's Board for considering and managing its future financial obligations, for determining appropriate reserve fund allocations, and for informing the individual Owners of the Association's required reserve expenditures and the resulting financial opinion.

For purposes of financial planning, Association-responsible expenses are typically divided into two categories:

- Operation and maintenance (O&M) of commonly held elements of real property and other assets. These O&M expenses usually include taxes, insurance, property management costs and other service fees.
- Reserve expenditures for major periodic repairs or replacement of commonly- held elements.

Normal, recurring O&M costs are typically paid by the individual Owners through periodic assessments or service fees equal to their share of the annual budget, which is estimated based on cost projections of either actual or average levels of expense. Some additional contingency amounts may be included in annual O&M budgets to result in a year-end surplus which is carried forward year-to-year to cover variations in annual costs or any uninsured losses. This carry-over is often referred to as an operating reserve.

These O&M costs, the funding and operating reserves are not typically considered by a Reserve Study. Long-term reserve expenditures, the funding plan and ensuring adequate Reserve Fund balances are the focus of this Reserve Study. Studies of this nature are important to ensure that a community will have sufficient funds for long-term, periodic reserve expenditure requirements to help preserve the value of the community and the units within it.

#### **4.0 LEVEL OF SERVICE**

Per the Association of Professional Reserve Analysts (APRA) there are three levels of Service

- I. Full Study
- II. Update with Site Visit Study
- III. Update without Site Visit Study

For the purpose of this evaluation, UES has conducted a full study which has included the evaluation of common area elements as dictated by Florida Statute (FS) 718.112(2)(g) (or 719.106(3)(k) for Cooperatives) (effective May 26, 2022) and local requirements of the Authority Having Jurisdiction (AHJ).

#### **5.0 SOURCES OF INFORMATION**

The following people were interviewed during UES's study: Property manager Janette Barcena and maintenance workers Alex and Austin.

The interiors of the units were not inspected at the time of inspection.

The following documents/information was provided:

- Estimate for building exterior painting project, dated October 2, 2019.
- Exhibit B – Roof total amounts for individual buildings.

UES engineers determined expected and replacement useful lives (EUL & RUL) of the common area components required as part of the SIRS and cost estimates for reserve expenditure budgets based on UES's evaluation of actual conditions and experience with similar building systems. In addition, UES also utilizes the following industry publications for data:

- On-Line RS Means – Construction Cost Data
- Fannie Mae – Expected Useful Life Tables
- National Association of Home Builders – Life Expectancy of Components

## 6.0 PROPERTY DESCRIPTION

The Landing Condominiums – Building 4 is located at 631 Buoy Lane, Altamonte Springs, FL 32714 in Seminole County. The building is 1 of 18 residential condominiums located on the property. Building 4 consists of 3 floors with 4 condominium units on each floor.

The primary vehicle entrances are off of Great Pond Drive at the east of the property via a paved driveway. Additionally, there are asphalt-paved drives and surface parking areas located throughout the property.

Building 4 has a wood framed superstructure with a combination of wood beams, wood shear walls, and prefabricated wooden floor and roof trusses.

Underground utility services include public water and sewer, including fire hydrants, electric power, telephone, and broadband cable.

Landscaping consists of trees, shrubs, and grassy areas along the perimeter of the building.

## 7.0 COMMON COMPONENTS

Please refer to **Appendix A** for UES’s Common Area Component Inventory. Condominium Association common components include:

- Building structure
- Roof.
- Common hallways/balconies.
- Common stairwells.
- Building perimeter.
- Site landscaping including trees, shrubs, landscaping planters, fountains, hardscape, and lawns.

Individual Unit Owners are responsible for maintenance & repairs of their units including the mechanical, plumbing, electrical components, doors, and windows within their respective units.

## 8.0 STRUCTURAL INTEGRITY RESERVE STUDY ITEMS

### 8.1 ROOF

#### Description and Observations

The roof system of the building is composed of architectural asphalt shingles. At the time of inspection, no damage was observed in the roof system. The roof system was observed to be in good condition.

#### Common Components and Required Reserve Expenditures

An asphalt shingle roof with proper installation, care, and maintenance has an average expected useful life (EUL) of 20 years. Proper maintenance includes but not limited to visually inspecting the roof at least once a year to ensure water is properly draining, inspecting shingles after every strong thunderstorm, trim branches that overhang the roof, and ensuring flashing at penetrations are not damaged or loose. See **Appendix A** for estimated cost and estimated contributions required.

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## 8.2 STRUCTURE, INCLUDING LOAD-BEARING WALLS AND OTHER PRIMARY STRUCTURAL MEMBERS AND PRIMARY STRUCTURAL SYSTEMS

### Description and Observations

Pursuant to FS 627.706, “Primary structural member” means a structural element designed to provide support and stability for the vertical or lateral loads of the overall structure and “Primary structural system” means an assemblage of primary structural members.

The building consists of exterior and interior wood framing walls and wood beams. The exterior walls are sheathed in plywood and stucco finished. The floor systems consist of prefabricated wooden floor trusses at the elevated units and reinforced concrete slabs at the elevated exterior stairway landings, walkways, and balconies. The roof framing system consists of prefabricated wooden roof trusses. The stairways consist of steel stringers with precast reinforced concrete steps. At the time of inspection, cracks in the elevated concrete slabs were observed in multiple locations (Photographs No. 9, 12, and 13). Missing bolts were observed in the steel framing located in the stairways in multiple locations (Photographs No. 14 and 15). Corrosion to the steel framing was observed in multiple locations in the stairways (Photographs No. 14 and 15). See **Appendix C** for reference site photographs.

### Common Components and Required Reserve Expenditures

A wood-framed structure and exterior reinforced concrete slabs with proper maintenance has a life span expectancy of 50 to 100 years. Proper maintenance includes but not limited to visually inspecting the exterior at least once a year to ensure water is properly shedding away from the building and evaluating the condition of the sealant material around penetrations and openings. Additional proper maintenance includes, repainting the building, annual visual inspection of all concrete slabs looking for signs of spalled concrete, cracks, and exposed steel reinforcement, and annual visual inspection of exposed wood framing members looking for signs of wood decay and wood deterioration. See **Appendix A** for estimated cost and estimated contributions required.

## 8.3 FIREPROOFING AND FIRE PROTECTION SYSTEMS

### Description and Observations

The fire protection system of the building consists of a wet pipe fire sprinkler system with sprinkler heads located in the units. In addition, a riser system and fire alarm are located at the exterior of the building. No issues or concerns were observed or reported at the time of inspection.

### Common Components and Required Reserve Expenditures

Fire protection systems have a life expectancy of 40 to 50 years with proper maintenance. However, corrosion issues can cause wet water systems (sprinkler systems) to start failing in 15 to 25 years. Proper maintenance includes but is not limited to routine inspections by a certified technician that looks for signs of wear and tear, corrosion, and damaged parts. See **Appendix A** for estimated cost and estimated contributions required.

## 8.4 PLUMBING

### Description and Observations

The plumbing system of the building was limited to visible inspection. Based on the age of the building, the plumbing system is likely PVC. No issues or concerns were observed or reported at the time of inspection.

### Common Components and Required Reserve Expenditures

Plumbing systems have a life expectancy of 50 years with proper maintenance. Proper maintenance includes but not limited to routine inspections by certified personnel that looks for signs of damage or corrosion, and assuring all plumbing fixtures work properly. See **Appendix A** for estimated cost and estimated contributions required.

## 8.5 ELECTRICAL SYSTEMS

### Description and Observations

The visible electrical systems inspected at the time of inspection included electrical meters, main disconnects, air conditioning disconnects on each unit, and electrical conduits. At the time of inspection, no damage or deficiencies were observed to the electrical systems.

### Common Components and Required Reserve Expenditures

Electrical systems have a life expectancy of 20 to 30 years with proper maintenance. Proper maintenance includes not limited to routine inspections by certified personnel who examines the condition of circuit breakers, ensures all connections are proper, and spot checks electrical components to ensure they are properly working. See **Appendix A** for estimated cost and estimated contributions required.

## 8.6 WATERPROOFING AND EXTERIOR PAINTING

### Description and Observations

The exterior finishes of the building consists of painted stucco finishes. At the time of inspection, cracks were observed in the stucco finish in multiple locations (Photographs No. 10 and 15). Overall, the general condition of the exterior finishes is in good condition. See **Appendix C** for reference site photographs.

### Common Components and Required Reserve Expenditures

Waterproofing and exterior paint have a life expectancy of approximately 7 to 10 years with proper maintenance. Proper maintenance includes but not limited to pressure washing exterior surfaces, routine inspections of exterior finishes to ensure paint peeling, bubbling and other imperfections are not present, and to seal all cracks and gaps with proper sealant. See **Appendix A** for estimated cost and estimated contributions required.



## 8.7 WINDOWS AND EXTERIOR DOORS

### Description and Observations

The building has no common windows or doors. All windows and exterior doors are the unit owner's responsibility.

## 8.8 DEFERRED MAINTENANCE ITEMS AS DICTATED BY FLORIDA STATUTE (FS)553.899.

### Description and Observations

There are no additional deferred maintenance items in which failure to replace or maintain would negatively affect the items listed above.

## 9.0 CURRENT DEFICIENCIES

Based on UES's observations, UES identified the following construction deficiency, which may require corrective action:

- Damage was observed to the metal balcony edge flashing in multiple locations. See **Appendix C** Photographs No. 8 and 9.
- Cracks in the exterior stucco finishes were observed in multiple locations. See **Appendix C** Photographs No. 10 and 15.
- Ponding was observed on the stairway landing located in the northwest stairway. See **Appendix C** Photograph No. 11.
- Cracks in the elevated concrete slabs were observed in multiple locations. See **Appendix C** Photographs No. 9, 12, and 13.
- Missing fasteners were observed in the steel framing located in the southeast stairway in multiple locations. See **Appendix C** Photographs No. 14 and 15.
- Corrosion to the steel framing was observed in multiple locations in the stairways. See **Appendix C** Photographs No. 14 and 15.

## 10.0 EXPECTED LIFE AND VALUATION

### 10.1 OPINIONS OF USEFUL LIFE

For components which require periodic reserve expenditures for their repairs or replacement, the frequency of work equals the typical, industry accepted expected useful life (EUL) for the type of feature:

$$\text{Component's Frequency of Reserve Expenditure} = \text{Component's EUL}$$

The remaining useful life (RUL) of a component before the next reserve expenditure for its repair or replacement is equal to the difference between its EUL and its age:

$$\text{RUL} = \text{EUL} - \text{AGE}$$

The condition and rate of deterioration of actual site improvements and building elements rarely conform to such simple analysis. And, often, a property's history and available documentation does not provide any record of a particular component's actual age.

In UES's experience, the effective age and actual RUL of an installed item vary greatly from its actual age and calculated RUL. These variances depend on the quality of its original materials and workmanship, level of service, climatic exposure, and ongoing maintenance. UES's opinion of the effective age, EUL and RUL of each common component included in the SIRS is based on UES's evaluation of its existing condition and consideration of the aforementioned factors.

As a result, in preparing the Reserve Expenditure schedule for the SIRS, UES factored in the following considerations:

- Accelerate the schedule of work for components found to be in poorer condition than expected for their age.
- Defer work for components observed to be in unusually good condition.

In reality, reserve repair and replacement work for some components is often spread over a number of years. This may be done because not all on-site installations of a particular type of component age or deteriorate at the same rate; Or work may be scheduled in phases to limit disruption or ease cash flow.

For these reasons, when it seems appropriate, UES will spread some budgets over multiple years. However, it is beyond the scope of this reserve study to prioritize the need for work between a number of buildings or installed locations or to closely specify or breakdown phased work packages.

In summary, UES has based these opinions of the remaining service life and expected frequency and schedule of repair for each common component on some or all of the following:

- Actual or assumed age and observed existing condition
- Association's or Property Manager's maintenance history and plan
- UES experience with actual performance of such components under similar service and exposure
- UES experience managing the repairs and replacements of such components. The following documentation was used as a guide for UES's considerations:
  - Fannie Mae - Expected Useful Life Tables
  - National Association of Home Builders - Life Expectancy of Components

## 10.2 ESTIMATES OF COST

In developing UES's estimate of reserve expenditure for most common components included in the SIRS, UES has estimated a quantity of each item and a unit cost for its repair or replacement. In some cases, it is more appropriate to estimate a lump sum cost for a required work package or 'lot'. Unless directed to take a different approach, UES assumes that contract labor will perform the work and apply appropriate installers mark-ups on supplied material and equipment. When required, UES's estimated costs include demolition and disposal of existing materials, and protection of other portions of the property. When appropriate for large reserve projects, UES has included soft costs for design and project management, and typical general contractor's cost for general conditions, supervision,

overhead and profit. UES’s opinions of unit and lump sum costs are based on some or all the following:

- Records of previous maintenance expenses
- Previously solicited Vendor quotations or Contractor proposals
- Provided reserve budgets developed by others
- UES project files on repairs and replacements at other properties

In addition, UES uses the following publications to guide the considerations:

- On-Line R S Means - Construction Cost Data
- Marshall & Swift Valuation Service - Facility Cost Index

Annual aggregated reserve expenditure budgets have been calculated for all years during the study period by inflating the annual amounts of current dollar cost estimates and compounding for inflation at 3.0% per year.

## 11.0 FINANCIAL ANALYSIS

Please refer to **Appendix A** which contains UES’s outline illustrating the findings.

### 11.1 RESERVE EXPENDITURE PROJECTIONS

Based on UES’s explorations and estimates described in Section 8 of this report, UES has identified likely reserve expenditures throughout the term.

In summary, the 30-year total of projected reserve expenditure budgets, at an inflation rate of 3% is \$520,604.

### 11.2 CURRENT FUNDING

UES’s analysis is based on initial information provided by the Association’s Board. The parameters of the analysis are listed below:

- Fiscal year Starting Date: January 1<sup>st</sup>, 2024
- For Designated Year: 2053
- Starting Balance: \$14,102
- Proposed Contribution Rate: \$12,504.67 per year
- Planned Increases: 3% per year
- Planned Special Assessments: NA
- Projected Average Return on Investment: NA
- Projected Rate of Inflation: 3%

## 12.0 STANDARD OF CARE AND WARRANTIES

UES performed the **Structural Integrity Reserve Study (SIRS)** as defined in (FS) 719.103(24), using methods and procedures and practices conforming to Florida Statute (FS) 718.112(2)(g) (or 719.106(3)(k) for Cooperatives) (effective May 26, 2022) and local requirements of the AHJ.

UES warrants that the findings contained in this report have been formulated within a reasonable degree of engineering certainty. These opinions were based on a review of the available information, associated research, onsite observations, as well as UES's education, knowledge, training, and experience. UES reserves the right to revise or update any of the assessments and/or opinions within this report as conditions change or additional information becomes available. UES's design professionals performed these professional services in accordance with the standard of care used by similar professionals in the community under similar circumstances.

The methodologies include reviewing information provided by other sources. UES treats information obtained from the document reviews and interviews concerning the property as reliable, note UES is not required to independently verify the information as provided. Therefore, UES cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete.

No other warranties are expressed or implied.



**APPENDIX A  
COMMON AREA BUILDING COMPONENT INVENTORY  
FINANCIAL EXHIBITS  
RESERVE REPORT**



**The Landing Condominiums - Building 4**  
 Altamonte Springs, Florida  
**RA Threshold Funding Model Summary**

Report Date	August 25, 2023
Budget Year Beginning	January 1, 2024
Budget Year Ending	December 31, 2024
Total Units	12

<i>Report Parameters</i>	
Inflation	3.00%
Annual Assessment Increase	3.00%
Interest Rate on Reserve Deposit	0.00%
2024 Beginning Balance	\$14,102

**Threshold Funding Model Summary**

- This is a 12 unit condominium that is located at 631 Buoy Lane, Altamonte Springs, FL 32714.
- A pooled reserve balance of \$253,843.34 (Total for all 18 buildings) for the condominium association was provided to UES by Janette Barcena.
- The starting balace is 1/18th of the pooled reserve balance provided.

***Threshold Funding Model Summary of Calculations***

Required Annual Contribution	\$12,504.67
<i>\$1,042.06 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$0.00</u>
Total Annual Allocation to Reserves	\$12,504.67
<i>\$1,042.06 per unit annually</i>	



**The Landing Condominiums - Building 4  
RA Threshold Funding Model Projection**

Beginning Balance: \$14,102

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2024	55,650	12,505		10,500	16,107	27,385	59%
2025	57,319	12,880		7,725	21,261	32,436	66%
2026	59,039	13,266		7,957	26,571	37,765	70%
2027	60,810	13,664		19,123	21,112	32,129	66%
2028	62,635	14,074		8,441	26,745	37,714	71%
2029	64,514	14,496		8,695	32,547	43,605	75%
2030	66,449	14,931		17,314	30,164	41,206	73%
2031	68,442	15,379		9,224	36,320	47,492	76%
2032	70,496	15,841		9,501	42,659	54,117	79%
2033	72,611	16,316		13,700	45,275	57,066	79%
2034	74,789	16,805		27,550	34,530	46,301	75%
2035	77,033	17,309		10,382	41,458	53,373	78%
2036	79,344	17,829		10,693	48,593	60,828	80%
2037	81,724	18,364		11,014	55,943	68,682	81%
2038	84,176	18,914		11,344	63,513	76,952	83%
2039	86,701	19,482		50,868	32,127	45,299	71%
2040	89,302	20,066		23,268	28,925	41,677	69%
2041	91,981	20,668		28,925	20,668	32,689	63%
2042	94,740	21,288		12,768	29,189	40,659	72%
2043	97,583	21,927		18,412	32,704	43,660	75%
2044	100,510	22,585		18,964	36,324	46,804	78%
2045	103,525	23,262		13,952	45,635	55,846	82%
2046	106,631	23,960		14,371	55,224	65,388	84%
2047	109,830	24,679		14,802	65,101	75,452	86%
2048	113,125	25,419		35,574	54,947	65,124	84%
2049	116,519	26,182		15,703	65,425	75,674	86%
2050	120,014	26,967		31,271	61,122	71,249	86%
2051	123,615	27,776		16,660	72,239	82,507	88%
2052	127,323	28,610		17,159	83,690	94,375	89%
2053	131,143	29,468		24,744	88,414	99,600	89%



**The Landing Condominiums - Building 4**  
**RA Component Funding Model Assessment & Category Summary**

Description	Replacement Year	Useful Life	Adjustment	Remaining Life	Current Cost	Assigned Reserves	Fully Funded
<b>Plumbing</b>							
Plumbing Syst. Routine Maint. and Insp.	2024	1	0	0	<u>2,500</u>	<u>2,500</u>	<u>2,500</u>
Plumbing - Total					<u>\$2,500</u>	<u>\$2,500</u>	<u>\$2,500</u>
<b>Roofing</b>							
Asphalt Shingle Roof Replacement	2039	20	0	15	<u>25,150</u>	0	<u>6,287</u>
Roofing - Total					<u>\$25,150</u>		<u>\$6,287</u>
<b>Painting</b>							
Exterior Painting	2027	7	0	3	10,000	3,602	5,714
Stucco Repairs	2030	10	0	6	<u>7,000</u>	<u>0</u>	<u>2,800</u>
Painting - Total					<u>\$17,000</u>	<u>\$3,602</u>	<u>\$8,514</u>
<b>Structural Components</b>							
Concrete and Stairway Repairs	2024	10	0	0	3,000	3,000	3,000
Wood Framing Repairs	2033	10	0	9	<u>3,000</u>	<u>0</u>	<u>300</u>
Structural Components - Total					<u>\$6,000</u>	<u>\$3,000</u>	<u>\$3,300</u>
<b>Electrical Systems</b>							
Elect. Syst. Routine Maint & Insp.	2024	1	0	0	<u>2,500</u>	<u>2,500</u>	<u>2,500</u>
Electrical Systems - Total					<u>\$2,500</u>	<u>\$2,500</u>	<u>\$2,500</u>
<b>Fire Protective Systems</b>							
Fire Protective Syst. Maintenance	2024	1	0	0	<u>2,500</u>	<u>2,500</u>	<u>2,500</u>
Fire Protective Systems - Total					<u>\$2,500</u>	<u>\$2,500</u>	<u>\$2,500</u>
Total Asset Summary					<u><u>\$55,650</u></u>	<u><u>\$14,102</u></u>	<u><u>\$25,602</u></u>

Percent Fully Funded	55%
Current Average Liability per Unit (Total Units: 12)	-\$958





**The Landing Condominiums - Building 4  
RA Annual Expenditure Detail**

Description	Expenditures
<i>No Replacement in 2024</i>	
<b>Replacement Year 2025</b>	
Concrete and Stairway Repairs	3,090
Elect. Syst. Routine Maint & Insp.	2,575
Fire Protective Syst. Maintenance	2,575
Plumbing Syst. Routine Maint. and Insp.	2,575
<b>Total for 2025</b>	<b><u>\$10,815</u></b>
<b>Replacement Year 2026</b>	
Elect. Syst. Routine Maint & Insp.	2,652
Fire Protective Syst. Maintenance	2,652
Plumbing Syst. Routine Maint. and Insp.	2,652
<b>Total for 2026</b>	<b><u>\$7,957</u></b>
<b>Replacement Year 2027</b>	
Elect. Syst. Routine Maint & Insp.	2,732
Exterior Painting	10,927
Fire Protective Syst. Maintenance	2,732
Plumbing Syst. Routine Maint. and Insp.	2,732
<b>Total for 2027</b>	<b><u>\$19,123</u></b>
<b>Replacement Year 2028</b>	
Elect. Syst. Routine Maint & Insp.	2,814
Fire Protective Syst. Maintenance	2,814
Plumbing Syst. Routine Maint. and Insp.	2,814
<b>Total for 2028</b>	<b><u>\$8,441</u></b>
<b>Replacement Year 2029</b>	
Elect. Syst. Routine Maint & Insp.	2,898
Fire Protective Syst. Maintenance	2,898
Plumbing Syst. Routine Maint. and Insp.	2,898
<b>Total for 2029</b>	<b><u>\$8,695</u></b>
<b>Replacement Year 2030</b>	
Elect. Syst. Routine Maint & Insp.	2,985



**The Landing Condominiums - Building 4  
RA Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2030 continued...</i></b>	
Fire Protective Syst. Maintenance	2,985
Plumbing Syst. Routine Maint. and Insp.	2,985
Stucco Repairs	8,358
<b>Total for 2030</b>	<b>\$17,314</b>
<b>Replacement Year 2031</b>	
Elect. Syst. Routine Maint & Insp.	3,075
Fire Protective Syst. Maintenance	3,075
Plumbing Syst. Routine Maint. and Insp.	3,075
<b>Total for 2031</b>	<b>\$9,224</b>
<b>Replacement Year 2032</b>	
Elect. Syst. Routine Maint & Insp.	3,167
Fire Protective Syst. Maintenance	3,167
Plumbing Syst. Routine Maint. and Insp.	3,167
<b>Total for 2032</b>	<b>\$9,501</b>
<b>Replacement Year 2033</b>	
Elect. Syst. Routine Maint & Insp.	3,262
Fire Protective Syst. Maintenance	3,262
Plumbing Syst. Routine Maint. and Insp.	3,262
Wood Framing Repairs	3,914
<b>Total for 2033</b>	<b>\$13,700</b>
<b>Replacement Year 2034</b>	
Elect. Syst. Routine Maint & Insp.	3,360
Exterior Painting	13,439
Fire Protective Syst. Maintenance	3,360
Plumbing Syst. Routine Maint. and Insp.	3,360
<b>Total for 2034</b>	<b>\$23,519</b>
<b>Replacement Year 2035</b>	
Concrete and Stairway Repairs	4,153
Elect. Syst. Routine Maint & Insp.	3,461



**The Landing Condominiums - Building 4  
RA Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2035 continued...</i></b>	
Fire Protective Syst. Maintenance	3,461
Plumbing Syst. Routine Maint. and Insp.	3,461
<b>Total for 2035</b>	<b>\$14,534</b>
<b>Replacement Year 2036</b>	
Elect. Syst. Routine Maint & Insp.	3,564
Fire Protective Syst. Maintenance	3,564
Plumbing Syst. Routine Maint. and Insp.	3,564
<b>Total for 2036</b>	<b>\$10,693</b>
<b>Replacement Year 2037</b>	
Elect. Syst. Routine Maint & Insp.	3,671
Fire Protective Syst. Maintenance	3,671
Plumbing Syst. Routine Maint. and Insp.	3,671
<b>Total for 2037</b>	<b>\$11,014</b>
<b>Replacement Year 2038</b>	
Elect. Syst. Routine Maint & Insp.	3,781
Fire Protective Syst. Maintenance	3,781
Plumbing Syst. Routine Maint. and Insp.	3,781
<b>Total for 2038</b>	<b>\$11,344</b>
<b>Replacement Year 2039</b>	
Asphalt Shingle Roof Replacement	39,183
Elect. Syst. Routine Maint & Insp.	3,895
Fire Protective Syst. Maintenance	3,895
Plumbing Syst. Routine Maint. and Insp.	3,895
<b>Total for 2039</b>	<b>\$50,868</b>
<b>Replacement Year 2040</b>	
Elect. Syst. Routine Maint & Insp.	4,012
Fire Protective Syst. Maintenance	4,012
Plumbing Syst. Routine Maint. and Insp.	4,012
Stucco Repairs	11,233
<b>Total for 2040</b>	<b>\$23,268</b>



**The Landing Condominiums - Building 4  
RA Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2041</b>	
Elect. Syst. Routine Maint & Insp.	4,132
Exterior Painting	16,528
Fire Protective Syst. Maintenance	4,132
Plumbing Syst. Routine Maint. and Insp.	4,132
<b>Total for 2041</b>	<b>\$28,925</b>
<b>Replacement Year 2042</b>	
Elect. Syst. Routine Maint & Insp.	4,256
Fire Protective Syst. Maintenance	4,256
Plumbing Syst. Routine Maint. and Insp.	4,256
<b>Total for 2042</b>	<b>\$12,768</b>
<b>Replacement Year 2043</b>	
Elect. Syst. Routine Maint & Insp.	4,384
Fire Protective Syst. Maintenance	4,384
Plumbing Syst. Routine Maint. and Insp.	4,384
Wood Framing Repairs	5,261
<b>Total for 2043</b>	<b>\$18,412</b>
<b>Replacement Year 2044</b>	
Elect. Syst. Routine Maint & Insp.	4,515
Fire Protective Syst. Maintenance	4,515
Plumbing Syst. Routine Maint. and Insp.	4,515
<b>Total for 2044</b>	<b>\$13,546</b>
<b>Replacement Year 2045</b>	
Concrete and Stairway Repairs	5,581
Elect. Syst. Routine Maint & Insp.	4,651
Fire Protective Syst. Maintenance	4,651
Plumbing Syst. Routine Maint. and Insp.	4,651
<b>Total for 2045</b>	<b>\$19,533</b>
<b>Replacement Year 2046</b>	
Elect. Syst. Routine Maint & Insp.	4,790



**The Landing Condominiums - Building 4  
RA Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2046 continued...</i></b>	
Fire Protective Syst. Maintenance	4,790
Plumbing Syst. Routine Maint. and Insp.	4,790
<b>Total for 2046</b>	<b>\$14,371</b>
<b>Replacement Year 2047</b>	
Elect. Syst. Routine Maint & Insp.	4,934
Fire Protective Syst. Maintenance	4,934
Plumbing Syst. Routine Maint. and Insp.	4,934
<b>Total for 2047</b>	<b>\$14,802</b>
<b>Replacement Year 2048</b>	
Elect. Syst. Routine Maint & Insp.	5,082
Exterior Painting	20,328
Fire Protective Syst. Maintenance	5,082
Plumbing Syst. Routine Maint. and Insp.	5,082
<b>Total for 2048</b>	<b>\$35,574</b>
<b>Replacement Year 2049</b>	
Elect. Syst. Routine Maint & Insp.	5,234
Fire Protective Syst. Maintenance	5,234
Plumbing Syst. Routine Maint. and Insp.	5,234
<b>Total for 2049</b>	<b>\$15,703</b>
<b>Replacement Year 2050</b>	
Elect. Syst. Routine Maint & Insp.	5,391
Fire Protective Syst. Maintenance	5,391
Plumbing Syst. Routine Maint. and Insp.	5,391
Stucco Repairs	15,096
<b>Total for 2050</b>	<b>\$31,271</b>
<b>Replacement Year 2051</b>	
Elect. Syst. Routine Maint & Insp.	5,553
Fire Protective Syst. Maintenance	5,553
Plumbing Syst. Routine Maint. and Insp.	5,553
<b>Total for 2051</b>	<b>\$16,660</b>



**The Landing Condominiums - Building 4  
RA Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2052</b>	
Elect. Syst. Routine Maint & Insp.	5,720
Fire Protective Syst. Maintenance	5,720
Plumbing Syst. Routine Maint. and Insp.	5,720
<b>Total for 2052</b>	<b>\$17,159</b>
<b>Replacement Year 2053</b>	
Elect. Syst. Routine Maint & Insp.	5,891
Fire Protective Syst. Maintenance	5,891
Plumbing Syst. Routine Maint. and Insp.	5,891
Wood Framing Repairs	7,070
<b>Total for 2053</b>	<b>\$24,744</b>

**The Landing Condominiums - Building 4**  
**RA Detail Report by Category**

Plumbing Syst. Routine Maint. and Insp. - 2024

Asset ID	1004	1 EA.	@ \$2,500.00
		Asset Actual Cost	\$2,500.00
		Percent Replacement	100%
Category	Plumbing	Future Cost	\$2,500.00
Placed in Service	January 2023	Assigned Reserves	\$5,000.00
Useful Life	1		
Replacement Year	2024	<i>No Future Assessments</i>	
Remaining Life	0		

<b>Plumbing - Total Current Cost</b>	<b>\$2,500</b>
<b>Assigned Reserves</b>	<b>\$5,000</b>
<b>Fully Funded Reserves</b>	<b>\$2,500</b>



**The Landing Condominiums - Building 4  
RA Detail Report by Category**

**Asphalt Shingle Roof Replacement - 2039**

Asset ID	1001	1 Lump Sum	@ \$25,150.00
		Asset Actual Cost	\$25,150.00
Category	Roofing	Percent Replacement	100%
Placed in Service	January 2019	Future Cost	\$39,182.88
Useful Life	20	Assigned Reserves	\$25,150.00
Replacement Year	2039	<i>No Future Assessments</i>	
Remaining Life	15		



<b>Roofing - Total Current Cost</b>	<b>\$25,150</b>
<b>Assigned Reserves</b>	<b>\$25,150</b>
<b>Fully Funded Reserves</b>	<b>\$6,287</b>



**The Landing Condominiums - Building 4  
RA Detail Report by Category**

**Exterior Painting - 2027**

Asset ID	1006	1 Lump Sum	@ \$10,000.00
Category	Painting	Asset Actual Cost	\$10,000.00
Placed in Service	January 2020	Percent Replacement	100%
Useful Life	7	Future Cost	\$10,927.27
Replacement Year	2027	Assigned Reserves	\$10,000.00
Remaining Life	3	<i>No Future Assessments</i>	

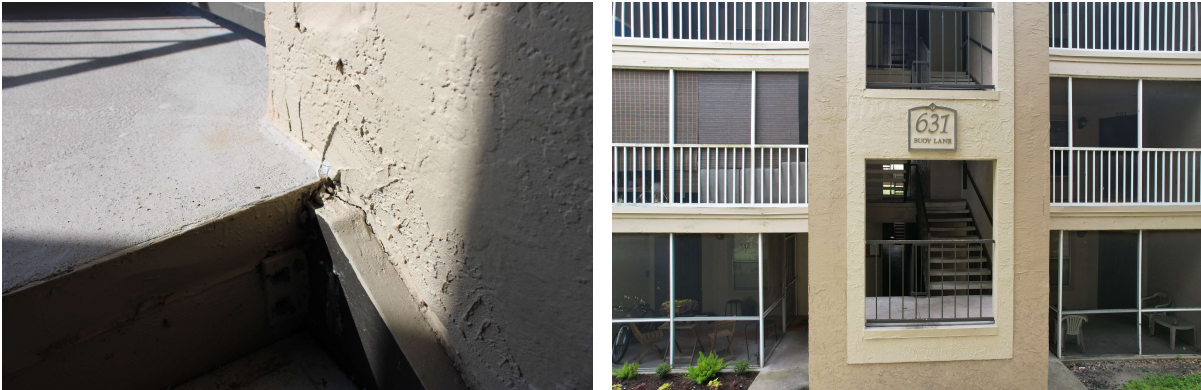


**Stucco Repairs - 2030**

Asset ID	1007	1 Lump Sum	@ \$7,000.00
Category	Painting	Asset Actual Cost	\$7,000.00
Placed in Service	January 2020	Percent Replacement	100%
Useful Life	10	Future Cost	\$8,358.37
Replacement Year	2030	Assigned Reserves	\$7,000.00
Remaining Life	6	<i>No Future Assessments</i>	

**The Landing Condominiums - Building 4  
RA Detail Report by Category**

*Stucco Repairs continued...*



<b>Painting - Total Current Cost</b>	<b>\$17,000</b>
<b>Assigned Reserves</b>	<b>\$17,000</b>
<b>Fully Funded Reserves</b>	<b>\$8,514</b>

**The Landing Condominiums - Building 4  
RA Detail Report by Category**

**Concrete and Stairway Repairs - 2024**

Asset ID	1008	1 Lump Sum	@ \$3,000.00
		Asset Actual Cost	\$3,000.00
		Percent Replacement	100%
Category	Structural Components	Future Cost	\$3,000.00
Placed in Service	January 2024	Assigned Reserves	\$6,000.00
Useful Life	10		
Replacement Year	2024	<i>No Future Assessments</i>	
Remaining Life	0		



Concrete and Stairway Repair for year 2024 shall include repairs to cracked and spalled concrete, corrosion to the steel framing, and missing bolts referenced within this report.

**Wood Framing Repairs - 2033**

Asset ID	1009	1 Lump Sum	@ \$3,000.00
		Asset Actual Cost	\$3,000.00
		Percent Replacement	100%
Category	Structural Components	Future Cost	\$3,914.32
Placed in Service	January 2023	Assigned Reserves	\$3,000.00
Useful Life	10		
Replacement Year	2033	<i>No Future Assessments</i>	
Remaining Life	9		

**The Landing Condominiums - Building 4**  
**RA Detail Report by Category**

*Wood Framing Repairs continued...*



<b>Structural Components - Total Current Cost</b>	<b>\$6,000</b>
<b>Assigned Reserves</b>	<b>\$9,000</b>
<b>Fully Funded Reserves</b>	<b>\$3,300</b>

**The Landing Condominiums - Building 4  
RA Detail Report by Category**

**Elect. Syst. Routine Maint & Insp. - 2024**

Asset ID	1005	1 EA.	@ \$2,500.00
Category	Electrical Systems	Asset Actual Cost	\$2,500.00
Placed in Service	January 2023	Percent Replacement	100%
Useful Life	1	Future Cost	\$2,500.00
Replacement Year	2024	Assigned Reserves	\$5,000.00
Remaining Life	0	<i>No Future Assessments</i>	



<b>Electrical Systems - Total Current Cost</b>	<b>\$2,500</b>
<b>Assigned Reserves</b>	<b>\$5,000</b>
<b>Fully Funded Reserves</b>	<b>\$2,500</b>

**The Landing Condominiums - Building 4**  
**RA Detail Report by Category**

<b>Fire Protective Syst. Maintenance - 2024</b>		1 EA.	@ \$2,500.00
Asset ID	1003	Asset Actual Cost	\$2,500.00
		Percent Replacement	100%
Category	Fire Protective Systems	Future Cost	\$2,500.00
Placed in Service	January 2023	Assigned Reserves	\$5,000.00
Useful Life	1		
Replacement Year	2024	<i>No Future Assessments</i>	
Remaining Life	0		

<b>Fire Protective Systems - Total Current Cost</b>	<b>\$2,500</b>
<b>Assigned Reserves</b>	<b>\$5,000</b>
<b>Fully Funded Reserves</b>	<b>\$2,500</b>



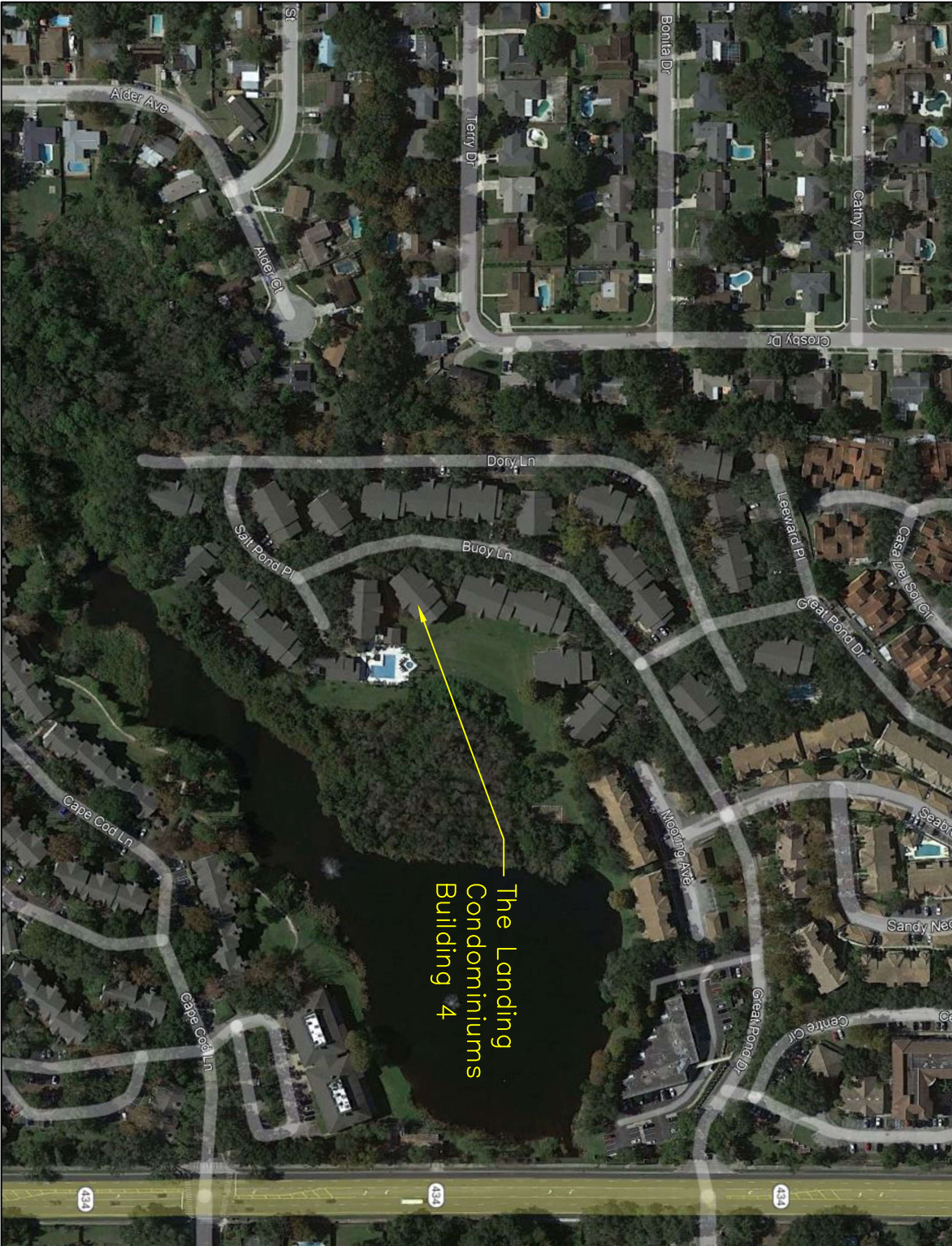
**The Landing Condominiums - Building 4**  
**RA Category Detail Index**

Asset ID	Description	Replacement	Page
1001	Asphalt Shingle Roof Replacement	2039	11
1008	Concrete and Stairway Repairs	2024	14
1005	Elect. Syst. Routine Maint & Insp.	2024	16
1006	Exterior Painting	2027	12
1003	Fire Protective Syst. Maintenance	2024	17
1004	Plumbing Syst. Routine Maint. and Insp.	2024	10
1007	Stucco Repairs	2030	12
1009	Wood Framing Repairs	2033	14
	Total Funded Assets	8	
	Total Unfunded Assets	<u>0</u>	
	Total Assets	8	



**APPENDIX B**  
**SITE LOCATION MAP**





# SITE LOCATION MAP

**APPENDIX C  
PHOTOGRAPHS**



Photograph No. 1: West elevation.



Photograph No. 2: South elevation.

## SITE PHOTOGRAPHS

The Landing Condominiums – Building 4  
631 Buoy Lane  
Altamonte Springs, Seminole County, Florida 32714

Photograph Date: Wednesday, July 19, 2023  
UES Project No. 0811.230006.0000  
UES Report No. 1



Photograph No. 3: East elevation.



Photograph No. 4: North elevation.

### **SITE PHOTOGRAPHS**

The Landing Condominiums – Building 4  
631 Buoy Lane  
Altamonte Springs, Seminole County, Florida 32714

Photograph Date: Wednesday, July 19, 2023  
UES Project No. 0811.230006.0000  
UES Report No. 1



Photograph No. 5: Overview of the northeast roof section



Photograph No. 6: Overview of the southwest roof section.

### **SITE PHOTOGRAPHS**

The Landing Condominiums – Building 4  
631 Buoy Lane  
Altamonte Springs, Seminole County, Florida 32714

Photograph Date: Wednesday, July 19, 2023  
UES Project No. 0811.230006.0000  
UES Report No. 1



Photograph No. 7: General view of the prefabricated wooden roof trusses.



Photograph No. 8: Corrosion and separation of the metal flashing at the edge of the balcony slab on Unit 201.

### SITE PHOTOGRAPHS

The Landing Condominiums – Building 4  
631 Buoy Lane  
Altamonte Springs, Seminole County, Florida 32714

Photograph Date: Wednesday, July 19, 2023  
UES Project No. 0811.2300006.0000  
UES Report No. 1



Photograph No. 9: Cracks in the balcony slab and corrosion and separation of the metal flashing at the edge of the balcony slab on Unit 203.



Photograph No. 10: Crack in the exterior wall stucco finish.

### SITE PHOTOGRAPHS

The Landing Condominiums – Building 4  
631 Buoy Lane  
Altamonte Springs, Seminole County, Florida 32714

Photograph Date: Wednesday, July 19, 2023  
UES Project No. 0811.2300006.0000  
UES Report No. 1



Photograph No. 11: Ponding on the stairway landing in the northwest stairway.



Photograph No. 12: Previously sealed cracks in the concrete slab located on the 3rd floor.

### SITE PHOTOGRAPHS

The Landing Condominiums – Building 4  
631 Buoy Lane  
Altamonte Springs, Seminole County, Florida 32714

Photograph Date: Wednesday, July 19, 2023  
UES Project No. 0811.230006.0000  
UES Report No. 1





Photograph No. 13: Crack in the stairway landing in the southeast stairway.



Photograph No. 14: Missing bolt and corrosion to the steel framing located in the southeast stairway.

### SITE PHOTOGRAPHS

The Landing Condominiums – Building 4  
631 Buoy Lane  
Altamonte Springs, Seminole County, Florida 32714

Photograph Date: Wednesday, July 19, 2023  
UES Project No. 0811.2300006.0000  
UES Report No. 1



Photograph No. 15: Missing fastener, cracks in the stucco and corrosion to the steel framing located in the southeast stairway.



Photograph No. 16: Electrical meters.

## SITE PHOTOGRAPHS

The Landing Condominiums – Building 4  
631 Buoy Lane  
Altamonte Springs, Seminole County, Florida 32714

Photograph Date: Wednesday, July 19, 2023  
UES Project No. 0811.230006.0000  
UES Report No. 1



**APPENDIX D**  
**QUALIFICATIONS OF KEY PERSONNEL**

## SUMMARY OF QUALIFICATIONS

Mr. Santiago is the Director of UES Milestone Inspection Program and Vice President of UES Construction Services Division. He has experience in building inspections, structural evaluations, geotechnical investigations, and construction process evaluations. He has over 25 years of construction, design and inspection experience dealing with all phases of project development including permitting, geotechnical, environmental, civil, and architectural design. He also has experience in pavement, foundation design, forensic analysis of construction defects, roofing consultation, construction project management and quality control/quality assurance. Mr. Santiago is a licensed Threshold Inspector in the State of Florida where he performs structural inspections for various types of projects including shoring/reshoring and design/plan compliance.

**YEARS WITH THE FIRM 3.5**

**YEARS WITH OTHER FIRMS 25**

## EDUCATION

B.S., CIVIL ENGINEERING, UNIVERSITY OF CENTRAL FLORIDA, 1998

## LICENSES & CERTIFICATIONS

- FLORIDA PROFESSIONAL ENGINEER, SPECIAL INSPECTOR #74520
- ACI AGGREGATE & FIELD-TESTING TECHNICIAN
- ACI CONCRETE
- ACI CONCRETE FIELD INSPECTOR
- FDOT LBR TECHNICIAN
- FDOT SOILS TECHNICIAN
- MASONRY SPECIAL INSPECTOR
- POST TENSION LEVEL I & II INSPECTOR
- RADIATION SAFETY OFFICER
- STRUCTURAL STEEL LEVEL I INSPECTOR

## REPRESENTATIVE PROJECT EXPERIENCE

### Commercial

**Citadel I and Citadel II, Tampa, FL:** Facility Evaluator. Performed a property condition and roofing assessment for two eight-story office buildings with a shared six-story parking garage. Cost projections were completed over a year term. Project was completed within 10 days of authorization.

**San Juan Integra Building, PR:** Commercial 7 story retrofit, interior rebuild and structural modifications to the structure and parking / garage area. Provided geotechnical assistance during design and construction as well as quality control during construction operations.

**Trinity Corporate Park, Tampa, FL:** 3 story settling structure, prepared evaluation report and recommended adequate foundation system.

### Government

**Fort Bragg Landfill Density Testing, Fort Bragg, NC, 2009:** Mr. Santiago was project principal for subsurface exploration of the SCS Energy Facility Expansion.

**Fort Bragg TEMF, Fort Bragg, NC:** Prepared proposal, assisted in planning and coordinating field exploration, and analyzed subsurface conditions. Provided a geotechnical report of findings, evaluations and recommendations for foundation, parking area design and construction considerations. This project was design and build of tactical vehicle maintenance facilities and retaining wall design.

**NCDOT, DMV Facility Fayetteville, NC:** Assisted in planning and coordinating field exploration, and analyzed subsurface conditions. Provided a geotechnical report of findings, evaluations and recommendations for foundation, parking design and construction considerations.

**Sypris Electronics, Tampa, FL, 2015: Facility Evaluator.** Performed a property condition and roofing assessment for a 300,000 sq. ft. facility. Cost projections were completed over a 10 year term. This project was an existing electronics manufacturing facility for the Department of Defense, due to homeland security; this report was

completed with no photo documentation under strict guidelines of disclosure. Project was completed within 10 days of authorization.

### **Healthcare**

**Hima San Pablo Hospitals, Caguas and Bayamon, PR, 2015:** Facility Evaluator. Performed a property condition and roofing assessment for 2 1.3M sq. ft. facilities. Completed both assessments and submitted final reports within 30 days of authorization.

**Sinai Assisted Living Facility, Boca Raton, FL:** Mr. Santiago was the project principal for Private Provider Inspections for the construction of the four-story independent living building and the three-story skilled nursing and assisted living facility building.

**Baptist South Tower, Jacksonville, FL:** Mr. Santiago was the project principal and Threshold Inspector during the construction of an 8-story medical tower. He provided construction quality control and quality assurance.

### **Institutional**

**Nocatee K-8 School KK, St. Johns County, FL:** Threshold Engineer. Provided Geotechnical Engineering, Construction Materials Testing, Threshold Inspection, and Settlement Monitoring services. The construction included a new 1 to 3-story school building of concrete and steel construction as well as associated paved parking and drive areas, a new stormwater management pond, and athletic fields. Site-elevating fills on the order of four to five feet were required to achieve final grade. Also included unsuitable soil removal and roofing testing and inspection.

**Aberdeen K-8 School LL, St. Johns County, FL:** Threshold Engineer Provided Geotechnical Engineering, Construction Materials Testing, Threshold Inspection, and Settlement Monitoring services. The construction included a new 1 to 3-story school building of concrete and steel construction as well as associated paved parking and drive areas, a new stormwater management pond, and athletic fields. Site-elevating fills on the order of four to five feet were required to achieve final grade. Also included roofing testing and inspection.

**North Star Villages Student Complex, Tampa, FL:** Performed subsurface exploration and conducted geotechnical engineering analyses for the proposed student housing project – North Star Villages at 1400 North 46th Street in Tampa, FL. ECS will perform construction materials testing and threshold observation services during construction, 2nd quarter of 2015.

### **Multifamily Residential**

**Bayshore Multifamily Complex, Tampa, FL, 2013:** The Bayshore multifamily complex consisted of a 3 building, 8-story, 220-unit apartment complex with associated parking, amenity and drive areas. Provided geotechnical consultation and exploration services as well as construction materials testing and threshold observation services during construction.

**Encore, REED Multifamily Complex, Tampa, FL, 2014:** Prepared the proposal and performed construction quality control services for the REED at Encore which consisted of a senior living multifamily complex for the Tampa Housing Authority. Provided construction materials testing and threshold observation services during construction.

**Yabucoa Real, Yabucoa, PR:** Residential development, Owner's representative/Inspector during design, permitting and construction of an 86-unit residential development. Provided geotechnical design and value engineering during construction.

### **Industrial**

**Renewable Resources Plant, West Palm Beach, Florida:** Mr. Santiago was one of the project principals involved during the construction of the deep foundation system implemented during the construction process of this 80-acre renewable resources power facility.

**Niagara Bottling Plant:** Mr. Santiago was the project principal and Threshold Inspector during the construction of a 350,000 square foot, bottling plant. He provided construction quality control and quality assurance.

**Pipeline Supply Company Facility, Fayetteville, NC:** Prepared proposal, assisted in planning and coordinating field exploration, and analyzed subsurface conditions. Provided a geotechnical report of findings, evaluations and recommendations for foundation, parking design and construction considerations.

### **Transportation**

**Orlando International Airport (OIA), FL:** Provided geotechnical engineering and construction materials testing for several runway and apron rehabilitation projects within the airport. Projects consisted of new runway construction and existing apron and runway rehabilitations.



## Education

BS, Civil Engineering  
(Emphasis in Structural  
Engineering) - University of  
South Florida

## Years of Experience

4

## Licenses

- Professional Engineer, FL  
#95850

## Ricardo Solis, PE

### Structural Engineer

Mr. Solis has over 4 years of combined experience in the construction and forensics industries as a structural engineer. His construction experience is built on the design and management of low-rise commercial/industrial buildings, residential homes, and threshold building inspections. His experience covers a wide range of project development including maintenance of client relationships, construction documents, and construction administration. This experience includes developing framing concepts and selecting framing systems, which include reinforced concrete, tilt-up construction, structural steel, light gauge steel, load-bearing masonry, and timber. Mr. Solis' forensics experience includes investigations of residential sites to determine the cause and origin of structural failures, damage or defects, and analyzing damage to structures caused by catastrophic events such as hurricanes and sinkholes. Additionally, Mr. Solis has experience in Enercalc, MathCAD, RISA, and AutoCAD.

## PROJECT EXPERIENCE

### Infinity Business Park

Orlando, Florida

Mr. Solis was responsible for the structural design, detailing, coordination, and quality control of multiple tilt wall buildings in the business park. He managed projects to completion from pre-design, meetings, and through construction shop drawing review.

### Gratigny Logistics Center Buildings

Miami, Florida

Mr. Solis was responsible for the structural design, detailing, coordination, and quality control of two 220,000-SF tilt wall buildings in Miami. He managed projects to completion from pre-design, meetings, and through construction shop drawing review.

### Marion Street Office Building

Tampa, Florida

Mr. Solis was responsible for the structural design, detailing, coordination, and quality control of this four-story masonry building on shallow concrete foundations and composite floor/roof framing system. He managed the project to completion from pre-design, meetings, and through construction shop drawing review.

### Wish Farms

Plant City, Florida

Mr. Solis was responsible for the structural foundation design, detailing, coordination, and quality control of this 118,000-SF pre-engineered metal building. He managed the project to completion from pre-design, meetings, and through construction shop drawing review.

### Amazon Warehouse

Seffner, Florida

Mr. Solis was responsible for the structural design, detailing, coordination, and quality control of the light gauge stud framing canopies and front entry. He managed the project to completion from pre-design, meetings, and through construction shop drawing review.

### Winthrop Town Center Buildings

Riverview, Florida

Mr. Solis was responsible for the structural design, detailing, coordination, and quality control of this two-story masonry building on shallow concrete foundations and composite floor/roof framing system. He managed projects to completion from pre-design, meetings, and through construction shop drawing review.