

Phase I Structural Assessments Phase II Structural Forensic Evaluations Structural Intergrity Reserve Studies

August 25, 2023

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

Re: The Landing Condominiums – Building 16 Structural Integrity Reserve Study (SIRS) 643 Dory 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 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.

Miguel A. Santiago, P.E., S.I. Principal Engineer Florida Professional Engineer No. 74520 msantiago1@teamues.com Ricardo Solis, P.E. Structural Engineer Florida Professional Engineer No. 95850 <u>rsolis@teamues.com</u>

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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 643 Dory 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 16 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, 2033

# 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. <u>627.706</u>.
- 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 16 is located at 643 Dory Lane, Altamonte Springs, FL 32714 in Seminole County. The building is 1 of 18 residential condominiums located on the property. Building 16 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 16 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.

# 8.2 STRUCTURE, INLCUDING 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, corrosion was observed to the metal stairway landing edge flashing in multiple locations (Photographs No. 9, 13, and 14). Cracks in the elevated concrete slabs were observed in multiple locations (Photograph No. 12). Corrosion to the steel framing was observed in multiple locations in the stairways (Photographs No. 13 through 15). See **Appendix C** for referce 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.

#### **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.

#### **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, damage and cracks in the exterior stucco finishes were observed in multiple locations (Photographs No. 9 through 12). Overall, the general condition of the exterior finishes is in good condition. See **Appendix C** for refence 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 and cracks in the exterior stucco finishes were observed in multiple locations. See **Appendix C** Photographs No. 9 through 12.
- Corrosion was observed to the metal stairway landing edge flashing in multiple locations. See **Appendix C** Photographs No. 9, 13, and 14.
- Cracks in the elevated concrete slabs were observed in multiple locations. See **Appendix C** Photograph No. 12.
- Corrosion to the steel framing was observed in multiple locations in the stairways. See **Appendix C** Photographs No. 13 through 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:

Component's Frequency of Reserve Expenditure = 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:

#### RUL = EUL – 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 16 Altamonte Springs, Florida RA Threshold Funding Model Summary

		Report Parameters
Report Date	August 25, 2023	Inflation 3.00%
		Annual Assessment Increase 3.00%
Budget Year Beginning	January 1, 2024	Interest Rate on Reserve Deposit 0.00%
Budget Year Ending	December 31, 2024	
Total Units	12	2024 Beginning Balance \$14,102

# **Threshold Funding Model Summary**

- This is a 12 unit condominium that is located at 643 Dory 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	\$0.00
Total Annual Allocation to Reserves	\$12,504.67
\$1,042.06 per unit annually	



# The Landing Condominiums - Building 16 RA Threshold Funding Model Projection

Beginning Balance: \$14,102

	-				Projected	Fully	
• •	Current	Annual	Annual	Annual	Ending	Funded	Percent
Year	Cost	Contribution	Interest	Expenditures	Reserves	Reserves	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 16 RA Component Funding Model Assessment & Category Summary

	-onot		,		8	2 5	*
Description	A A A A A A A A A A A A A A A A A A A	L' CL	40: 201:	Action of the second	Cution to	A 30: A 80: A 80:	Ent Forded
Plumbing							
Plumbing Syst. Routine Maint. and Insp. Plumbing - Total	2024	1	0	0	$\frac{2,500}{$2,500}$	$\frac{2,500}{$2,500}$	$\frac{2,500}{$2,500}$
Roofing							
Asphalt Shingle Roof Replacement Roofing - Total	2039	20	0	15	$\frac{25,150}{\$25,150}$	0	$\frac{6,287}{\$6,287}$
Painting							
Exterior Painting	2027	7	0	3	10,000	3,602	5,714
Stucco Repairs	2030	10	0	6	7,000	0	2,800
Painting - Total					\$17,000	\$3,602	\$8,514
Structural Components							
Concrete and Stairway Repairs	2024	10	0	0	3,000	3,000	3,000
Wood Framing Repairs Structural Components - Total	2033	10	0	9	<u>3,000</u> \$6,000	$\frac{0}{$3,000}$	$\frac{300}{\$3,300}$
Electrical Systems							
Elect. Syst. Routine Maint & Insp. Electrical Systems - Total	2024	1	0	0	$\frac{2,500}{$2,500}$	$\frac{2,500}{$2,500}$	$\frac{2,500}{$2,500}$
Fire Protective Systems							
Fire Protective Syst. Maintenance Fire Protective Systems - Total	2024	1	0	0	$\frac{2,500}{$2,500}$	$\frac{2,500}{$2,500}$	$\frac{2,500}{$2,500}$
	Total	Asset Su	ummar	у	\$55,650	\$14,102	\$25,602
	Percen	<mark>t Fully F</mark>	unded	55%	ý 0		
Current Average Liability	per Unit (T	otal Unit	s: 12)	-\$958	3		



Description	Expenditures
No Replacement in 2024	
Replacement Year 2025 Concrete and Stairway Repairs Elect. Syst. Routine Maint & Insp. Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp.	3,090 2,575 2,575 2,575 2,575
Total for 2025	\$10,815
Replacement Year 2026 Elect. Syst. Routine Maint & Insp. Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp. Total for 2026	2,652 2,652 2,652 <b>57 057</b>
10tal 10r 2026	\$7,957
Replacement Year 2027 Elect. Syst. Routine Maint & Insp. Exterior Painting Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp.	2,732 10,927 2,732 2,732
Total for 2027	\$19,123
Replacement Year 2028 Elect. Syst. Routine Maint & Insp. Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp.	2,814 2,814 2,814
Total for 2028	\$8,441
Replacement Year 2029Elect. Syst. Routine Maint & Insp.Fire Protective Syst. MaintenancePlumbing Syst. Routine Maint. and Insp.Total for 2029	2,898 2,898 2,898 <b>2,898</b> <b>\$8,695</b>
Replacement Year 2030 Elect. Syst. Routine Maint & Insp.	2,985



Description	Expenditures
Replacement Year 2030 continued	2.095
Fire Protective Syst. Maintenance	2,985
Plumbing Syst. Routine Maint. and Insp. Stucco Repairs	2,985 8,358
Total for 2030	\$17,314
Donla coment Veen 2021	
Replacement Year 2031 Elect. Syst. Routine Maint & Insp.	3,075
Fire Protective Syst. Maintenance	3,075
Plumbing Syst. Routine Maint. and Insp.	3,075
Total for 2031	<del>\$9,224</del>
	\$7,224
Replacement Year 2032	
Elect. Syst. Routine Maint & Insp.	3,167
Fire Protective Syst. Maintenance	3,167
Plumbing Syst. Routine Maint. and Insp.	3,167
Total for 2032	\$9,501
Der la coment Very 2022	
Replacement Year 2033 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
Total for 2033	<b>\$13,700</b>
	\$13,700
Replacement Year 2034	
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
Total for 2034	\$23,519
Replacement Year 2035	
Concrete and Stairway Repairs	4,153
Elect. Syst. Routine Maint & Insp.	3,461



Description	Expenditures
Replacement Year 2035 continued	
Fire Protective Syst. Maintenance	3,461
Plumbing Syst. Routine Maint. and Insp.	3,461
Total for 2035	\$14,534
Replacement Year 2036	
Elect. Syst. Routine Maint & Insp.	3,564
Fire Protective Syst. Maintenance	3,564
Plumbing Syst. Routine Maint. and Insp.	3,564
Total for 2036	\$10,693
Replacement Year 2037	
Elect. Syst. Routine Maint & Insp.	3,671
Fire Protective Syst. Maintenance	3,671
Plumbing Syst. Routine Maint. and Insp.	3,671
Total for 2037	\$11,014
Replacement Year 2038	
Elect. Syst. Routine Maint & Insp.	3,781
Fire Protective Syst. Maintenance	3,781
Plumbing Syst. Routine Maint. and Insp.	3,781
Total for 2038	\$11,344
	<b>\$11,544</b>
Replacement Year 2039	
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
Total for 2039	\$50,868
Replacement Year 2040	4.012
Elect. Syst. Routine Maint & Insp.	4,012
Fire Protective Syst. Maintenance Plumbing Syst. Routine Maint. and Insp.	4,012 4,012
Stucco Repairs	11,233
Total for 2040	\$23,268



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



Description	Expenditures
<b>Replacement Year 2046 continued</b> Fire Protective Syst. Maintenance	4,790
Plumbing Syst. Routine Maint. and Insp.	4,790
Total for 2046	\$14,371
Replacement Year 2047	
Elect. Syst. Routine Maint & Insp.	4,934
Fire Protective Syst. Maintenance	4,934
Plumbing Syst. Routine Maint. and Insp.	4,934
Total for 2047	\$14,802
Replacement Year 2048	
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
Total for 2048	\$35,574
Replacement Year 2049	5.00.4
Elect. Syst. Routine Maint & Insp.	5,234
Fire Protective Syst. Maintenance	5,234
Plumbing Syst. Routine Maint. and Insp.	5,234
Total for 2049	\$15,703
Replacement Year 2050	
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
Total for 2050	\$31,271
Replacement Year 2051	
Elect. Syst. Routine Maint & Insp.	5,553
Fire Protective Syst. Maintenance	5,553
Plumbing Syst. Routine Maint. and Insp.	5,553
Total for 2051	\$16,660



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



PAGE 9

	outine Maint. and Insp 20	024	
	I	1 EA.	@ \$2,500.00
Asset I	D 1004	Asset Actual Cost	\$2,500.00
100001		Percent Replacement	100%
Categor	ry Plumbing	Future Cost	\$2,500.00
Placed in Service		Assigned Reserves	\$5,000.00
Useful Li	2	g	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Replacement Yea		No Future Assessments	
Remaining Li			
р	lumbing - Total Current Cost	\$2,500	
	Assigned Reserves		
	Fully Funded Reserves		



PAGE 10

Asphalt Shingle Roof R	eplacement - 203	39	
Asset ID	1001	1 Lump Sum Asset Actual Cost Percent Replacement	<pre>@ \$25,150.00 \$25,150.00 100%</pre>
Category	Roofing	Future Cost	\$39,182.88
Placed in Service	January 2019	Assigned Reserves	\$25,150.00
Useful Life	20		
Replacement Year	2039	No Future Assessments	
Remaining Life	15		



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



7

Exterior Painting - 2027		1 Lump Sum	@ \$10,000.00
Asset ID	1006	Asset Actual Cost	\$10,000.00
		Percent Replacement	100%
Category	Painting	Future Cost	\$10,927.27
Placed in Service	January 2020	Assigned Reserves	\$10,000.00
Useful Life	7		
Replacement Year	2027	No Future Assessments	
Remaining Life	3		
Stucco Repairs - 2030		1 Lump Sum	@ \$7,000.00
Asset ID	1007	Asset Actual Cost	\$7,000.00
	1007	Percent Replacement	100%
Category	Painting	Future Cost	\$8,358.37
Placed in Service	January 2020	Assigned Reserves	\$7,000.00
Useful Life	10	-	
Replacement Year	2030	No Future Assessments	
Remaining Life	6		



Stucco Repairs continued...



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



Concrete and Stairway Repairs - 2024 1 Lump Sum (a) \$3,000.00 \$3,000.00 Asset ID 1008 Asset Actual Cost Percent Replacement 100% Category Structural Components Future Cost \$3,000.00 January 2024 Assigned Reserves Placed in Service \$6,000.00 Useful Life 10 Replacement Year 2024 *No Future Assessments* Remaining Life 0



Concrete and Stairway Repairs for year 2024 shall include repairs to cracked cocnrete and corrosion to the steel framing referenced within this report.

	airs - 2033	Wood Framing Rep
Asset	1009	Asset ID
Percent		
	Structural Components	Category
Assig	January 2023	Placed in Service
	10	Useful Life
No Future	2033	Replacement Year
	9	Remaining Life

1 Lump Sum	@ \$3,000.00
Asset Actual Cost	\$3,000.00
Percent Replacement	100%
Future Cost	\$3,914.32
Assigned Reserves	\$3,000.00

No Future Assessments



Wood Framing Repairs continued...



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



Asset ID 1005 Asset Actual Cost \$2,500.0 Percent Replacement 100 Category Electrical Systems Future Cost \$2,500.0	Elect. Syst. Routine N	Maint & Insp 2024	1 EA.	@ \$2,500.00
CategoryElectrical SystemsFuture Cost\$2,500.0Placed in ServiceJanuary 2023Assigned Reserves\$5,000.0Useful Life11Replacement Year2024No Future AssessmentsRemaining Life00Electrical Systems - Total Current CostAssigned Reserves\$5,000\$5,000\$5,000	Asset ID	1005	Asset Actual Cost	\$2,500.00
Placed in Service       January 2023       Assigned Reserves       \$5,000.0         Useful Life       1         Replacement Year       2024       No Future Assessments         Remaining Life       0         Electrical Systems - Total Current Cost       \$2,500         Assigned Reserves       \$5,000			Percent Replacement	100%
Useful Life1Replacement Year2024Remaining Life0Electrical Systems - Total Current CostAssigned Reserves\$2,500\$5,000		Electrical Systems	Future Cost	\$2,500.0
Replacement Year2024No Future AssessmentsRemaining Life0Electrical Systems - Total Current Cost\$2,500Assigned Reserves\$5,000	Placed in Service	January 2023	Assigned Reserves	\$5,000.0
Remaining Life0Electrical Systems - Total Current Cost\$2,500Assigned Reserves\$5,000	Useful Life	1		
Electrical Systems - Total Current Cost \$2,500 Assigned Reserves \$5,000			No Future Assessments	
Assigned Reserves \$5,000	Remaining Life	0		
Assigned Reserves \$5,000				
	Electrical Sys	tems - Total Current Cost		
Fully Funded Reserves \$2,500				
		Fully Funded Reserves	\$2,500	



Fire Protective Syst. Mai	ntenance - 2024	
Asset ID	1003	
		Р
CategoryFire Pr	otective Systems	
Placed in Service	January 2023	
Useful Life	1	
Replacement Year	2024	No
Remaining Life	0	
-		

1 EA.	@ \$2,500.00
Asset Actual Cost	\$2,500.00
Percent Replacement	100%
Future Cost	\$2,500.00
Assigned Reserves	\$5,000.00

No Future Assessments



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

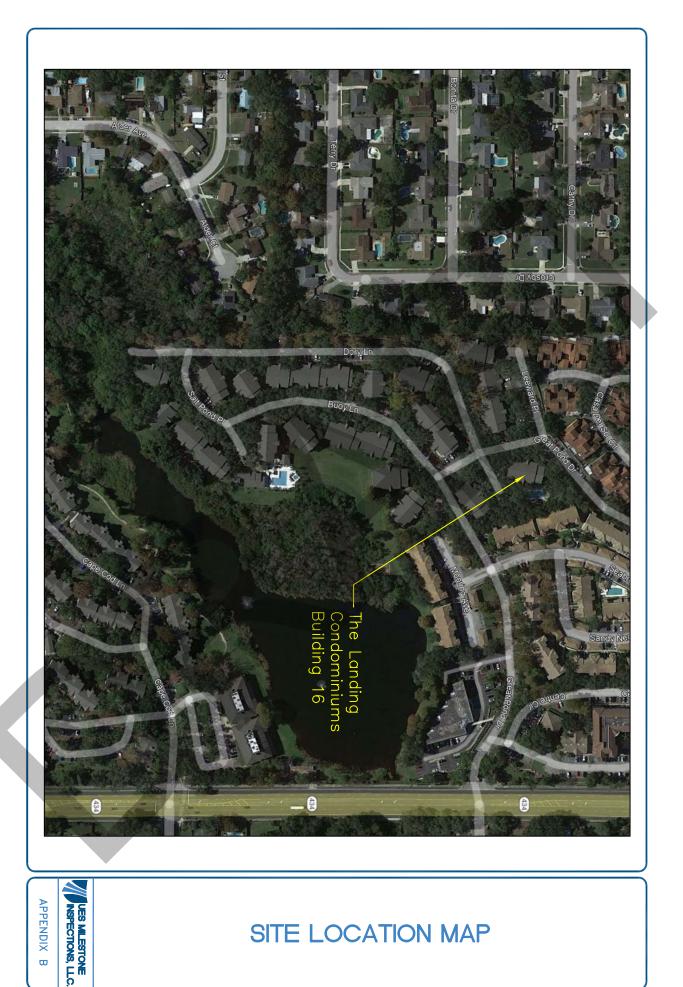


# The Landing Condominiums - Building 16 RA Category Detail Index

Asset I	DDescription	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 Total Unfunded Assets Total Assets	8 <u>0</u> 8	



313.740.8506 PAGE 18 APPENDIX B SITE LOCATION MAP



APPENDIX C PHOTOGRAPHS



Photograph No. 1: South elevation.



Photograph No. 2: East elevation.

# SITE PHOTOGRAPHS

The Landing Condominiums – Building 16 643 Dory 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. 3: North elevation.



Photograph No. 4: West elevation.

# SITE PHOTOGRAPHS

The Landing Condominiums – Building 16 643 Dory 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. 5: View of the south roof section.



Photograph No. 6: View of the north roof section.

The Landing Condominiums – Building 16 643 Dory Lane Altamonte Springs, Seminole County, Florida 32714



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



Photograph No. 8: View of the balconies and stairway on the west side of the building.

The Landing Condominiums – Building 16 643 Dory Lane Altamonte Springs, Seminole County, Florida 32714

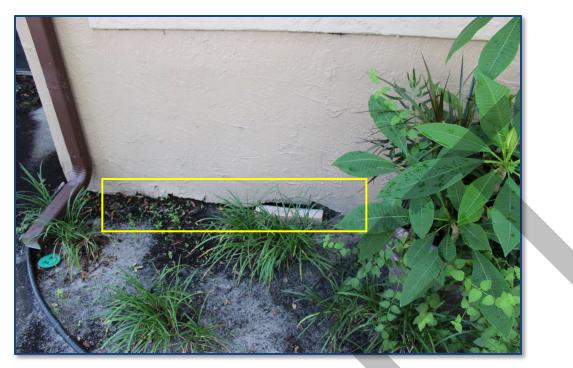


Photograph No. 9: Cracks and damage to the exterior wall stucco finish and the metal flashing located on the west stairway.



Photograph No. 10: Cracks in the exterior wall stucco finish located on the west stairway.

The Landing Condominiums – Building 16 643 Dory Lane Altamonte Springs, Seminole County, Florida 32714



Photograph No. 11: Damage to the exterior wall stucco finish located on the west stairway.



Photograph No. 12: Damage to the exterior wall stucco finish and crack in the balcony slab on Unit 204.

The Landing Condominiums – Building 16 643 Dory Lane Altamonte Springs, Seminole County, Florida 32714

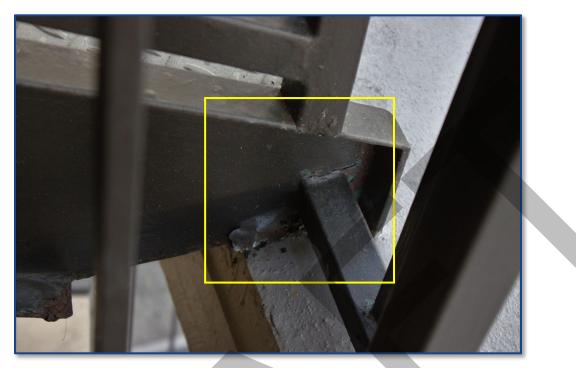


Photograph No. 13: Corrosion to the steel framing and metal flashing located in the west stairway.



Photograph No. 14: Corrosion to the steel framing and metal flashing located in the west stairway.

The Landing Condominiums – Building 16 643 Dory Lane Altamonte Springs, Seminole County, Florida 32714



Photograph No. 15: Corrosion to the steel framing located in the west stairway.



Photograph No. 16: Cracks in the ceiling in Unit 203 due to water leak.

## SITE PHOTOGRAPHS

The Landing Condominiums – Building 16 643 Dory Lane Altamonte Springs, Seminole County, Florida 32714



Photograph No. 17: Unsafe conditions declaration by order of the City of Altamonte Springs due to the broken fire sprinkler pipe in Unit 302.



Photograph No. 18: Fire sprinkler head located in Unit 203.

## SITE PHOTOGRAPHS

The Landing Condominiums – Building 16 643 Dory Lane Altamonte Springs, Seminole County, Florida 32714



Photograph No. 19: Fire riser system and fire alarm.

The Landing Condominiums – Building 16 643 Dory Lane Altamonte Springs, Seminole County, Florida 32714

APPENDIX D QUALIFICATIONS OF KEY PERSONNEL

### **MIGUEL SANTIAGO, P.E., S.I.**

Professional Engineer / Special Inspector / Director Milestone Prog.

#### 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.

#### **REPRESENTATIVE PROJECT EXPERIENCE**

#### Commercial

Citadel I and Citadel II, Tampa, FL: Facility Evaluator. Performed a property • ACI AGGREGATE & FIELD-TESTING 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 • ACI CONCRETE was completed within 10 days of authorization.

San Juan Integra Building, PR: Commercial 7 story retrofit, interior rebuild and • FDOT SOILS TECHNICIAN 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



## **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
- TECHNICIAN
- ACI CONCRETE FIELD INSPECTOR
- FDOT LBR TECHNICIAN
- MASONRY SPECIAL INSPECTOR
- POST TENSION LEVEL I & II INSPECTOR
- RADIATION SAFETY OFFICER
- STRUCTURAL STEEL LEVEL I INSPECTOR

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

#### <u>Healthcare</u>

**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

## Ar Solis was res

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.