

Phase I Structural Assessments

Phase II Structural Forensic Evaluations

Structural Intergrity Reserve Studies

January 23, 2024

Tammy Bennetts
Princeton Place at Wiggins Bay Condominium Two Associates, Inc.
Community Management Associates, Inc.
Naples, FL 34104

Re: Princeton Place 2 at Wiggins Bay Condominiums

Structural Integrity Reserve Study (SIRS)

320 Horse Creek Drive Naples, FL 34110

UES Project No: 0811.2300027.0000 – Task 17

Dear Ms. Bennetts,

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(1)(k) for Cooperatives) (effective May 26, 2022, and amended June 9, 2023) 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 Princeton Place at Wiggins Bay Condominium Two 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.

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#### 1.0 INTRODUCTION

Per authorization of UES proposal 6011.0523.00010, sent May 23, 2023, by Princton Place at Wiggins Bay Condominium Two Association, Inc., UES has conducted a Structural Integrity Reserve Study (SIRS) of the 37-unit residential condominium community located at 320 Horse Creek Drive, Naples, FL 34110.

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(1)(k) for Cooperatives) (effective May 26, 2022, and amended June 9, 2023) 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 professional Ricardo Solis, P.E. performed this study and visited the site on December 6, 2023. This report is principally based on UES's visual inspection of Princeton Place 2 at Wiggins Bay Condominiums 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:

## **JANUARY 23, 2034**

#### 2.0 EXECUTIVE SUMMARY

In summary, as a result of UES's site inspection, we find the common area components to be in good 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(1)(k) for Cooperatives) (effective May 26, 2022, and amended June 9, 2023) and local requirements of the Authority Having Jurisdiction (AHJ).

#### 5.0 SOURCES OF INFORMATION

Dave and Ted were interviewed during UES's study.

The interiors of Units 202, 204, 206, 301, 306, 307, 404, 407, 408, 501, 502, and 505 were inspected at the time of inspection.

The following documents were provided:

- Alpine Engineered Products, Inc. prefabricated roof truss shop drawings.
- Allen Davis Architect drawings dated 3-14-88.
- North Collier Fire Control Rescue District Reinspection #4 inspected on 7/18/2023 report.
- Naples Fire Protection Annual & Quarterly Standpipe Inspection & 5 year Inspection.
- Water Pump System Replacement Focus Systems LLC BOD Meeting Minutes.

- Water Side Maintenance Report by Page Mechanical Group, LLC dated 11-16-23.
- Page Mechanical Group, LLC Contract dated April 7, 2022.
- Elias Brothers Group Painting Proposal, 2020.
- Painting of Walkways & Stairwell, June 2020.
- 2024 Reserve Account Balance.

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

Princeton Place 2 at Wiggins Bay Condominiums is located in Naples, Collier County, Florida. The 5-story building was built in 1990 and consists of 37 residential condominium units. The pump room, electrical room, elevator room, and trash room are all located on the first floor.

The primary vehicle entrance is off of Horse Creek Drive at the north end of the site via a paved driveway. Additionally, there are asphalt-paved drives and surface parking areas located along the north elevation of the building.

The building is a concrete framed superstructure with reinforced cast-in-place (CIP) concrete walls, wood framed walls, reinforced cast-in-place concrete beams, reinforced concrete elevated slabs, and prefabricated wood roof trusses. The building is supported on shallow foundations.

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

Landscaping consists of palm trees, shrubs, and grassy areas along the perimeter of the building. The Cocohatchee River is located south 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
- Trash chutes
- Electrical room.
- Pumo room.
- Trash room.
- Elevator room.
- Roof.
- Common walkways

- Common stairwells.
- Building perimeter.
- Windows/Doors.

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 an asphalt-shingle roof system. UES was informed that the roof was replaced in 2018 shortly after Hurricane Irma by Hicks Roofing. At the time of inspection, the roof was observed to be in good condition with no deficiencies.

#### **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 inspecting shingles once a year or after every strong thunderstorm, trimming branches that overhang the roof, ensuring flashing at penetrations are not damaged or loose. See **Appendix A** for estimated cost and estimated contributions required.

## 8.2 STRUCTURE, INLCLUDING 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 is composed of cast-in-place concrete load bearing walls, concrete beams, and reinforced concrete elevated slabs. At the time of inspection, cracks/spalling were observed in the elevated walkways at 5 locations. Additionally, exposed steel reinforcement was observed in the ceiling slab located in the electrical room in multiple locations. See **Appendix C** for referenced photographs.

#### **Common Components and Required Reserve Expenditures**

A reinforced concrete structure with proper maintenance has a life span expectancy of 50 to 100 years. Proper maintenance includes but not limited to pressure washing exposed exterior concrete surfaces, providing proper sealant at concrete cracks, and visual inspection of all exposed concrete surfaces for signs of spalled concrete, cracks, and exposed steel reinforcement.

#### 8.3 FIREPROOFING AND FIRE PROTECTION SYSTEMS

#### **Description and Observations**

The fire protection system of the building consists of a fire standpipe, fire extinguishers, fire alarm system, and emergency/exit lighting. The fire extinguishers were last inspected in January of 2023 by Fire Pro, LLC. The fire alarm system was last inspected in November of 2022 by Piper Fire Protection. The fire alarm system was last inspected in January of 2023 by Cintas. The emergency/exit lights were last inspected in December of 2022 by Fire Pro, LLC. The fire standpipe was last inspected in September of 2023 by Pye Barker Fire & Safety. At the time of inspection an emergency/exit light was observed to not be working properly. See **Appendix C** for referenced photograph.

#### **Common Components and Required Reserve Expenditures**

Fire protection systems have a life expectancy of 40 to 50 years with the proper maintenance. However, corrosion issues can cause wet water systems to start failing in 15 to 25 years. Proper maintenance includes but not limited to routine inspections by a certified technician that looks for signs of wear and tear, corrosion, and damaged parts. Fire extinguishers should be recharged every 6 years according to the National Fire Protection Association (NFPA) and should be inspected annually by a certified technician. Additionally, emergency exit lighting shall be checked yearly to ensure that the light bulbs do not need to be replaced. See **Appendix A** for estimated cost and estimated contributions required.

#### 8.4 PLUMBING

#### **Description and Observations**

The visible building plumbing systems were very limited, but UES was informed that the plumbing systems consists of PVC. Additionally, a domestic booster pump system was observed to be in good condition and no issues were reported to UES. At the time of inspection, no damage or deficiencies were observed to the plumbing systems.

#### **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, 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 labeled house and fire panels, 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 common elevated exterior walkways are covered with an acrylic paint and were observed to be in good condition overall with peeling walkway finishes at isolated locations. The exterior finish of the building consists of painted stucco finishes. At the time of inspection, patch repairs were observed on the south elevation in multiple locations. Overall, the general condition of the exterior finishes is in good condition. See **Appendix C** for referenced 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**

Based on UES's inspection the condominium has 11 common doors and no common windows. All doors with the exception of the elevator door were observed to be in good condition. The elevator door was observed to be corroded at the bottom of the door.

#### **Common Components and Required Reserve Expenditures**

Windows and doors have a life expectancy of 25 years with proper maintenance. Proper maintenance includes but is not limited to routine cleaning of windows and routine inspection to ensure cracks and gaps are not present. See **Appendix A** for estimated cost and estimated contributions required.

#### 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 deficiencies, which may require corrective action:

- Cracks/spalled concrete in the exterior walkways were observed at 5 locations. See Appendix C Photographs No. 8, 25 through 27.
- Exposed steel reinforcement was observed in the ceiling slab located in the electrical room in multiple locations. See **Appendix C** Photograph No. 14.
- Cracks in the exterior wall and ceiling finishes were observed in the balcony of Unit 408. See **Appendix C** Photographs No. 17 and 18.
- A corroded steel bracket was observed on the 5<sup>th</sup> floor near the western end. See Appendix C Photograph No. 24.
- An emergency light was not properly working and was observed in the eastern stairwell. See **Appendix C** Photograph No. 32.
- Peeling of the exterior walkway finishes was observed at an isolated location. See Appendix C Photograph No. 39.

#### 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:
  - o Fannie Mae Expected Useful Life Tables
  - o 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 \$1,015,986.00.

#### 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: \$58,631 (starting balance provided by Ed DeJong and only

includes applicable components)

• Proposed Contribution Rate: \$ 27,415 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(1)(k) for Cooperatives) (effective May 26, 2022, and amended June 09, 2023) 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

#### Princeton Place 2 at Wiggins Bay Condominiums

Naples, Florida

#### **RA Threshold Funding Model Summary**

3.00% 0.00%

\$58,631

		Report Parameters
Report Date	January 23, 2024	
Budget Year Beginning Budget Year Ending	January 1, 2024 December 31, 2024	Annual Assessment Increase Interest Rate on Reserve Deposit
Total Units	37	2024 Beginning Balance

## **Threshold Funding Model Summary**

- This is an 37 unit condominium that is located at 320 Horse Creek Drive, Naples, Florida 34110.
- The starting balance was provided to UES by Ed DeJong and only includes applicable components.

## Threshold Funding Model Summary of Calculations

Required Annual Contribution \$27,414.08 \$740.92 per unit annually

Average Net Annual Interest Earned \$0.00

Total Annual Allocation to Reserves \$27,414.08 \$740.92 per unit annually



# Princeton Place 2 at Wiggins Bay Condominiums RA Threshold Funding Model Projection

Beginning Balance: \$58,631

υ		,			Projected	Fully	
	Current	Annual	Annual	Annual	Ending	Funded	Percent
Year	Cost	Contribution	Interest	Expenditures	Reserves	Reserves	Funded
2024	210,900	27,414		7,500	78,545	116,030	68%
2025	217,227	28,237		26,059	80,723	118,242	68%
2026	223,744	29,084		7,957	101,849	139,933	73%
2027	230,456	29,956		63,925	67,881	105,418	64%
2028	237,370	30,855		8,441	90,294	127,829	71%
2029	244,491	31,780		20,055	102,019	139,788	73%
2030	251,826	32,734		8,955	125,798	164,403	77%
2031	259,380	33,716		9,224	150,290	190,368	79%
2032	267,162	34,727		9,501	175,516	217,744	81%
2033	275,177	35,769		16,310	194,976	239,871	81%
2034	283,432	36,842		78,619	153,199	199,455	77%
2035	291,935	37,948		33,637	157,510	205,160	77%
2036	300,693	39,086		24,666	171,930	221,306	78%
2037	309,714	40,259		11,014	201,174	253,061	79%
2038	319,005	41,466		192,553	50,088	100,175	50%
2039	328,575	42,710		11,685	81,113	130,133	62%
2040	338,433	43,992		12,035	113,070	161,797	70%
2041	348,586	45,311		96,692	61,689	108,421	57%
2042	359,043	46,671		12,768	95,592	141,125	68%
2043	369,814	48,071		39,103	104,559	148,963	70%
2044	380,909	49,513		13,546	140,526	184,677	76%
2045	392,336	50,998		45,205	146,320	190,209	77%
2046	404,106	52,528		14,371	184,477	229,063	81%
2047	416,229	54,104		14,802	223,779	270,077	83%
2048	428,716	55,727		118,918	160,588	206,563	78%
2049	441,578	57,399		15,703	202,284	248,982	81%
2050	454,825	59,121		39,466	221,939	269,769	82%
2051	468,470	60,895		16,660	266,174	316,290	84%
2052	482,524	62,721		17,159	311,736	365,359	85%
2053	497,000	64,603		29,457	346,882	404,951	86%



Description	Expenditures
Replacement Year 2024	
Elect. Syst. Routine Maint & Insp.	2,500
Fire Protective Systems Maint. Allowance	2,500
Plumbing System Routine Maint. and Insp.	2,500
Total for 2024	<del>\$7,500</del>
Replacement Year 2025	
Elect. Syst. Routine Maint & Insp.	2,575
Elevator Room Door Replacement	1,030
Fire Protective Systems Maint. Allowance	2,575
Plumbing System Routine Maint. and Insp.	2,575
Railing repaint	17,304
Total for 2025	\$26,059
Replacement Year 2026	
Elect. Syst. Routine Maint & Insp.	2,652
Fire Protective Systems Maint. Allowance	2,652
Plumbing System Routine Maint. and Insp.	2,652
Total for 2026	\$7,9 <b>5</b> 7
Replacement Year 2027	
Elect. Syst. Routine Maint & Insp.	2,732
Exterior Paint	55,729
Fire Protective Systems Maint. Allowance	2,732
Plumbing System Routine Maint. and Insp.	2,732
Total for 2027	\$63,925
Replacement Year 2028	
Elect. Syst. Routine Maint & Insp.	2,814
Fire Protective Systems Maint. Allowance	2,814
Plumbing System Routine Maint. and Insp.	2,814
Total for 2028	\$8,441
Replacement Year 2029	
Elect. Syst. Routine Maint & Insp.	2,898



Description	Expenditures
Replacement Year 2029 continued  Exterior elevated walkways recoat Fire Protective Systems Maint. Allowance Plumbing System Routine Maint. and Insp.  Total for 2029	11,361 2,898 2,898 <b>\$20,055</b>
	Ψ20,000
Replacement Year 2030  Elect. Syst. Routine Maint & Insp. Fire Protective Systems Maint. Allowance Plumbing System Routine Maint. and Insp.  Total for 2030	2,985 2,985 2,985 <b>\$8,955</b>
Replacement Year 2031	
Elect. Syst. Routine Maint & Insp. Fire Protective Systems Maint. Allowance Plumbing System Routine Maint. and Insp.  Total for 2031	3,075 3,075 3,075 <b>\$9,224</b>
Replacement Year 2032	
Elect. Syst. Routine Maint & Insp. Fire Protective Systems Maint. Allowance Plumbing System Routine Maint. and Insp.  Total for 2032	3,167 3,167 3,167 <b>\$9,501</b>
	,
Replacement Year 2033  Elect. Syst. Routine Maint & Insp. Fire Protective Systems Maint. Allowance Plumbing System Routine Maint. and Insp. Routine Concrete Patch Repair Routine Stucco Repairs	3,262 3,262 3,262 3,262 3,262
Total for 2033	\$16,310
Replacement Year 2034  Elect. Syst. Routine Maint & Insp.  Exterior Paint	3,360 68,540



Description	Expenditures
Replacement Year 2034 continued Fire Protective Systems Maint. Allowance	3,360
Plumbing System Routine Maint. and Insp.	3,360
Total for 2034	\$78,619
10tai 101 2034	\$70,017
Replacement Year 2035	
Elect. Syst. Routine Maint & Insp.	3,461
Fire Protective Systems Maint. Allowance	3,461
Plumbing System Routine Maint. and Insp.	3,461
Railing repaint	23,255
Total for 2035	\$33,637
DL	
Replacement Year 2036  Elect. Syst. Routine Maint & Insp.	3,564
Exterior elevated walkways recoat	13,972
Fire Protective Systems Maint. Allowance	3,564
Plumbing System Routine Maint. and Insp.	3,564
Total for 2036	<b>\$24,666</b>
Panlagament Voor 2027	
Replacement Year 2037 Elect. Syst. Routine Maint & Insp.	3,671
Fire Protective Systems Maint. Allowance	3,671
Plumbing System Routine Maint. and Insp.	3,671
Total for 2037	\$11,014
D. I. (N. 2020)	
Replacement Year 2038 Asphalt Shingle Roof Replacement	146 721
Common Exterior Door Replacement	146,721 15,126
Domestic Booster Pump	19,361
Elect. Syst. Routine Maint & Insp.	3,781
Fire Protective Systems Maint. Allowance	3,781
Plumbing System Routine Maint. and Insp.	3,781
Total for 2038	<b>\$192,553</b>
Replacement Year 2039	2.005
Elect. Syst. Routine Maint & Insp.	3,895



Description	Expenditures
Replacement Year 2039 continued Fire Protective Systems Maint. Allowance	3,895
Plumbing System Routine Maint. and Insp.	3,895
Total for 2039	<del>\$11,685</del>
Replacement Year 2040	
Elect. Syst. Routine Maint & Insp.	4,012
Fire Protective Systems Maint. Allowance	4,012
Plumbing System Routine Maint. and Insp.	4,012
Total for 2040	\$12,035
Replacement Year 2041	
Elect. Syst. Routine Maint & Insp.	4,132
Exterior Paint	84,295
Fire Protective Systems Maint. Allowance	4,132
Plumbing System Routine Maint. and Insp.	4,132
Total for 2041	\$96,692
Replacement Year 2042	
Elect. Syst. Routine Maint & Insp.	4,256
Fire Protective Systems Maint. Allowance	4,256
Plumbing System Routine Maint. and Insp.	4,256
Total for 2042	\$12,768
Replacement Year 2043	
Elect. Syst. Routine Maint & Insp.	4,384
Exterior elevated walkways recoat	17,184
Fire Protective Systems Maint. Allowance	4,384
Plumbing System Routine Maint. and Insp.	4,384
Routine Concrete Patch Repair Routine Stucco Repairs	4,384 4,384
Total for 2043	\$39,103
	,
Replacement Year 2044 Elect. Syst. Routine Maint & Insp.	4,515



Description	Expenditures
Replacement Year 2044 continued	
Fire Protective Systems Maint. Allowance	4,515
Plumbing System Routine Maint. and Insp.	4,515
Total for 2044	\$13,546
Replacement Year 2045	
Elect. Syst. Routine Maint & Insp.	4,651
Fire Protective Systems Maint. Allowance	4,651
Plumbing System Routine Maint. and Insp.	4,651
Railing repaint	31,253
Total for 2045	\$45,205
Replacement Year 2046	
Elect. Syst. Routine Maint & Insp.	4,790
Fire Protective Systems Maint. Allowance	4,790
Plumbing System Routine Maint. and Insp.	4,790
Total for 2046	<del>\$14,371</del>
Replacement Year 2047	
Elect. Syst. Routine Maint & Insp.	4,934
Fire Protective Systems Maint. Allowance	4,934
Plumbing System Routine Maint. and Insp.	4,934
Total for 2047	<b>\$14,802</b>
Replacement Year 2048	
Elect. Syst. Routine Maint & Insp.	5,082
Exterior Paint	103,672
Fire Protective Systems Maint. Allowance	5,082
Plumbing System Routine Maint. and Insp.	5,082
Total for 2048	<del>\$118,918</del>
Replacement Year 2049	
Elect. Syst. Routine Maint & Insp.	5,234
Fire Protective Systems Maint. Allowance	5,234
Plumbing System Routine Maint. and Insp.	5,234
Total for 2049	<b>\$15,703</b>



Description	Expenditures
Replacement Year 2050	
Elect. Syst. Routine Maint & Insp.	5,391
Elevator Room Door Replacement	2,157
Exterior elevated walkways recoat	21,135
Fire Protective Systems Maint. Allowance	5,391
Plumbing System Routine Maint. and Insp.	5,391
Total for 2050	<del>\$39,466</del>
Replacement Year 2051	
Elect. Syst. Routine Maint & Insp.	5,553
Fire Protective Systems Maint. Allowance	5,553
Plumbing System Routine Maint. and Insp.	5,553
Total for 2051	<b>\$16,660</b>
Replacement Year 2052	
Elect. Syst. Routine Maint & Insp.	5,720
Fire Protective Systems Maint. Allowance	5,720
Plumbing System Routine Maint. and Insp.	5,720
Total for 2052	<del>\$17,159</del>
Replacement Year 2053	
Elect. Syst. Routine Maint & Insp.	5,891
Fire Protective Systems Maint. Allowance	5,891
Plumbing System Routine Maint. and Insp.	5,891
Routine Concrete Patch Repair	5,891
Routine Stucco Repairs	5,891
Total for 2053	\$29,457



## Fire Protective Systems Maint. Allowance - 2024

Asset ID	1004	1 EA. Asset Actual Cost Percent Replacement	@ \$2,500.00 \$2,500.00 100%
CategoryFire	e Protective Systems	Future Cost	\$2,500.00
Placed in Service	January 2023	Assigned Reserves	\$2,500.00
Useful Life	1		
Replacement Year	2024	Annual Assessment	<u>\$2,148.58</u>
Remaining Life	0	Reserve Allocation	\$2,148.58

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



Elect. Syst. Routine N	Maint & Insp 2024	1 EA.	@ \$2,500.00
Asset ID	1003	Asset Actual Cost	\$2,500.00
		Percent Replacement	100%
Category	Electrical Systems	Future Cost	\$2,500.00
Placed in Service	January 2023	Assigned Reserves	\$2,500.00
Useful Life	1		
Replacement Year	2024	Annual Assessment	<u>\$2,148.58</u>
Remaining Life	0	Reserve Allocation	\$2,148.58

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



Domestic Booster Pump	o - 2038	1 Lump Sum	@ \$12,800.00
Asset ID	1020	Asset Actual Cost	\$12,800.00
		Percent Replacement	100%
Category	Plumbing	Future Cost	\$19,361.15
Placed in Service	January 2018	Assigned Reserves	\$1,396.71
Useful Life	20		
Replacement Year	2038	Annual Assessment	\$1,070.68
Remaining Life	14	Reserve Allocation	\$1,070.68

## Plumbing System Routine Maint. and Insp. - 2024

		1 EA.	@ \$2,500.00
Asset ID	1005	Asset Actual Cost	\$2,500.00
		Percent Replacement	100%
Category	Plumbing	Future Cost	\$2,500.00
Placed in Service	January 2023	Assigned Reserves	\$2,500.00
Useful Life	1		
Replacement Year	2024	Annual Assessment	<u>\$2,148.58</u>
Remaining Life	0	Reserve Allocation	\$2,148.58

Plumbing - Total Current Cost
Assigned Reserves
\$15,300
\$3,897
Fully Funded Reserves
\$6,340



## Asphalt Shingle Roof Replacement - 2038

		1 Lump Sum	@ \$97,000.00
Asset ID	1017	Asset Actual Cost	\$97,000.00
		Percent Replacement	100%
Category	Roofing	Future Cost	\$146,721.20
Placed in Service	January 2018	Assigned Reserves	none
Useful Life	20		
Replacement Year	2038	Annual Assessment	<u>\$8,744.59</u>
Remaining Life	14	Reserve Allocation	\$8,744.59

Roofing - Total Current Cost \$97,000
Assigned Reserves \$0
Fully Funded Reserves \$29,100



Exterior Paint - 2027		1 Lump Sum	@ \$51,000.00
Asset ID	1009	Asset Actual Cost	\$51,000.00
		Percent Replacement	100%
Category	Painting	Future Cost	\$55,729.08
Placed in Service	April 2020	Assigned Reserves	\$29,142.86
Useful Life	7	_	
Replacement Year	2027	Annual Assessment	\$7,394.52
Remaining Life	3	Reserve Allocation	\$7,394.52
Exterior elevated walk	tways recoat - 2029		
		1 Lump Sum	@ \$9,800.00
Asset ID	1023	Asset Actual Cost	\$9,800.00
		Percent Replacement	100%
Category	Painting	Future Cost	\$11,360.89
Placed in Service	June 2022	Assigned Reserves	\$2,800.00
Useful Life	7		
Replacement Year	2029	Annual Assessment	\$1,428.64
Remaining Life	5	Reserve Allocation	\$1,428.64
D-:1:			
Railing repaint - 2025		1 Lump Sum	@ \$16,800.00
Asset ID	1024	Asset Actual Cost	\$16,800.00
		Percent Replacement	100%
Category	Painting	Future Cost	\$17,304.00
Placed in Service	January 1990	Assigned Reserves	\$16,320.00
Useful Life	10		
Adjustment	25	Annual Assessment	<u>\$821.05</u>
Replacement Year	2025	Reserve Allocation	\$821.05
Remaining Life	1		
Paint	ting - Total Current Cost	\$77,600	
1	Assigned Reserves	\$48,263	
	Fully Funded Reserves	\$48,263	
	i any i anaca ixeseives	ψτ0,203	



Routine Concrete Pa	atch Repair - 2033	1 EA.	@ \$2,500.00
Asset ID	1016	Asset Actual Cost	\$2,500.00
		Percent Replacement	100%
Category	<b>Building Components</b>	Future Cost	\$3,261.93
Placed in Service	January 2023	Assigned Reserves	\$250.00
Useful Life	10		
Replacement Year	2033	Annual Assessment	<u>\$279.24</u>
Remaining Life	9	Reserve Allocation	\$279.24

<b>Building Components - Total Current Cost</b>	\$2,500
Assigned Reserves	\$250
Fully Funded Reserves	\$250



## Common Exterior Door Replacement - 2038

		10 Lump Sum	@ \$1,000.00
Asset ID	1001	Asset Actual Cost	\$10,000.00
		Percent Replacement	100%
Category	Doors	Future Cost	\$15,125.90
Placed in Service	January 1990	Assigned Reserves	none
Useful Life	25		
Adjustment	23	Annual Assessment	<u>\$901.50</u>
Replacement Year	2038	Reserve Allocation	\$901.50
Remaining Life	14		

Common exterior doors appeared to be in good condition so the replacement was pushed out an additional 15 years.

## Elevator Room Door Replacement - 2025

		1 Lump Sum	@ \$1,000.00
Asset ID	1022	Asset Actual Cost	\$1,000.00
		Percent Replacement	100%
Category	Doors	Future Cost	\$1,030.00
Placed in Service	January 1990	Assigned Reserves	\$971.43
Useful Life	25		
Adjustment	10	Annual Assessment	<u>\$48.87</u>
Replacement Year	2025	Reserve Allocation	\$48.87
Remaining Life	1		

Doors - Total Current Cost
Assigned Reserves
\$11,000

Fully Funded Reserves
\$8,055

Routine Stucco Repair	rs - 2033	1 Lump Sum	@ \$2,500.00
Asset ID	1013	Asset Actual Cost	\$2,500.00
		Percent Replacement	100%
Category	<b>Exterior Finishes</b>	Future Cost	\$3,261.93
Placed in Service	January 2023	Assigned Reserves	\$250.00
Useful Life	10		
Replacement Year	2033	Annual Assessment	<u>\$279.24</u>
Remaining Life	9	Reserve Allocation	\$279.24

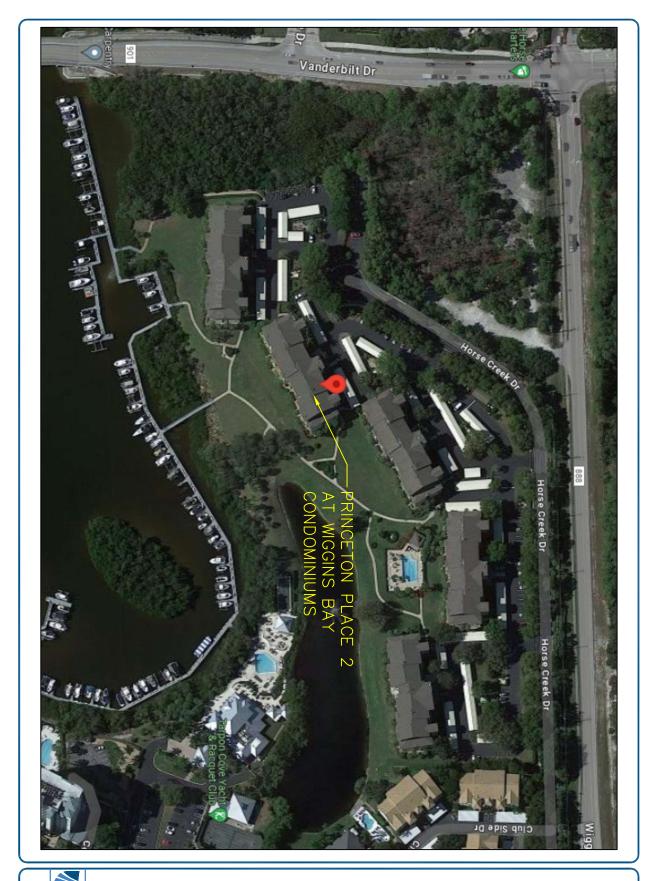
<b>Exterior Finishes - Total Current Cost</b>	\$2,500
Assigned Reserves	\$250
<b>Fully Funded Reserves</b>	\$250



## Princeton Place 2 at Wiggins Bay Condominiums RA Category Detail Index

Asset I	DDescription	Replacement	Page
1017	Asphalt Shingle Roof Replacement	2038	12
1001	Common Exterior Door Replacement	2038	15
1020	Domestic Booster Pump	2038	11
1003	Elect. Syst. Routine Maint & Insp.	2024	10
1022	Elevator Room Door Replacement	2025	15
1009	Exterior Paint	2027	13
1023	Exterior elevated walkways recoat	2029	13
1004	Fire Protective Systems Maint. Allowance	2024	9
1005	Plumbing System Routine Maint. and Insp.	2024	11
1024	Railing repaint	2025	13
1016	Routine Concrete Patch Repair	2033	14
1013	Routine Stucco Repairs	2033	16
	Total Funded Assets	12	
	Total Unfunded Assets	_0	
	Total Assets	12	

APPENDIX B
SITE LOCATION MAP



NSPECTIONS, LLC.

APPENDIX B

SITE LOCATION MAP

## APPENDIX C PHOTOGRAPHS



Photograph No. 1: View of the north (front) elevation.



Photograph No. 2: View of the west elevation.



Photograph No. 3: View of the south elevation.



Photograph No. 4: View of the east elevation.

#### **SITE PHOTOGRAPHS**



Photograph No. 5: General view of the roof.



Photograph No. 6: Partial view of the roof.



Photograph No. 7: Partial view of the roof.



Photograph No. 8: General view of the exterior walkways and cracks/spalling in the exterior walkway corner on the fifth floor.



Photograph No. 9: View of previous patch repairs.



Photograph No. 10: View of previous patch repairs.



Photograph No. 11: View of previous patch repair.



Photograph No. 12: View of previous patch repair.



Photograph No. 13: General view of the pump room.



Photograph No. 14: View of exposed steel reinforcement in the ceiling slab located in the electrical room.



Photograph No. 15: View of the balcony of Unit 301.



Photograph No. 16: View of the balcony of Unit 408.



Photograph No. 17: View of crack in the exterior stucco wall finishes observed in the balcony of Unit 408.



Photograph No. 18: View of cracks in the exterior ceiling finishes observed in the balcony of Unit 408.



Photograph No. 19: General view of the prefabricated wood roof trusses.



Photograph No. 20: General view of the prefabricated wood roof trusses.



Photograph No. 21: General view of the prefabricated wood roof trusses.



Photograph No. 22: General view of the prefabricated wood roof trusses.



Photograph No. 23: General view of the cast-in-place concrete stairs.



Photograph No. 24: View of corroded steel bracket observed on the 5th floor near the western end.



Photograph No. 25: View of cracks/spalling in the exterior walkway corner on the fifth floor.



Photograph No. 26: Close-up view of Photograph No. 25.



Photograph No. 27: View of cracks/spalling along the exterior walkway edge on the fourth floor.



Photograph No. 28: Fire panels.



Photograph No. 29: Fire extinguisher.



Photograph No. 30: Fire extinguisher & hose valve connector.



Photograph No. 31: Emergency lighting.



Photograph No. 32: Emergency light not properly working (eastern stairwell).



Photograph No. 33: Electrical meters.



Photograph No. 34: Electrical panel.



Photograph No. 35: Electrical disconnects.



Photograph No. 36: Electrical conduit.



Photograph No. 37: Domestic water booster pump.



Photograph No. 38: Exterior walkway finishes.



Photograph No. 39: Peeling of the exterior walkway finishes.



Photograph No. 40: Peeling of the paint in the exterior railing.



Photograph No. 41: Common door.



Photograph No. 42: Corrosion in the elevator room door.

# APPENDIX D QUALIFICATIONS OF KEY PERSONNEL

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

Professional Engineer / Special Inspector / Director Milestone Prog.



Phase II Structural Forensic Evaluations Structural Intercrity Reserve Studies

#### **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.

#### **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**

5

#### Licenses

Professional Engineer, FL #95850

#### **Certifications**

■ FAA Remote Pilot #4504445

# Ricardo Solis, PE

# Structural Engineer

Mr. Solis has over 5 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.

#### SELECTED THRESHOLD EXPERIENCE

**UT Delaware Parking Garage -** 6-story building Tampa, FL

**BMW Wesley Chapel -** 7-story building Wesley Chapel, FL

**Central Pasco Apartments -** 4-story building Pasco County, FL

# SELECTED MILESTONE INSPECTION/ STRUCTURAL INTEGRITY RESERVE STUDY EXPERIENCE

**Anchor Point Condominiums -** 3-story building Apollo Beach, FL

**Arenda De Madeira Condominiums -** 6-story building Maderia Beach, FL

**Banyan Point Condominiums -** (6)3-story buildings Punta Gorda, FL

**Belleair Sands Condominiums -** 3-story building Belleair Beach, FL

**Boca Vista Condominiums -** 8-storybuilding Madeira Beach, FL

**Carlton Vero Beach Condominiums** - (6) 4-story buildings Indians River Shores, FL

**Charlevoi Condominiums -** (2)3-story buildings Punta Gorda, FL

**Ciega Cove Condominiums -** 8-story building South Pasadena,FL

**Coquina Reef Condominiums -** (2)3-story buildings Bradenton Beach, FL

**Cordova Greens IV Condominiums -** 3-story building Seminole, FL

**Country Club Condominiums -** (6)6-story buildings Largo, FL

**The Fountains Condominiums -** 3-story building Indian River Shores, FL

**Garden Bay Condominiums -** 4-story building Cocoa Beach, FL

**Gateway Square Condominiums -** (2)3-story buildings St. Petersburg, FL

# SELECTED MILESTONE INSPECTION/ STRUCTURAL INTEGRITY RESERVE STUDY EXPERIENCE CONT.

**Golf Lake Condominiums -** 6-story building Largo, FL

**Gulf Island Beach & Tennis Condominiums -** (2)10-story buildings Hudson, FL

**Heather Ridge West Condominiums -** (3)3-story buildings Dunedin, FL

**Hidden Lagoon Beach Club -** 7-story building Sarasota, FL

**The Landing Condominiums -** (18)3-story buildings Altamonte Springs, FL

**Land's End at Sunset Beach Condominiums -** (10) 4-story buildings

Treasure Island, FL

**Park Plaza Condominiums -** 5-story building Pinellas Park, FL

**Penthouse Greens Condominiums -** (2)3-story buildings Largo, FL

**Sea Island South -** 8-story building Clearwater, FL