

O'CONNELL
& ASSOCIATES
CONSULTING ENGINEERS

People & Projects

An Overview
Summer 2025

"Their expertise, which has consistently proven to be a strong value to our development projects, is a testament to their capabilities. They have a knack for taking on very complicated challenging projects and developing cost-effective design solutions. Their availability, promptness, thoroughness, and professionalism are always on display."

— Tess Howard, Alys Beach, Vice President of Community & Development Planning

O'Connell & Associates Consulting Engineers, LLC is a mid-sized, multi-disciplined firm specializing in residential, commercial, and municipal work with civil and structural engineers on staff. Our principals and engineering team has a strong design and construction background which, when combined with our experience in a wide variety of processes, techniques, and materials, ensures a commonsense approach and economical solutions.

Mission Statement

O'Connell & Associates is committed to helping solve problems for our clients in a cost-efficient and timely manner by combining superior technical proficiency with first class interpersonal skills to achieve advantageous outcomes for all project stakeholders.

Vision Statement

We are a well-organized, disciplined team of experts and who are deliberate in growing our firm to become the best engineering company on the Gulf Coast designing and protecting sustainable community.

Community

People are the foundation of our company. Our goal is to construct long-term relationships that are built on trust, integrity, and effective communication. Our employees and clients define our reputation, ability, and path to success.

Communication

Effective communication helps us better understand people and situations. It helps us overcome differences, build trust, and respect, and create conditions for sharing creative ideas and solving problems.

Quality of Work

We share a high level of passion for our work and believe in the importance of using our skills to complete our projects to the highest standard by considering specific, measurable, achievable, and time-based project goals.



"Their professionalism, expertise, and commitment have consistently impressed us, contributing to an improved overall well-being, aesthetic appeal, and operational efficiency."

—Wendy Blevins, Virtuous Management Group



Image: 3rd Golf Course ~ 2023 Civil Engineering Project



Neill O’Connell, PE, SI, FBRSE

President
Mr. O’Connell has practiced civil and structural engineering since graduating from the University of Alabama in 1999. His civil experience includes the design of stormwater management systems, roadways, and municipal water and sewer utilities, encompassing planning, permitting, and construction oversight. His structural work involves the design of low-, mid-, and high-rise buildings using a wide range of construction materials, along with the forensic evaluation and analysis of critical structural components in existing buildings.



Michael Ekblad, PLA

Director of Operations
Mr. Ekblad holds a degree in Landscape Architecture from Louisiana State University and is licensed in Florida and Tennessee. His design work includes site planning for residential, commercial, industrial, medical, hospitality, and streetscape projects. He also has expertise in project management, contract administration, process development, and scheduling. Mr. Ekblad applies strong problem-solving skills and land development knowledge to improve operations and support the firm’s continued growth.



Matthew Fressell, PE, CCE

Director of Waterproofing & Restoration
Mr. Fressell brings +35 years of experience in the construction industry, with deep expertise in waterproofing, restoration, contract administration, and project management. A graduate of the Georgia Institute of Technology with a bachelor’s degree in Civil Engineering, his background includes work with the Army Corps of Engineers and decades in commercial construction and facade restoration. Having spent much of his career along the Gulf Coast, he understands the unique challenges of building and maintaining structures in coastal environments.



Jonathan Nash, PE

Manager of Civil Engineering
Mr. Nash has worked in civil engineering, land development, and construction since before graduating from Auburn University in 2001. His experience spans residential, commercial, and industrial site design, and permitting including planning, roadways, stormwater systems, utilities, and permitting. He also has extensive expertise in municipal water and sewer systems, from conceptual design and funding assistance to bid documents, contract administration, and project management.



Josh Barker, PE

Manager of Structural Engineering
Mr. Barker holds a Bachelor’s in Civil Engineering and a Master’s in Structural Engineering from the University of Alabama. His expertise covers detailed design of low- to high-rise buildings using steel, aluminum, concrete, masonry, timber, and engineered wood, supported by finite element analysis. He also specializes in structural assessment, renovation, building expansion, forensic analysis of distressed components, and foundation design.



Brandi Ryles-Waller, RS

Community Asset Consultant
Mrs. Ryles-Waller has been active in condominium and homeowner associations since becoming a Licensed Community Association Manager in 2005. Her experience includes managing building systems, overseeing building envelope reports, maintenance plans, and reserve studies. She has led multiple building refurbishment projects, enhancing her attention to detail, communication skills, and commercial construction knowledge. She is a registered Reserve Specialist and a Professional Reserve Analyst.



Caleb Alexander, REWO

Manager of Contract Administration
Mr. Alexander began his career in construction by interpreting design drawings and managing daily field operations across both residential and commercial projects. Over the years, he has successfully completed numerous construction projects along the Gulf Coast, gaining valuable experience in schedule coordination, inspections, and document control. Caleb is a Certified Thermographer, Licensed Drone Pilot, Construction Manager In-Training (CMIT), and Registered Exterior Wall Observer (REWO).

Leadership
Leadership is defined by experience, integrity, and a commitment to collaboration. Our principals & engineers bring strong design and construction backgrounds, guiding each project with practical wisdom & strategic insight.

Reputation
Our reputation is built on trust, personalized service, and proven expertise. We pride ourselves on delivering consistent, high-quality engineering solutions that address the unique challenges of coastal communities.

Collaboration
Our commitment to collaboration extends beyond our internal team to include clients, allied professionals, contractors, and regulatory agencies, creating a unified approach that builds trust and drives efficiency.

“from start to finish was extremely well managed by O’Connell & Associates and their staff. The communication and information received kept all involved well informed and knowledgeable during each phase of this project.”

— Michael Balzer, Association Manager/ Hidden Dunes Community Association

Condition Assessment

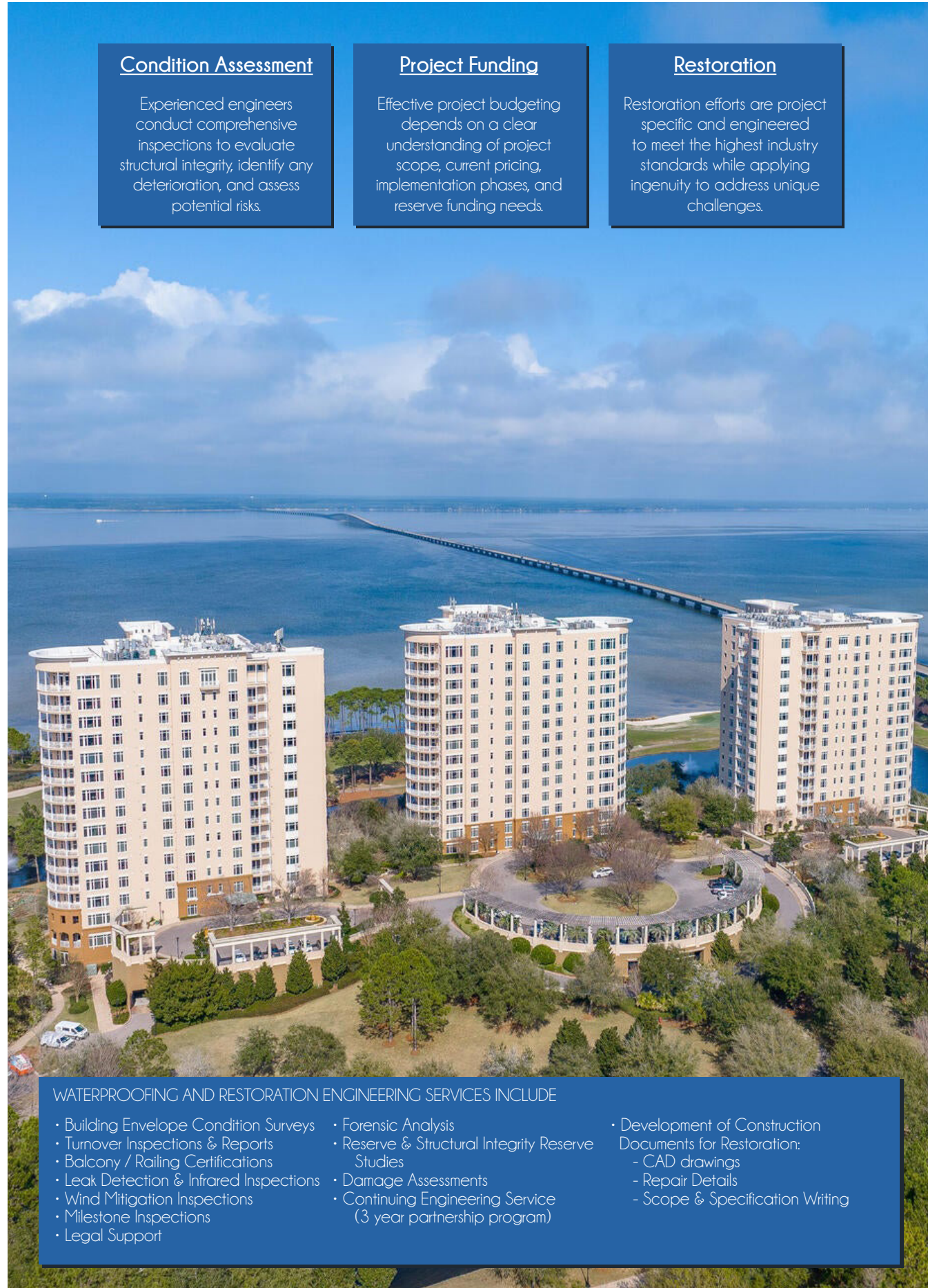
Experienced engineers conduct comprehensive inspections to evaluate structural integrity, identify any deterioration, and assess potential risks.

Project Funding

Effective project budgeting depends on a clear understanding of project scope, current pricing, implementation phases, and reserve funding needs.

Restoration

Restoration efforts are project specific and engineered to meet the highest industry standards while applying ingenuity to address unique challenges.



WATERPROOFING AND RESTORATION ENGINEERING SERVICES INCLUDE

- Building Envelope Condition Surveys
- Turnover Inspections & Reports
- Balcony / Railing Certifications
- Leak Detection & Infrared Inspections
- Wind Mitigation Inspections
- Milestone Inspections
- Legal Support
- Forensic Analysis
- Reserve & Structural Integrity Reserve Studies
- Damage Assessments
- Continuing Engineering Service (3 year partnership program)
- Development of Construction Documents for Restoration:
 - CAD drawings
 - Repair Details
 - Scope & Specification Writing

Image: One Water Place ~ 2025 Roof Replacement Project

WATERPROOFING & RESTORATION



Matthew Fressell, PE, CCE

Director of Waterproofing & Restoration
Specializes in waterproofing, facade restoration, and project management. His experience along the Gulf Coast and with the ACOE gives him deep insight into the challenges of maintaining coastal structures.



Brandi Ryles-Waller, CAM, RS, PRA

Community Asset Consultant - Specializes in building systems, maintenance planning, and reserve studies. Her experience with multi-building refurbishments enhances her construction knowledge and communication between owners and contractors.



Logan McDaniel, EI

Project Engineer - Specializes in engineering design, reserve studies, and property condition assessments. He holds a Master of Engineering in Biomechanical Engineering from Clemson University and brings experience in CAD modeling.



David Wilson

Project Engineer - He holds a Bachelor of Science in Mechanical Engineering from Auburn University and brings expertise in CAD modeling and hands-on work in structural repair, diagnostics, and engineering challenges.

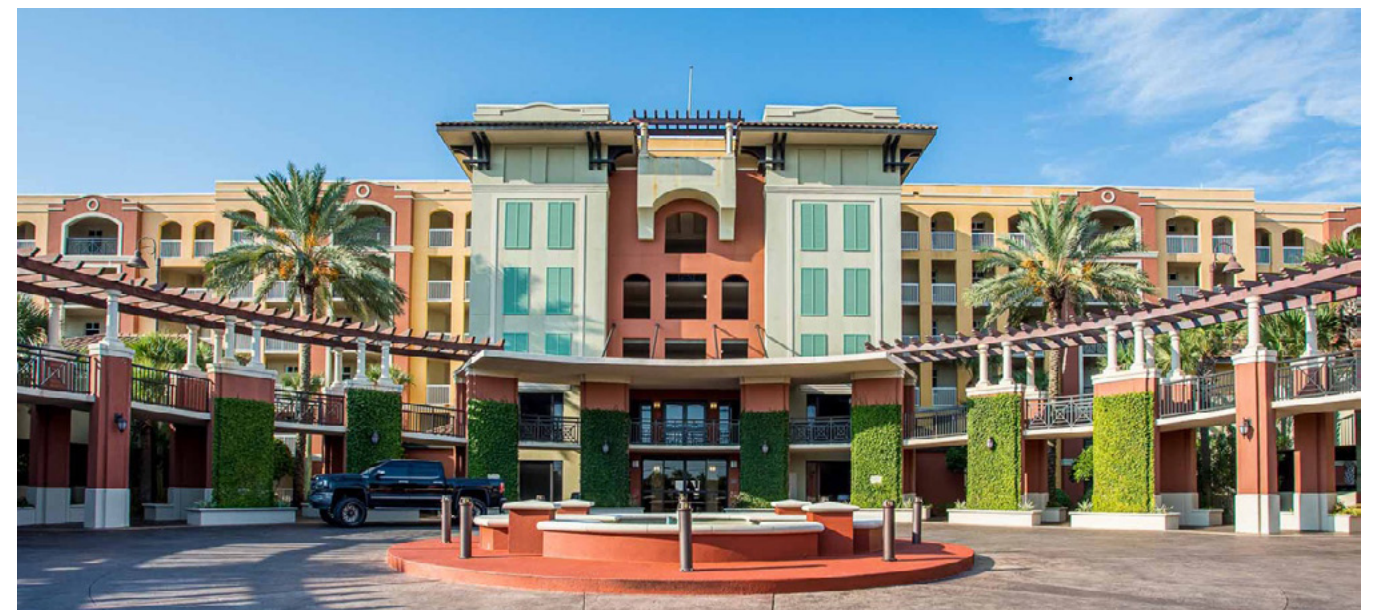


Image: Azure - 2024 Exterior Restoration Design Project



Condition Assessments

Identifying deficiencies, evaluating physical components, & estimating remaining service life to guide repairs, maintenance, or investment decisions.

Milestone Inspections

Evaluating structural integrity, identifying deficiencies, & determining necessary repairs to ensure safety & compliance with Florida's Statutes.

Reserve Studies

Evaluating building components, forecasting repair costs, & establishing reserve funding to maintain property value & comply with State requirements.

CONTINUING ENGINEERING SERVICE (CES)

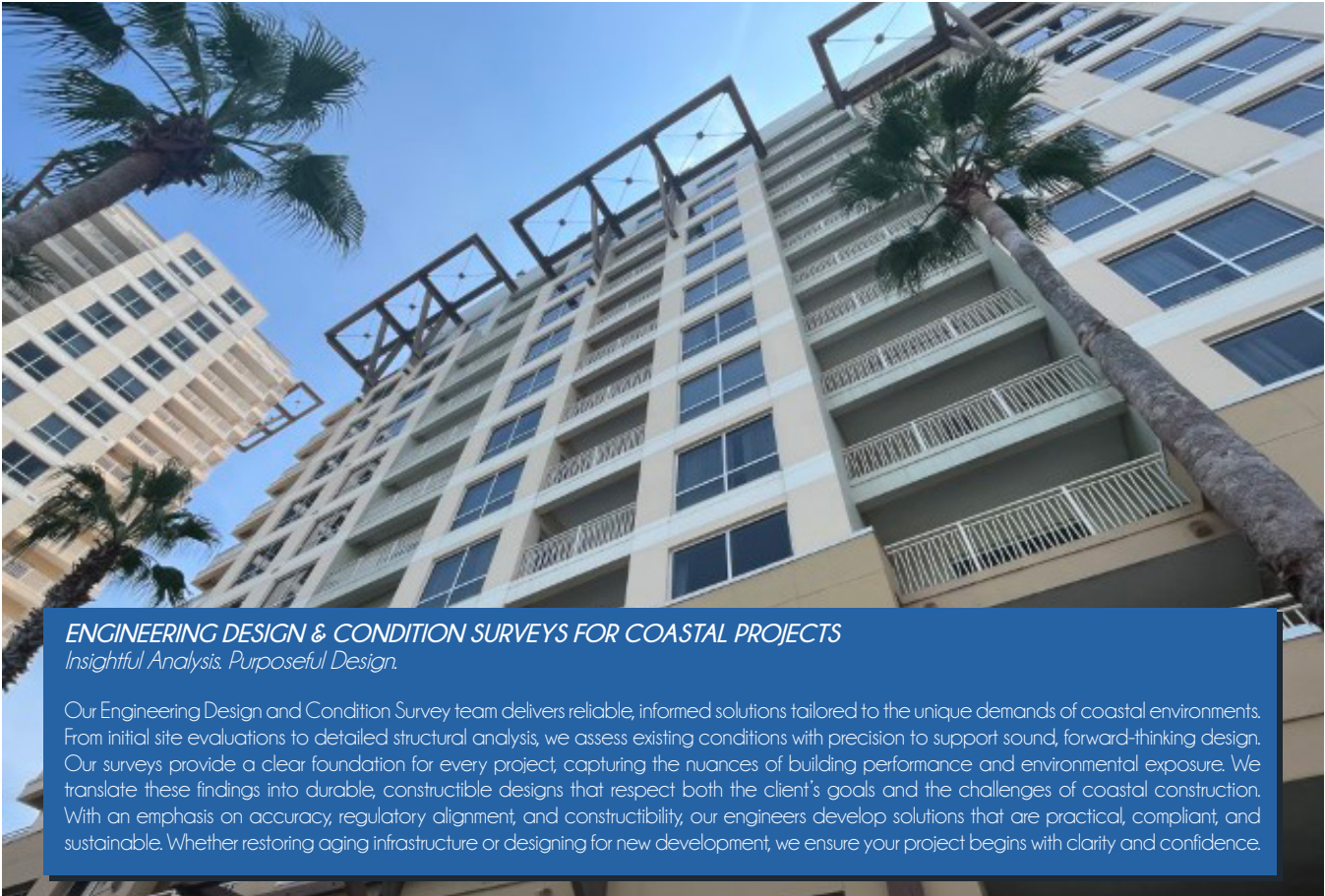
O'Connell & Associates Continuing Engineering Services (CES) plan is a customizable, three-year (3) partnership with condominium and homeowners associations to proactively maintain building safety and serviceability. Services include balcony and railing inspections, annual condition surveys, reserve studies, leak detection, infrared surveys, and construction documents. Each year, drone photos document pre-hurricane conditions. O&A provides electronic maintenance manuals and scanned building plans for easy access. We attend board meetings, offer on-call inspections, and deliver honest reporting to support timely repair decisions. CES aligns with Chapter 718, Florida Statutes, helping associations extend the life of critical components and plan for major repairs with confidence.

Image: Shoreline Towers ~ 2024 Exterior Restoration Project



Completed Milestone Inspections, Structural Integrity Reserve Studies, & Reserve Studies

» Alerio Condominium Association, Inc.	» Emerald Towers West Condominium Association, Inc.	» Oceania Owners' Association, Inc.	» The Tides at Tops'l Condominium Owners Association, Inc.
» Ariel Dunes II Condominium Association, Inc.	» Forest Lakes Owners Association, Inc.	» One Water Place Condominium Association, Inc.	» The Valencia Condominium Association, Inc.
» Bahia at Baytowne Wharf Condominium Association, Inc.	» Grand Sandestin at Baytowne Wharf Condominium Association, Inc.	» Pelican Isle Condominium Owners Association, Inc.	» The Villas at Sunset Beach Owners Association, Inc.
» Beachside Villas Owners' Association, Inc.	» Gulf Crest Condominium Association, Inc.	» Pine Ridge Villas Condominium Association, Inc.	» Tops'l Tennis Village Condominium Association, Inc.
» Boardwalk Beach Resort Community Association, Inc.	» Highland Park at Blue Mountain Beach Owners Association, Inc.	» Pinnacle Port Community Association, Inc. - Midrises Only	» Tranquility on the Beach Owners Association, Inc.
» Carillon Beach Association, Inc.	» High Pointe Resort Owners Association, Inc.	» Pinnacle Port Community Association, Inc. - Tower Only	» Tropic Winds Owners Association, Inc.
» Carillon Beach Association, Inc. - Carillon Beach Institute	» Huntington-By-The-Sea Owners Association, Inc.	» Presidio Yacht Club Condominium Owners Association, Inc.	» Ventana Dunes Property Owners Association, Inc.
» Celadon Beach Owners Association, Inc.	» Islander Beach Resort & Condominium Council of Co-Owners, Inc.	» Seagrove Highlands Condominium Owners Association, Inc.	» Venus Condominium Association, Inc.
» Century Park Villas, Inc.	» Luau Condominium Association, Inc.	» Shoreline Towers Phase I Condominium Association, Inc.	» Villa Lago Owners Association, Inc.
» Compass Point at Watersound Owners Association, Inc.	» Magnolia House Condominium Owners Association, Inc.	» Sterling Shores Owners' Association, Inc.	» Waterhaven Owners Association, Inc.
» Destin Gulfgate Owners Association, Inc.	» Mainsail Owner's Association, Inc.	» Summerchase at Crystal Beach Owners' Association, Inc. - Inn @ Crystal Beach	» Watersound West Beach Community Association, Inc.
» Dune Pointe Owners Association, Inc.	» Maravilla Condominium Association, Inc.	» Summerlin Condominium Owner's Association, Inc.	» White Cliffs Owners Association, Inc.
» Dunes of Seagrove Owners Association, Inc.	» Meditteranea of Destin Condominium Owners Association, Inc.	» Sundestin International Condominium Owners' Association, Inc.	
» East Pass Towers I Condominium Association, Inc.	» Misty Cove Homeowner's Association, Inc.	» Surfside Owners Association, Inc.	
» East Pass Towers II Condominium Association, Inc.	» Navarre Towers Condominium Owner's Association, Inc.	» The Plaza Condominium Owner's Association, Inc.	
» Elation at Baytowne Wharf Condominium Association, Inc.			
» Emerald Towers Owners Association, Inc.			



ENGINEERING DESIGN & CONDITION SURVEYS FOR COASTAL PROJECTS
Insightful Analysis. Purposeful Design.

Our Engineering Design and Condition Survey team delivers reliable, informed solutions tailored to the unique demands of coastal environments. From initial site evaluations to detailed structural analysis, we assess existing conditions with precision to support sound, forward-thinking design. Our surveys provide a clear foundation for every project, capturing the nuances of building performance and environmental exposure. We translate these findings into durable, constructible designs that respect both the client's goals and the challenges of coastal construction. With an emphasis on accuracy, regulatory alignment, and constructibility, our engineers develop solutions that are practical, compliant, and sustainable. Whether restoring aging infrastructure or designing for new development, we ensure your project begins with clarity and confidence.

Image: Luau ~ 2025 (est.) Exterior Restoration & Roof Replacement Project



Shores of Panama

A multi-phase exterior evaluation and restoration planning project at a large resort-style condominium complex in Panama City Beach, FL. The initial phase included a detailed visual assessment of the exterior envelope and exposed structural components supported by a formal report with findings and recommendations. Follow-up phases involved developing a comprehensive restoration scope, including waterproofing and structural repairs, to guide contractor bidding and ongoing work.

Completed 2028 (est.)



Gulfside at Hidden Dunes

A phased exterior evaluation and restoration planning project for a beach-front condominium tower in Miramar Beach, FL. The project began with prioritizing repairs and evaluating options for deteriorated components. Subsequent phases included developing a detailed scope of work addressing stucco and sealant repairs, concrete restoration, waterproof coatings, and structural repairs to walkway knee walls—forming the basis for contractor bidding and future restoration.

Completed 2020



Elation at Baytowne Wharf

A waterproofing and painting project at a mid-rise resort condominium in Miramar Beach, FL. Engineering services included the development of construction documents with detailed specifications, waterproofing and coating details, and contractor bid support. The project also involved prequalifying bidders, tabulating results, and providing a recommendation for award. Contract administration services were proposed to support construction observation, enforce technical standards, and compile project close-out documentation for the Association.

Completed 2017



Navarre Towers (CES)

A multi-year continuing engineering services agreement was completed for a beach-front high-rise condominium in Navarre, FL. The scope included annual inspections of the building envelope and structural systems, balcony and railing certifications, reserve study updates, and pre-hurricane condition surveys. Services also encompassed infrared moisture scans, board meeting participation, and priority on-call support for structural and civil engineering needs. A combined Milestone Inspection and Structural Integrity Reserve Study was also performed to meet new state requirements.

Completed 2026 (est.)



Mainsail (CES)

Provided engineering and contract administration services for a multi-building exterior restoration project in Miramar Beach, Florida. Services included site inspections, condition assessments of building envelope systems, and development of a detailed scope of work for sealant replacement, stucco and concrete repairs, deck coatings, and roof restoration. Developed a comprehensive project manual including technical specifications, bidding requirements, and construction documents. Assisted in contractor prequalification and bid evaluation.

Completed 2021



Emerald Isle Club

Provided engineering and contract administration services for a multi-building condominium restoration project. Work included inspections, coordination with architectural, electrical, and mechanical consultants, and development of repair plans for structural, paving, and waterproofing systems. During construction, a full-time Construction Coordinator was on site weekly, supported by regular site visits from the Project Engineer. Services included facilitating contractor bidding, overseeing progress meetings, and providing ongoing guidance.

Completed 2017



Construction Liaison

Acts as the communication bridge between teams, ensuring seamless coordination and smooth project execution through clear, timely information exchange.

Quality Control

Monitors and evaluates construction processes to ensure adherence to safety standards, quality control, and regulatory compliance throughout all project phases.

Progress Observations

Tracks daily construction progress, documenting issues and ensuring timely resolutions while reporting on project status, risks, and milestone achievements.

CONTRACT ADMINISTRATION SERVICES INCLUDE

- Forensic Analysis
- Observation Reports
- Value Engineering
- Pay Application Review
- Change Order Review
- Work & Field Change Directives
- Facilitate Progress Meetings
- Mock-up Review
- Construction Observations
- Crack Gauge Installation
- Building Envelope Condition Surveys
- Turnover Inspections & Reports
- Balcony / Railing Certifications
- Leak Detection & Infrared Inspections
- Punch List Inspections
- Maintenance & Warranty Support
- As-Built Inspections
- Aerial Photography & Inspections
- Substantial & Final Completion Support

Image: LaSata ~ 2022 Exterior Restoration Project

CONTRACT ADMINISTRATION



Matthew Fressell, PE, CCE

Director of Waterproofing & Restoration
Specializes in waterproofing, facade restoration, and project management. His experience along the Gulf Coast and with the ACOE gives him deep insight into the challenges of maintaining coastal structures.



Caleb Alexander, REWO

Manager of Contract Administration
Oversees contract administration with experience in construction management, owner representation, inspections, and construction document review.



Amy Owens, CDT

Construction Coordinator - Has 30+ years of experience in construction management, project coordination, and design compliance for commercial, government, and residential projects.



Nicolas 'Nico' Thomas, CMI

Construction Coordinator - With 25+ years of experience in inspections and construction, specializing in electrical systems, project management, and client communication.



Dillon Dagget

Construction Coordinator - Has project management experience in marina construction, real estate development, permitting, budgeting, logistics coordination, and heavy equipment operations.



Cole Bailey

Construction Coordinator - Has a background in customer service, management, and operations, thriving in fast-paced environments and delivering exceptional work.



Connor Hudson, EI

Project Engineer - Brings experience in site design, concrete design, inspections, and project coordination, with strong technical skills in AutoCAD and Civil 3D.



Justin Marcotte, EI

Project Engineer - Experienced in structural analysis, concrete design, geotechnical engineering, and surveying, with strong skills in Civil3D, SAP2000, and AutoCAD.



Image: Players Club on the Bay ~ 2025 Exterior Restoration Replacement Project



Mainsail

Provided contract administration services for a multi-building exterior restoration project in Miramar Beach, Florida. Following design development and contractor selection, services included construction observation, coordination with contractors, and enforcement of the contract documents. Completed submittal reviews, responded to contractor requests for information, and issued field clarifications to maintain design intent and schedule compliance. Facilitated weekly construction progress meetings, and prepared reports of ongoing work.

Completed 2021



Grand Sandestin

Provided contract administration services for an exterior restoration project at a 12-story condominium building in Miramar Beach, Florida. Following the development of construction documents, responsibilities included coordination with the selected contractor, review of submittals, and timely responses to requests for information to maintain adherence to the contract scope. Observed and reported on construction activities through regular site visits and meetings, ensuring the work was completed in accordance with the design specifications and industry standards.

Completed 2021



WaterColor Town Center

Conducted an exterior assessment and planning project at WaterColor Town Center, focusing on Buildings 20, 1680, and the stair/elevator tower between Buildings 4 and 1680. The project involved visual surveys and targeted destructive testing to evaluate building conditions. The findings were used to develop a detailed scope of work addressing structural repairs, siding replacement, new flashings, sealants, and waterproofing improvements, providing clear guidance for future restoration efforts.

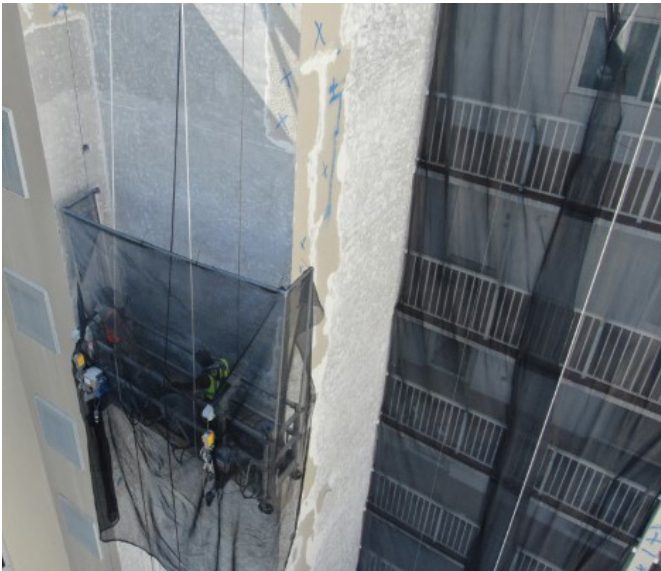
Completed 2022



Grand Villas at Hidden Dunes

Provided engineering and contract administration services for an exterior restoration project at Grand Villas. The work focused on restoring and protecting the building's exterior envelope through removal and replacement of exterior sealants, full building repainting, and evaluation of alternates for bedroom window replacement and walkway waterproofing. Services included preparation of construction documents, contractor coordination, construction observation, and ongoing project administration to ensure compliance.

Completed 2025



Shoreline Towers

Provided contract administration services for a large-scale exterior restoration project at a beach-front complex consisting of three 12-story condominium towers and ten townhomes. Services included pre-construction planning, review of contractor qualifications, and coordination during the bidding and award process. During construction, conducted routine site observations, reviewed submittals and pay applications, and responded to requests for information to support adherence to the project scope and technical specifications.

Completed 2024



The Cottages at Hidden Dunes

Provided contract administration services for a residential roof restoration project at The Beach Cottages at Hidden Dunes in Walton County, FL. The project included the replacement of twelve (12), 3-story, cottage roofs and involved full engineering support from pre-construction through project closeout. Services included the preparation of construction documents, assistance with contractor procurement, and oversight throughout construction. Monitored compliance with technical specifications, reviewed submittals and pay applications.

Completed 2025 (est.)

Structural Analysis

Assesses site conditions, loads, & materials to develop safe, efficient systems suited for coastal hazards like wind & corrosion. We model structural behavior to maximize resilience without over-design.

Design Objectives

Converts architectural vision into buildable, code-compliant structures that blend safety, performance, & aesthetics. Our focus is on constructability, durability, & long-term service.

Construction Support

Delivers on-site structural inspections & responsive engineering input during construction, ensuring alignment with design intent & resolving field issues with timely, practical solutions.

STRUCTURAL ENGINEERING SERVICES INCLUDE

- 3D Modeling
- Aluminum Design
- Building Code Analysis
- CAD Drafting
- Concrete Design
- Specification Writing
- Steel Design
- Retaining Walls

- Masonry Design
- Wood Design
- Forensic Analysis
- Inspection Reports
- Value Engineering
- Construction Management
- Contract Administration
- Parking Deck Design & Analysis

- Produce Structural Contract Documents for Building Permits
- Residential, Commercial & Municipal Design
- Door & Window Wind Pressure Certification

Image: 3500 E County Highway 30a ~ Custom Residence Structural Engineering Project

STRUCTURAL ENGINEERING



Neill O'Connell, PE, SI, FBRSE

President - His civil work includes stormwater systems, roadways, utilities, & permitting for residential & commercial projects. Structurally, he has designed low to high-rise buildings with diverse materials and performed forensic analysis of existing structures.



Josh Barker, PE

Manager of Structural Engineering - His expertise covers detailed design of low- to high-rise buildings using a variety of materials supported by finite element analysis. He also specializes in structural assessment, renovation/expansion, forensic analysis of distressed components.



BJ Bryant, CGC, CPRC

Contract Administrator - Experience in structural, mechanical, and electrical design and construction. His structural work includes steel, concrete, masonry, timber, and light gage systems. He also designs processing equipment and control systems for industrial applications.



Tyson Sanders, EI

Project Engineer - Focused on foundation and superstructure design for new and existing buildings, using advanced modeling & multiple material systems. He also conducts forensic studies & condition assessments of structural failures & deficiencies.



Matthew Spence, EI

Project Engineer - Specializes in foundation & structural design for buildings of all sizes, utilizing diverse materials and finite element modeling. His work also involves forensic evaluations and the assessment of existing or damaged structural systems.



Image: 86 Lanier - Forest Lakes



Image: 68 Okeechobee - Forest Lakes



Image: Grayton Beach



Design

Develops structural systems that balance performance, efficiency, & constructability—tailored to meet architectural goals, site conditions, & code requirements while enabling long-term durability.

Value

Delivers cost-effective engineering solutions that reduce material use, streamline construction, & extend building life cycles—maximizing client investment without compromising safety or quality.

Intent

Translates project vision into structural clarity, ensuring every beam, connection, & foundation supports both the function & the purpose of the design—from concept through completion.

Image: Shunk Gulley Oyster Bar ~ Civil & Structural Engineering Project



The Okaloosa Gas District Campus

A multi-building commercial project located in Valparaiso, Florida. Designed to consolidate key operational functions, the campus includes four new structures: an administrative headquarters, operations building, maintenance facility, and warehouse. The site is positioned at the intersection of Valparaiso Parkway and Government Avenue and will serve as a central hub for regional utility services. This project focused on structural engineering design, including shallow foundations for all buildings and cast-in-place concrete systems for the main administrative facility. The design incorporated post-tensioned floor slabs, concrete columns, and detailed coordination of load-bearing systems. The remaining buildings were designed using either masonry or pre-engineered metal building systems with light-gauge or wood truss roof framing. The engineering scope also included structural support for elevator shafts, stairways, balconies, and walkways.

Completed 2024



Red Bar

After the original establishment was destroyed by fire in 2019, O’Connell & Associates assisted with the redevelopment of the 0.32-acre site located in Grayton Beach. The project primarily consisted of replacing the iconic building and O’Connell & Associates provided civil, structural, mechanical, electrical, and plumbing engineering services for the re-build. The Red Bar successfully reopened as a 5,300 SF restaurant in the summer of 2020.

Completed 2020



The Camden & the Whitby - Mixed Use Condos

The Camden and The Whitby (TC-3&4) in the Town Center at Alys Beach was primarily a structural engineering project. The scope of work included the design and engineering of shallow concrete foundations, cast-in-place concrete columns, coordination for the development of the post-tension cable reinforced floor, and design of the roof systems, cast-in-place archways and headers, and pre-engineered light gauge steel truss roof over-framing. The project also includes the design and engineering of elevator shafts, balconies, walkways, and stairways to meet local building codes and the Fortified™ Engineering Standards.

Completed 2023



The Dannelly & The Varian - Mixed Use Condos

The Dannelly and The Varian are adjacent mixed-use buildings that mark the completion of the walkable core of shops and restaurants within the Alys Beach Town Center. Together, they help define the pedestrian-friendly streetscape and enhance the central hub’s continuity and charm. This project was primarily a structural engineering effort, encompassing the design and engineering of shallow concrete foundations, cast-in-place concrete columns, and the development of a post-tension cable reinforced floor system. The scope also included roof systems, cast-in-place archways and headers, and a prominent heavy timber trellis system that contributes both functionally and architecturally to the outdoor spaces. Additional features include elevator shafts, balconies, walkways, and stairways, all designed and engineered to meet local building codes and the Fortified™ Engineering Standards.

Completed 2025



Bud & Alley’s

This project involved structural engineering services for a two-story expansion to the existing restaurant. The new construction includes a commercial kitchen on the second level, and an open-air bar on the third level, along with a four-story stair tower. Structural design responsibilities included a mat-slab foundation, reinforced concrete, masonry walls on the first floor, concrete floor systems, and a combination of masonry and timber framing on the upper levels and roof. The scope also included connections to the existing structure and a field engineering allowance for coordination during demolition and early construction phases. Construction-phase services included scheduled inspections for foundation work, concrete and steel elements, masonry, timber framing, and structural systems.

Completed 2023



STRUCTURAL DESIGN FOR COASTAL LIVING

Engineered for Strength. Inspired by the Coast.

Whether you're building a luxury beach cottage or a Fortified™-certified residence, our structural engineering team specializes in resilient, code-compliant designs tailored for coastal environments. From elevated foundations to high-wind framing systems, we bring technical expertise and architectural sensitivity to every project. With a deep understanding of local building codes, FEMA requirements, and the unique demands of shoreline construction, we help homeowners and builders create safe, durable homes without compromising beauty or comfort.

Let us bring your vision to life—with coastal confidence built in.

Image: 71 Cedar Post Road ~ Structural Engineering Project



35 Boat House Road

This project involved the structural design of a two-story single-family residence totaling approximately 4,200 sq. ft. under roof. The home featured a mix of conditioned living areas and unconditioned spaces, including covered porches and a garage. The structure was supported by CMU piers with a crawlspace foundation, and the first level was timber-framed. Vertical and horizontal framing systems included timber-framed walls and pre-engineered timber trusses for the upper floor and roof assemblies.

Completed 2016



146 Montgomery Street

This project involved the structural and civil design of a four-story single-family residence with approximately 7,900 sq. ft. of conditioned space, plus unconditioned areas including two garages, open porches, and balconies. The structure utilized auger-cast piles, grade beams, and a turn-down slab foundation, with CMU and/or cast-in-place concrete walls for vertical support. Floors were concrete, and the roof featured pre-engineered timber trusses with a cast-in-place deck. The scope also included a rooftop pool, concrete site walls, foundation for an at-grade pool, and a stormwater exfiltration system.

Completed 2020



205 Okeechobee West

Provided structural engineering services in support of a residential development project located in Walton County. Scope of work included review and mark-up of architectural design development drawings, and final review and certification of structural construction drawings and specifications for permit submittal. Engineering responsibilities also included coordination with a geotechnical engineer to evaluate subsurface conditions and provide recommendations for foundation design.

Completed 2015



5012 W County Highway 30a

Provided structural engineering services for two identical, four-story single-family residences with carriage houses. Each structure includes approximately 6,900 sq. ft. of conditioned living space and 2,300 sq. ft. of porches and outdoor living areas. Structural systems include a shallow concrete foundation, slab-on-grade, pre-engineered timber trusses for upper floors, timber-framed side walls with brick cladding, and a stick-framed tower with timber roof trusses. Brick-clad site walls and underground stormwater systems were also included.

Completed 2025



93 Sand Hill Circle

This residential project involved civil and structural engineering services for a new three-story single-family home in the WaterSound Bridges community. Structural design services included engineering the foundation, framing systems, and roof structure based on architectural plans. Construction-phase services included scheduled inspections and engineering support to confirm general compliance with design specifications and applicable codes.

Completed 2022



16 McGee Drive

The project featured approximately 2,700 sq. ft. of conditioned space and 1,600 sq. ft. of unconditioned loggia, balconies, roof terraces, and concrete site walls. The scope included structural design of the foundation, floor, and roof systems utilizing a combination of concrete and timber framing, as well as civil engineering support for stormwater drainage and site grading. Construction-phase services included review and coordination of architectural drawings, structural shop drawings, and test reports, along with participation in project team meetings.

Completed 2019

Regulations

Navigate complex regulatory environments by anticipating permitting requirements, aligning designs with jurisdictional codes, & coordinating with regulatory agencies.

Modeling

Translating design intent into buildable solutions using advanced tools - concepts are developed into models that account for site conditions, performance criteria, & constructability.

Experience

Leverage a broad base of design & construction experience to deliver practical, cost-effective solutions drawing from lessons learned, technical expertise, and field-tested judgment.

CIVIL ENGINEERING SERVICES INCLUDE

- CAD Drafting & Modeling
- Construction Administration
- Flood Zone Certification
- Forensic Analysis
- Grading & Drainage
- Production Water Wells
- Potable Water Treatment

- Permitting
- Traffic Studies
- Utility Relocation
- Pumping Systems
- Retaining Walls
- Specification Writing
- Wastewater Treatment

- Potable Water Storage & Distribution
- Reuse Water Distribution/Disposal
- Road & Bridge Design & Analysis
- Wastewater Collection Systems
- Stormwater Design & Analysis

Image: The 3rd Golf Course ~ 2023 Civil Engineering Project

CIVIL ENGINEERING



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President - His civil work includes stormwater systems, roadways, utilities, & permitting for residential & commercial projects. Structurally, he has designed low to high-rise buildings with diverse materials and performed forensic analysis of existing structures.



Jonathan Nash, PE

Manager of Civil Engineering - Oversees contract administration with experience in construction management, owner representation, inspections, & construction document review.



Brice Nist, PE

Senior Civil Engineer - Has 30+ years of experience in construction management, project coordination, and design compliance for commercial, government, and residential projects.



Ansley Williams

Permitting Manager - Has project management experience in marina construction, real estate development, permitting, budgeting, logistics coordination, and heavy equipment operations.



Brent Lowell, EI

Project Engineer - Brings experience in site design, concrete design, inspections, and project coordination, with strong technical skills in AutoCAD and Civil 3D.



Alex London, EI

Project Engineer - Experienced in structural analysis, concrete design, geotechnical engineering, and surveying, with strong skills in Civil3D, SAP2000, and AutoCAD.



Don Pritt

Senior Design Technician - Has a background in customer service, management, and operations, thriving in fast-paced environments and delivering exceptional work.



Image: Saltaire Mixed-Use Development ~ Civil Engineering Project



Watercolor Crossings

The project involved the development of a 1.0-acre site in WaterColor, Florida, to support a new ±7,200 sq. ft. restaurant and office building. Civil engineering services included the design and permitting of infrastructure improvements such as paved areas, potable water and sanitary sewer utilities, and a stormwater drainage and management system. The permitting process encompassed approvals from multiple agencies, including a local Development Order, an Environmental Resource Permit, a Water Distribution Permit, and a Wastewater Collection Permit.

Completed 2018



Shunk Gulley Oyster Bar

Civil and structural engineering services supported the expansion of Shunk Gulley Restaurant and the addition of a new retail space along Scenic Highway 30A. The project encompassed structural design, site planning, stormwater management, utility coordination, and local and state permitting necessary for Walton County's Development Order approval. The completed expansion enhanced restaurant functionality and added retail space, contributing to the walkable, mixed-use character of the area.

Completed 2021



Papa Surf

The project involved civil engineering services in support of a Development Order application in Walton County, FL. The scope included the preparation of all required documentation for submittal in accordance with local land development regulations. Design and engineering efforts focused on the implementation of infrastructure improvements, including paved areas and a stormwater collection and management system. The stormwater system was designed using hydrologic and hydraulic modeling to ensure code compliance and to support long-term site functionality.

Completed 2023



Cowgirl Kitchen

The project involved the development of a commercial establishment consisting of a ±1,300 sq. ft. restaurant and a modular-type prep kitchen. Civil engineering services included the design of infrastructure to support the commercial use, with a focus on facilitating smooth accessibility and customer mobility throughout the site. To meet the operational needs of the establishment, the project also incorporated the installation of on-site potable water and sanitary sewer utilities, ensuring code compliance and supporting functional, long-term serviceability.

Completed 2022



Freeport Shipyard

The project involved engineering services for the development of a 5.5-acre commercial site at 116 Shipyard Road in Freeport, Florida. The site includes commercial buildings, warehouses, paved areas, and supporting infrastructure. Services included site review, environmental coordination, conceptual layouts. Project deliverables were comprised of stormwater, grading, and drainage modeling, utility layouts, and construction documents for permitting.

Completed 2025



The Powder Room

The Powder Room, is a dynamic recreational facility situated on a 1.9-acre parcel in Panama City Beach, FL. This project constructed a state-of-the-art sports club, including common area/retail space and a 12-lane indoor shooting range. The project involved the construction of essential infrastructure such as roadways, parking, utilities, and a comprehensive stormwater drainage and management system. The structural scope for the facility consisted of a two-story commercial building, with a conditioned area spanning approximately 17,300 sq. ft.

Completed 2023



Image: Saltaire Village ~ Civil Engineering Project



Camp Creek Amenity

The Camp Creek Amenity Expansion project involved designing and permitting infrastructure to support new amenities adjacent to the existing Camp Creek Golf Club in Walton County, Florida. The scope included paved roadways, sidewalks, parking, potable water and sanitary sewer systems—including a new lift station—and stormwater management, while keeping the existing facility operational. Detailed construction drawings and specifications were prepared, and multiple regulatory permits were secured, including Walton County Major Development Order and Environmental Resource Permits. Coordination with surveyors, environmental and geotechnical engineers ensured thorough site evaluation, stormwater modeling, and traffic analysis. The team also facilitated public review by attending key county meetings to ensure compliance.

Completed 2023



Peach Creek, Mixed-Use PUD

A 62-acre mixed-use development was planned in Santa Rosa Beach, Walton County, Florida, proposing approximately 604 residential units and 8 acres of commercial space. The project successfully obtained Planned Unit Development (PUD) approval from Walton County following extensive planning efforts, including the preparation of a Conceptual Master Concept Plan to support requested deviations and minimize future design review requirements. The entitlement process involved detailed coordination with agencies for wetland delineation and ACOE permitting, as well as collaboration with the local school board to plan roadway and pedestrian connections. The design incorporated the alignment of an existing utility easement that bisected the site, which also served as the corridor for a proposed regional multi-use path.

Completed 2023



Black Creek, Residential PUD

A new 87-acre single-family residential development was planned along Black Creek Boulevard near the City of Freeport in Walton County, Florida. The project aimed to create approximately 130 residential lots across a mix of 50'x110' and 70'x130' parcels, incorporating multiple access points, wetland buffers, stormwater management areas, and a ±1.5-acre amenity site. The site was constrained by approximately 35 acres of state and NWFWMJ- jurisdictional wetlands, resulting in 52 developable acres. The proposed development was designed in accordance with Walton County's Land Development Code, which allows a maximum residential density of two dwelling units per acre in the Rural Village zoning district.

Completed 2022



Quail Run, Mixed-Use PUD

The project site covered approximately 211 acres and involved the design and construction of infrastructure to support around 400 single-family residential lots and associated amenities. The scope encompassed paved roadways, sidewalks, parking areas, potable water and sanitary sewer utilities, as well as a comprehensive stormwater drainage and management system. Detailed construction drawings and specifications were developed to effectively guide the construction process. The project required coordination and submission of multiple regulatory permit applications, including the Walton County Major Development Order, Florida Department of Environmental Protection potable water and wastewater permits, and Northwest Florida Water Management District stormwater permits.

Completed 2023



Wolf Creek, Residential PUD

Phase II of the Wolf Creek residential development in Freeport, Florida involved designing infrastructure for approximately 500 single-family homes across 250 acres within a larger 970-acre Planned Unit Development. The scope included paved roads, sidewalks, parking, potable water and wastewater utilities, stormwater management, landscaping, and lighting. A new 4,000-foot access road connected State Road 20 to the lots, while design considerations addressed wetlands, buffers, and zoning requirements. The project included preparation and submission of Conceptual and Detailed PUD applications, coordinating closely with Walton County staff and stakeholders. The team developed a Comprehensive Master Plan, managed public hearings, and ensured regulatory compliance.

Completed 2025 (est.)

Form

Defines the physical layout of the site to enhance arrival, circulation, & views—aligning roadways, walkways, & utilities with spatial hierarchy & architectural rhythm.

Aesthetics

Blends civil infrastructure seamlessly into the guest experience—shaping site elements like paving, grading, & drainage to complement architecture & landscape with subtle, intentional design.

Function

Engineers reliable, resilient systems beneath the surface—ensuring stormwater, utilities, & grading perform quietly & efficiently to support hospitality operations without disruption.

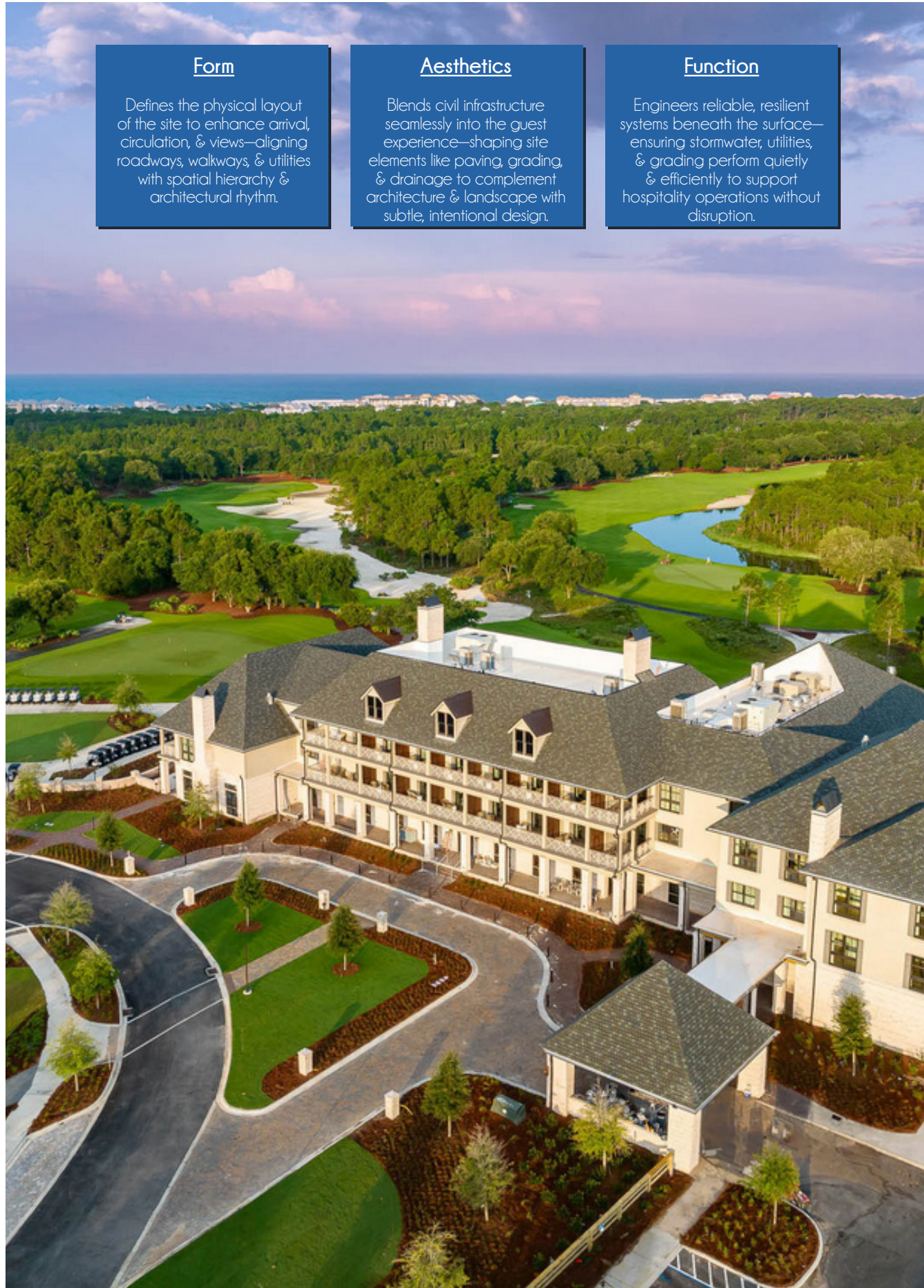


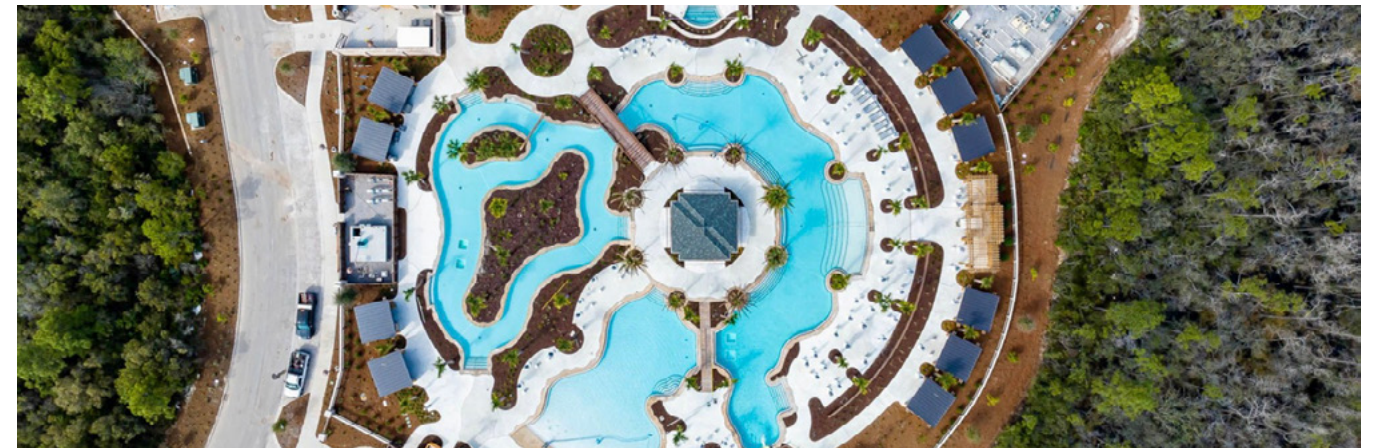
Image: Camp Creek Resort ~ 2023 Civil Engineering Project



WaterSound Beach Club

A new urbanist community of WaterSound needed to expand its existing beach club along the Gulf. The new beach club features a 7,000 sq. ft. free-form, zero-entry pool with a lazy river, a 2,225 SF clubhouse with a grille and restrooms on the pool level, a small pool bathhouse, fire pits, cabanas, and a band stage and amphitheater lawn. The design and State and local permitting for the project included the redesign of the entry drive, a new golf cart parking lot, a new round-a-bout, an upgrade of the existing stormwater management system and an upgrade of water and sewer services necessary to accommodate the future proposed buildings and amenities. The project included a curvilinear layout, structural design, and permit with FDEP for nearly one mile of timber boardwalk through environmentally sensitive areas.

Completed 2022



Camp Creek Amenity

The civil engineering project included the development of a vacant portion of land east of the existing Camp Creek Golf Club. The design and permitting for the project included modifications to the existing facility, construction of infrastructure necessary to service a series of new buildings and associated amenities and included paved areas, potable water and sanitary sewer utilities and a stormwater drainage and management system. At build-out, the expansion will include a new 75-room three-story hotel, a 12,000 sq. ft. state-of-the-art health & wellness center, family pool with water slide and lazy river, and a dedicated adults-only lap pool, 8 tennis courts and 8 pickle ball courts with stadium-style seating and 1,100 sq. ft. sport building, 3 dining venues, a 1,000 sq. ft. kids club, and a multi-use sports field.

Completed 2024





ENGINEERING DESIGN FOR MUNICIPAL SYSTEMS

Engineered for Reliability. Designed for Resilience.

Our Civil & Structural engineering teams specialize in the planning and design of critical municipal infrastructure that supports growing communities and safeguards public health. From ground storage tanks and pump stations to stormwater management and water distribution networks, we deliver solutions that are durable, efficient, and tailored to local needs.

We approach every project with a deep understanding of regulatory requirements, operational demands, and long-term maintenance—balancing technical rigor with environmental responsibility and community impact. Whether it's expanding utility capacity or modernizing aging systems, we design with clarity, coordination, and care. We don't just build infrastructure—we help future-proof the systems that sustain daily life.

Image: Destin Linear Park ~ 2026 Civil Engineering Project



Seacoast Collegiate High School

This project included civil and structural engineering services for a phased campus expansion in Walton County, Florida. The work focused on site planning, permitting, and documentation the new campus. Civil services included stormwater modeling, utility layout, and preparation of numerous site permits. Structural services covered three new multi-story buildings totaling approximately 27,000 SF. The scope included design of foundations, framing, floors, roofs, elevator shafts, and stair supports.

Completed 2025



Veterans Tribute Tower

This project involved structural engineering for the foundation design of the Veterans Tribute Tower in Fort Walton Beach, Florida. The scope included reviewing tower drawings provided by The Verdin Company and conducting a site visit to collect measurements and assess field conditions. Geotechnical coordination was performed to evaluate subsurface conditions and determine soil bearing capacity. Based on the findings, a foundation was designed to support the tower and withstand site-specific loads.

Completed 2015



Port of Gulfport

This project involved providing structural engineering services for the design of an aluminum spiral stair, observation platform, and lantern room for the Port of Gulfport Ground Storage Tank and Elevated Platform. The scope included detailed design calculations, structural analysis, and preparation of design and fabrication drawings. Services included coordination with The Crom Corporation to review existing documents, confirm project requirements, and ensure compliance with applicable federal, state, and local standards.

Completed 2017



Duke Energy Stair Tower - Bartow

This project involved structural engineering and contract administration services for the design, fabrication, and construction oversight of a 69-foot freestanding aluminum stair tower and foundation. The scope included comprehensive structural analysis and design of stair treads, stringers, landings, support columns, lateral bracing, handrails, foundation elements, and all associated connections, utilizing advanced 3D engineering software. Project deliverables included signed and sealed design and fabrication drawings.

Completed 2017



Regional Utilities Master Plan Update

This project provided civil engineering services to update the 2024 FCSC Master Plan, focusing on integrating the Inlet Beach Water System (IBWS) into FCSC's water and wastewater network. The work included evaluating existing infrastructure, updating demand forecasts, and identifying necessary capital improvements. Deliverables included revised demand tables, supply and treatment analyses, and a five-year capital improvement plan for both FCSC and IBWS. An engineering report supporting the 2024 FCSC bond issue was also prepared.

Completed 2024

“O’Connell & Associates’ team of engineers is knowledgeable, detail-oriented, and dedicated to each project. They have consistently exhibited excellent communication and project management skills, effectively coordinating with stakeholders, adhering to deadlines, and delivering outcomes within budget.”

— Patrick Murphy, Senior Vice President, The St. Joe Company

By choosing O’Connell & Associates Consulting Engineers, you’ll work with a team of experienced, registered engineers, design professionals, and construction experts with extensive experience in materials, design techniques, and civil, structural, and waterproofing systems. We are licensed to practice in 12 states, bringing a broad scope of expertise to every project. We focus on selecting the most efficient design solutions and tailoring them to meet your project’s unique requirements.

Our practical, deadline-driven team prioritizes clear communication of project goals and works diligently to meet deadlines, helping to minimize permitting and construction delays. We take pride in both our work and our clients, offering personalized yet professional service to ensure the highest satisfaction, no matter the project size.

Our mission is to become the Gulf Coast’s premier engineering firm, dedicated to designing and protecting sustainable communities.

— Neill R. O’Connell, P.E., F.B.R.S.E
President

People

Empowering talented engineers & technical staff to lead with precision, collaborate across disciplines, & deliver high-performance design solutions. Driving project success through expertise, innovation, & accountability.

Relationships

Building strong client & partner relationships by listening closely, engaging early, & staying responsive throughout design & delivery. Fostering collaboration to align technical vision with project outcomes & long-term goals.

Reputation

Upholding a trusted reputation by consistently delivering technically sound, cost-effective designs that meet project goals & exceed expectations. Reinforce credibility through quality work, responsiveness, & professional integrity.



“they listened to the Board’s questions and took the time to offer thoughtful answers; educating us as we went from floor to floor and condo to condo. The O’Connell Team owned the process and stuck to the facts.”

— Vandy Vela, Valencia Board President



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