



AMENDMENT TO AGREEMENT
AMENDMENT NO.: 04

Project Name: Flagler Beach Fishing Pier Design Engineering Services
Project No.: 190739

THE AGREEMENT, dated August 18, 2022, between City of Flagler Beach and Moffatt & Nichol for services on the above-named Project is hereby amended as follows:

1. Services

- Provide beachwalk surveying, permitting, architecture and engineering services to the City of Flagler Beach (the City) as described in the attached proposal.

2. Charges or payments

- M&N will perform these services for a lump sum fee of \$300,000.00.
- M&N will manage and invoice this scope of services as project number 190739/04. Work and charges will be independent from the Flagler Beach Fishing Pier Design Engineering Services project (No. 190739), which includes the original contract and contract amendment #1.

3. Other amendments

- The original contract amount was \$968,100.00 for engineering design services related to the new Flagler Beach Fishing Pier dated August 18, 2022.
- Contract Amendment #1 included a revised scope of work for front-end construction support services in the amount of \$12,000.00 dated September 8, 2022.
- Contract Amendment #2 included new scope of work for coastal engineering advisory services related to the A1A Stike team in the amount of \$13,400.00 dated December 20, 2022.
- Contract Amendment #3 included new scope of work for planning the beachwalk and building renovation project at the base of the Pier in the amount of \$46,300.00 dated January 20, 2024.

Except as expressly amended herein, all provisions contained in the aforementioned Agreement and its Amendments shall remain in full force and effect and are hereby incorporated herein by this reference.

Moffatt & Nichol

By: 

By: _____

Name: Gary Smith, P.E.

Name: _____

Title: Vice President

Title: _____

Date: 12/4/2024

Date: _____

December 4, 2024

City of Flagler Beach
105 S. 2nd Street
Flagler Beach, Florida 32136

Attn: Dale Martin, City Manager

Subject: Beachwalk Phases 1 and 2 Design Services

Dear Mr. Martin:

Moffatt & Nichol (M&N) is submitting this proposal to provide surveying, permitting, engineering and architectural design services to the City of Flagler Beach (the CITY) for Phases 1 and 2 of the Beachwalk project. This scope of services is a continuation of the Beachwalk concept development and preliminary design services performed earlier this year that was recently awarded a grant through the Flagler County Tourism Development Council (TDC) Capital Project Funding Program. Phase 1 includes renovation of the service building at the base of the pier – expanding the restrooms and reconfiguring the bait shop and radio station – while Phase 2 includes construction of a new promenade south of the pier. Figure 1 and Figure 2 show the rendering and floor plan, respectively, of the approved concept.

With demolition and reconstruction of the outer 700 feet of the pier scheduled to begin in the next few months, this is a timely opportunity to revitalize the remaining portion of the historical pier while expanding public facilities and improving accessibility between the new pier and nearby attractions and businesses. Design will also consider the complexities introduced by construction activities expected to occur simultaneously while focusing on minimizing disruptions to nearby attractions, services, and businesses.

The scope for these two phases will be performed concurrently as outlined in the following tasks:

- Task 1: Field Work and Data Collection
- Task 2: Preliminary Engineering and Schematic Design
- Task 3: Environmental Permitting
- Task 4: Final Design

M&N understands that clear and frequent communication is critical to any successful project achieving its goals and schedule. Our project manager will schedule regular work planning sessions and meetings with the project team, including subconsultants, to review progress, identify risks, and keep the project on track. We will also plan to meet virtually or in person every two weeks with CITY staff to coordinate project needs and direction. Progress reports will be submitted monthly summarizing work completed, decisions made, and action items. Progress reports will also include an updated project schedule to keep the CITY informed.



Figure 1. Conceptual rendering of the Beachwalk Phases 1 and 2.

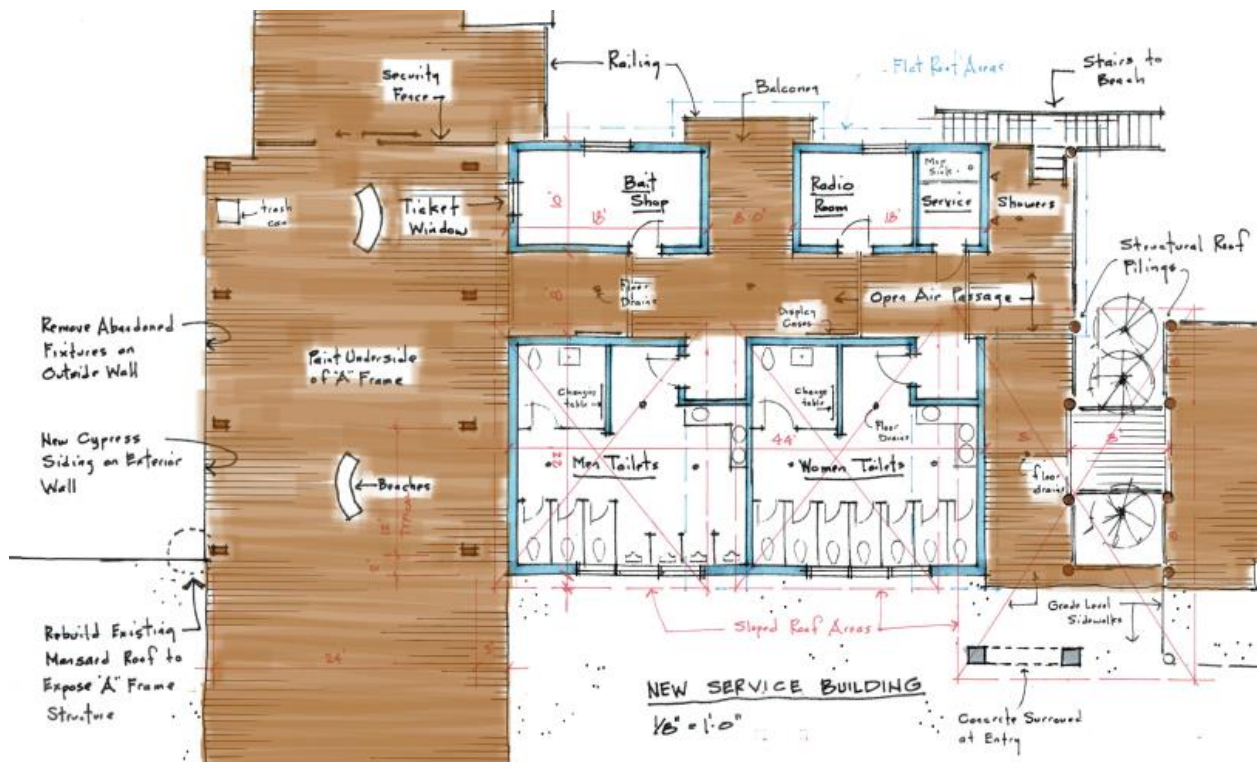


Figure 2. Concept design floor plan of the service building area.

Task 1: Field Work and Data Collection

Objectives:

Field work will include a visual site assessment by M&N staff, a geotechnical investigation within the footprint of the new promenade and building foundation, and topographic surveying of the project area.

Scope:

- **Site Assessment.** M&N will conduct a site visit to assess the existing conditions at the base of the pier and the area south of the pier, including:
 - Confirming existing conditions following completion of the beach nourishment project.
 - Confirming existing structural and utility conditions within the project area compared to the prior site assessment by M&N in 2022.

A Site Assessment Memorandum will be prepared documenting changes or notable findings relevant to the proposed design, including site photographs.

- **Geotechnical Investigation and Evaluation Report.** Tierra is M&N's geotechnical subconsultant that will be performing geotechnical exploration and evaluation to support the design of the Beachwalk Phases 1 and 2. Tierra will execute a program of subsurface exploration consisting of Standard Penetration Test (SPT) borings to depths of approximately eighty (80) feet below existing grade. The boring data will be used to evaluate timber pile capacities, estimate pile tip elevations, and provide soil parameters for the load analyses. Additional geotechnical tasks include:
 - Performing visual classification and laboratory testing program at each boring location.
 - Providing geotechnical input parameters for design of the foundations.
 - Preparing an engineering report that summarizes the field work, boring logs, laboratory results, subsurface conditions encountered and engineering recommendations.
- **Topographic and Existing Conditions Survey.** Southeastern Surveying and Mapping Corporation (SSMC) will perform topographic survey in the vicinity of the project using land-based surveying techniques landward of the shoreline to capture existing topographic elevations following the beach nourishment project and locate improvements and visible utilities.

Dependencies/Exclusions:

- Structural inspection of existing structures is not included.
- Identification of subsurface utilities may vary or be inconclusive depending on varied factors, including, but not limited to, soil composition, moisture content, tide levels, water table, dielectric constant of subsurface material, and unknown obstructions that may attenuate equipment signals.
- Deliverables will be provided in electronic format.

Deliverables:

- Site Visit Memorandum
- Geotechnical Report
- Topographic Survey



Task 2: Preliminary Engineering and Schematic Design

Objectives:

The initial planning and concept design services included development of a basis of concept (BOC) report and selection of a preferred Beachwalk concept plan that was submitted to Flagler County and approved for the TDC grant (shown in Figure 1 and Figure 2). This task will progress the selected service building and promenade concept design to develop a schematic design that integrates Phases 1 and 2.

Scope:

- **Preliminary Engineering** includes engineering development of the concept design framework based on existing site constraints, geotechnical conditions, project objectives and public access requirements that will inform the Schematic Design deliverables.
- **Schematic Design (SD) 30%** consists of drawings which define and depict the character, scale, and relationship of the project components, Technical Specification outline, DRAFT Basis of Design (BOD), and 30% level Opinion of Probable Construction Costs (OPCC). The 30% level drawings will be suitable to initiate environmental permitting. The design team will meet with the appropriate building department staff, if requested by the CITY; complete preliminary code research to obtain schematic level planning and zoning requirements; prepare initial architectural studies that explore new plan configurations developed to a minimum level for CITY review, comment, and direction; and prepare a refined final scheme with exterior elevations for CITY approval. Drawings will include the following:
 - Plan and typical sections for the promenade and service building foundation, including utilities, considering use of timber structural elements.
 - Architectural site plan and longitudinal section drawings of the new service building.
 - Landscape plan.
 - Development of a marine turtle-friendly lighting plan. If required to respond to environmental protection agency comments, M&N will provide copies of photometrics and secure CITY documentation of compliance criteria under local safety codes.
 - ADA accessibility plan.
- **Attend One Public Meeting** with CITY staff to present to the promenade and service building schematic design and answer questions.

Dependencies/Exclusions:

- The scope considers the service building at the base of the pier and the new promenade. Historical reconstruction of the A-frame, the Funky Pelican, the lifeguard station, and upland civil, drainage, or pavement work, including parking realignment and striping, are not included.
- No communication, data, access control, fire alarm, or life safety systems are included at this stage.
- It is assumed that no standby/emergency generator is required and that the existing electrical service at the base of the pier is adequate to support the proposed lighting and convenience power. M&N assumes that a new electrical utility service will not be required.

December 4, 2024

- It is assumed that the public water supply near the pier can provide the required potable water and fire flow demand. A flow test is not included.
- All mapping and drawings will be in AutoCAD and PDF formats.
- The CITY is responsible for all official public notice and related media/advertising charges.
- M&N will coordinate with CITY staff on development of the schematic design to be presented at the public meeting. Revisions to the SD resulting from the public meeting are not anticipated or included in this scope.
- Phase 3, which includes the proposed new boardwalk segments that extend north and south of the pier, is not included in this scope of work.

Deliverables:

- Schematic Design (30%) set of drawings suitable for permitting:
 - 30% SD drawings with plan and typical sections
 - Technical specification outline
 - OPCC
 - DRAFT Basis of Design
 - Preliminary Construction Schedule

Task 3: Environmental Permitting

Objective:

The Beachwalk building expansion and promenade are located seaward of the Coastal Construction Control Line (CCCL) but will remain landward of the Mean High Water (MHW) line and will be designed minimize impacts to the overall beach and dune system. Given that the proposed project will be located above MHW, USACE/federal permitting is not expected to be required and is not included in this scope of services. M&N will prepare a CCCL permit application package for submittal to the Florida Department of Environmental Protection (FDEP) for the proposed service building expansion and the new promenade.

Scope:

- **Standard FDEP Conceptual Design Review/Strategy.** M&N will review site aerial photography, an FDEP-compliant survey, and the conceptual design to identify any potential items of concern relative to FDEP CCCL permitting regulations and policies. It is assumed that no new major structures will be proposed. M&N will provide input to the CITY and the design team regarding key Project elements that may affect the level of complexity and/or timing relative to the FDEP CCCL permitting process and will attend up to two (2) Project team meetings (estimated at 2 hours in length) to discuss the design and permitting strategy. This initial task does not include engineering calculations or detailed technical analyses.
- **FDEP Consultation Meeting.** A consultation meeting with FDEP staff in Tallahassee is recommended to present the conceptual design details, discuss compliance with applicable regulations and/or possible activity exemptions, establish conceptual approval of key regulatory criteria. The opening of a formal FDEP consultation file prior to permit application is also strongly



December 4, 2024

recommended to document discussions and direction provided by agency staff. M&N will prepare Meeting Minutes documenting the discussions and conclusions.

- **FDEP CCCL Permit Application.** M&N will prepare and submit an FDEP CCCL permit application for the proposed service building improvements and new promenade. The CITY will provide M&N with a copy of the recorded warranty deed or other FDEP-accepted ownership documentation for the subject property, an executed permit application form designating M&N as the authorized agent, and an FDEP permit application fee (amount to be confirmed). The permit application package will include an electronically signed and sealed set of the Project plans and topographic survey meeting the standard requirements of the FDEP. The CITY will provide a letter from the planning and zoning department indicating their approval and confirming that the Project “does not contravene local setback requirements or zoning codes.”
- **FDEP Permit Processing.** After submittal of the permit application, M&N will maintain contact with FDEP staff to advise them of the details of the proposed Project and identify any areas of staff concern, as well as expedite their processing of the application. M&N will review available Project plans as they develop relative to their compliance with FDEP criteria. M&N will advise the CITY regarding any revisions or additional information that may be required by the FDEP. M&N will represent the Project before FDEP staff to assist the CITY in securing a FDEP CCCL Permit for the proposed Project.
 - The fee estimate provided assumes that the design process will move forward on a linear/consistent basis, without significant gaps of time in the development schedule or Project re-design. This scope of services assumes that no improvements will be proposed that exceed standard FDEP criteria and the Project team will provide any design modifications necessary to meet those standard criteria. This scope also assumes that the FDEP will agree that the proposed structures will be an expansion of the existing pier.
- **Marine Turtle Lighting Coordination.** M&N will assist in processing the exterior lighting plan approval that is required relative to the FDEP CCCL permitting process for avoidance of impacts to endangered nesting marine turtles and their hatchlings. M&N will submit the required exterior lighting plans, lighting schedules, and manufacturer cutsheets of all existing (to remain) and proposed exterior light fixtures meeting State guidelines. All lights that may be visible from, or may create a glow that is visible from, the nesting beach must be included in the plans - building, landscape, emergency, security, signage lighting, etc. If required, the Project team will provide copies of photometrics and CITY comments representing compliance criteria under local safety codes. M&N will respond to comments from the FDEP and/or the FWC.

The fee provided is for the issuance of one (1) set of FWC approved lighting plans. Any modifications to the FDEP/FWC-approved lighting plan including the addition or relocation of fixtures or changes in fixture, manufacturer or bulb types will require resubmittal of the exterior lighting plans to FWC for the entire site. If additional negotiation is required with the FDEP or the FWC due to CITY preference to evaluate alternatives to the standard lighting guidelines, including



December 4, 2024

alternative additional “seasonal” lighting to be turned on only outside the marine turtle nesting season, these additional services will be provided under an addendum scope.

This scope assumes the following:

- The CITY will agree to revisions, as necessary, to comply with FDEP / FWC requests for fixture changes, bulb changes, wattage reductions, etc., as necessary;
 - No seasonal lighting is proposed;
 - This scope of services does not include separate compliance review under the City’s Lighting Ordinance; and
 - Meetings with FWC in Tallahassee, or any FWC-requested site inspections during the permitting process, are not included in this scope. If required, these additional services will be provided under a separate scope.
- **Dune Mitigation Plan (not included in base scope/fee).** The proposed action may result in impacts to the dune, dune vegetation or habitat that may require mitigation. M&N will include dune vegetation enhancements as part of the promenade project, which aims to stay landward of the beach turtle nesting area near the front of the dune, and we will discuss the proposed project and potential impacts with FDEP during a pre-application meeting. If a dune mitigation plan is required, M&N will perform that work under a separate scope of services.
 - **Cultural Resource Assessment (not included in base scope/fee).** With reference to the Flagler Beach Shore Protection Project’s Cultural Resource Assessment Report, there do not appear to be cultural resources within the Project area. If potential cultural resources are identified, which is not anticipated, any additional investigations would be performed under a separate scope of services.

Dependencies/Exclusions:

- Scope assumes there will be no third-party objections to the Project that may result in additional data collection, alternatives analysis, design revisions, meetings, or other additional efforts.
- Scope assumes that there will be no significant design changes from the approved concept plan.
- Scope assumes that all work will occur within CITY property limits.
- Neither a dune mitigation plan nor a cultural resource assessment is included; these additional services can be provided if requested by the regulatory agencies under an addendum scope/budget with the CITY’s authorization.
- Scope assumes that the CITY will agree to make design changes based on comments received from FDEP and/or State commenting agencies for avoiding/minimizing natural resource impacts.
- This scope assumes that the CITY will directly pay all permit application fees and will coordinate any payments required for public notices by the FDEP.
- Scope does not include any environmental assessment, impact studies, or resources surveys.
- Issuance of permits by regulatory agencies cannot be guaranteed.
- This scope of services assumes there will be no required design changes for purposes of environmental impact avoidance/minimization.



December 4, 2024

- This scope includes services through permit issuance only and does not include pre-construction meetings, pre-construction surveys, or during/post-construction monitoring/compliance services; a proposal for these bidding/construction phase services will be provided once the Project permits and associated permit conditions are drafted.
- This scope anticipates a six-month permitting duration. Additional permitting duration and regulatory activity generated by the agencies that exceed this task's budget will be invoiced on a time and materials basis.
- Additional studies or data requests not listed here that may arise during the permitting process are not included.
- Note that approval of lighting plans/fixtures by the FWC does not preclude FWC requests for lighting modifications upon inspection of installed lights.

Deliverables:

- CCCL Permit Application.
- Permit application drawings.

Task 4: Final Design

Objectives:

Final design services will be performed for the building expansion, including the pile-supported foundation, the promenade, mechanical and electrical engineering elements, ADA accessibility, and the architectural components described below. Final design will result in a combined, coordinated set of construction drawings and technical specifications for Contractor bidding and construction. M&N will manage production of the design/construction drawings across all disciplines. M&N will lead development and coordination of the design basis with a focus on improving permitting, procurement, construction, costs, and schedule efficiencies. Final engineering design includes project deliverables at Design Development (60%) and Construction Documents (100%).

Final design assumes that the service building is detached from the historical A-frame and the work on the new service building can be performed independently of the A-frame structure while protecting the A-frame in place.

Scope:

Overall Execution Approach

- **Design Development (DD) 60%** consists of developing drawings that will define the materials required to construct the project along with a DRAFT Technical Specification book, FINAL BOD and 60% level OPCC. Design Development will also incorporate feedback received from the CITY's value engineering review.
- **Construction Document (CD) Services 100%** consist of producing final design and construction documents necessary to perform the work and obtain necessary building permits and solicit bids from Contractors. This work includes a final set of signed and sealed bid document for coordinated and final demolition, architectural, structural mechanical, electrical, and mechanical design; FINAL



December 4, 2024

Technical Specifications; and FINAL Opinion of Probable Construction Costs (OPCC). Final drawings, specifications and calculations shall be signed and sealed by a State of Florida registered professional engineer or architect.

Building Substructure and Promenade

M&N will provide final structural engineering design services and construction documents for the building foundation, the promenade, and pedestrian pathways that connect the promenade with the service building. All structural foundations, including piles and substructure, will be timber; and the promenade superstructure will be constructed of timber. Structural design calculations will also be prepared and submitted as a final deliverable. Structural design drawings will include:

- Demolition
- Structural Notes
- Structural Plans
- Structural Typical Sections and Details
- Technical structural specifications

Site Electrical and Lighting

The electrical scope of work includes:

- Lighting design via rail lighting that meets regulatory turtle lighting requirements at the promenade.
- Electrical distribution design for lighting and convenience receptacles (for maintenance purposes).
- Design of electrical tie-in to existing electrical service at the base of the pier.

Site Mechanical Utilities

The mechanical engineering scope includes design of a potable water system along the promenade while providing potable water and sanitary sewer discharge piping for the new service building. The potable water system will include piping and supports under the structure to supply hose bibbs along the promenade and showers at the beach access stairs. The new potable water piping will be connected to the existing potable water system under the existing structure. The new sewer discharge piping and supports will span from the new service building and restrooms to the existing lift station. The systems will be designed in accordance with the 7th Ed of Florida Building Code, Plumbing.

Service Building Architecture

Architecture design will be performed by our subconsultant Joseph Pozzuoli Architects (JPA), whose scope includes design of the new service building at the base of the pier. Design scope includes:

- Finalizing design of the new service building according to the schematic design approved by the CITY, including the men's and women's toilet rooms, bait shop, radio station, service closet, open air passages, balcony, outdoor showers, access stairs to the beach, and all MEP (mechanical, electrical and plumbing) designs for the new service building.
- The bait shop and radio station will include mini-split units for heating and cooling, and the toilet rooms will include natural ventilation, with minor mechanical ventilation.



December 4, 2024

- Open-air passages will connect the service building to the promenade that will provide a secondary entrance to the south for the toilet rooms and bait shop.
- The deck under the toilet rooms, bait shop, radio station, and service closet will be concrete slabs while the open-air passages will be wood decking.
- The service building walls will consist of concrete masonry units with a Coquina Stone (or other approved) veneer on the toilet room walls and a wood veneer on the bait shop, radio station, and service closet walls.
- The slanted roof sections over the toilet rooms will be pre-engineered wood roof trusses or hand framed with a standing seam metal roof with a flat roof at the back over the bait shop, radio station and service closet section as shown in the approved schematic design.

Dependencies/Exclusions:

- The scope considers the service building at the base of the pier and the new promenade. Historical reconstruction of the A-frame, the Funky Pelican, the lifeguard station, and upland civil, drainage, or pavement work, including parking realignment and striping, are not included.
- No communication, data, access control, fire alarm, or life safety systems are included.
- It is assumed that no standby/emergency generator is required.
- The existing electrical service at the base of the pier is adequate to support the renovated building and promenade lighting and convenience power. M&N assumes that a new electrical utility service will not be required.
- M&N assumes the public water supply near the pier is adequate for required water demands. A flow test is not included.
- M&N assumes that the existing sanitary facilities, including the sump pump and force main, under the pier are adequate to support the proposed demands of the service building. Design of sanitary sumps, pumps, or force mains are not included.
- Rezoning, variance, or special exception submissions related to obtaining approvals from the various governmental agencies with jurisdiction over the project are not included.
- Bid and construction support services are not included.
- The issued construction drawings will be adequate to submit for building permits; however, revisions to those construction drawings requested as part of the building permit process, if any, will be performed under a separate scope of services and are not included in this scope.
- The CITY will provide front End Division 00 and 01 specifications.
- Phase 3, which includes the proposed new boardwalk segments that extend north and south of the pier, is not included in this scope of work.

Deliverables:

- 60% DD drawings, DRAFT technical specifications, OPCC, and FINAL BOD
- 100% CD/IFB drawings, FINAL technical specifications, and OPCC



December 4, 2024

Project Schedule

The schedule for the tasks in this proposal has a duration of nine (9) months assuming that all environmental permits are received within six (6) months from permit application submittal.

Fees

Professional engineering fees for the above referenced services will be Lump Sum and are summarized in the table below. M&N will invoice each month on a percent completed basis. This proposal is valid for sixty (60) days from date on proposal cover sheet.

Task	Description	Subtotal Fees	Revised Fees
1	Field Work and Data Collection		\$37,200
2	Preliminary Engineering and Schematic Design		\$64,400
3	Environmental Permitting		\$30,100
4	Final Design		\$168,300
	TOTAL		\$300,000

Sincerely,

MOFFATT & NICHOL



Michael Herrman, PE
Vice President



Gabriel Perdomo, PE
Senior Project Manager