Beach Preservation Committee
8:00 a.m., Thursday, November 19, 2026
1207 Palm Boulevard
City Hall Council Chambers

Public Comment:
All citizens who wish to speak during the meeting must email their first and last name, address and topic to Nicole DeNeane, City Clerk, at nicoled@isleofpalms.gov no later than **3:00 p.m. the day before the meeting.** Citizens may also provide written public comment here: https://www.isleofpalms.gov/public-comment-form

Agenda

1. **Opening remarks**
2. **Public comments** — All comments have a time limit of three (3) minutes.
3. **Approval of Minutes**
    a. September 2, 2026
    b. October 1, 2026
4. **Proposed Process Change for BPC Interaction with City Council**
    a. Proposed BPC recommendation on process change related to City Council interactions
5. **Update on Beach Renourishment and Sand Fencing and Beach Grass Planting**
    a. Discuss select homeowner issues in the north
    b. Update on Ocean Club and Beachwood East back dune planting
    c. Timing of fencing and beach grass planting in the south
    d. Citizen involvement to supplement southern dune fencing and plantings
    e. Proposed BPC recommendation on southern fencing and planting to City Council
6. **Foth Olsen Alternatives Study**
    a. Update on Ways and Means Committee discussion
    b. Update on revised proposals for the southern groin and Dewees dredging
    c. Proposed BPC recommendation to City Council on support for the two studies
    d. Proposed BPC recommendation to City Council on the northern groin study
    e. Status update on the Marinex future dredging proposal and contracting
    f. Discussion of sand compatibility of the USACE Intracoastal beneficial use project
    g. Proposed BPC recommendation to City Council on Breach Inlet dredging
7. **Next meeting and future discussion priorities**

Beach Preservation Committee
1:00pm, Wednesday, September 2, 2026
City Hall Council Chambers
1207 Palm Boulevard, Isle of Palms, SC

MINUTES

1. **Roll Call**

Present: Dietmar Ostermann, Wendi Pasterik, Dan Slotchiver, John Shilling, Council Member Cohen

Staff Present: Administrator Kerr, Deputy Administrator Kuester

Absent: Alice Bova

2. **Citizen's Comments** - none

3. **Approval of previous meeting's minutes – July 2, 2026**

MOTION: Ms. Pasterik made a motion to approve, and Mr. Slotchiver seconded the motion. The minutes of the June 4, 2026 meeting passed unanimously.

4. **New Business**

A. **Alternative Analysis Presentation – Chris Creed, Foth Olsen**

Chris Creed of Foth Olsen presented findings from the firm's beach management alternatives analysis, which evaluated a range of options for maintaining the City's shoreline going forward, using a defined "baseline" condition (generally the primary dune crest) as the benchmark for beach performance.

The analysis found that under recent erosion trends, the 2026 renourishment project is expected to maintain the beach seaward of the baseline for no more than about three years island-wide, with Reaches 1, 5, and 6 experiencing the most significant erosion. Foth Olsen evaluated a no-action alternative, scheduled and trigger-based renourishment at various intervals, and renourishment supplemented by two lower-cost sand sources — beneficial reuse of dredge material from the Army Corps of Engineers' (USACE) periodic Breach Inlet/AICWW maintenance dredging, and a proposed Dewees Inlet shoal management program — as well as hard structural options including a terminal groin at the southern end of Reach 1 and T-groins, breakwaters, or geotubes as a "last line of defense" for Reaches 5 and 6.

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The cost analysis showed that supplementing renourishment with the no-cost AICWW dredge material and the lower-cost Dewees Inlet shoal sand meaningfully reduces the average annual cost of maintaining the beach compared to relying solely on more expensive offshore borrow sand, and that adding a terminal groin further reduces costs by decreasing the rate of sand loss at the island's south end.

Based on these findings, Foth Olsen recommended that the City: establish and formally confirm an appropriate beach management baseline; pursue an agreement with Marinex to lock in proposed renourishment pricing; pursue an agreement with USACE to direct beach-compatible dredge material from Breach Inlet/AICWW maintenance dredging to Reaches 1 and 2; further investigate the feasibility, scope, and cost of a Dewees Inlet shoal management program, potentially including a test project; further investigate the feasibility, scope, and cost of a terminal groin at the southern end of Reach 1; and consider last-line-of-defense structural solutions (T-groins, breakwaters, or geotubes) in Reaches 5 and 6 to complement Dewees Inlet shoal management. The full report, including detailed cost tables and assumptions, is attached to these minutes.

B. **Discussion and recommendation on future dune vegetation and fencing RFB**

Administrator Kerr wants to publish the request for bids (RFB) for dune vegetation and fencing as soon as practically possible, structured as two separate installer projects, in order to secure a contractor and pricing. He noted the bid document will set per-plant and per-foot pricing while retaining flexibility to adjust quantities, fencing distances, and planting patterns or placement as needed.

Mr. Ostermann offered changes including changing the plant ratio to include 10% morning glory, 60% sea oats, and 40% panic grass; planting on an 18” grid, requesting optimal plant size instead of minimal, adding fertilizer paste, and to have the fencing in a V-shape facing the direction of the wind. He requested clarification of fence length versus dune length as they do not match in the current draft of the RFB.

Administrator Kerr said the bid will go out tomorrow. They are due back on September 18. He hopes to have the bid recommendation before City Council at their September 22 meeting.

C. **Discussion of June 2026 beach monitoring report executive summary**

Ms. Pasterik said, “My top concern is what we show for a gain of sand in the June survey should basically be reflecting the majority of the Army Corps’ work from Cottrell in Reach 2 and then Ahtna pumped all the way through the end of February as well. And I know that uh CSE was out measuring uh the beginning of February. So the majority of Cottrell’s work was captured in the latest survey. Does that make sense? I put a little timeline if that helps. So what you see through the whole report that was put together is that he's attributing it to mainly from sand coming from Reaches 3 and 4 down to the south. I am not sure that if that is really the case, and if we are getting a lot of sand, then we are eroding at a way faster rate because we got a whole bunch of

sand from the Army Corps during that time period, which should be explaining the increase in the volumes."

She would like more clarity in the Executive Summary related to accretion: "as to what exactly happened and where the benefits are coming from."

Administrator Kerr noted that this is a volumetric survey, adding, "I don't think he would be able to say with a with any degree of certainty exactly which cubic yard of sand came from which location."

D. **Discussion of information to be included in future beach monitoring reports**

Mr. Shilling went over his "Review of Current Reporting Practices and Recommendations for Change" in the meeting packet. Both he and Ms. Pasterik expressed a preference for the presentation of the reports done for Hilton Head Island.

Mr. Slotchiver noted that each professional has his/her own way of writing and presenting information and suggested the Committee provide Mr. Traynum with categories to include and request they be presented in layman's terms.

Administrator Kerr stated, "This was written [as] a requirement of the environmental permits that Stephen has been doing this now for it is exactly 15 years to give to the State and the Feds to satisfy a surveying requirement. They want us to go out and survey, and that's what he does he goes and measures…and it was never historically intended for groups like this to sit around and try to kind of gain insight."

In addition to the required federal report elements, Mr. Osterman suggested that Mr. Traynum provide "a very readable short information report that informs city council and the beach committee about the state of the beach."

The Committee discussed the need for a standard benchmark for measuring the beach width. Administrator Kerr said he would share Mr. Shilling's recommendations with Mr. Traynum.

5. **Old Business**

Update on beach renourishment project

Administrator Kerr said the renourishment project is going very well and is currently ahead of schedule. Marinex is now working in Reach 2. He also reported that the City received $1.5 million from the State in last year's budget. The FY27 State budget includes $10 million for beach renourishment, and the City hopes to receive an additional $3.5 million in funding.

6. Miscellaneous Business

The next meeting will include another review of the report from Foth/Olsen, possibly a discussion about the RFB for vegetation and fencing (if not passed by City Council at their September 22 meeting), and CSE's beach monitoring report.

The next meeting of the Beach Preservation Committee will be Thursday, October 1, 2026 at 9:00am.

7. Adjournment

Mr. Ostermann made a motion to adjourn the meeting, and Ms. Pasterik seconded the motion. The meeting was adjourned at 2:35pm.

Respectfully submitted,

Nicole DeNeane
City Clerk

Beach Preservation Committee
9:00am, Thursday, October 1, 2026
City Hall Council Chambers
1207 Palm Boulevard, Isle of Palms, SC

MINUTES

1. **Roll Call**

Present: Dietmar Ostermann, Wendi Pasterik, Alice, Bova, Dan Slotchiver, John Shilling, Council Member Cohen

Staff Present: Administrator Kerr, Deputy Administrator Kuester

2. **Citizen's Comments** - none

3. **Approval of previous meeting's minutes – September 2, 2026**

These minutes will be voted on at the November meeting.

4. **New Business**

A. **Discussion of alternatives analysis presentation**

Committee members gave brief assessments of the Foth/Olsen alternatives analysis presentation. Mr. Slotchiver expressed concern about the lack of a backup plan for the shoal management option. Council Member Cohen said the City asked for an alternatives analysis and received a "plan with options." He noted the lack of comparison between the alternatives as well as pros and cons for each alternative.

Mr. Ostermann said he did not believe Foth/Olsen took the City seriously as a client and stated the recommendations lack evidence.

Ms. Pasterik said she was impressed by Foth/Olsen and would like to see the City move forward with a groin on the south end.

Committee members reviewed the recommendations presented by Foth/Olsen and addressed each one. Their recommendations for City Council's consideration are attached to these minutes.

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B. **Discussion and recommendation of future RFP for terminal groin and shoal management feasibility, design, permitting, and construction administration**

Committee members would like to bypass the RFP process and have Foth/Olsen complete the feasibility, design, permitting, and construction administration for the terminal groin and shoal management.

C. **Discussion and recommendation on future dune vegetation and fencing**

Mr. Ostermann expressed his disappointment and the disappointment of the WDCA Board regarding City Council's decision to reduce the amount of fencing and vegetation to be placed on the beach. The Committee would like City Council to reconsider their scaled back plan.

Administrator Kerr said the revised budgeted amount has been sent to Earth Balance for their feedback.

D. **Discussion of information to be included in future beach monitoring reports**

Administrator Kerr said the Committee's suggestions have been sent to CS&E, but he has not had the opportunity to speak to them directly. They will reach out to Mr. Shilling with his comments and questions.

Ms. Pasterik noted how CS&E addresses the "cubic yards perspective" in the reports they prepare for Sullivan's Island, and she would like to see that in reports for Isle of Palms.

5. **Old Business**

Update on beach renourishment project

Administrator Kerr said Marinex is in Reach 2 and has moved 541,000 cubic yards so far. They anticipate completing Reach 2 by October 14. They will take a week to reset the equipment and move to Reach 3.

6. **Miscellaneous Business**

The next meeting of the Beach Preservation Committee will be Thursday, November 19, 2026 at 8:00am.

7. **Adjournment**

Ms. Bova made a motion to adjourn the meeting, and Mr. Shilling seconded the motion. The meeting was adjourned at 10:57am.

Respectfully submitted,

Nicole DeNeane
City Clerk

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foth.com

November 5, 2026

Douglas Kerr
City Administrator
City of Isle of Palms
P.O. Drawer 508
Isle of Palms, SC 29451

Re: City of Isle of Palms Terminal Groin
Proposal for Feasibility and Permitting Services

Dear Douglas Kerr:

Foth Infrastructure & Environment, LLC (Foth) is pleased to provide the following proposal for engineering services related to the evaluation, design, and permitting for a terminal groin along the south end of City of Isle of Palms (City). The proposed project will evaluate the feasibility and effectiveness of a terminal groin to address ongoing shoreline erosion and support long term shoreline stability.

Foth will provide the City with alternatives and design for a proposed terminal groin, supported by permit-level engineering and environmental documentation suitable for submittal to the South Carolina Department of Environmental Services (SCDES) and the U.S. Army Corps of Engineers (USACE), Charleston District.

Foth will advance the project through a phased process consisting of existing conditions assessment, hydrographic and topographic surveying, environmental resource investigations, sediment characterization, conceptual alternatives development, feasibility evaluation, agency coordination and permitting, and advancement of one preferred terminal groin alternative through approximately 60 percent design.

The feasibility phase will consider potential groin configurations and identify a preferred concept based on engineering feasibility, anticipated shoreline benefits, constructability, environmental resource considerations, regulatory requirements, and relative cost. Following selection of the preferred alternative in coordination with the Client, Foth will advance one design concept to approximately 60 percent design for use in permitting and subsequent design development.

1. Scope of Work

Foth will provide overall project management and coordination throughout the feasibility, investigation, design, and permitting phases. Activities will include:

- Project Kickoff Meeting with the City
- Coordination of Foth staff and specialty subconsultants
- Development and maintenance of the project schedule

- Up to twelve (12) periodic progress meetings
- Coordination of survey and environmental field activities
- Coordination with regulatory agencies
- Quality assurance and quality control reviews
- Management of project deliverables and permitting documentation

1.1 Existing Conditions Assessment

Foth and its subconsultants will complete the field investigations and supporting studies necessary to characterize existing site conditions and provide the technical basis for feasibility evaluation, design, and permitting. The site assessment will include hydrographic and topographic surveying, environmental resource investigations, and subsurface and sediment investigations.

Hydrographic and Topographic Survey

Foth will retain and coordinate McKim & Creed, Inc. (M&C) to complete an integrated upland, swash zone, nearshore, inlet, and shoal survey within the Breach Inlet and south end Isle of Palms project area. The authorized survey program will include beach profiles at approximately 500-foot intervals, GNSS wading through the shoreline transition, and single beam echosounder hydrographic coverage extending approximately 2,500 feet offshore, with supplemental lines at approximately 200-foot spacing to define the inlet and shoal complex. Survey is to be conducted within the limits shown below in Figure 1.



Figure 1: Proposed Survey Limits

Upland data may be collected using conventional land-based GNSS topographic surveying or full-resolution Unmanned Aircraft System (UAS) aerial mapping of the approved upland area while retaining the same GNSS wading and hydrographic components. If UAS id utilized, the work will provide georeferenced orthomosaic imagery, a bare-earth digital terrain model, a classified LiDAR point cloud, and supporting control and accuracy documentation. Use of the UAS is dependent on applicable airspace authorization, property access, launch and landing permission, and public safety coordination.

Foth will establish the survey limits, coordinate the subconsultant's work, review the data for completeness, and incorporate the results into subsequent engineering analyses. The survey will provide the existing-condition bathymetry needed to evaluate potential groin configurations and potential excavation limits.

Site Visit

Foth will conduct one (1) site visit during the course of design development to observe and document existing site conditions and features relevant to the proposed terminal groin improvements. The site visit will include a visual assessment of the project area and surrounding shoreline conditions to support development and refinement of the design.

As part of the site visit, Foth will perform a drone-based photogrammetry survey of the project area to collect current aerial imagery and site data. The resulting imagery and photogrammetric information will be used to support preparation of design plans, evaluation of existing conditions, and ongoing design development. Drone operations will be subject to applicable airspace authorization, property access, launch and landing permissions, weather conditions, and public safety requirements.

Deliverables:

- *Existing conditions incorporated into permitting and design documents including:*
  - *Hydrographic and topographic survey*
  - *Existing conditions base mapping*
  - *Site visit observations incorporated into design development*

1.2 Design

Feasibility Study and Alternatives Evaluation

Using information developed during the site assessment, along with existing information available for the project area, Foth will evaluate the feasibility of constructing a terminal groin and develop conceptual alternatives. The alternatives may consider variations in terminal groin alignment, length, geometry, crest elevation, structural configuration, and materials. Foth will develop the concepts to a level sufficient to evaluate their relative performance, constraints, constructability, environmental considerations, permitting implications, and anticipated costs. It is anticipated that up to three (3) alternatives will be considered as part of this task.

The evaluation will consider existing shoreline and nearshore conditions, historical shoreline behavior, anticipated sediment retention and shoreline stabilization benefits, potential effects on adjacent shoreline areas, subsurface conditions, environmental constraints, constructability, regulatory considerations, preliminary quantities, and planning level construction costs. Foth will document the advantages, disadvantages, and key considerations associated with the alternatives and provide a recommendation for a preferred terminal groin concept. Foth will

review the alternatives with the City, and one preferred alternative will be selected for advancement to 60 percent design.

This work will not include a numerical modeling study of the existing beach or proposed alternatives. The evaluation will instead use available site information, historical data, field investigation results, engineering analyses, established coastal engineering principles, and professional judgment. If numerical modeling is required by a regulatory agency, it will be performed as an additional service following City authorization.

Deliverables:

- *Conceptual terminal groin alternatives*
- *Feasibility study documenting the evaluation and recommended alternative*
- *Planning level opinion of probable construction cost*

60 Percent Design Drawings

Following selection of the preferred alternative, Foth will advance one terminal groin alternative to approximately 60 percent (%) design adequate for use as permit materials. The design will incorporate the results of the hydrographic and topographic survey, subsurface investigation, environmental studies, and feasibility assessment.

Foth will refine the preferred terminal groin alignment, footprint, length, elevations, cross sections, structural configuration, and material requirements. The design will also address the connection of the structure to the existing shoreline and other site-specific features necessary to establish the overall project configuration.

The 60% design will establish the proposed project footprint and major design elements at a level sufficient to support permitting and provide a basis for subsequent final design. Foth will also develop preliminary construction quantities and an opinion of probable construction cost based on the 60% design.

Numerical modeling of hydrodynamic, wave, sediment transport, shoreline evolution, or morphological response is included in this scope. If numerical modeling is specifically required by a regulatory agency as part of the permitting process, Foth will develop a separate scope and fee for the required modeling. Modeling will only proceed following written authorization from the City.

Deliverables:

- *60% design drawings*
- *Updated opinion of probable construction cost*

1.3 Environmental Permitting

Foth will lead the permitting effort, with support from Davey, for the preferred terminal groin alternative and coordinate with applicable federal, state, and local regulatory agencies. Permit applications will be based on the 60% design and will incorporate the engineering, environmental, and site investigation information developed under the previous tasks.

Environmental Documentation

Foth will retain and coordinate Davey Resource Group, Inc. (Davey) to prepare the environmental documentation and provide permitting support. Davey's work includes a project specific Essential

Fish Habitat Assessment, Environmental Assessment, Biological Assessment, if required, and environmental technical support during development and initial review of the federal and state permit applications. These documents will evaluate the proposed action and reasonable alternatives, including the no action alternative, and identify applicable avoidance, minimization, conservation, and mitigation measures. A Biological Assessment will be prepared if determined necessary through agency consultation.

The assessments will evaluate the potential effects of the proposed dredging, sediment transport, and beach placement activities on federally listed threatened and endangered species and designated critical habitat, as applicable, and on federally managed species and EFH within the project area. The results of these investigations will collectively establish the physical, environmental, and regulatory baseline for the feasibility study and subsequent design.

Application Preparation Submittal

Foth anticipates that the primary federal authorization will include a U.S. Army Corps of Engineers (USACE) Charleston District Department of the Army Individual Permit (IP) under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. At the state level, Foth will coordinate with the South Carolina Department of Environmental Services, Bureau of Coastal Management (SCDES-BCM). It is anticipated that this will consist of a Major Beachfront Critical Area Permit; Section 401 Water Quality Certification; and applicable South Carolina Coastal Zone Management Act (CZM) consistency review.

Foth will prepare the engineering components of the permit application packages, including the project description, purpose and need, alternatives evaluation, permit drawings, impact quantities, and supporting technical information appropriate to the 60 percent level of design. Davey will prepare the Essential Fish Habitat Assessment, Environmental Assessment, and Biological Assessment, if necessary, and will address reasonable Foth review comments and revisions necessary to complete the initial permit submittal package. Davey will also support responses to reasonable agency questions and comments during initial permit processing, subject to the assumptions and limits stated below.

Permit Support and Processing

Permit support and processing will be performed on a time and materials basis, as the level of effort will depend on regulatory agency review and comments. The budget assumes up to one (1) round of responses to requests for additional information and one (1) virtual regulatory agency meeting. Additional or extensive rounds of agency comments, additional meetings, prolonged consultation, material project revisions, or additional resource evaluations may require additional effort beyond the estimated budget and will be performed upon authorization by the Client.

Cultural resource investigations are not included in this scope. If a cultural resource survey, archaeological investigation, or related consultation is required by a regulatory agency, these services will be provided under a separate proposal and authorization.

The final list of permits, consultations, and supporting technical studies will be confirmed through preapplication coordination with the regulatory agencies. Foth will coordinate the overall development and submittal of the permit application packages and will serve as the primary point of contact during regulatory review. Foth will coordinate responses to reasonable agency comments and up to one (1) requests for additional information (RAIs) based on the work completed under this scope. If regulatory review identifies a need for additional investigations,

analyses, significant design modifications, or numerical modeling beyond the services described herein, those efforts will be addressed as additional services.

Deliverables:

- *Permit application packages for USACE and SCDES-BCM*
- *Environmental Assessment and supporting environmental documentation*
- *Up to one (1) agency Requests for Additional Information (RAIs)*

1.4 Liaison/Public Presentation

Foth will provide ongoing liaison and presentation support to assist the City in communicating project progress, technical findings, alternatives, design development, and permitting activities. Foth will participate in a maximum of two (2) virtual presentations to City Council, anticipated to coincide with key project milestones such as completion of the feasibility study, selection of the preferred alternative, or advancement of the design. Foth will prepare presentation materials and participate in the meetings to present technical findings and respond to project related questions.

Foth will also participate in a maximum of twelve (12) monthly virtual meetings with the Beach Preservation Committee. These meetings will provide regular updates on site investigations, feasibility and alternatives development, design, environmental resource coordination, agency coordination, and permitting. Foth will prepare appropriate presentation materials and coordinate with specialty subconsultants as needed to support these updates. Additional meetings, workshops, hearings, or in-person presentations are not included and may be provided as additional services.

2. Cost Proposal

Table 1

Cost Proposal

Tasks	Description	Fee / Budget	Fee Type
1	Hydrographic and Topographic Survey		Lump Sum
	Foth	$5,810	
	McKim & Creed	$53,580	
	Site Visit	$11,100	
	Existing Conditions Assessment Total	**$70,490**	
2	Feasibility	$48,590	Lump Sum
	60% Design	$49,660	
	Design Total	**$98,250**	
3	Environmental Documentation		Lump Sum
	Foth	$7,595	
	Davey Resource Group, Inc.	$92,015	
	Application Preparation Submittal		
	Foth	$42,080	
	Davey Resource Group, Inc.	$23,320	
	Permit Support and Processing		Time and Materials
	Foth	$11,850	
	Davey Resource Group, Inc.	$16,500	
	Environmental Permitting Total	**$193,360**	
4	**Liaison/Public Presentation Total**	**$31,790**	Lump Sum
	Total Lump Sum	**$365,540**	
	Total Time and Materials	**$28,350**	
	Total Cost Proposal	**$393,890**	

3. Assumptions and Exclusions

Foth shall perform all work on this contract in accordance with the following terms:

- Quotations are offered on Lump Sum Fee basis based on the conditions stated herein. Foth reserves to right to request modifications to the scope of work and task durations, if deemed necessary by the Owner. All additional work shall be approved in writing by the client and billed on actual hours worked based on our standard 2027 rate schedule.
- Scope of work shall be limited to the areas mentioned in this proposal. Additional charges shall apply if the number and/or locations are modified. Any and all work beyond the scope of this proposal shall be deemed extra work and contracted for prior to the commencement of such work.
- Fieldwork is subject to safe access and suitable tide, weather, visibility, wind, wave, current, sea state, aviation, and marine safety conditions. Shallow water, exposed shoals,

breaking waves, inlet currents, and practical vessel access may require adjustments to line placement or acquisition timing and may affect the schedule.
    - The survey assumes one coordinated mobilization and authorized access to the beach, dunes, shoreline, project area, and suitable vessel launch and staging locations. Additional mobilization caused by a material scope change, access restriction, or conditions outside the surveyor's control will be an additional service.
    - All Unmanned Aircraft System (UAS) work is subject to applicable airspace authorization, property access, launch and landing permission, and public safety coordination.
    - Boundary surveying, construction staking, environmental monitoring, permitting, sediment sampling, and certification of conditions beyond the scope of this proposal are excluded unless separately authorized.
- The scope does not include site specific biological sampling, species surveys, cultural surveys, environmental monitoring, or additional onsite resource evaluations.
- It is assumed that one (1) round of revisions will be required as part of agency coordination. Foth has not accounted for additional revisions within this scope.
- Opinions and recommendations will be based on information available at the time the services are performed.
- Opinions of probable construction cost will reflect the level of design and market information available at the time of preparation. Actual construction costs may vary.
- Final permit requirements, agency determinations, approval conditions, and review schedules are established by the applicable regulatory agencies.
- Additional studies, analyses, modeling, or design revisions requested by regulatory agencies beyond this scope may be provided as additional services.

Foth would like to sincerely thank the City for their time and consideration of our proposal. If you have any questions or concerns, please feel free to reach out at Chris.Creed@foth.com or (904) 612-7983.

Sincerely,
Foth Infrastructure & Environment, LLC

Christopher G. Creed, P.E., BC.CE
Senior Coastal Engineer & Client Team Leader
Licensed in FL, GA, SC, NC

Kaitlyn Cross
Project Manager

cc: Zachary Bedell, P.E. (Foth)

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November 5, 2026

Douglas Kerr
City Administrator
City of Isle of Palms
P.O. Drawer 508
Isle of Palms, SC 29451

Re: City of Isle of Palms Dewees Inlet Shoal Management
Proposal for Feasibility and Permitting Services

Dear Douglas Kerr:

Foth Infrastructure & Environment, LLC (Foth) is pleased to provide the following proposal for engineering services related to the evaluation, design, and permitting for a proactive shoal management program at the northern end of the City of Isle of Palms (City) shoreline. The proposed project will evaluate the feasibility of a shoal management program at Dewees Inlet to address chronic shoreline erosion and support long term shoreline stability.

The purpose of this assignment is to provide the City with an implementable shoal management plan, supported by permit-level engineering and environmental documentation suitable for submittal to the South Carolina Department of Environmental Services (SCDES) and the U.S. Army Corps of Engineers (USACE), Charleston District. The goal is to secure authorizations that will allow the City to strategically excavate beach-compatible sediment from portions of the Dewees Inlet shoal system and place that material along vulnerable portions of the northern Isle of Palms beach before shoreward-migrating shoals induce additional erosion along the adjacent shorelines.

Foth will advance the project through a phased process consisting of existing conditions assessment, hydrographic and topographic surveying, environmental resource investigations, sediment characterization, conceptual alternatives development, feasibility evaluation, agency coordination and permitting, and advancement of one preferred shoal management alternative through approximately 60 percent design.

The feasibility phase will consider potential shoal excavation and beach fill placement configurations and identify a preferred concept based on engineering feasibility, anticipated shoreline benefits, constructability, environmental resource considerations, regulatory requirements, and relative cost. Following selection of the preferred alternative in coordination with the City, Foth will advance one design concept to approximately 60 percent design for use in permitting and subsequent design development.

1. Scope of Work

Foth will provide overall project management and coordination throughout the feasibility, investigation, design, and permitting phases. Activities will include:

- Project Kickoff Meeting with the City
- Coordination of Foth staff and specialty subconsultants
- Development and maintenance of the project schedule
- Up to twelve (12) periodic progress meetings
- Coordination of survey and environmental field activities
- Coordination with regulatory agencies
- Quality assurance and quality control reviews
- Management of project deliverables and permitting documentation

1.1 Existing Conditions Assessment

Foth and its subconsultants will complete the field investigations and supporting studies necessary to characterize existing site conditions and provide the technical basis for feasibility evaluation, design, and permitting. The site assessment will include hydrographic and topographic surveying, environmental resource analyses, and subsurface and sediment investigations.

Hydrographic and Topographic Survey

Foth will retain and coordinate with McKim & Creed, Inc. (M&C) to complete a coordinated topographic and hydrographic survey of the Dewees Inlet project area as shown in Figure 1 below. The survey will include approximately thirty-five (35) beach profiles at nominal 500-foot spacing. Each profile will extend from the approved project baseline across the accessible beach and dune, through the swash and shallow-water transition, and approximately 2,500 feet offshore. Survey-grade single-beam echosounder lines will also be collected at approximately 200-foot spacing to improve definition of the inlet and shoal complex. Near Dewees Inlet, supplemental lines will generally be oriented perpendicular to the inlet alignment; outside the immediate inlet area, lines will generally be oriented parallel to the shoreline or as otherwise directed by Foth.

Upland data may be collected using conventional land-based GNSS topographic surveying or full-resolution Unmanned Aircraft System (UAS) aerial mapping of the approved upland area while retaining the same GNSS wading and hydrographic components. If UAS is utilized, the work will provide georeferenced orthomosaic imagery, a bare-earth digital terrain model, a classified LiDAR point cloud, and supporting control and accuracy documentation. Use of the UAS is dependent on applicable airspace authorization, property access, launch and landing permission, and public safety coordination.

Foth will establish the survey limits, coordinate the subconsultant's work, review the data for completeness, and incorporate the results into subsequent engineering analyses. The survey will provide the existing-condition bathymetry needed to evaluate shoal morphology, sand volumes, dredging access, and potential excavation limits. Survey is to be conducted within the limits shown below in Figure 1.



Figure 1: Proposed Survey Limits

Reconnaissance Vibracore Collection

Foth will retain and coordinate with Athena Technologies, Inc. (Athena) to conduct a reconnaissance-level geotechnical investigation of the Dewees Inlet ebb-shoal complex to characterize sediment conditions within areas being considered for future shoal management and beneficial use of excavated material along the northern Isle of Palms shoreline. The investigation will consist of the collection and analysis of up to fifteen (15) vibracores distributed throughout the potential shoal-management area. It is assumed that a target penetration of up to 12 feet below sediment surface or refusal will be utilized. Water depths within the investigation area are anticipated to range from approximately 0 to -8 feet MLLW. Athena will use its research vessel as the primary sampling platform and may use a Jon boat and terrestrial sampling equipment at shallow or exposed locations where vessel-based coring is not practicable.

Foth will develop proposed core locations based on available hydrographic and historical information, anticipated excavation limits, shoal morphology, and the objectives of the subsequent engineering evaluation, and will retain and coordinate with a qualified marine geotechnical subconsultant to perform the field investigation. Foth will provide engineering oversight and coordination of the field program and may adjust individual core locations based on observed sediment conditions, accessibility, water depths, and other site conditions.

At each station, Athena will position and stabilize the sampling platform, document the sample location and sediment-surface elevation, and advance a three-inch-diameter vibracore barrel to the target depth or refusal. Refusal is defined as a penetration rate of less than 0.2 foot over a 30-

second period. A target recovery of 75 percent is proposed. Completed cores will be sectioned, opened longitudinally, photographed, and logged in general accordance with ASTM D2488. The scope assumes up to four (4) grain-size subsamples per core, for up to sixty (60) grain-size analyses, plus one (1) composite carbonate-content analysis per core. Laboratory characterization will include grain-size distribution in accordance with ASTM D6913, visual shell-content estimation, Munsell color observations, classification in accordance with ASTM D2487, and carbonate-content analysis.

The resulting data will be reviewed by Foth to assess the general distribution, thickness, and characteristics of potentially beach-compatible sediment within the investigated portion of the Dewees Inlet shoal system and to support development of preliminary shoal excavation limits.

It is assumed that work will occur during warmer months, generally May through September when water temperatures are at or above 70 degrees Fahrenheit.

Site Visit

Foth will conduct one (1) site visit during the course of the shoal management evaluation to observe and document existing shoreline, shoal, and other site conditions relevant to the project. As part of the site visit, Foth will perform a drone based photogrammetry survey to collect current aerial imagery and site data. The information collected will be used to support evaluation of existing conditions, development of shoal management alternatives, and preparation of associated concept plans.

Deliverables:

- *Existing conditions incorporated into permitting and design documents including:*
  - *Hydrographic and topographic survey*
  - *Existing conditions base mapping*
  - *Subsurface sediment characterization*
  - *Site observations incorporated into the shoal management evaluation*

1.2 Design

Feasibility Study and Alternatives Evaluation

Using information developed during the site assessment, along with existing information available for the project area, Foth will evaluate the feasibility of implementing a proactive shoal management program within the Dewees Inlet ebb-shoal complex and develop schematic-level alternatives for shoal excavation and beach fill placement. The alternatives will consider variations in the location and limits of potential excavation areas, excavation depths and volumes, dredging access, beach fill placement areas, construction methods, and the anticipated frequency of future shoal-management events. Foth will develop alternatives to a level sufficient to evaluate their relative feasibility, constructability, environmental and regulatory considerations, potential effects on coastal processes and adjacent shorelines, and planning-level construction costs to identify a recommended schematic-level project configuration. It is anticipated that up to three (3) alternative will be considered as part of this task. Foth will review the alternatives and recommendations with the City, and the preferred configuration will be advanced to permit-level design.

This work will not include a numerical modeling study of the existing beach or proposed alternatives. The evaluation will instead use available site information, historical data, field

investigation results, engineering analyses, established coastal engineering principles, and professional judgment. If numerical modeling is required by a regulatory agency, it will be performed as an additional service following City authorization.

Deliverables:

- *Conceptual shoal management alternatives*
- *Feasibility study documenting the evaluation and recommended alternative*
- *Planning level opinion of probable construction cost*

60 Percent Design Drawings

Following selection of the preferred shoal management alternative, Foth will advance that alternative to approximately 60 percent (%) design adequate for use as permit materials. The design will incorporate the results of the hydrographic and topographic survey, subsurface investigation, environmental studies, and feasibility assessment. The 60 percent design will refine the shoal management area, excavation depths and cross sections, and identify the beach fill placement limits along the Isle of Palms shoreline.

The 60% design will establish the proposed project footprint and major design elements at a level sufficient to support permitting and provide a basis for subsequent final design. Foth will also develop preliminary construction quantities and an opinion of probable construction cost based on the 60% design.

Numerical modeling of hydrodynamic, wave, sediment transport, shoreline evolution, or morphological response is included in this scope. If numerical modeling is specifically required by a regulatory agency as part of the permitting process, Foth will develop a separate scope and fee for the required modeling. Modeling will only proceed following written authorization from the City.

Deliverables:

- *60% design drawings*
- *Updated opinion of probable construction cost*

1.3 Environmental Permitting

Foth will lead the permitting effort, with support from Davey, for the preferred shoal management alternative and coordinate with applicable federal, state, and local regulatory agencies. Permit applications will be based on the 60% design and will incorporate the engineering, environmental, and site investigation information developed under the previous tasks.

Environmental Documentation Preparation

Foth will retain and coordinate Davey Resource Group, Inc. (Davey) to prepare the environmental documentation and provide permitting support. Davey's work includes a project specific Essential Fish Habitat Assessment, Environmental Assessment, Biological Assessment, if required, and environmental technical support during development and initial review of the federal and state permit applications. These documents will evaluate the proposed action and reasonable alternatives, including the no action alternative, and identify applicable avoidance, minimization, conservation, and mitigation measures. A Biological Assessment will be prepared if determined necessary through agency consultation.

The assessments will evaluate the potential effects of the proposed dredging, sediment transport, and beach placement activities on federally listed threatened and endangered species and designated critical habitat, as applicable, and on federally managed species and EFH within the project area. The results of these investigations will collectively establish the physical, environmental, and regulatory baseline for the feasibility study and subsequent design.

Application Preparation Submittal

Foth anticipates that the primary federal authorization will include a U.S. Army Corps of Engineers (USACE) Charleston District Department of the Army Individual Permit (IP) under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. At the state level, Foth will coordinate with the South Carolina Department of Environmental Services, Bureau of Coastal Management (SCDES-BCM). It is anticipated that this will consist of a Major Beachfront Critical Area Permit; Section 401 Water Quality Certification; and applicable South Carolina Coastal Zone Management Act (CZM) consistency review.

Foth will prepare the engineering components of the permit application package, including the project description, purpose and need, alternatives evaluation, permit drawings, impact quantities, and supporting technical information appropriate to the 60% level of design. Foth will work closely with Davey to integrate the environmental review and resource consultation requirements into the federal and state permitting process. Davey will support the environmental review and consultation process, including preparation of the Environmental Assessment (EA) and Essential Fish Habitat (EFH) documentation. Environmental findings will be incorporated into the project design and permitting documentation to support avoidance and minimization of potential impacts where practicable.

Permit Support and Processing

Permit support and processing will be performed on a time and materials basis, as the level of effort will depend on regulatory agency review and comments. The budget assumes up to one (1) round of responses to requests for additional information and one (1) virtual regulatory agency meeting. Additional or extensive rounds of agency comments, additional meetings, prolonged consultation, material project revisions, or additional resource evaluations may require additional effort beyond the estimated budget and will be performed upon authorization by the Client.

Cultural resource investigations are not included in this scope. If a cultural resource survey, archaeological investigation, or related consultation is required by a regulatory agency, these services will be provided under a separate proposal and authorization.

The final list of permits, consultations, and supporting technical studies will be confirmed through preapplication coordination with the regulatory agencies. Foth will coordinate the overall development and submittal of the permit application packages and will serve as the primary point of contact during regulatory review. Foth will coordinate responses to reasonable agency comments and up to one (1) requests for additional information (RAIs) based on the work completed under this scope. If regulatory review identifies a need for additional investigations, analyses, significant design modifications, or numerical modeling beyond the services described herein, those efforts will be addressed as additional services.

Deliverables:

- *Permit application packages for USACE and SCDES-BCM*
- *Agency coordination and response as necessary*
- *Up to one (1) agency Requests for Additional Information (RAIs)*

1.4 Liaison/Public Presentation

Foth will provide ongoing liaison and presentation support to assist the City in communicating project progress, technical findings, alternatives, design development, and permitting activities. Foth will participate in a maximum of two (2) virtual presentations to City Council, anticipated to coincide with key project milestones such as completion of the feasibility study, selection of the preferred alternative, or advancement of the design. Foth will prepare presentation materials and participate in the meetings to present technical findings and respond to project related questions.

Foth will also participate in up to twelve (12) monthly virtual meetings with the Beach Preservation Committee. These meetings will provide regular updates on site investigations, feasibility and alternatives development, design, environmental resource coordination, agency coordination, and permitting. Foth will prepare appropriate presentation materials and coordinate with specialty subconsultants as needed to support these updates. Additional meetings, workshops, hearings, or in person presentations are not included and may be provided as an additional service.

2. Cost Proposal

Table 1

Cost Proposal

Tasks	Description	Fee / Budget	Fee Type
1	Hydrographic and Topographic Survey		Lump Sum
	Foth	$8,985	
	McKim & Creed	$69,960	
	Reconnaissance Vibracore Collection		Lump Sum
	Foth	$26,215	
	Athena Technologies, Inc.	$96,910	
	Site Visit	$11,100	
	Existing Conditions Assessment Total	**$213,170**	
2	Feasibility	$52,655	Lump Sum
	60% Design	$46,475	
	Design Total	**$99,130**	
3	Environmental Documentation		Lump Sum
	Foth	$7,595	
	Davey Resource Group, Inc.	$92,015	
	Application Preparation Submittal		
	Foth	$42,080	
	Davey Resource Group, Inc.	$23,320	
	Permit Support and Processing		Time and Materials
	Foth	$11,850	
	Davey Resource Group, Inc.	$16,500	
	Environmental Permitting Total	**$193,360**	
4	**Liaison/Public Presentation Total**	**$31,790**	Lump Sum
	Total Lump Sum	**$509,100**	
	Total Time and Materials	**$28,350**	
	Total Cost Proposal	**$537,450**	

3. Assumptions and Exclusions

Foth shall perform all work on this contract in accordance with the following terms:

- Quotations are offered on Lump Sum Fee basis based on the conditions stated herein. Foth reserves to right to request modifications to the scope of work and task durations, if deemed necessary by the Owner. All additional work shall be approved in writing by the client and billed on actual hours worked based on our standard 2027 rate schedule.
- Scope of work shall be limited to the areas mentioned in this proposal. Additional charges shall apply if the number and/or locations are modified. Any and all work beyond the scope of this proposal shall be deemed extra work and contracted for prior to the commencement of such work.
- Fieldwork is subject to safe access and suitable tide, weather, visibility, wind, wave, current, sea state, aviation, and marine safety conditions. Shallow water, exposed shoals, breaking waves, inlet currents, and practical vessel access may require adjustments to line placement or acquisition timing and may affect the schedule.
  - The survey assumes one coordinated mobilization and authorized access to the beach, dunes, shoreline, project area, and suitable vessel launch and staging locations. Additional mobilization caused by a material scope change, access restriction, or conditions outside the surveyor's control will be an additional service.
  - All Unmanned Aircraft System (UAS) work is subject to applicable airspace authorization, property access, launch and landing permission, and public safety coordination.
  - Boundary surveying, construction staking, environmental monitoring, permitting, sediment sampling, and certification of conditions beyond the scope of this proposal are excluded unless separately authorized.
  - Vibracore fieldwork may require up to six (6) days and multiple mobilizations to obtain acceptable weather, tide, daylight, and sea-state windows. Core recovery, penetration, and completion of every proposed station are not guaranteed because of subsurface refusal, shallow-water access, breaking waves, inlet currents, or other site conditions.
  - Terrestrial vibracore collection is assumed to occur during warmer months, generally May through September. Athena will not attempt terrestrial coring when water temperatures are below 70 degrees Fahrenheit.
- The scope does not include site specific biological sampling, species surveys, environmental monitoring, or additional onsite resource evaluations.
- It is assumed that one (1) round of revisions will be required as part of agency coordination. Foth has not accounted for additional revisions within this scope.
- Opinions and recommendations will be based on information available at the time the services are performed.
- Opinions of probable construction cost will reflect the level of design and market information available at the time of preparation. Actual construction costs may vary.
- Final permit requirements, agency determinations, approval conditions, and review schedules are established by the applicable regulatory agencies.
- Additional studies, analyses, modeling, or design revisions requested by regulatory agencies beyond this scope may be provided as additional services.

Foth would like to sincerely thank the City for their time and consideration of our proposal. If you have any questions or concerns, please feel free to reach out at Chris.Creed@foth.com or (904) 612-7983.

Sincerely,
Foth Infrastructure & Environment, LLC



Christopher G. Creed, P.E., BC.CE
Senior Coastal Engineer & Client Team Leader
Licensed in FL, GA, SC, NC



N. Zachary Bedell, P.E.
Project Coastal Engineer
Licensed in FL, SC, NC

cc: Kaitlyn Cross (Foth)