

BOARD OF ALDERMEN AGENDA ITEM

11/05/25

ISSUE: Contract Authorization Ordinance 2026-26.26

PRESENTED BY: Town Manager, Alice Derian

DEPARTMENT: Administration

Background:

In accordance with Ordinance 2025-25.25 which limited the Town Manager's Contracting Authority to contracts under \$40,000 without Board Approval; the attached Contract Authorization Ordinance requests for the Board to authorize the Town Manager to approve payments to Dial Cordy up to \$185,926 for the EIS Hardened Structure Project. The original contract was approved on June 9, 2017 and this Modification Request is for \$147,500 and the balance of the original contract of \$38,426 = \$185,926.

Attachments: Contract Authorization Ordinance 2026-26.26, Contract Modification Request and the Original Contract

Recommendation: Approve the Purchase Authorization Ordinance as recommended.

Yes Action Needed:

"I, -----, make a motion to approve the Contract Authorization Suggested Motion: Ordinance 2026-26.26 as presented."

Funds: 30

Town Manager Follow Up:

ORDINANCE NO. CA 2026-26.26 TOWN OF NORTH TOPSAIL BEACH, NC

THE TOWN OF NORTH TOPSAIL BEACH, NORTH CAROLINA DOES ORDAIN that the North Topsail Beach EIS Hardened Structure Project Contract with Dial Cordy and Associates, Inc (DC&A) is hereby Amended.

Section I: In accordance with Ordinance 2025-25.25 Limited Town Manager's Contracting Authority to contracts under \$40,000 without Board Approval.

Section II: The Beach Hardened Structure Project Contract signed on June 9, 2017 to DC&A was for \$499,985. There is a balance of \$38,425.86 on the original contract and would need \$38,426.00 appropriated in FY 2026 as the balance of the 2017 Contract was not rolled over into the subsequent fiscal years.

Section III: DC&A requests a contract modification to account for the factors detailed in their request that has caused delays in the project, such as COVID, additional modeling requirements and the PDEIS required multiple rounds of revisions to incorporate up-to-date biological resource and habitat data; including the development of a new biotic communities GIS layer for the study area.

Section IV: The contract modification cost of \$147,500 plus the original contract balance of \$38,426 is a total of \$185,926. The FY 2026 adopted budget included the \$147,500 in account 30-720-07 and the \$38,426 is included in Budget Ordinance 2026-26.25.

Section V: The Finance Officer has determined that after adoption of Budget Ordinance 2026-26.22 sufficient funds are available in account 30-720-07 to cover the additional cost of \$38,426.

Section VI: The Town Board authorizes the Town Manager to execute the Contract and hereby authorizes the Town Manager to approve payments to DC&A up to \$185,926, subject to a pre-audit certificate thereon by the Town's Finance Officer.

Section VII: Copies of this ordinance shall be furnished to the Town Manager, the Finance Officer and to the Clerk to the Board.

Adopted this 5th I	Day of November 2025.							
Motion made by _	, 2nd l	oy						
VOTE: FOR AGAINST ABSENT								
JOANN I	MCDERMON, MAYOR	WAYNE JOHANNESSEN, FINANCE OFFICER						



662 Mentone Lane Wilmington NC 28403

October 28, 2025

Alice Derian, ICMA-CM Town Manager Town of North Topsail Beach 2008 Loggerhead Ct. North Topsail Beach, NC 28460

Re: Request for Contract Modification for Inlet Management Plan EIS

Dear Alice:

Dial Cordy and Associates Inc. (DCA) is pleased to submit this request for a modification to the present contract. Please find attached a detailed breakdown of the fees requested by task for both DCA and ATM (Geosyntec).

The present contract was signed over seven years ago. Original cost proposal assumptions are listed below, as well as factors contributing to the need for additional fees.

Original cost proposal assumptions:

- EIS prepared using only existing CPE modeling data.
- No new numerical modeling, additional engineering/modeling analyses limited to minimal desktop analysis.
- EIS prepared using only existing biological resource/habitat data

While these were positive goals, none of them were realized during the long duration of this contract.

Factors contributing to need for contract modification

Additional 4-year numerical modeling was required based on ERDC model review and state agency comments. New 4-year modeling results required major revisions to PDEIS sections/quantitative analyses already completed. Subsequent modifications to the Alternative 2 baseline bathymetric contours required additional extensive revisions to these same PDEIS sections/quantitative analyses.

Due to project delays attributable to COVID and additional modeling requirements, the PDEIS has undergone multiple rounds of revisions to incorporate up-to-date biological resource and

habitat data; including the development of a new biotic communities GIS layer for the study area.

The PDEIS has basically been completely rewritten on multiple occasions. Our quantitative analyses (habitat, shoreline, parcels at risk, etc.) have been rerun/revised at least twice based on updated modeling.

The proposed contract modification requested (see attached details) is \$147,500. A schedule for the balance of the NEPA process has been provided to you by the Wilmington District, USACE.

We would be pleased to review this request with you at your convenience.

Thank you,

R Steve Dial President

Dial Cordy and Associates Inc.

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SUMMARY	DIAL CORDY AND ASSOCIATES, INC										
	sail Beach Hardened Structure Project EIS, Design	and Pe	ermitting	1		O	riginal Contract				
Horan Top		l	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,		•	inginiar Contract		ORIGINAL	CHANGE	REVISED
Task 1.0	Environmental Impact Statement and Permitting	Labor	DC&A	L	_abor ATM		Expenses		Total	Additional	Revised Total
Task 1.1	Informal kick-off meeting and third-party agreement										
	process	,	,940.00	\$	-	\$	112.00		7,052.00		\$ 7,052.00
Task 1.2	Notice of Intent		,877.00	\$	-	\$	1,989.00		3,866.00		\$ 3,866.00
Task 1.3	Prepare annotated EIS outline		,200.00	\$	-	\$	-	\$	9,200.00	\$ -	\$ 9,200.00
Task 1.4	Literature and data collection and review	,	,864.00	\$	-	\$	-	\$	6,864.00	\$ -	\$ 6,864.00
Task 1.5	Formal agency ad public scoping	\$ 18,	,820.00	\$	-	\$	312.00	\$	19,132.00	\$ -	\$ 19,132.00
Task 1.6	Preliminary draft environmental impact statement (PDEIS)	\$ 63.	,700.00	\$	_	\$	12,724.00	\$	76,424.00	\$ -	\$ 76,424.00
Task 1.7	Supporting documentation		660.00	\$	-	\$	-	\$	24,660.00	\$ 30,000.00	\$ 54,660.00
Task 1.8	Prepare and submit final PDEIS for Corps of	¥ = .,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			_		_	_ 1,000.00	+,	7 01,000.00
	Engineers' review	\$ 9,	,684.00	\$	-	\$	56.00	\$	9,740.00		\$ 9,740.00
Task 1.9	Prepare DEIS for distribution	\$ 27,	,340.00	\$	-	\$	2,612.00	\$	29,952.00	\$ 10,000.00	\$ 39,952.00
Task 1.10	Prepare notice of aailabiity of DEIS	\$ 1,	,483.00	\$	-	\$	-	\$	1,483.00	\$ -	\$ 1,483.00
Task 1.11	DEIS public workshop and public hearing	\$ 18,	,340.00	\$	-	\$	312.00		18,652.00		\$ 21,652.00
Task 1.12	Prepare comment and response document		760.00	\$		\$	112.00	_	16,872.00	\$ 12,000.00	\$ 28,872.00
Task 1.13	Final EIS preparation		940.00	\$	-	\$	2,500.00	\$	23,440.00		\$ 38,440.00
Task 1.14	Individual agency meetings	,	580.00	\$	_	\$	448.00	_	26,028.00		\$ 36,028.00
Task 1.15	Monthly progress reports and invoices		160.00	\$	_	\$	-	\$	8,160.00	\$ 6,000.00	\$ 14,160.00
Task 1.16	Project delivery team meetings		,336.00	\$	_	\$		\$	21,336.00	\$ 5,000.00	\$ 26,336.00
Task 1.17	USACE and NCDCM environmental permit(s) pre-	Ψ 21,	,000.00	Ψ		Ψ		Ψ	21,000.00	ψ 0,000.00	Ψ 20,000.00
145K 1.17	application meeting	\$ 3.	,592.00	\$	_	\$	112.00	\$	3,704.00	\$ 5,000.00	\$ 8,704.00
Task 1.18	Major CAMA permit and Section 10/404 permit	Φ Э,	,592.00	Φ	-	Φ	112.00	Φ	3,704.00	\$ 5,000.00	\$ 0,704.00
1 ask 1.18		e 40	440.00	φ.		φ.	200.00	φ.	40.040.00	¢ 45 000 00	¢ 00.040.00
T 1.4.40	application package		,448.00	\$	-	\$	200.00		13,648.00		•
Task 1.19	Agency permit coordination		,340.00	\$	-	\$	224.00	\$	22,564.00	\$ 15,000.00	\$ 37,564.00
Task 1.20	Administrative record	\$ 8,	,632.00	\$	-	\$	200.00	\$	8,832.00	\$ 5,000.00	\$ 13,832.00
	Task 1.0 Total	\$ 329,	,696.00	\$	-	\$	21,913.00	\$	351,609.00	\$ 131,000.00	\$ 482,609.00
	Engineering Alternatives Analysis and Design		DC&A		_abor ATM		Expenses		Total	Additional	Revised Total
Task 2.1	Evaluation of design alternatives	\$	-	\$	66,620.00		2,520.00		69,140.00	\$ -	\$ 69,140.00
Task 2.2	Engineering support and review - EIS process	\$	-	\$	33,620.00		640.00		34,260.00	\$ -	\$ 34,260.00
Task 2.3	Engineering support and review - permitting	\$	-	\$	19,160.00		324.00		19,484.00	\$ -	\$ 19,484.00
Task 2.4	Meetings and coordination	\$	-	\$	21,560.00	\$	3,932.00	\$	25,492.00	\$ 16,500.00	\$ 41,992.00
	Task 2.0 Total	\$	-	\$	140,960.00	\$	7,416.00	\$	148,376.00	\$ 16,500.00	\$ 164,876.00
	PROPOSED LUMP SUM FEE							\$	499,985.00	\$ 147,500.00	\$ 647,485.00
									,	ψ · · · · ,σσσ.σσ	\$ 0.11,100.00
				PΑ	YMENTS AS	OF	10/24/25	\$	461,559.14		
				OF	RIGINAL CON	ITR	ACT BALANCE	\$	38,425.86		
				М	ODIFICATION	RE	EQUEST	\$	147,500.00		
				TC	TAL AMEND	ED	CONTRACT	\$	647,485.00		
				RΔ	A ANCE AFTE	-R	MODIFICATION	\$	185,925.86		
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North Topsail Beach Hardened Structure Project

Professional Engineering, Planning, Permitting & Design Services Agreement Fixed Price Basis

This agreement is entered to by and among Dial Cordy and Associates, Inc. and the Town of North Topsail Beach on a fixed price basis, subject to the following terms and conditions:

- 1. SCOPE OF SERVICES: Dial Cordy and Associates, Inc. ("DC&A") agrees to perform for the Town of North Topsail Beach ("CLIENT"), professional consulting ("Services") described in the proposal, attached hereto as Exhibit A and incorporated herein by reference.
- 2. FEES, INVOICES AND PAYMENTS: The Services will be performed on a fixed price basis not to exceed \$499,985.00. Invoices will be submitted to CLIENT on a monthly basis and are due and payable within 30 days of receipt by CLIENT. Should there be any dispute as to the amount of payment to be made on a percent complete basis to any portion of an invoice, the undisputed portion shall be promptly paid. All change orders that would require additional compensation beyond the fixed price of this Agreement shall be first be approved by an affirmative vote of the majority of CLIENT'S Board of Aldermen.
- 3. CLIENT'S COOPERATION: To assist DC&A in performing the Services, CLIENT shall (i) consult with DC&A when requested, (ii) permit DC&A reasonable access to relevant project sites, (iii) ensure reasonable cooperation of CLIENT's employees (iv) notify and report to all regulatory agencies as required by such agencies.
- 4. If DC&A anticipates a delay in the work and/or Services to be performed under this Agreement that, in DC&A's opinion is caused by (i) an act, failure to act or neglect of CLIENT or CLIENT's employees or any third parties; (ii) changes in the scope of the work; (iii) unforeseen, differing or changed circumstances or conditions including differing site conditions, acts of force majeure (such as fires, floods, riots, and strikes); (iv) changes in government acts or regulations; (v) delay authorized by CLIENT and agreed to by DC&A; or (vi) any other cause beyond the reasonable control of DC&A, then DC&A shall immediately report to CLIENT the anticipated delay and the causes thereof in writing. CLIENT and DC&A may then discuss and seek to agree as to the cause(s) of the anticipated delay, the remedies of the delay, as well as any additional compensation to be paid as a consequence of the delay; provided however no additional compensation shall be paid for work additional work performed as a consequence of a delay until such time as DC&A's has provided written notice of the anticipated delay and CLIENT agrees to additional compensation in writing.
- 5. INSURANCE: DC&A is presently protected by Worker's Compensation Insurance as required by applicable law and by General Liability and Automobile Liability Insurance. DC&A shall at all times maintain the nature and amount of insurance depicted on the Certificate of Insurance attached hereto as Exhibit B and incorporated herein by reference. DC&A shall cause CLIENT to be endorsed and named as an additional insured on DC&A's liability insurance throughout the course of and for the purposes of

this Agreement. Insurance certificates shall be furnished to CLIENT with the appropriate endorsement of CLIENT as an additional insured.

- 6. INDEMNITY: DC&A shall defend, indemnify and hold harmless CLIENT from and against loss or damages to tangible property, or injury to persons, or any other damages or costs to the extent said damages and costs arise from the negligent or intentional acts or omissions of DC&A, its borrowed servants and their employer and its subcontractors, and their respective employees and agents acting in the course and scope of their employment in any way related to the Project.
- 7. GOVERNING LAWS: This Agreement shall be governed and construed in accordance with the laws of the State of North Carolina.
- 8. TERMINATION: Either party may terminate this Agreement with or without cause upon thirty (30) days' written notice to the other party. Upon such termination, CLIENT shall pay DC&A for all Services performed hereunder up to the date of such termination provided that DC&A provides the Town with all data, modeling and other associated items developed, gathered or maintained by DC&A for the purpose of this project.
- 9. ASSIGNMENT: Neither DC&A nor CLIENT shall assign any right or delegate any duty under this Agreement without the prior written consent of the other, which consent shall not be unreasonably withheld.
- 10. DATA GATHERING AND TRANSFER: It is understood that DC&A's fixed price for this Agreement is based in part on certain assumptions pertaining to data transfers from other non-governmental entities other than CLIENT. DC&A represents that all such material data related to said assumptions shall be obtained by DC&A or otherwise successfully transferred to DC&A within sixty (60) days of the Issuance of the Notice to Proceed. DC&A further represents that the costs associated with the DC&A's gathering and obtaining said data shall not exceed the sum of \$25,000 of the contract price. DC&A shall, in writing, confirm to CLIENT on or before the sixtieth day following the issuance of the Notice to Proceed that DC&A has successfully gathered and obtained the data referenced in this Section 10. In the event DC&A is unable to make such a written confirmation to CLIENT, DC&A shall provide CLIENT with a written comprehensive report of the status of the transfer/collection of the data referenced herein. In the event CLIENT is not satisfied with the status of the data transfer/collection process on the sixtieth (60th) day following the issuance of the Notice to Proceed CLIENT may, in its sole discretion, elect to terminate the Agreement immediately notwithstanding the provisions of Section 8 above. Any such termination shall be by an affirmative vote of a majority of CLIENT'S Board of Alderman and notice of said affirmative vote shall be given to DC&A within three (3) days of the vote to terminate.

11. MISCELLANEOUS:

a. ENTIRE AGREEMENT, PRECEDENCE, ACCEPTANCE MODIFICATIONS The terms and conditions set forth herein constitute the entire understanding of the Parties relating to the provisions of

the Services by DC&A to the CLIENT. In the event of conflict, this Agreement, including all Exhibits referenced, shall govern.

- b. DISPUTES, ATTORNEY FEES Any dispute regarding this Agreement or the Services shall be resolved first by exchange of documents by senior management of the parties, who may be assisted by counsel. Any thereafter unresolved disputes shall be litigated in Onslow County, North Carolina. In any litigation, the Prevailing Party shall be entitled to receive, as part of any award or judgment, fifty percent (50%) of its reasonable attorneys' fees and costs incurred in handling the dispute. For these purposes, the "Prevailing Party" shall be the party who obtains a litigation result more favorable to it than its last formal written offer (made at least 20 calendar days prior to the formal trial) to settle such litigation.
- c. WAIVER OF TERMS AND CONDITIONS The failure of DC&A or CLIENT in any one or more instances to enforce one or more of the terms or conditions of this Agreement or to exercise any right or privilege in the Agreement or the waiver by DC&A or CLIENT of any breach of the terms or conditions of this Agreement shall not be construed as thereafter waiving any such terms, conditions, rights, or privileges, and the same shall continue and remain in force and effect as if no such failure to enforce had occurred.
- d. NOTICES- Any notices required hereunder may be sent by orally confirmed US Mail, courier service (e.g. FedEx), orally confirmed telecopy (fax) or orally confirmed email (further confirmed by US Mail) to the addresses set forth below.
- e. SEVERABILITY AND SURVIVAL- Each provision of this Agreement is severable from the others. Should any provision of this Agreement be found invalid or unenforceable, such provision shall be ineffective only to the extent required by law, without invalidating the remainder of this Agreement.

Further, to the extent permitted by law, any provision found invalid or unenforceable shall be deemed automatically redrawn to the extent necessary to render it valid and enforceable consistent with the parties' intent. The terms and conditions set forth herein shall survive the termination of this Agreement.

CLIENT and DC&A agree to the foregoing and have caused this Agreement to be executed by their duly authorized representatives as of the date set forth below.

[Signatures on following page]

Executed this the **9** day of June, 2017 by:

Town of North Topsail Beach

Stuart Turille, Town Manager 2008 Loggerhead Court

North Topsail Beach, NC 28460

Dial Cordy and Associates Inc.

R. Steven Dial, President 201 North Front Street

Wilmington, NC 28401.

RSteve Dial

North Topsail Beach Hardened Structure Project Professional Engineering, Planning, Permitting & Design Services

Dial Cordy and Associates Inc. and Applied Technology and Management Inc.

Scope of Services

Dial Cordy and Associates Inc. (DC&A) will assist the Town of North Topsail Beach (Town) and Onslow County (County) in the preparation and development of a NEPA-compliant Environmental Impact Statement (EIS) and supporting documentation, following acceptance of a preferred hardened structure design by the Town and County. The DC&A team will complete an EIS in accordance with the National Environmental Policy Act (NEPA) / State Environmental Policy Act (SEPA) process as legislatively mandated. Engineering design and cost estimating will be prepared at a level needed to assess alternative costs, and to support the EIS and permitting for the project.

The NEPA/SEPA documentation timeline goal is anticipated to be a minimum of 2 years. While some upfront work on the NEPA/SEPA document can be started, the main body of document preparation will be completed after our subcontractor, Applied Technology and Management Inc., has completed the preliminary engineering analysis and gained approval from the client and the US Army Corps of Engineers Project Manager to proceed with design of the preferred alternative.

For this contract, DC&A will serve as the third-party contractor under direction from the Wilmington District Corps of Engineers. Our subcontractor, ATM, will work independently on the engineering analysis, design alternatives, and cost estimating for the project. Dr. Pete Schuhmann from the University of NC at Wilmington will serve as the team's economist for assistance in the EIS development.

Scope of Work Assumptions

In preparing the Scope of Work, it should be noted that there are some overriding assumptions that have been made which are listed below. These assumptions are provided in order for us to stay within the budget the Town/County presently have for the project.

- The alternatives evaluated and modelled in the Feasibility Report by CBI/CPE will be utilized as a basis for alternative evaluation and selection of a preferred design. No additional numerical modeling is proposed for new hardened structure alternatives and if required will be conducted under separate proposal.
- All available documents requested from CBI/CPE will be provided on a timely basis.

- Additional engineering analysis and modelling required will be limited to minimal desk top analysis. No additional complex numerical modeling is proposed.
- This contract includes only 60% design of the preferred alternative and does not include preparation of bid specifications and final design needed to develop construction plans.
- The overall duration of the project is expected to be two (2) years. Should the timeframe extend beyond this length due to delays on the part of the Corps of Engineers or the Town/County, additional funding may be requested for continued agency coordination.
- Participation in meetings may be required of CPE/CBI staff pertaining to modeling and to linkage of the Ocean Bar project. Their staff time is not covered in our cost for this project.

The following scope of services includes engineering services, preparation of a Draft and Final EIS, an Administrative Record (AR), and associated supplemental documentation as required to meet NEPA of 1969 as amended, found in the 42 United States Code § 4321, SEPA procedures found in North Carolina General Statute 133A-1 through -12, and hardened structure specifics under General Statute 113A-115.1. Efforts will also include a significant and proactive public involvement program through scoping; formal and informal coordination with local, state, and federal resource agencies; and preparation and coordination of specific local, state, and federal environmental authorizations.

1.0 ANALYSIS AND DEVELOPMENT OF ALTERNATIVES

TASK 1.1 - INFORMAL KICK-OFF MEETING and DEVELOPMENT OF ALTERNATIVES

Initially, DC&A will arrange a project workshop between the Town's Board of Aldermen and the County's Board of Commissioners to establish the project's purpose, needs, and desired outcomes. Upon completion of the workshop, DC&A will proceed with an economic evaluation and the development of alternatives as outlined below.

- Review available plans, reports, survey data, and conceptual designs already completed
 and formulate engineering design alternatives that are cost-effective and accomplish the
 Town's and County's stated goals and objectives.
- Evaluate a No Action alternative and up to five feasible alternatives. The alternatives will be evaluated based on placement volumes, hardened structure design, engineering approach, cost estimates, and schedules. Alternatives will be delineated to a feasibility level
- Delineate project life cycle costs for each alternative.
- Conduct an economic analysis that illustrates how each alternative action may impact
 the property base within the North Topsail Beach erosion zone and what the cost-benefit
 return is for each action (note: additional analysis will be provide by Dr. Schuhmann,
 UNCW).
- Prepare a detailed report identifying the clear purpose and need, and summarizing the engineering, cost and benefit of each alternative.

- Present findings of the study task to the Onslow County Board of Commissioners and Town of North Topsail Beach Board of Aldermen, with a recommended plan and associated costs and benefits
- In concert with Onslow County and the Town of North Topsail Beach, identify the preferred project alternative

At the completion of this task, the County and Town will provide a recommended direction to the consultant team should they wish to proceed forward.

2.0 ENVIRONMENTAL IMPACT STATEMENT AND PERMITTING

TASK 2.1 – INTER-AGENCY MEETING and THIRD-PARTY CONTRACT AGREEMENT PROCESS

The third-party contract agreement process will be implemented and coordinated with the USACE following approval of the Scope of Work by the USACE. In coordination with the USACE, DC&A will arrange an informal information session between project team members and primary regulatory or resource agencies of interest. Suggested agency attendees will include the NC Division of Coastal Management (NCDCM) and the USACE. The meeting's purpose will be to share with the respective agencies the Town's proposed goals and to facilitate agency discussion, initial thoughts, and ideas regarding their active roles and involvement in the EIS and supporting documentation. This meeting will also be used to discuss the strategy for the NEPA documentation, and whether a supplemental EIS can be prepared instead of a complete new EIS, as well as to review and discuss the present design alternatives described in the Feasibility Study prepared by CPE/CBI for the Town. Following review and concurrence from the Town/County and the USACE, a summary of the meeting will be prepared and forwarded to respective attendees. This summary will form the basis for the direction needed for design, modelling and development of the EIS.

TASK 2.2 - NOTICE OF INTENT

In coordination with the USACE, DC&A will compose a draft Notice of Intent (NOI) to prepare a Draft Environmental Impact Statement for the preferred alternative plan selected by the Town/County which bests meets their purpose and need. The NOI will be sent to the USACE for their approval and use for placement in the Federal Register by the Environmental Protection Agency (EPA). Similarly, a notice will be provided by DC&A for publication in the NC Environmental Bulletin and will include the proposed project's sponsor, a brief action description, a general project location map, anticipated study schedule, and a request for initial comments.

TASK 2.3 - PREPARE ANNOTATED EIS OUTLINE

DC&A will prepare a brief EIS outline which describes the approach to evaluating the proposed actions' effects on the Town's environmental, cultural, and socio-economic condition. A draft of the outline will be provided to the Town and the USACE for review and comment. The outline will be provided to the USACE in advance of specific meetings to discuss and gain concurrence from the

project delivery team (PDT) on the EIS approach. A record of the meeting and issues concurred upon will be prepared and submitted by DC&A as a draft to all attendees. Based on the USACE's input, the meeting summary will serve as the EIS approach, format, and expectations of the consultant and the Town in preparation and coordination of the EIS documentation. A final draft will be sent to all parties following concurrence.

TASK 2.4 - LITERATURE AND DATA COLLECTION AND REVIEW

DC&A will initiate literature and data searches with local, state, and federal agencies to obtain existing available information (i.e. technical reports, scientific journals, databases) relevant to environmental, cultural, socio-economic, and regulatory conditions and issues within the North Topsail Beach project area. Information sought and collected will include both text and GIS files. We will prepare a formal list of reports, data and information needed from CPE/CBI and forward this to the Town's manager for coordination with them. It will be the Town's responsibility to obtain the information requested in a timely manner. The information and data sources identified and collected will be scanned and cataloged within a database for use in the Draft EIS preparation and as part of the EIS's formal administrative record. Aerial imagery will be provided to the project team from the Town or as acquired from other sources.

TASK 2.5 - FORMAL AGENCY AND PUBLIC SCOPING

In concert with the USACE and Town, DC&A will assist the USACE in facilitating and conducting formal agency and public scoping meetings to introduce the proposed project to local, state, and federal agencies; non-governmental organizations (NGO's); and the general public. The agencies' scoping meeting is to request ideas, opinions, and recommendations for evaluation and consideration during preparation of the Draft EIS. Agency and public scoping meetings will be held in North Topsail Beach the same day. The agency scoping meeting will take place in the early afternoon followed in the early evening by an informal public workshop and formal public scoping. North Topsail Beach will be responsible for securing a location and court reporter for the meetings. North Topsail Beach will prepare the advertisement for placement by the Town in local newspapers. DC&A will prepare and receive pre-approval by the USACE for handouts, agendas, boards, and other resources needed for conveying information about the proposed beach nourishment and hardened structure plan and the NEPA process. The DC&A project manager and engineer will assist the USACE in chairing the agency meeting with support from technical staff.

DC&A anticipates the public workshop will be held the evening of the agency scoping meeting and at the same venue. The public workshop will begin with an informal open-house with standing boards/posters, followed by a formal project introduction using MS PowerPoint, and concluded with a formal public scoping comment period. During the public workshop, DC&A staff will be positioned throughout the room to answer any questions posed by interested attendees. Name tags will be prepared and worn by all attending staff and offered to Town staff for their use.

Following the comment period, a scoping summary report of the two meetings, comments received, and list of attendees will be prepared by DC&A in coordination with the USACE. This scoping report will be forwarded to the Town, County and the USACE for review and comment,

and a final scoping report sent by DC&A to the Town, County and USACE as a record of the Draft EIS's formal scoping.

TASK 2.6 - PRELIMINARY DRAFT ENVIRONMENTAL IMPACT STATEMENT (PDEIS)

DC&A will prepare the Preliminary Draft EIS (PDEIS) in accordance with NEPA guidelines and specific requirements as agreed with the USACE on format, content, and technical approach. This document will be a supplemental EIS if allowed by USACE and NCDCM. The EIS outline (as approved through earlier coordination with the USACE and modified if needed following agency and public scoping) will be used. DC&A will tailor the PDEIS sections from specific interests and/or comments received during scoping. A summary of the approach to each section and appendices of the PDEIS are provided below. Preparation of the document will be subject to receipt of an alternatives formulation and design report, provided by ATM.

Purpose and Need

In concert with the USACE, a Project Purpose and Need Section will be developed describing the proposed action.

General Action

DC&A will define the general action by the location of Town of North Topsail Beach's geographic limits, natural resources, and by the potential borrow source/fillet location(s).

Existing Actions

DC&A will summarize current actions and planned efforts by others that may influence the analysis and ultimate project description.

Economic Evaluation

DC&A will summarize the area's economic benefits resulting from continued maintenance of North Topsail Beach, use of the hardened structure and the inter-relation the beach's natural resources have on the North Topsail Beach and Onslow County economic tourism engine. These economic statistics will be developed by Dr. Pete Schuhmann from UNCW, as a subcontractor to DC&A.

Projected Needs

DC&A will generally describe the current beachfront shoreline status south of New River Inlet, resource challenges, and how the proposed action will help meet the projected needs and better position North Topsail Beach for long-term beachfront shoreline management within the vicinity of New River Inlet and maintain navigation within the inlet.

Scoping and Issues

DC&A will summarize the results of the agency and public scoping report previously prepared and submitted to the USACE.

Alternatives Analysis

In coordination with the USACE, DC&A will further evaluate the engineered template, design, and cost associated with the Town and County's selected alternative. <u>Alternatives Considered but</u> Eliminated from Further Consideration

DC&A will describe, in the detail needed, all alternatives that were considered, but eliminated from further consideration, and not fully analyzed. DC&A will describe the elements of these alternatives in terms of general non-compatibility, excessive environmental, cultural, and/or anthropogenic effects, excessive capital outlays, and/or engineering impracticality.

Project Alternatives

Area borrow sources, beach-fill templates and hardened structure design alternatives in association with ATM's engineering evaluation will be evaluated by DC&A, each representing feasible and cost effective approaches.

Preferred Applicant Alternative

Following the evaluation of the project alternatives, an applicant's preferred alternative will be identified within the PDEIS in consultation with the Town, County and USACE. As mandated by recent state legislation, the Applicant's Preferred Alternative section will include initial construction cost estimates, timelines, annual compliance outlays/deliverables, as well as projected maintenance and potential mitigation costs and timelines in the form of an Inlet Management Plan, which may be required, but is not part of this scope of services

Affected Environment

Based upon existing available data, DC&A will describe the environmental, cultural, and socioeconomic resources that may exist both within the hardened structure design and fillet templates, borrow source locations, and borrow source material corridors, as follows:

General Environmental Setting

DC&A will describe in general terms the project location and environmental/cultural attributes, including all potential borrow source locations.

Land Use

DC&A will make use of available aerial photography, topographic maps, and current land use plans encompassing the project area. DC&A will describe current land uses within the project area as found in North Topsail Beach's most recent land use and resource planning documentation. DC&A will coordinate with local, state, and federal resource agencies to determine the presence of unique or prime lands located within the project template or borrow source locations.

<u>Geology</u>

Geologic features and attributes will be characterized by ATM for both the project beach fill area and the borrow source area. Such data will be accessed by DC&A and incorporated into the NEPA/SEPA documentation.

Biotic Resources

DC&A will describe the existing upland, dune, beach, estuarine, and nearshore marine habitats and their associated plant and animal communities based on available documentation and/or scientific literature. Physical and biological reporting and monitoring

data from all recent beach nourishment events, past EIS's and feasibility studies will be used to develop baseline conditions. Past EIS's for the Towns project may include information regarding nesting and foraging habitat for shorebirds and sea turtles, locations of the listed plant species, seabeach amaranth, and studies of project effects which include the presence/absence and use patterns by species and habitats of concern (i.e. piping plover, red knot, shorebirds, and colonial waterbirds; nesting sea turtles; benthic macroinvertebrates; salt marsh habitat; submerged aquatic vegetation; and shellfish).

In addition, for any proposed sand borrow areas, marine resources and associated benthic and fish communities will be described by DC&A. DC&A does not anticipate the need for further benthic or fisheries studies to complete this section; however, it is anticipated that further desktop mapping and assessment of estuarine resources may be required for full assessment of the hardened structure alternatives. This Biotic Resource Section will also address fisheries and Essential Fish Habitats (EFH). The EFH assessment will be prepared by DC&A as a separate supporting document.

Protected Species

DC&A will formally contact the US Fish and Wildlife Service (USFWS), NC Natural Heritage Program and the National Marine Fisheries Service to confirm and identify the list of federal and state protected species known or thought to exist within the project study area and which are afforded legal protection. These threatened and endangered plants and animals, including their potential habitats, will be described in detail by DC&A in the Protected Species Section, including species that may use or occur on the beaches, in nearshore waters, or within the proposed borrow areas. The occurrence of any significant natural communities, natural heritage areas, or conservation/managed areas within the project area or borrow area locations will also be documented by DC&A. A Biological Assessment (BA) will be prepared by DC&A as a supplemental document.

Water Resources

DC&A will describe the project areas' surface water bodies, state classifications, and ideal uses. North Topsail Beach's point source and non-point source (stormwater) users (readily available NPDES data) will be described as applicable. North Topsail Beach groundwater resources will be described by DC&A from readily available public information depicted by accessible formations, volume, and quality.

Air Quality/Noise

DC&A will describe Onslow County's current air quality attainment status for EPA's criteria pollutants. DC&A will assess from currently available data likely ranges of audible sources found on North Topsail Beach.

Historic and Archeological Resources

DC&A will describe both terrestrial and marine cultural resources found within the project area and all selected borrow source locations from existing reports or data on file with the Town, County or SHPO. Assessments could include archive database reviews, magnetometer surveys, sub-bottom profiles, and Phase II diver reconnaissance. Analyses for this task will be based upon previous cultural assessment efforts by others.

Social and Economic Attributes

DC&A, in collaboration with Dr. Pete Schuhmann, will describe North Topsail Beach's demographics, including seasonal population, population densities, and resident population characteristics. North Topsail Beach's primary community/park facilities, emergency facilities, educational, and ocean-front access facilities will be described by DC&A. The Town's major industries (tourism, boating, and fishing) and their economic effects will be described by DC&A in terms of personal revenue, taxes, and jobs. Readily available economic data will be used by DC&A to develop the Social and Economic Attributes Section.

Coastal Trust Issues

Issues such as areas of environmental concern, natural and cultural resource areas, public trust waters, public trust bottoms, and public use areas will be described by DC&A as components of the coastal analysis. Such coastal, environmental, and cultural resource analyses will also be applied to the borrow source locations.

Navigation Features

DC&A will describe North Topsail Beach's and the New River Inlet proximal navigation features as well as access routes and mechanisms for potential borrow sources and other interest uses.

Coastal Processes

North Topsail Beach and New River Inlet tidal regime, wave climate, nearshore currents, and littoral transport will be described from existing data or modeling developed and provided by CPE/CBI. Applicable coastal processes within or adjacent to proposed borrow areas or structures will also be described by DC&A based on existing documentation or additional data provided by CPE/CBI.

Environmental Consequences

DC&A will describe the beneficial and adverse human, cultural, and environmental effects from implementation of the No Action, Project Alternatives and the Applicant's Preferred Alternative.

Land Use

DC&A will assess and describe the potential effects of the No Action and project alternatives on the Towns current land use, planned land use, and land use goals. DC&A will also assess and describe the borrow source locations' current land/sub-surface uses and planned uses. DC&A will assess and describe the No Action and project alternatives' potential effects on unique or prime lands located within the project template and borrow source locations.

Geology and Soils

DC&A will assess and describe the potential effects of the No Action and project alternatives on the beach fill areas', hardened structure location, and borrow locations' geology and soils. Sediment compatibility will be evaluated and described by ATM for the beaches' physical and chemical sediment characteristics (grain size fractions, percent

carbonate, etc.) and for the borrow sources included in the project alternatives. The compatibility analysis will be based on North Carolina's sediment quality criteria for beach placement and provided by ATM based on previous studies.

Biotic Resources

DC&A will assess and describe the effects of the No Action alternative and project alternatives on terrestrial and marine resources found within the project area and borrow locations. Evaluated resources will include flora and fauna which occur in or use the dune system and dry beach; shorebirds which use the dry beach and intertidal zone for foraging and resting; and fisheries, benthos, marine mammals, and reptiles which may occur in the intertidal, nearshore, and offshore areas. DC&A will prepare an EFH assessment as a supplemental document to the EIS. This EFH assessment will be used by the National Marine Fisheries Service (NMFS) in their evaluation of the proposed project's effects on managed species and their habitats. This Biotic Resources section will summarize the findings of the EFH and agency coordination efforts (see Task 7).

Protected Species

DC&A will assess and describe the potential effects of the No Action and project alternatives on federal and state protected species and their habitats. A BA will be prepared by DC&A as a supplemental document to the EIS. The BA will be provided by DC&A to the USACE, NMFS and USFWS for their review and concurrence under Section 7 of the Endangered Species Act. The Protected Species Section will summarize the findings of the BA and agency coordination efforts (see Task 7).

Water Resources

DC&A will assess construction and operational effects on North Topsail Beach's surface waters resources, groundwater resources, potable water resources, and wastewater treatment capabilities potentially arising from the No Action and project alternatives.

Air Quality/Noise

DC&A will assess the potential effects of the No Action and project alternatives on the Town's and County's air quality attainment status resulting from mobile source equipment emissions and audible emissions. This assessment would include evaluation of potential effects on terrestrial and marine biota, as well as anthropogenic effects.

Historic and Archeological Resources

DC&A will evaluate potential effects of the No Action and project alternatives on any known or potentially occurring terrestrial or marine historic or archeological resources. The Historic and Archeological Resources Section will include a discussion of Section 106 coordination with the NC State Historic Preservation Office.

Social and Economic

DC&A, in coordination with Dr. Pete Schuhmann, will assess and describe the potential effects the No Action and project alternatives may have on the Town's and County's communities' neighborhoods, island travel patterns, and beach accessibility. DC&A will assess and describe, from readily available economic data, the project alternatives' effects on the Town's and County commercial bases (tourism, boating, and fishing). The potential

effects from beach and hardened structure construction on visual aesthetic and lighting associated with the project alternatives will also be assessed and described by DC&A in the Social and Economic Section.

Coastal Trust Issues

DC&A will assess and describe potential effects of the No Action and project alternatives on coastal trust issues ranging from public trust waters and public trust bottoms to cultural and unique coastal resources such as coquina rock outcrops, shipwrecks, or other significant natural or cultural resources within the project area or borrow location(s).

Navigation

Based upon information provided by ATM, DC&A will assess and describe the potential effects of the No Action and project alternatives on navigation during dredging, hardened structure construction, and beach placement activities.

Coastal Processes

Based upon results and information provided by ATM, DC&A will assess and describe the potential effects the No Action and project alternatives may have on erosion, long-shore current patterns, wave climate, wave surge, and sediment transport.

Secondary and Cumulative Effects

DC&A will summarize the potential secondary and cumulative effects resulting from the No Action and project alternatives. The Secondary and Cumulative Effects Section will be presented by DC&A as a supplemental document in the PDEIS's appendices. This section will focus on potential secondary anthropogenic, cultural, and environmental effects (see Task 7).

Avoidance and Mitigation Measures

The Avoidance and Mitigation Measures Section will be prepared by DC&A in conjunction with ATM, the Town and County, as a plan for complying with the specific conditions of the State's legislation with regards to mitigation. DC&A in coordination with the USACE will develop post-construction activities to monitor potential impacts of the proposed project on coastal resources. In addition, DC&A will coordinate with the USACE and NCDCM on defining baseline conditions for assessing any adverse impacts and thresholds for when the adverse impacts must be mitigated. DC&A will assist the USACE and NCDCM in the provision of mitigation measures to be implemented in the event adverse impacts reach the thresholds defined above. In addition to those measures described above, the Avoidance and Mitigation Plan will include a summary of potential mitigation measures and best management practices that may be employed to avoid, minimize, or mitigate for potential effects on biological and cultural resources. A draft Inlet Management plan will be prepared and presented by ATM as a supplemental document in the PDEIS's appendices.

Required Authorizations and Actions

DC&A will develop a list of local, state, and federal authorizations/actions/coordination required prior to construction. A brief description of the authorizations/actions/coordination will be provided and their applicability with the preferred alternative.

List of Preparers

DC&A will develop a primary author list of names and qualifications participating in the PDEIS development.

Comments and Coordination

DC&A will describe the agency and public coordination and participation engaged during the EIS scoping process. Comments received during the EIS effort will be included by DC&A within the Draft and Final EIS as appendices.

Tables, Figures, References, and Appendices

DC&A will develop/manage the inclusion of all tables, figures, references and appendices.

TASK 2.7 - SUPPORTING DOCUMENTATION

The following documents will be prepared by DC&A as supporting documentation of the PDEIS.

Biological Assessment

As part of the EIS, DC&A will research, prepare, and provide a BA as required by the Endangered Species Act, describing the potential effects on federal and state protected species potentially or likely to be encountered within the alternatives' project areas, including all borrow source locations. The BA will be prepared and coordinated by DC&A and the USACE with the USFWS and NMFS for concurrence of findings. The BA will be of the detail necessary for the USFWS and NMFS to prepare and submit a formal Biological Opinion, if necessary. DC&A will coordinate with the USACE regarding any conditions stipulated by either agency which may restrict construction techniques, schedules, or operation and maintenance of the Applicant's Preferred Alternative.

Essential Fish Habitat Assessment

As part of the EIS, DC&A will research, prepare, and provide an EFH Assessment in accordance with the Magnuson-Stevens Fishery Conservation and Management Act of 1979. The assessment will include all managed species, their habitats, and Habitat Areas of Particular Concern (HAPC). The EFH will include all applicable species managed by the Mid-Atlantic and South Atlantic Fishery Management Councils, and the Atlantic States Marine Fisheries Commission. DC&A will coordinate with the USACE regarding any conditions stipulated by the NMFS which may restrict construction techniques, schedules, or operation and maintenance of the preferred alternative.

Cumulative Effects Assessment

As an integral part of the EIS development process, secondary and cumulative effects will be analyzed. These effects can result from minor individual actions viewed collectively, resulting in a significant effect over a period of time. Secondary and cumulative effects result from a preferred alternative when added to past, present, and reasonably foreseeable future actions regardless of the entity responsible for the actions. The Secondary and Cumulative Effects Section will describe the Applicant's Preferred Alternative's effects considering applicable actions both geographically and temporally. DC&A, in coordination with the USACE, will consider activities that may or have contributed to cumulative effects within the project area or within regions of influence. In coordination with the USACE, DC&A will collect and analyze readily available data and perform a cumulative impact analyses on the Applicant's Preferred Alternative.

TASK 2.8 - PREPARE AND SUBMIT FINAL PDEIS FOR CORPS OF ENGINEERS' REVIEW

An electronic copy of the PDEIS will be submitted by DC&A to the USACE for review and comment. After receiving comments, DC&A will schedule conference call meetings with the USACE and Town/County representatives to review comments and discuss applicable responses.

TASK 2.9 - PREPARE DEIS FOR DISTRIBUTION

DC&A shall produce approximately five (5) complete bound hard copies, ten (10) digital copies, and post to a dedicated site a complete pdf of the Draft EIS. Inclusive are complete hard copies and fourteen (14) digital copies of the Draft EIS to be provided to the NC Clearinghouse for agency dispersal and to the EPA.

<u>Hard Copies</u>: Onslow County (1); North Topsail Beach Board of Alderman (1); USACE (1); NC Clearinghouse (1); EPA (1).

TASK 2.10 - PREPARE NOTICE OF AVAILABILITY OF DEIS

In coordination with the USACE, DC&A will prepare the Notice of Availability (NOA) for use by the USACE. DC&A will include, within the NOA, a brief project summary; narrative of the No Action, Project, and Preferred Alternatives; and a project location map.

TASK 2.11 - DEIS PUBLIC HEARING

DC&A will facilitate arrangement (by the USACE and Town) of a formal public hearing that will proceed into a formal comment period. DC&A will arrange, in collaboration with the Town, for detailed minutes to be captured, recorded, or both; DC&A will prepare and provide a written summary of minutes. The Town will prepare two public notices for local newspaper publication. The notices should be published approximately 4 weeks and 2 weeks prior to the scheduled hearing date. The Town will arrange the location of the hearing in coordination with DC&A and the USACE. A brief post-hearing meeting will take place on-site for a project team de-brief.

TASK 2.12 - PREPARE COMMENT AND RESPONSE DOCUMENT

In coordination with the USACE, DC&A will review, sort, and assemble all comments received during the public comment period in a spreadsheet matrix. DC&A will assess each comment, prepare an appropriate response, and prepare a Comment Response report to be included in the FEIS. DC&A will meet with the USACE to review the comment response document and applicable responses. A final Comment Response report will be prepared and forwarded to the Town, County and the USACE. It is anticipated that discussions with the USACE will be needed until the wording is approved by all parties.

TASK 2.13 - FINAL EIS

DC&A will prepare the Final EIS for review by the USACE. Following concurrence by the USACE, DC&A shall produce approximately fifteen (15) complete bound hard copies, fifty (50) digital copies, and post to a dedicated site a complete pdf of the Final EIS. Inclusive are two (2) complete

hard copies and fourteen (14) digital copies of the Final EIS to be provided by DC&A to the NC Clearinghouse for agency dispersal.

<u>Hard Copies:</u> Onslow County (1); N Topsail Beach Board of Alderman (1); Onslow County Library, ECU Library, UNC Library, NC State Library, UNCW (1 each); USACE (1); NC Clearinghouse, (2); and internal and miscellaneous (6).

<u>Electronic Copies:</u> Onslow County (1); N Topsail Beach Board of Alderman (10); Onslow County Library, ECU Library, UNC Library, NC State Library, UNCW (1 each); USACE (5); NC Clearinghouse (14); and internal and miscellaneous (17).

TASK 2.14 - INDIVIDUAL AGENCY MEETINGS

DC&A, as necessary and as requested, will coordinate with resource agencies throughout the EIS process to obtain data, receive comments, and update project status. This coordination may include telephone calls, letters, emails, and individual meetings. A total of eight (8) agency meetings and twelve (12) teleconferences are proposed and budgeted. DC&A will provide at least one staff member for these coordination efforts.

TASK 2.15 - MONTHLY PROGRESS REPORTS AND INVOICES

DC&A will develop monthly summary memos that will accompany monthly invoices. These memos will bullet progress by task with an estimated percent complete to date based on our contract tasks' deliverables. An anticipated 24 monthly memos/invoices will be prepared by DC&A over the duration of the contract.

TASK 2.16 - PROJECT REVIEW TEAM MEETINGS

DC&A will participate in monthly conference calls for the project's duration for up to 24 months. DC&A will budget for quarterly project review team meetings. DC&A will attend up to four board meetings at the board's request. DC&A will facilitate project coordination cooperatively with the Town and the USACE, the lead agency for federal actions under NEPA. The NCDCM will lead the State's CAMA Major permit process in coordination with the USACE and DC&A, in order to limit duplication of effort and conflict. These agencies, along with Camp Lejeune representatives, NCDMF, North Carolina Wildlife Resources Commission (NCWRC), NMFS, USFWS and North Carolina Department of Environmental Quality (NCDEQ), will form the core Project Review Team as well as private and/or non-profit interest groups such as the NC Coastal Federation, Audubon, and Environmental Defense.

TASK 2.17 - USACE AND NCDCM ENVIRONMENTAL PERMIT(S) PRE-APPLICATION MEETING

DC&A will arrange a permit pre-application meeting with the USACE, NCDCM, NCDEQ, and NCDMF, NMFS, NCWRC and USFWS. ATM will provide all required engineering drawings and calculations.

TASK 2.18 - MAJOR CAMA PERMIT AND SECTION 10/404 PERMIT APPLICATION PACKAGE

In coordination with the USACE and NCDCM, DC&A will assemble applications to the USACE and NCDCM. All engineering drawings and engineering support documentation will be provided by ATM. The USACE approved EIS will serve as the support document for the factual information needed for the applications. Upon review and signature of the application packages by the Town, applicable copies of the packages will be delivered by the Applicant to the NCDCM and the USACE. Application fees will be provided by the Town as required by agencies.

TASK 2.19 - AGENCY PERMIT COORDINATION

In coordination with the USACE, DC&A will respond to questions and requests for additional information (RAI) pertaining to the EIS during state and federal review of the permit applications. Upon receipt of an RAI, DC&A will schedule and hold teleconferences/meetings as needed to assign team members comment responsibilities and timeframes. DC&A will coordinate and distribute each response to the agencies' RAIs, with copies to the Town. DC&A will plan for 3 teleconferences/meetings and 3 RAI response letters during the permit coordination period – expected to include up to 6 months. RAI responses will be based on existing information only.

TASK 2.20 - ADMINISTRATIVE RECORD

DC&A will provide the Town and USACE with a CD/DVD of all correspondences, letters, emails, and summaries which constitute the administrative record produced during the EIS process. This record will be integral in preparation for any challenge to the project by third parties. A spreadsheet listing all sources of information included in the AR will be complied and submitted by DC&A as well.

3.0 ENGINEERING ALTERNATIVES ANALYSIS AND DESIGN

TASK 3.1 – EVALUATION OF DESIGN ALTERNATIVES

ATM will prepare an engineering analysis of design alternatives to serve as a basis for project evaluation within the EIS process. This effort will serve as a basis for identification of the preferred project alternative. Specific sub-tasks include the following:

- Review available plans, reports, survey data and conceptual designs already completed and formulate engineering design alternatives that are cost-effective and accomplish the stated goals and objectives
- Develop engineering alternatives for consideration within the EIS process. Alternatives will be delineated to a feasibility level
- Develop sufficient design analysis, drawings and performance analysis to provide sufficient technical support to the EIS process
- Delineate project life cycle costs for each alternative

- Conduct an economic analysis that illustrates how each alternative action may impact
 the property base within the North Topsail Beach erosion zone and what the cost-benefit
 return is for each action (note: additional analysis will be provide by Dr. Schuhmann,
 UNCW)
- Prepare a detailed report identifying the clear purpose and need, and summarizing the engineering, cost and benefit of each alternative
- Present findings of the study task to the Onslow County and Town of North Topsail Beach boards, with a recommended plan and associated costs and benefits
- In concert with Onslow County and the Town of North Topsail Beach identify the preferred project alternative

TASK 3.2 - ENGINEERING SUPPORT AND REVIEW - EIS PROCESS

ATM will provide engineering support throughout the EIS process including additional analysis as required to evaluate project impacts, alternatives and mitigative strategies. ATM will provide input for EIS development and evaluation tasks and will review products for consistency with project engineering. This will include submittal of an engineering analysis report and an Inlet Management Plan.

TASK 3.3 - ENGINEERING SUPPORT AND REVIEW - PERMITTING

ATM will provide engineering support throughout the regulatory review process including additional analysis as required to evaluate project impacts, alternatives and mitigative strategies. ATM will provide input for regulatory review tasks and will review products for consistency with project engineering. Engineering design (60% level) of the preferred alternative will be prepared for the permit application process.

TASK 3.4 – MEETINGS AND COORDINATION

ATM will attend either in person or by conference regular and task specific meetings in support of EIS development and permitting process. ATM staff will coordinate with the EIS project development team on an as-needed basis and will provide engineering input and opinion as required to further EIS tasks or complete the permitting process.

Task 1.0 Task 1.1 Task 1.2 Task 1.3 Task 1.4 Task 1.5 Task 1.6 (Task 1.7 Task 1.8 Fask 1.8 Task 1.9 Task 1.10 Task 1.11	Environmental Impact Statement and Permitting Informal kick-off meeting and third-party agreement process Notice of Intent Prepare annotated EIS outline Literature and data collection and review Formal agency ad public scoping Preliminary draft environmental impact statement (PDEIS) Supporting documentation Prepare and submit final PDEIS for Corps of Engineers' review Prepare DEIS for distribution Prepare notice of aailabiity of DEIS DEIS public workshop and public hearing	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	abor DC&A 6,940.00 1,877.00 9,200.00 6,864.00 18,820.00 63,700.00 24,660.00 9,684.00 27,340.00 1,483.00	\$	Labor ATM	\$ \$ \$ \$ \$	Expenses 112.00 1,989.00 312.00 12,724.00 - 56.00	\$ \$ \$ \$ \$	7,052.00 3,866.00 9,200.00 6,864.00 19,132.00 76,424.00 24,660.00
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Task 1.9 F Task 1.10 F Task 1.11 [Engineers' review Prepare DEIS for distribution Prepare notice of aailabiity of DEIS	\$	27,340.00			\$	56.00		
Task 1.9 F Task 1.10 F Task 1.11 [Prepare DEIS for distribution Prepare notice of aailabiity of DEIS	\$	27,340.00			\$	56 00	1 -	
Task 1.10 F Task 1.11 [Prepare notice of aailabiity of DEIS	\$		2.				\$	9,740.0
Task 1.11 [4 402 00		-	\$	2,612.00	\$	29,952.0
	DEIS public workshop and public hearing		,	\$	-	\$		\$	1,483.0
		\$	18,340.00	\$	-	\$	312.00	\$	18,652.0
	Prepare comment and response document	\$	16,760.00	\$	-	\$	112.00	\$	16,872.0
	Final EIS preparation	\$	20,940.00	\$	-	\$	2,500.00	\$	23,440.0
	Individual agency meetings	\$	25,580.00	\$	-	\$	448.00	\$	26,028.0
	Monthly progress reports and invoices	\$	8,160.00	\$	-	\$	-	\$	8,160.0
Task 1.16	Project delivery team meetings	\$	21,336.00	\$	-	\$	-	\$	21,336.0
	USACE and NCDCM environmental permit(s) pre-								
	application meeting	\$	3,592.00	\$	-	\$	112.00	\$	3,704.0
	Major CAMA permit and Section 10/404 permit	_		_		_		_	
	application package	\$	13,448.00	\$	<u>-</u>	\$	200.00	\$	13,648.0
Task 1.19	Agency permit coordination	\$	22,340.00	\$	-	\$	224.00	\$	22,564.0
Task 1.20	Administrative record	\$	8,632.00	\$	-	\$	200.00	\$	8,832.0
	Task 1.0 Total	\$	329,696.00	\$		\$	21,913.00	\$	351,609.0
	Engineering Alternatives Analysis and Design		abor DC&A		Labor ATM		Expenses		Total
	Evaluation of design alternatives	\$	-	\$	66,620.00	\$	2,520.00	\$	69,140.0
	Engineering support and review - EIS process	\$	-	\$	33,620.00	\$	640.00	\$	34,260.0
	Engineering support and review - permitting	\$	-	\$	19,160.00	\$	324.00	\$	19,484.0
Task 2.4 N	Meetings and coordination	\$	-	\$	21,560.00	\$	3,932.00	\$	25,492.0
	Task 2.0 Total	\$	-	\$	140,960.00	\$	7,416.00	\$	148,376.0
	PROPOSED LUMP SUM FEE							•	499,985.0