

Department of Natural Resources and Environmental Control
CONTRACT FOR PROFESSIONAL SERVICES
NOAA Federal Funds

THIS CONTRACT is made by **Landmark Engineering, Inc.** "CONTRACTOR" and the Department of Natural Resources and Environmental Control ("DEPARTMENT"), as follows:

1. Service Contract.

DEPARTMENT agrees to pay CONTRACTOR and CONTRACTOR agrees to perform certain technical or professional services.

2. Scope of Services.

The following are tasks to be performed to collect necessary field information; prepare drawings for federal, State permits; and provide a complete and functional design including construction plans and bid documents for shoreline stabilization and enhancement through structural and nonstructural techniques along approximately 1,600 LF of Gambacorta Marsh Dike.

Phase 1: Data collection

- 1) Confirm Design and Performance Requirements / Project Kickoff Meeting
 - Project kickoff meeting with key stakeholders to facilitate introductions, establish roles and responsibilities, define design requirements, review project funding, confirm anticipated schedule, and identify other project constraints or considerations. It is anticipated that this meeting will be ½ day held in the City of New Castle. The project Team will prepare an agenda and meeting minutes.
- 2) Survey and Base Plan Project Preparation:
 - Establish local mean lower low water (MLLW) and survey bench marks on-site based on NOAA bench marks at Reedy Point, Delaware.
 - Establish traverse along top of existing dike. Tie in traverse to NAD 83 horizontal datum using topographic survey depicting one-foot contours in conformance with National Map Accuracy Standards.
 - Perform field run topographic and hydrographic survey of the project area at 50 feet cross sections from top of dike to 100 feet into tidal waters. Significant land features will also be located.
 - Locate existing discharge structures, pipes, utilities, access roads, and other relevant features as feasible.
 - Coordinate with Miss-Utility and US Coast Guard for the project area.
 - Combine field run survey with existing DCP or LiDAR survey data to create a base map suitable for design including 1-foot contour intervals and spot elevations as necessary.
- 3) Coastal Assessment to Develop Design Parameters:
 - Perform site visit and develop a photo documentation of the existing shoreline conditions.
 - Review previously completed Storm Wave Climate Analysis to assess site coastal characteristics including seasonal wind patterns, rate and direction of sediment transport, wave and wake climate, tidal range, storm tides, near shore and back characteristics.
 - Develop level of protection and storm frequency for design.
 - Perform coastal analysis necessary to confirm site coastal conditions and wave climate using ACES computer model.
 - Confirm shoreline protection measure design including typical section and stone size in accordance with U.S. Army Corps of Engineers (COE) design manuals.
- 4) Collect Other Applicable Site and Design Data
 - Consult with SHPO office and City of New Castle for information / records relating to prior land uses.
 - Review historical aerial photographs.
 - Work with City of New Castle and DCMP to assemble pertinent information to in anticipation of Section 106 compliance.
 - Perform a Wetland evaluation consistent with current requirements to include a review Federal and state databases for endangered / threatened species.
 - Assist the DCMP in applying for a Jurisdictional Determination from DNREC and a Preliminary Jurisdictional Determination from the USACE.
 - Identify and visit reference wetlands.

- Review utility records and identify contact to coordinate field and construction efforts with appropriate utility owners.
- 5) Geotechnical Subsurface Exploration / Recommendations
- Prepare boring location map based on preliminary alignment.
 - Perform four (4) borings: Three (3) to a depth of twenty feet (20') and one (1) to a depth of fifty feet (50') below mud line using an ATV mounted Drill Rig during low tide periods.
 - Perform Standard Penetrameter Test (SPT) and collect split spoon samples at two and a half-foot (2 ½') intervals.
 - Prepare boring logs and provide visual classification of materials encountered.
 - Develop recommendations for the living shoreline based on observations and testing results and other related geotechnical considerations.

Deliverable #1: ("INITIAL MEETING SUMMARY") Meeting and one (1) hard copy and one (1) electronic copy of meeting minutes.

Deliverable #2: ("BASE PLAN") One (1) hard copy and one (1) electronic copy of Paper Base Plan and digital file capable of being read in AutoCAD™

Deliverable #3: ("COASTAL ASSESSMENT") One (1) hard copy and one (1) electronic copy of memorandum summarizing the basis of design.

Deliverable #4: ("APPLICABLE SITE/DESIGN DATA") (A) One (1) hard copy and one (1) electronic copy of summary and compilation of site data from SHPO and City of New Castle including aerial photographs, (B) Three hard (3) copies and one (1) electronic copy of completed wetland evaluation, and (C) One (1) hard copy and one (1) electronic copy of Memorandum summarizing findings from reference wetland.

Deliverable #5: ("GEOTECHNICAL SURVEY") Three (3) hard copies and one (1) electronic copy of completed subsurface evaluation report with recommendations

- 6) Prepare Preliminary Design
- Prepare a Concept Design based on collected data.
 - Present design elements to the Steering Committee and Key Stakeholders at a public meeting in the City of New Castle. Document comments.
- 7) Prepare Pre-Final Design (70%) incorporating comments from Concept Design review.
- Meet with Steering Committee to discuss and consider comments as well as anticipated impacts to project scope and cost. After consideration, Steering Committee will issue formal direction to Design Team.
 - Prepare a Pre-Final (70%) design demonstrating all proposed improvements and key design features.
 - Prepare material quantity estimates including stone, sand fill and marsh planting.
 - Prepare preliminary estimate of probable construction cost.
 - Submit pre-final plans to Steering Committee, Key Stakeholders and DCMP for review and comment.

Deliverable #6: ("PRELIMINARY DESIGN AND SUPPORTING MATERIAL") (A) Ten (10) paper sets and one (1) electronic copy of concept design, (B) Meeting/ Presentation to Steering Committee / Stakeholders with One (1) hard copy and one (1) electronic copy of meeting minutes and materials, (C) Attendance at JPP meeting and one (1) hard copy and one (1) electronic copy of Memorandum summarizing project comments from the Presentation and JPP meeting.

Deliverable #7: ("PRE-FINAL DESIGN AND SUPPORTING MATERIAL") (A) Meeting with Steering Committee with meeting minutes, (B) Ten (10) paper sets and one (1) electronic copy of pre-final design documents, and digital drawing file capable of being read in AutoCAD™, (C) Ten (10) paper copies one (1) electronic copy of material quantity estimate, (D) Ten (10) paper copies and one (1) electronic copy of preliminary estimate of probable construction cost.

- 8) Prepare Final Design / Construction Documents
- Incorporate comments from steering committee.
 - Prepare Final Design / Construction Documents.
 - Present final design to the Steering Committee and Key Stakeholders at a public meeting in the City of New Castle.
 - Update material quantity estimates including stone, sand fill and marsh planting.
 - Update preliminary estimate of probable construction cost.
 - Submit final plans and documentation to Key Stakeholders and DCMP for use in permitting.

Deliverable #8: ("FINAL DESIGN AND SUPPORTING MATERIAL") (A) Attendance / Presentation at a public meeting, (B) Ten (10) paper sets and one (1) electronic copy of Final design documents, and digital drawing file capable of being read in AutoCAD™, (C) Ten (10) paper copies and one (1) electronic copy of updated material quantity estimate, (D) Ten (10) paper copies one (1) electronic copy of updated estimate of probable construction cost, and (E) One (1) hard copy and one (1) electronic copy of all documentation collected during data collection and design development phases.

3. Data Furnished to CONTRACTOR.

DEPARTMENT shall furnish all information, data, reports, records, and maps as existing, available, easily retrievable and necessary for the execution of the work to CONTRACTOR, without charge by DEPARTMENT, and DEPARTMENT shall reasonably cooperate with CONTRACTOR in carrying out the work.

4. Personnel.

- A. CONTRACTOR represents that it has, or will secure at its own expense, all personnel required in performing the services under this Contract.
- B. CONTRACTOR, or persons under CONTRACTOR'S supervision, shall perform all of the services required by this Contract, and all personnel engaged in the work shall be fully qualified and shall be authorized to perform such services.
- C. CONTRACTOR shall not subcontract any of the work or services covered by this Contract without the prior written approval of DEPARTMENT.

5. Time of Performance.

The services of CONTRACTOR are to commence as soon as practicable after the execution of this Contract and shall be undertaken in such sequence as to assure their expeditious completion in the light of the purposes of this Contract, but in any event all of the services required by this CONTRACT shall be completed no later than **June 29, 2012**. Time is of the essence in this Contract.

6. Total Cost and Compensation.

- A. It is agreed that the total cost for the services provided under this Contract shall not exceed **\$60,000.00**.
- B. CONTRACTOR is responsible for costs incurred in excess of the total cost of this Contract and DEPARTMENT is not liable for such costs.
- C. Notwithstanding other terms and conditions of this Contract, it is understood and agreed that the total cost and compensation under this Contract shall not exceed the funds made available to the State of Delaware and DEPARTMENT by the National Oceanic and Atmospheric Administration (NOAA) for this project.
- D. Condition Precedent: The rights and obligations of each party to this Contract are not effective and no party is bound by the terms of this Contract unless and until a valid executed purchase order is approved by the Secretary of Finance and received by CONTRACTOR. The rights and obligations of DEPARTMENT under this Contract are limited to the amount of any approved purchase order.

7. Obligations and Payment.

- A. The obligations of the DEPARTMENT under this Contract shall be subject to the receipt of sufficient funds appropriated by either the General Assembly or the National Oceanic and Atmospheric Administration and the obligations of the DEPARTMENT are limited to the amount of such appropriation.
- B. A first payment, in the amount of **\$25,200.00**, shall be made upon satisfactory completion, in DEPARTMENT'S sole discretion, of INITIAL MEETING SUMMARY, BASE PLAN, COASTAL ASSESSMENT, APPLICABLE SITE/DESIGN DATA, and GEOTECHNICAL SURVEY, as detailed in Scope of Services above, and upon submission of an invoice by CONTRACTOR. A second payment, in the amount of **\$26,300.00**, shall be made upon satisfactory completion, in DEPARTMENT'S sole discretion, of PRELIMINARY DESIGN AND SUPPORTING MATERIAL and PRE-FINAL DESIGN AND SUPPORTING MATERIAL, as detailed in Scope of Services above, and upon submission of an invoice by CONTRACTOR. A third payment, in the amount of **\$8,500.00**, shall be made upon satisfactory completion, in DEPARTMENT'S sole discretion, of FINAL DESIGN AND SUPPORTING MATERIAL, as detailed in Scope of Services above, and upon submission of an invoice by CONTRACTOR. Invoices shall be paid within 30 days after receipt by DEPARTMENT, if services are performed satisfactorily, in DEPARTMENT'S sole discretion.

- C. The obligations of each party to this Contract are not effective and no party is bound by the terms of this Contract unless and until a valid executed purchase order has been approved by the Secretary of finance, and all the procedures of the Department of Finance have been complied with.
- D. CONTRACTOR will maintain accurate financial records and make them available to Federal and State auditors, as needed, up to 3 years following Contract termination.
8. Contractor and Subcontractor Agreements
- CONTRACTOR shall indemnify, save and hold harmless and defend the DEPARTMENT, its directors, employees, representatives or agents against any demand, claim, suit, loss, costs, or damages sustained in connection with performance of services provided under this agreement.
- CONTRACTOR shall require each and every contractor or subcontractor for the project to indemnify, save and hold harmless, and defend the DEPARTMENT, its directors, employees, representatives, or agents against any demand, claim, suit, loss, costs, or damages sustained in connection with performance of services provided under this agreement.
9. Termination of Contract for Cause.
- If, for any reasons, or through any cause, CONTRACTOR shall fail to fulfill in timely or proper manner its obligations under this Contract, or if CONTRACTOR shall violate any of the covenants, agreements, or stipulations of this Contract, DEPARTMENT shall then have the right to terminate this Contract by giving written notice to CONTRACTOR of such termination and specifying the effective date, at least 5 days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports or other material prepared by CONTRACTOR under this Contract shall, at the option of DEPARTMENT, become its property, and CONTRACTOR shall be entitled to receive reasonable compensation as determined by DEPARTMENT in its sole discretion for any satisfactory work completed on such documents and other materials which is usable to DEPARTMENT. Whether such work is satisfactory and usable is determined by DEPARTMENT in its sole discretion.
10. Termination for Convenience of DEPARTMENT.
- DEPARTMENT may terminate this Contract in its sole discretion at any time for any reason by giving written notice of such termination and specifying the effective date, at least 15 days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, models, photographs, reports, supplies, and other materials shall, at the option of DEPARTMENT, become its property and CONTRACTOR shall be entitled to receive reasonable compensation as determined by DEPARTMENT in its sole discretion for any satisfactory work completed on such documents and other materials which is usable to DEPARTMENT. Whether such work is satisfactory and usable to is determined by DEPARTMENT in its sole discretion. Such reasonable compensation shall be CONTRACTOR'S sole compensation. Exercise of this right by DEPARTMENT shall not be deemed a breach of this Contract, and no damages shall be awarded to CONTRACTOR for exercise of this paragraph. If this Contract is terminated due to the fault of CONTRACTOR, Paragraph 9 hereof relative to termination shall apply.
11. Changes; Fragmentation Prohibition.
- DEPARTMENT may, from time to time, require changes in the Scope of Services of the CONTRACTOR to be performed under this Contract in DEPARTMENT'S sole discretion, provided, however, if such changes include any decrease in the amount of CONTRACTOR'S compensation, then such changes must be mutually agreed upon by DEPARTMENT and CONTRACTOR, and shall be incorporated in written amendments to this Contract. The parties represent and agree that this Contract is not a fragmentation of a project, and that this Contract is not part of or a continuation of an ongoing project. The parties understand that any intentional fragmentation of a project, in order to make a professional services contract subjects a violator to a fine of not less than one thousand (\$1,000) dollars nor more than two thousand (\$2,000) dollars, and to imprisonment for not more than one year, pursuant to 29 Del. C. §6903.
12. Interest of CONTRACTOR.
- CONTRACTOR covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Contract. CONTRACTOR further covenants that in the performance of this Contract, no person having any such interest shall be employed.
13. Publication, Reproduction and Use of Material.

No material produced in whole or in part under this Contract shall be subject to copyright in the United States or in any other country. DEPARTMENT shall have unrestricted authority to publish, disclose, distribute and otherwise use, in whole or in part, any reports, data, or other materials prepared under this Contract. CONTRACTOR shall have the right to publish any and all scientific findings. Appropriate acknowledgment including the Department's Seal and/or Logo and credit for DEPARTMENT'S support will be given in the publication.

The cover of the title page of all reports, studies, or other documents supported in whole or in part by this contract shall acknowledge the financial assistance provided by the Coastal Zone Management Act of 1972, as amended, administered by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration by including the following statement: *"This project was funded by the State of Delaware Department of Natural Resources and Environmental Control, in part, through a grant from the Delaware Coastal Programs with funding from the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration under award number NA09NOS4190172."*

14. Assignment of Antitrust Claims.

As consideration for the award and execution by DEPARTMENT of this Contract, CONTRACTOR hereby grants, conveys, sells, assigns, and transfers to the State of Delaware all of its right, title and interest in and to all known or unknown causes of action it presently has or may now or hereafter acquire under the antitrust laws of the United States and the State of Delaware, relating to the particular goods or services purchased or acquired by DEPARTMENT or CONTRACTOR pursuant to this Contract.

15. NOAA Funding.

A. General:

- 1) CONTRACTOR shall comply with all applicable State and Federal laws and regulations. If applicable State and Federal laws and regulations conflict with the provisions of paragraph 15, then applicable laws and regulations supersede the provisions of paragraph 15. The provisions of paragraph 15 shall apply to the work to be performed under this Contract and such provisions shall supersede any conflicting provisions of this Contract.
- 2) This Contract is funded by the Delaware Coastal Management Implementation grant from the NOAA under award number NA09NOS4190172, Task or Project number 306-4, and Catalog of Federal Domestic Assistance (CFDA) number 11.419. Neither the United States nor any of its departments, agencies, or employees is a party to this Contract.
- 3) The rights and remedies of DEPARTMENT provided for in these clauses are in addition to any other rights and remedies provided by law or under this Contract.

B. Remedies: Except as may be otherwise provided in this Contract all claims, counterclaims, disputes and other matters in question between DEPARTMENT and CONTRACTOR arising out of or relating to this Contract or the breach thereof will be decided by arbitration if the parties hereto mutually agree, or in a court of competent jurisdiction within the State of Delaware.

C. Audit; Access to Records: CONTRACTOR shall maintain books, records, documents and other evidence directly pertinent to performance on NOAA grant work under this Contract in accordance with generally accepted accounting principles and practices. CONTRACTOR shall also maintain the financial information and data used by CONTRACTOR in the preparation or support of the cost submission, and a copy of the cost summary submitted to DEPARTMENT. The United State's Department of Labor, DEPARTMENT (and the State of Delaware) or any of their duly authorized representatives shall have access to such books, records, documents and other evidence for the purpose of inspection, audit and copying. CONTRACTOR will provide proper facilities for such access and inspection.

D. Subcontracts: Any subcontractors and outside associates or consultants required by CONTRACTOR in connection with the services covered by this Contract will be limited to such individuals or firms as were specifically identified and agreed to in writing during negotiations, or as are specifically authorized in writing by DEPARTMENT during the performance of this Contract. Any substitutions in or additions to such subcontractors, associates, or consultants will be subject to the prior written approval of DEPARTMENT.

E. Equal Employment Opportunity: CONTRACTOR agrees that it will not discriminate against any employee or applicant for employment because of race, religion, color, sex, age or national origin.

- F. Utilization of Small and Minority Business: CONTRACTOR agrees that qualified small business and minority business enterprises shall have the maximum practicable opportunity to participate in the performance of NOAA grant-assisted contracts and subcontracts.
- G. Covenant Against Contingent Fees: CONTRACTOR warrants that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees. For breach or violation of this warranty, DEPARTMENT shall have the right to annul this Contract without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.
- H. Gratuities:
- 1) If it is found, after notice and hearing, by DEPARTMENT that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by CONTRACTOR, or any agent of DEPARTMENT or of NOAA with a view toward securing a Contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performance of this Contract, DEPARTMENT may, by written notice to CONTRACTOR, terminate the right of CONTRACTOR to proceed under this Contract and/or may pursue such other rights and remedies provided by law or under this agreement; provided that the existence of the facts upon which DEPARTMENT makes such findings shall be in issue and may be reviewed in proceedings pursuant to the Remedies clause of this Contract.
 - 2) In the event this Contract is terminated as provided in paragraph 13.H.1) hereof, DEPARTMENT shall be entitled (i) to pursue the same remedies against CONTRACTOR, and (ii) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by DEPARTMENT), which shall be not less than three nor more than ten times the costs incurred by CONTRACTOR in providing any such gratuities to any such officer or employee.
- I. Patents: If this Contract involves research, developmental, experimental, or demonstration work and any discovery or invention arises or is developed in the course of or under this Contract, such invention or discovery shall be subject to the reporting and rights provisions of 37 C.F.R. Part 401, in effect on the date of execution of this Contract. In such case, CONTRACTOR shall report the discovery or invention to NOAA directly or through DEPARTMENT and shall otherwise comply with DEPARTMENT'S responsibilities in accordance with 37 C.F.R. Part 401. CONTRACTOR hereby agrees that the disposition of rights to inventions made under this Contract shall be in accordance with the terms and conditions of 37 C.F.R. Part 401. CONTRACTOR shall include provisions appropriate to effectuate the purposes of this condition in all subcontracts involving research, developmental, experimental, or demonstration work.
- J. Debarment and Suspension: NOAA grant-assisted contracts and subcontracts are subject to Subpart C of 15 CFR Part 26, "Governmentwide Debarment and Suspension (Nonprocurement)."
- K. Lobbying: NOAA grant-assisted contracts and subcontracts exceeding \$100,000 in Federal funds are subject to Section 319 of Public Law 101-121, which added Section 1352, regarding lobbying restrictions, to Chapter 13 of Title 31 of the United States Code as implemented at 15 CFR Part 28, "New Restrictions on Lobbying," in which case the CONTRACTOR must submit a completed "Disclosure of Lobbying Activities" (Form SF-LLL) regarding the use of non-Federal funds for lobbying. The Form SF-LLL shall be submitted within 15 days following the end of the calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed. The Form SF-LLL shall be submitted to the DEPARTMENT.
16. DEPARTMENT'S Responsibilities. DEPARTMENT shall:
- A. Examine and review in detail all letters, reports, drawings and other documents presented by CONTRACTOR to DEPARTMENT and render to CONTRACTOR in writing findings and decisions pertaining thereto within a reasonable time so as not to delay the services of CONTRACTOR.
 - B. Give prompt written notice to CONTRACTOR whenever DEPARTMENT observes or otherwise becomes aware of any development that affects the scope or timing of CONTRACTOR'S services.
17. The Parties Agree:
- A. The laws of the State of Delaware shall apply to the construction and operation of this Contract.

- B. This contract is the entire agreement between the CONTRACTOR and the DEPARTMENT and supersedes any prior agreement, whether oral or written, between the CONTRACTOR or any predecessor of the CONTRACTOR and the DEPARTMENT. It may be altered only by a written agreement signed by the CONTRACTOR and the DEPARTMENT. The CONTRACTOR's rights and obligations under this agreement will be binding on the CONTRACTOR's successors and assigns.
- C. The CONTRACTOR shall not assign any interest in this Contract, and shall not transfer any interest in it, without the prior written consent of the DEPARTMENT.
- D. The Contractor shall comply with 30 DE Code Chapter 23 regarding business licenses throughout the term of this agreement.

STATE OF DELAWARE

**DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL**

Collin P O'Mara, Secretary 2/16/11
Date

LANDMARK ENGINEERING, INC.

F. Thomas Prusak, Principal P.E. 2/15/11
Date