

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE J	PAGE OF PAGES 1 2
2. AMENDMENT/MODIFICATION NO. 0002	3. EFFECTIVE DATE 02-Sep-2004	4. REQUISITION/PURCHASE REQ. NO. W25PHS-4063-7539		5. PROJECT NO.(If applicable)
6. ISSUED BY US ARMY ENGINEER DISTRICT, PHILADELPHIA CONTRACTING DIVISION WANAMAKER BUILDING 100 PENN SQUARE EAS PHILADELPHIA PA 19107-3390	CODE W912BU	7. ADMINISTERED BY (If other than item 6) See Item 6		
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		X	9A. AMENDMENT OF SOLICITATION NO. W912BU-04-B-0015	
		X	9B. DATED (SEE ITEM 11) 16-Aug-2004	
			10A. MOD. OF CONTRACT/ORDER NO.	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS				
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended.				
Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.				
12. ACCOUNTING AND APPROPRIATION DATA (If required) BEACHFILL, DELAWARE COAST FROM CAPE HENLOPEN TO FENWICK ISLAND, FENWICK ISLAND, DELAWARE				
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.				
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.				
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).				
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
D. OTHER (Specify type of modification and authority)				
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.				
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) THIS AMENDMENT DOES NOT EXTEND THE BID OPENING DATE OF TUESDAY, SEPTEMBER 14, 2004 AT 2:00 P.M. (CONTINUED ON NEXT PAGE)				
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.				
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
		TEL: _____ EMAIL: _____		
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)	16C. DATE SIGNED	

14. DESCRIPTION OF AMENDMENT (continued)

a. TECHNICAL SPECIFICATIONS:

(1) Section 02446 - SAND FENCE AND DUNE GRASS: Please delete this section in its entirety and substitute the new section of the same number, annotated Amendment No. 0002, attached hereto.

(2) Section 02500 - DUNE CROSSOVERS: Please delete this section in its entirety and substitute the revised section of the same number, annotated Amendment No. 0002, attached hereto.

b. CONTRACT DRAWINGS: Drawing Nos. 62040,62043,62047,and 62048 - Please delete these drawings, in their entirety and substitute the revised sheets, of the same Drawing Numbers, with a revision date of 2 Sept 2004, attached hereto.

c. Please indicate receipt of this amendment on Standard Form 1442 (SOLICITATION, OFFER, AND AWARD) as Amendment No.0002. Failure to acknowledge all amendments may be cause for rejection of the bid.

SECTION 02446

SAND FENCE AND DUNE GRASS

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all labor, materials, and equipment, and performing all operations required for the erection of sand fence and the planting of dune grass, as specified herein and shown on the Contract Drawings.

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01300 SUBMITTAL PROCEDURES:

SD-07 Certificates

Sand Fence; G,COR. Dune Grass Plants and Seed; G,COR.

Statement signed by an official authorized to certify on behalf of the manufacturer of a product, system or material, attesting that the product, system or material meets specified requirements. The statement must be dated after the award of the contract, must state the Contractor's name and address, must name the project and location, and must list the specific requirements which are being certified.

PART 2 PRODUCTS

2.1 SAND FENCE

2.1.1 Fence

Fence shall be a wood picket fence. Pickets shall be No. 1 white cedar. Pickets shall be relatively free of large knots and other structural defects. Binding wire shall be 19 gauge soft galvanized wire. Fence shall be stretched after weaving to ensure the pickets are tightly bound by the wire. Fence shall be furnished in 50-foot minimum lengths and shall be unpainted.

2.1.2 Fence Posts

Fencing shall be supported by 3" to 5" diameter cedar sawn round wood posts, 8-feet in length. Wood posts shall be untreated.

2.1.3 **Fastenings**

Staples shall conform to ASTM F 1667, Type IV, 16 gauge, Style 3, having a minimum length of 1-1/2 inches and zinc-coated conforming to ASTM A 641,

Class 3 coating.

2.2 DUNE GRASS

2.2.1 Plants

Plants shall be the Cape variety of American Beachgrass (*Ammophila breviligulata*) and the Plants which are damaged will not be accepted. Each plant shall consist of two or more healthy culms.

2.2.2 Seed

Seed shall be the Atlantic variety of coastal panicgrass (*Panicum amarulum*).

2.2.3 Fertilizer

Fertilizer shall be 10-10-10 grade. Fertilizer shall be uniform in composition, free-flowing, and suitable for application with approved equipment.

PART 3 EXECUTION

3.1 SAND FENCE

The sand fence shall be erected in such a manner as to accumulate wind blown sand and thereby aid in the formation of a dune. Fence shall be erected in the locations and along the lines shown on the drawings. Posts shall be provided at a maximum spacing of 8 feet and shall be driven 4 feet into the ground. Fence shall be secured to posts with bottom portion of fence touching the ground surface. Fence shall be stapled to posts at the same locations as the picket bindings.

3.2 DUNE GRASS

3.2.1 General

The dunes shall be fertilized and planted with beachgrass and seeded with panicgrass after construction of the dune has been completed.

3.2.2 Surface Preparation

All surfaces to be planted shall be graded with no sharp depressions greater than 2 inches in depth. All compacted areas shall be scarified to a depth of 3 inches prior to planting.

3.2.3 Planting Method

3.2.3.1 Beachgrass

One beachgrass plant consisting of two or more culms shall be planted per hole. All beachgrass plants shall be in a dormant stage at the time of planting. The plants shall be placed as shown on the contract drawings. Fertilizer shall be applied by broadcasting over planted and seeded areas at a rate of 500 lbs. per acre 30 days after the planting, but no earlier than April 1. Fertilizer application shall be repeated two more times at the same rate between June 15th and July 1st and between August 31st and September 15th during the first year of establishment.

3.2.3.2 *Panicgrass*

The dunes shall seeded with panicgrass from the centerline of the dune to the landside dune toe. The panicgrass shall be seeded at a rate of 10 pounds of seed (pure live seed) per acre. Seeds shall be planted 2.0 to 2.5 inches deep either by hand or by a mechanically operated drill or seeder. The panicgrass may be seeded prior to planting beachgrass. If the panicgrass is seeded after planting beachgrass, the Contractor shall avoid damaging the beachgrass plantings.

3.2.4 Planting Season

Beachgrass shall only be planted between 15 December and 1 April, under nonfrozen soil conditions. Panicgrass shall only be seeded between 15 February and 1 April.

3.2.5 Care and Protection

The Contractor shall be responsible for proper care and protection of all planted areas. At least 80% plant survival is required in areas at the end of the first growing season. Areas having less than an 80% survival rate shall be replanted and fertilized by the Contractor.

3.3 MEASUREMENT AND PAYMENT

3.3.1 Dune Grass

The unit of measurement for the placement of the dune grass and seeding will be the actual square yards of dune grass placed in accordance with this Section and the Contract Drawings and accepted by the Contracting Officer. Following placement of the dune grass, a survey shall be taken by a Delaware licensed surveyor to determine the actual square yards of dune grass placed. Costs associated with this survey shall be the responsibility of the Contractor. Measurement of dune grass area shall be to the nearest square yard. Payment for the placement of dune grass and seeding will be made at the Contract Unit Price for Base Bid Item No. 5, "Dune Grass," which shall constitute full compensation to the Contractor for all costs associated with the placement and surveying of the dune grass and seeding.

3.3.2 Sand Fence

The work specified in this section for sand fence, installed parallel to the dune centerline, will be measured for payment by the linear footage of sand fence installed. Payment for this work will be made at the Contract Unit Price for Base Bid Item No. 6, "Sand Fence." All sand fence incidental to construction of pedestrian crossovers shall be included in the unit prices for those pedestrian crossovers.

-- End of Section --

THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK

SECTION 02500

DUNE CROSSOVERS

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all plant, labor, equipment, and materials, and performing all operations in connection with construction of the handicap and pedestrian crossovers in accordance with this Specification, as shown on the Contract Drawings or as directed by the Contracting Officer.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN WOOD-PRESERVERS' ASSOCIATION (AWPA)

AWPA C2 (2000) *Lumber, Timber, Bridge Ties and Mine Ties - Preservative Treatment by Pressure Processes*

AWPA P5 (2002) *Standard for Waterborne Preservatives*

ASME INTERNATIONAL (ASME)

ASME B18.22.1 (1965; R 1998) *Plain Washers*

ASTM INTERNATIONAL (ASTM)

ASTM D 1556 (1990; R 1996) *Density and Unit Weight of Soil in Place by the Sand-Cone Method*

ASTM D 1557 (1998) *Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/cu. ft. (2,700 kN-m/cu. m.))*

ASTM D 2922 (1996) *Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)*

ASTM D 3017 (1988; R 1996e1) *Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)*

ASTM F 593 (2002) *Stainless Steel Bolts, Hex Cap Screws, and Studs*

ASTM F 594

(2002) Stainless Steel Nuts

SOUTHERN PINE INSPECTION BUREAU (SPIB)

SPIB-01

**(1994; Supplements 8 thru 11) Grading
Rules for Southern Pine Lumber**

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Pre-Placement Test Data; G,DO.

At least 15 days prior to placement of the base material, the Contractor shall submit to the Contracting Officer the name and location of the source which is proposed for obtaining base material. In addition, the Contractor shall submit such laboratory test data as necessary to demonstrate to the satisfaction of the Contracting Officer that the material is suitable for use as base material and meets the requirements of this Specification. All testing shall be performed by a Corps of Engineers approved laboratory as specified in SECTION 01450: CONTRACTOR QUALITY CONTROL. All testing shall be entirely at the Contractor's expense.

SD-02 Shop Drawings

Pedestrian and Handicap Crossovers; G,DO.

The Contractor shall submit drawings which graphically show the details of the pedestrian and handicap crossovers including materials and installation.

SD-09 Reports

Testing Results; G,DO.

Within one week of conclusion of physical tests, including gradation tests, proctor tests and nuclear density tests, three copies of test results, including calibration curves and results of calibration tests. Reports shall indicate the location of the sample/test, the test data, and a statement of compliance or non-compliance, where applicable.

SD-13 Certificates

Testing Laboratory Qualifications; G,COR.

Qualifications of the Independent Testing Laboratory which will be performing the required testing shall be submitted to the Contracting Officer a minimum of 7 calendar days prior to the start of construction of the crossings.

PART 2 PRODUCTS

2.1 BASE MATERIAL

The dune crossovers shall be constructed utilizing a soil aggregate, designation Borrow Type C, conforming to Subsection 209.04 of the DelDOT Specifications. The soil aggregate shall have a gradation designation of Borrow Type C as specified in Subsection 209.04, Table 209-A of the DelDOT Specifications. Recycled materials are not acceptable.

The Contracting Officer reserves the right to reject any materials, which in his opinion, contains organic material or debris in quantities which he considers objectionable. Material which is frozen at the time of placement will also be rejected.

2.2 GEOTEXTILE

Geotextile shall be as specified in Section 02215 GEOTEXTILE>.

2.3 HANDRAILS

2.3.1 Posts

Posts on handicap crossover shall be the Southern Yellow Pine, grade "dense standard decking" per SPIB-01. Lumber and timbers shall be treated in accordance with AWP A C2 with waterborne preservatives listed in AWP A P5 to a retention level of 0.40 pcf intended for ground contact.

2.3.2 Railings

Lumber used for the handicap crossover railings shall be constructed with wood-polymer composite lumber. Color shall be natural.

2.3.3 Thru Bolts, Screws, Nuts, And Washers

ASTM F 593 or ASTM F 594, Group 2 (316 alloy) stainless steel for bolts, and nuts. ASME B18.22.1 for washers, except fabricate washers of 316 alloy stainless steel. Screws shall be weather guard coated steel. Nails shall be hot-dipped galvanized steel.

PART 3 EXECUTION

3.1 GENERAL

The dune crossovers shall be constructed in accordance with the details, dimensions, and arrangements shown on the Contract Drawings, as directed by the Contracting Officer, or as specified.

3.2 GEOTEXTILE

Geotextile shall be placed as specified in Section 02215 GEOTEXTILE.

3.3 BASE MATERIAL

3.3.1 Subgrade Preparation

Prior to the placement of the base material, the subgrade shall be shaped to the lines and grades as shown on the Contract Drawings and compacted as specified. This operations shall include disking, plowing, aeration and/or moistening, as required to obtain proper compaction. Unsatisfactory material shall be removed and replaced with satisfactory beachfill material as directed. Compaction of the prepared subgrade shall be accomplished by the controlled use of dozers or other approved equipment to at least 90 percent laboratory maximum dry density as determined by the Modified Proctor test procedure as presented in ASTM D 1557. Any previously placed beachfill material excavated to establish the required line and grades for the base material shall be placed and spread out on the beach as directed by the Contracting Officer.

3.3.2 Placing, Spreading, Moisture Control and Compaction

No fill shall be placed on any part of the foundation until such areas have been inspected and approved by the Contracting Officer. No fill shall be placed upon frozen or frost-covered ground, nor shall snow, ice or frozen material be incorporated in the fill. The base material shall be placed in maximum 12 inch lifts and compacted to at least 90 percent laboratory maximum dry density as determined by the Modified Proctor test procedure as presented in ASTM D 1557. If the material is too wet to facilitate proper compaction, it shall be removed and replaced or dried out by any method approved by the Contracting Officer. If the material is too dry to facilitate proper compaction, it shall be removed and replaced or moistened by any method approved by the Contracting Officer. Placement of the base material shall be made to the lines and grades shown on the Contract Drawings and compacted by the controlled use of the hauling and spreading equipment. Movement of the equipment shall be distributed as much as practicable over the surface to provide uniform compaction and complete coverage of the fill.

3.3.3 Rejected Material

Rejected material is defined as fill material not suitable as defined in Paragraph BASE MATERIAL of this Section. Any material that, in the opinion of the Contracting Officer, is considered unsuitable shall be promptly removed from the construction site at no expense to the Government.

3.3.4 Testing

3.3.4.1 General

The Contractor shall be wholly responsible for furnishing material meeting the requirements of this Section, for placing the material within the limits of moisture suitable for proper compaction, and for compacting the materials in accordance with the requirements of this Section. The Contractor is also responsible for performing laboratory tests as required to control the work and demonstrate compliance with material specifications. Testing shall be performed by an approved Independent Testing Laboratory retained by the Contractor. Field in-place density shall be determined in accordance with ASTM D 2922. ASTM D 2922 results in a wet unit weight of soil and ASTM D 3017 shall be used to determine the moisture content of the soil. The calibration curves furnished with the moisture gauges shall also be checked along with density calibration checks

as described in ASTM D 3017; the calibration checks of both the density and moisture gauges shall be made at the beginning of a job on each different type of material encountered and at intervals as directed by the Contracting Officer. When test results indicate, as determined by the Contracting Officer, that compaction is not as specified, the material shall be removed, replaced and recompacted to meet specification requirements. Tests on recompacted areas shall be performed to determine conformance with specification requirements. Inspections and test results shall be certified by a professional engineer registered in the State of Delaware. These certifications shall state that the tests and observations were performed by or under the direct supervision of the engineer and that the results are representative of the materials or conditions being certified by the tests. The following number of tests, if performed at the appropriate time, will be the minimum acceptable for each type operation.

a. The Contractor shall perform not less than one gradation test every fifth pedestrian crossover unless otherwise directed or approved by the Contracting Officer. The Contracting Officer will require additional tests whenever materials are questionable.

b. Proctor tests shall be performed for each type material used as base material to determine the optimum moisture and laboratory maximum density values. A minimum of two proctor tests shall be performed.

c. A minimum of three in-place nuclear density tests shall be performed per lift of base material placed at each crossing.

d. In-place densities shall be checked using ASTM D 1556 a minimum of one time during placement. Additional checks shall be performed as requested by the Contracting Officer.

3.3.4.2 Action Required for Non-Compliance

Whenever testing specified in this Section indicates material non-compliance, the Contractor may be required to remove all material not meeting the specification requirements. The Contracting Officer may require as many additional tests as necessary to identify the limits of unsuitable material. No additional payment will be made for test required to determine the limits of unsuitable material nor for the cost of removal and replacement with suitable material.

3.4 MEASUREMENT AND PAYMENT

3.4.1 Pedestrian Crossovers

Pedestrian crossovers shall be measured for payment as a unit for each crossover completed and accepted. Payment will be at the contract unit price per pedestrian crossover for Bid Item No. 4, "Pedestrian Crossovers".

Such payment shall provide full compensation for all plant, labor, materials, equipment, base material, laboratory testing, geotextile, sand fence, and incidentals necessary to complete the work as shown on the Contract Drawings and specified herein.

3.4.2 Handicap Crossover

The handicap crossover shall not be measured for payment. All costs in connection therewith will be at the contract lump sum price for Bid Item No. 7, "Handicap Crossover". Such payment shall provide full compensation for all plant, labor, materials, equipment, base material, laboratory

testing, geotextile, handrails, and incidentals necessary to complete the work as shown on the Contract Drawings and specified herein.

-- End of Section --