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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT (Nonappropriated Funds)

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For use of this form, see AR 215-4; proponent agency is ODCSPER

1. AMENDMENT/MODIFICATION NO. 0003 2. EFFECTIVE DATE January 16, 2004 3. REQUISITION/PURCHASE REQUEST NO. 4. PROJECT NO. (If applicable)

5. ISSUED BY Contracting Office (CENAO-SS-C) US Army Engineer District, Norfolk 803 Front Street Norfolk, VA 23510

6. ADMINISTERED BY (If other than block 5)

7. CONTRACTOR NAME AND ADDRESS (Include Street, City, County, State, and ZIP Code)

Empty rectangular boxes for contractor name and address.

8. AMENDMENT/MODIFICATION X AMENDMENT OF SOLICITATION DATED December 19, 2003 NO. NAFTS3-04-R-0009

MODIFICATION OF CONTRACT/ ORDER DATED NO.

9. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS

X The above numbered solicitation is amended as set forth in block 12. The hour and date specified for receipt of Offers is extended, X is not extended. Offerors 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 signing and returning 1 copies of this amendment; (b) by acknowledging receipt 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 ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.

10. NO APPROPRIATED FUNDS OF THE UNITED STATES SHALL BECOME DUE, OR BE PAID, THE CONTRACTOR BY REASON OF THIS CONTRACT.

11. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACT/ORDERS

- (a) This Change Order is issued pursuant to The Changes set forth in block 12 are made to the above numbered contract/order. (b) The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, etc.) set forth in block 12. (c) This Supplemental Agreement modifies the above numbered contract as set forth in block 12.

12. DESCRIPTION OF AMENDMENT/MODIFICATION

YOUTH ACTIVITY CENTER, LANGLEY AIR FORCE BASE, VIRGINIA is amended as follows:

- 1. Plans and Specifications are amended as shown on attached list.

Except as provided herein, all terms and conditions of the document referenced in block 8, as heretofore changed, remain unchanged and in full force and effect.

13. SIGNATURE REQUIREMENT

- CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT. CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE

14. NAME AND SIGNATURE OF CONTRACTING OFFICER DATE SIGNED

15. NAME OF CONTRACTOR/OFFEROR (Signature of person authorized to sign)

16. NAME AND TITLE OF CONTRACTOR/OFFEROR DATE SIGNED

SPECIFICATIONS

PROJECT TABLE OF CONTENTS

Delete the Project Table of Contents and replace with the attached Project Table of Contents.

SECTION 01330 – SUBMITTAL PROCEDURES

Paragraph 1.9. Delete the first two sentences and replace it with the following:

“The required transmittal form shall be available to the contractor in the Construction Contractor Module of RMS as specified in section 01312 Quality Control Systems (GCS).”

SECTION 01355 – ENVIRONMENTAL PROTECTION

Paragraph 1.1 Change the publication date for EM 385 -1-1 to read 3 Nov 2003.

SECTION 01451 – CONTRACTOR QUALITY CONTROL

Paragraph 3.10. Delete the first sentence of this paragraph and replace with the following:

“The required forms shall be available to the contractor in the Construction Contractor Module of RMS as specified in section 01312 Quality Control Systems (GCS).”

SECTION 01500 – TEMPORARY CONSTRUCTION FACILITIES

Paragraph 1.3.2

Change the first sentence to read as follows:

“The requirements for the signs, and their content shall be as shown on the attached drawings”.

Add the following sentence

““Location of the project sign and project safety sign shall be as directed by the Contracting Officer”.

SECTION 02220 – DEMOLITION

Paragraph 1.1 Change the publication date for EM 385 -1-1 to read 3 Nov 2003.

Paragraph 1.6.2

Add the following sentence:

“Any shoring, bracing or temporary supports must be designed by a registered professional engineer and the designs must be approved by the Contracting Officer prior to any demolition work being performed”.

SECTION 02315 – EXCAVATION, TRENCHING AND BACKFILLING FOR BUILDINGS

Paragraph 3.5 Add the following sentence:

“Any shoring required must be designed by a registered professional engineer and the designs must be approved by the Contracting Officer prior to any excavation work being performed”.

SECTION 02316 – EXCAVATION, TRENCHING AND BACKFILLING FOR UTILITIES SYSTEMS

Paragraph 1.1 Change the publication date for EM 385 -1-1 to read 3 Nov 2003.

SECTION 02458A – PRESTRESSED CONCRETE PILING

Paragraph 1.2.1

Delete the paragraph in its entirety and insert the following:

“The contract includes a total of 212 25-ton, 10-inch square, 30 to 40 feet piles (204 at 30 feet and 6 at 40 feet) having a total aggregate length of 6360 linear feet; dynamic analysis of 6 test piles and any necessary dynamic monitoring of initial production piles; mobilization and demobilization for load testing; and (1) load test to 50 tons or to failure, whichever occurs first. The linear footage of piles is based upon piles driven to a minimum tip elevation of (-25.00) feet with the top of pile at the elevation determined by the dimensions and elevations of structural components as shown on the structural plans, and assumes an additional length of 10 feet per test pile.”

Paragraph 1.2.2 Pile load test

Delete the first sentence and replace with the following:

“The contract includes one pile load test”.

SECTION 02770 – CONCRETE SIDEWALKS AND CURBS AND GUTTERS

Paragraph 2.1.3

Add the following sentence:

“Welded wire mesh to be fabricated and supplied in flat sheets only”.

SECTION 03200 – CONCRETE REINFORCEMENT

Paragraph 2.2

Add the following sentence:

“Welded wire fabric to be fabricated and supplied in flat sheets only”.

Paragraph 2.4

Delete the paragraph in its entirety and insert the following:

“Bar supports for formed surfaces shall be designed and fabricated in accordance with CRSI MSP-1 and shall be steel or plastic. Where concrete formed surfaces will be exposed to weather or where surfaces are to be painted, steel supports within ½ inch of the concrete surface shall be galvanized, plastic protected or of stainless steel. For slabs on grade, supports shall be plastic coated steel fabricated with bearing plates, or specifically designed wire fabric supports fabricated of plastic”.

SECTION 03300 – CAST-IN-PLACE STRUCTURAL CONCRETE

Paragraph 3.13

Add the following sentence:

“Test samples of concrete conveyed by concrete pumps or belts shall be taken at the discharge end of the conveying equipment. Test samples taken at other locations will be for the convenience of the Contractor and shall not be chargeable to the Government.”

SECTION 05120 – STRUCTURAL STEEL

Add the following paragraph.

Paragraph 3.4.1.2

“All bolted connections with misaligned holes shall not be field welded without specific written approval of the Contracting Officer.”

SECTION 05300A – STEEL DECKING

Add the following paragraph.

Paragraph 3.3.1:

“All steel deck sections that are damaged by welding “blow holes” to be repaired in accordance with the recommendations of the manufacturer that is submitted, reviewed and approved by the Contracting Officer.”

SECTION 07214N – BOARD AND BLOCK INSULATION

Add the attached section 0714N – Board and Block Insulation to the Project Specification.

SECTION 08710 – DOOR HARDWARE

Paragraph 3.6 Hardware Sets. Delete Hardware Set 23 and Hardware Set 24 and replace with the following:

HARDWARE SET 23

Door # 100, 116A, 122, 129A 140

1 Cylinder	As required
2 Sets Push/Pulls	J504 – 1” Dia.
2 Sets Offset Pivots	C07162
1 Threshold	J36330
2 Closers	C05032

1 Set Weatherstripping By Door Mfr

HARDWARE SET 24

Door # 101, 149

2 Sets Push/Pulls	J504 – 1” Dia.
2 Sets Offset Pivots	C07162
2 Closers	C05032

SECTION 13720 – Electronic Security System

Include the following specifications attached.

SECTION 15569 – WATER HEATING; GAS; UP TO 20 MBTUH

Paragraph 2.1.6 Hot Water Heating Boilers – delete items h and i.

SECTION 15951 – DIRECT DIGITAL CONTROL FOR HVAC

Paragraph 2.6 Smoke Detectors - Revise Section reference 13851 Fire Detection and Alarm System, Addressable to 16175 Analog Addressable Fire Detection and Alarm System.

SECTION 15995 – COMMISSIONING OF HVAC SYSTEMS

APPENDIX A – Start Appendix A on a new sheet.

SECTION 15951 – DIRECT DIGITAL CONTROL FOR HVAC

Paragraph 2.6 Smoke Detectors - Revise Section reference 13851 Fire Detection and Alarm System, Addressable to 16175 Analog Addressable Fire Detection and Alarm System

SECTION 16175 – ANALOG ADDRESSABLE FIRE DETECTION AND ALARM SYSTEM.

Delete the first page numbered “Page 1”.(This page contains the paragraph headings PART 1 GENERAL, PART 2 PRODUCTS and PART 3 EXECUTION, however there is no paragraph content.) The following page, also numbered “Page 1” shall be the first page of this section.

SECTION 16415 – Electrical Work, Interior

Add the following to “receptacles”: Child Safety Type Receptacles, UL 498, Heavy Duty Grade with interior shutters behind outlet face (not a faceplate shutter) that permits access to the interior contacts upon insertion of ground first.

DRAWINGS

DRAWING C101/C504 - CLARIFICATION

The required, minimum depth of milling is 1-1/2 inches.

The required thickness is the difference between the milled surface and finished grade but not less than 1 1/2 inches of surface course (SM-9.5A). Any remainder should be base course (BM-25.0). The differences between existing and new indicated on the plans are accurate.

On sheet C101, the note reading” Remove sidewalks, curbing and pavement” applies only to areas where new curbs, gutters and entrances are required.

DRAWING A606 - Delete this sheet and replace with the attached sheet A606.

DRAWING A702 - Delete this sheet and replace with the attached sheet A702.

DRAWING A805 – Delete this sheet and replace with the attached sheet A805.

DRAWING S105 – Delete this sheet and replace with the attached sheet S105.

DRAWING S201 - Delete this sheet and replace with the attached sheet S201.

DRAWING S202 - Delete this sheet and replace with the attached sheet S202.

DRAWING S203 - Delete this sheet and replace with the attached sheet S203.

DRAWING S303 - Delete this sheet and replace with the attached sheet S303.

DRAWING S503 - Delete this sheet and replace with the attached sheet S503.

DRAWING P-501 - Delete this sheet and replace with the attached sheet P-501.

DRAWING M-201 - Delete this sheet and replace with the attached sheet M-201.

DRAWING M-301 - Delete this sheet and replace with the attached sheet M-301.

DRAWING M-501 - Delete this sheet and replace with the attached sheet M-501.

DRAWING M-502 - Delete this sheet and replace with the attached sheet M-502.

DRAWING M-801 - Delete this sheet and replace with the attached sheet M-801.

DRAWING M-802 - Delete this sheet and replace with the attached sheet M-802.

DRAWING E-001 - Delete this sheet and replace with the attached sheet E-001.

DRAWING E-101 - Delete this sheet and replace with the attached sheet E-101.

DRAWING E-102 - Delete this sheet and replace with the attached sheet E-102.

DRAWING E-107 - Delete this sheet and replace with the attached sheet E-107.

DRAWING E-401 - Delete this sheet and replace with the attached sheet E-401.

DRAWING E-402 - Delete this sheet and replace with the attached sheet E-402.

DRAWING E-803 - Delete this sheet and replace with the attached sheet E-803.

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- 15620 LIQUID CHILLERS
- 15700 UNITARY HEATING AND COOLING EQUIPMENT
- 15895 AIR SUPPLY, DISTRIBUTION, VENTILATION, AND EXHAUST SYSTEM
- 15951 DIRECT DIGITAL CONTROL FOR HVAC
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-- End of Project Table of Contents --

SECTION 07214N

BOARD AND BLOCK INSULATION

09/99

PART 1 GENERAL

1.1 REFERENCES

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

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 165	(1995) Measuring Compressive Properties of Thermal Insulations
ASTM C 203	(1992) Breaking Load and Flexural Properties of Block-Type Thermal Insulation
ASTM C 272	(1991; R 1996) Water Absorption of Core Materials for Structural Sandwich Constructions
ASTM C 552	(1991) Cellular Glass Thermal Insulation
ASTM C 553	(1992) Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications
ASTM C 578	(1995) Rigid, Cellular Polystyrene Thermal Insulation
ASTM C 591	(1994) Unfaced Preformed Rigid Cellular Polyisocyanurate Thermal Insulation
ASTM C 612	(1993) Mineral Fiber Block and Board Thermal Insulation
ASTM C 930	(1992) Potential Health and Safety Concerns Associated with Thermal Insulation Materials and Accessories
ASTM C 1289	(1998) Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board
ASTM D 828	(1997) Tensile Properties of Paper and Paperboard Using Constant-Rate-of-Elongation Apparatus
ASTM D 1621	(1994) Compressive Properties of Rigid Cellular Plastics
ASTM D 3833/D 3833M	(1996) Water Vapor Transmission of Pressure-Sensitive Tapes
ASTM D 4397	(1996) Polyethylene Sheeting for

Construction, Industrial, and Agricultural Applications

- ASTM E 84 (1998) Surface Burning Characteristics of Building Materials
- ASTM E 96 (1995) Water Vapor Transmission of Materials
- ASTM E 136 (1996; Rev. A) Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C
- ASTM E 154 (1988; R 1993) Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

- 29 CFR 1910.134 Respiratory Protection

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

- NFPA 31 (1997) Installation of Oil Burning Equipment
- NFPA 54 (1996) National Fuel Gas Code
- NFPA 70 (1999) National Electrical Code
- NFPA 211 (1996) Chimneys, Fireplaces, Vents, and Solid Fuel Burning Appliances

TECHNICAL ASSOCIATION OF THE PULP AND PAPER INDUSTRY (TAPPI)

- TAPPI T803 OM (1988) Puncture Test for Containerboard

1.2 SUBMITTALS

Submit the following in accordance with Section 01330, "Submittal Procedures."

SD-03 Product Data

- Block or board insulation; G
- Vapor retarder
- Pressure sensitive tape
- Protection board or coating
- Accessories

SD-08 Manufacturer's Instructions

- Block or Board Insulation
- Adhesive

1.3 DELIVERY, STORAGE, AND HANDLING

1.3.1 Delivery

Deliver materials to the site in original sealed wrapping bearing manufacturer's name and brand designation, specification number, type, grade, R-value, and class. Store and handle to protect from damage. Do not allow insulation materials to become wet, soiled, crushed, or covered with ice or snow. Comply with manufacturer's recommendations for handling, storing, and protecting of materials before and during installation.

1.3.2 Storage

Inspect materials delivered to the site for damage; unload and store out of weather in manufacturer's original packaging. Store only in dry locations, not subject to open flames or sparks, and easily accessible for inspection and handling.

1.4 SAFETY PRECAUTIONS

1.4.1 Respirators

Provide installers with dust/mist respirators, training in their use, and protective clothing, all approved by National Institute for Occupational Safety and Health (NIOSH)/Mine Safety and Health Administration (MSHA) in accordance with 29 CFR 1910.134.

1.4.2 Other Safety Considerations

Consider safety concerns and measures as outlined in ASTM C 930.

PART 2 PRODUCTS

2.1 BLOCK OR BOARD INSULATION

Provide only thermal insulating materials recommended by manufacturer for type of application indicated. Provide board or block thermal insulation conforming to one of the following standards and the physical properties listed below:

- a. Faced Rigid Cellular Polyisocyanurate and Polyurethane Insulation: ASTM C 1289
 1. Type III Perlite insulation board on one major surface of the core foam and a fibrous felt or glass fiber mat membrane on the other major surface of the core foam.
 2. Type IV Cellulosic fiber insulating board on the one major surface of the core foam and fibrous felt or glass fiber mat membrane on the other major surface of the core foam.
 3. Type V Oriented strand board or water-board on one major surface of the core foam and fibrous felt or glass fiber mat membrane or aluminum foil on the other major surface of the core foam.

2.1.1 Thermal Resistance

As indicated.

2.1.2 Fire Protection Requirement

- a. Flame spread index of 55 or less when tested in accordance with ASTM E 84.
- b. Smoke developed index of 150 or less when tested in accordance with ASTM E 84.

2.1.3 Other Material Properties

Provide thermal insulating materials with the following properties:

- a. Flexural strength: Not less than 25 psi when measured according to ASTM C 203.
- b. Water Vapor Permeance: Not more than 1.1 perms or less when measured according to ASTM E 96, desiccant method, in the thickness required to provide the specified thermal resistance, including facings, if any.
- c. Water Absorption: Not more than 2 percent by total immersion, by volume, when measured according to ASTM C 272.
- d. Water Adsorption: Not more than 1 percent by volume when measured in accordance with paragraph 14 of ASTM C 553.

2.1.4 Recycled Materials

Provide thermal insulation containing recycled materials to the extent practicable, provided that the material meets all other requirements of this section. The minimum required recycled material contents (by weight, not volume) are:

Polyisocyanurate/Polyurethane: 9 percent
Perlite Board: 23 percent

2.1.5 Prohibited Materials

Do not provide materials containing more than one percent of asbestos.

2.2 VAPOR RETARDER AND DAMPPROOFING

2.2.1 Vapor Retarder in Roofs

- a. 6 mil thick polyethylene sheeting conforming to ASTM D 4397 and having a water vapor permeance of one perm or less when tested in accordance with ASTM E 96.
- b. Membrane with the following properties:

Water Vapor Permeance: ASTM E 96: 1 perm
Maximum Flame Spread: ASTM E 84: 50
Combustion Characteristics: Passing ASTM E 136
Puncture Resistance: TAPPI T803 OM: 50
Tensile Strength: ASTM D 828: 35

2.3 PRESSURE SENSITIVE TAPE

As recommended by manufacturer of vapor retarder and having a water vapor permeance rating of one perm or less when tested in accordance with ASTM D 3833/D 3833M.

2.4 PROTECTION BOARD OR COATING

As recommended by insulation manufacturer.

2.5 ACCESSORIES

2.5.1 Adhesive

As recommended by insulation manufacturer.

2.5.2 Mechanical Fasteners

Corrosion resistant fasteners as recommended by the insulation manufacturer.

PART 3 EXECUTION

3.1 EXISTING CONDITIONS

Before installing insulation, ensure that all areas that will be in contact with the insulation are dry and free of projections which could cause voids, compressed insulation, or punctured vapor retarders. If installing perimeter or under slab insulation, check that the fill is flat, smooth, dry, and well tamped. If moisture or other conditions are found that do not allow the proper installation of the insulation, do not proceed but notify the Contracting Officer of such conditions.

3.2 PREPARATION

3.2.1 Blocking Around Heat Producing Devices

Unless using insulation board that passes ASTM E 136 in addition to the requirements in Part 2, install non-combustible blocking around heat producing devices to provide the following clearances:

- a. Vents and vent connectors used for venting products of combustion, flues, and chimneys other than masonry chimneys: minimum clearances as required by NFPA 211.
- b. Gas Fired Appliances: Clearances as required in NFPA 54.
- c. Oil Fired Appliances: Clearances as required in NFPA 31.

Blocking is not required if chimneys or flues are certified by the Manufacturer for use in contact with insulating materials.

3.3 INSTALLATION

3.3.1 Insulation Board

Install and handle insulation in accordance with the manufacturer's installation instructions. Keep material dry and free of extraneous materials. Observe safe work practices.

3.3.2 Electrical Wiring

Do not install insulation in a manner that would sandwich electrical wiring between two layers of insulation.

3.3.3 Cold Climate Requirement

Place insulation to the outside of pipes.

3.3.4 Continuity of Insulation

Butt tightly against adjoining boards, and obstructions. Provide continuity and integrity of insulation at corners, roof, and floor. Avoid creating any thermal bridges or voids.

-- End of Section --