FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC

ADDENDUM NO. 5
DHSS HERMAN HOLLOWAY PHASE 1 PRIMARY UPGRADES AND EMERGENCY GENERATOR AT KENT/SUSSEX BUILDING
1901 N. DUPONT HIGHWAY, NEW CASTLE DE 19720
OMB/DFM PROJECT: MJ3501000007
DATE OF ISSUE: June 17, 2016

1.0 This Addendum, Addendum No. 5, shall be made part of the Project Manual and Drawings dated May 23, 2016 for the DHSS Herman Holloway Phase 1 Primary Upgrades and Emergency Generator At Kent/Sussex Building; OMB/DFM Project: MJ3501000007. **Bid Date and time remains unchanged and bids are due at 2:00 p.m. local time on Thursday, June 23, 2016** at the Thomas Collins Building, 540 S. DuPont Highway Suite 1-3rd Floor, Dover DE 19901

2.0 Any provision in any of the Contract Documents which may be in conflict or be inconsistent with the contents of this Addendum shall be void to the extent of such conflicts or inconsistency.

3.0 Changes to Specifications:

3.1 Section 00 41 13 Bid Form: Replace existing Bid Form with new Bid Form to include Addenda issued, change to construction period and revised bid due date.

3.2 Section 26 05 26 Grounding of Electrical Systems. Modify Article 2.4, 2.5 & add new Article 2.6 as shown on attached specification page. Changes are underlined for clarity.

3.3 Section 32 31 13 Chain Link Fences & Gates. Revise as follows:

1. Article 2.05A: Add the following to Paragraph A: Minimum depth of concrete for posts is 36 inches.
2. Article 2.06B.1a: Delete current paragraph and replace with:
   a. 8 feet high: Fabricate perimeter frames of 2.375 inch minimum O.D. pipe, 3.65 lbs. per linear foot (Schedule 40) or Type II (Grade B) steel tubing, 2.375 inch O.D. 3.12 lbs. per linear foot.
3. Article 2.07: Add the following new article in its entirety:
   2.07 PRIVACY SLATS
   A. Tubular Polyethylene Slats: Minimum 0.023-inch thick tubular polyethylene, manufactured for chain-link fences from virgin polyethylene with UV inhibitor, sized to fit mesh specified for direction indicated, with vandal-resistant fasteners and lock strips.
   B. Color: As selected by Engineer from manufacturer's full range.

4.0 Changes to Drawings:

4.1 Drawing C-2, 3, 4, and 7: The area between new roadway at radius 122' and Cooling Tower screen wall shall be prepared and paved with concrete to match roadway. Stripe paving to identify roadway.

VOSB cVE

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4.2 Drawing E16-04:

1. Provide four (4) NEMA Size 2 and four (4) NEMA Size 1 combination-across the line starters connected and wired complete for temporary services to loads connected to the existing MCC's. The selection of motors served by the temporary starters will be determined during construction.

4.2 Drawing E16-05:

1. Replace existing drawing with new drawing to reflect the following:
   A. Modifications to the generator yard fence and equipment grounding system.

   B. Eliminate 18" x 24" x 36" Stainless Steel, 480 VAC & 208 VAC pullboxes on the outside of the Kent/Sussex Cooling Tower/Switchgear enclosure. Core drill through foundation, sawcut pad and extend new conduits into base of new Termination Cabinets. Patch with Concrete as required. Remove existing Manhole MH-1C.

4.3 Drawing E12-01: Add the following General Note 4: A temporary generator, minimum of 50kW will be required for the shutdown of the Powerhouse/Main Substation while the existing substation is being replaced. This substation serves site lighting, controls and 120V services to the VISI-VAC switchgear. Note work shown on this drawing is not included in Alternate #8.

5.0 Questions/Clarifications:

5.1 Will the new 900KW Generator Fence require grounding?

Reply: Yes, refer to reissued drawing E16-05 attached & Changes to Specification Section 26 05 26 above for additional grounding requirements and fence clarifications of the generator yard.

5.2 Will generator supplied stand-by power be necessary at the Powerhouse/Main substation building when Square D is working on the modification of the existing switchgear door control if either of the Delmarva services need to be shut down?

Reply Standby power is not required to support the Powerhouse/Main Substation during the door replacement work unless both 12kV Services are required to be de-energized at the same time for a duration greater than one hour. To avoid the need for a temporary generator if both services must be de-energized, this work should be deferred until after the new Kent/Sussex Generator is installed and then, only a 500kW generator would be required for the Mitchell Building as long as this work is performed on a weekend. This work cannot be performed during the workweek as the campus is in full operation. Note this is to be included in Alternate #8.

5.3 There are 3 types of test listed to be performed on cables (DC Hipot, Partial Discharge and Dissipation Factor). NETA ATS suggests that you can use any of these methods. Typically we would only do DC hipot as both Partial discharge and Tan Delta add exorbitant cost to the project.

Reply: Only DC High Potential Tests are required on the new primary cables. Partial Discharge & Tan Delta tests are not required.

5.4 Is the 500kva transformer for Mitchell building existing? It is not on the schedule

Reply: The 500 kVA Transformer is incorrectly shown as new on Detail 12 & 12A/E10-04. This is an existing transformer that will remain.

5.5 Who owns fuel & watch for temporary generators?

Reply: Contractor shall bear all costs associated with the operation of all temporary generators.

5.6 Who owns fuel for the new 900kW Generator for the Kent/Sussex Building?

Reply: Per Specification Section 26 32 13-1.3.5, the contractor shall provide the first 1000 gallons of fuel.

5.7 On Drawing C-1: Are the four electrical ductbanks and two water service piping locations that are shown on drawing C-, with hash lines, to be completely removed from this area or capped and abandoned in place?

Reply: Entire Ductbank and water piping shall be removed in its entirety. These utilities conflict with proposed changes to grade/elevations.

5.8 On Drawing C-1: Can the existing 100Kw Generator be taken out of service immediately and removed from the site? If the existing generator is decommissioned will any of the existing circuits from Panel "Emergency" require a temporary generator?

Reply: The Kent/Sussex Building shall have emergency services supplied by a generator at all times. Should the existing 100kW generator be removed prior to the new generator installed, tested and placed in operation, contractor shall provide temporary generation. The size of the temporary generator shall be no less than 90kW and electrically connected in the same manner as the existing generator.

5.9 On Drawing C-1: For clarification, is it possible to identify what are truly ductbanks versus direct buried conduits?

Reply: The conduits that are currently shown to be run through the existing pond are concrete encased ductbanks and terminate in Manhole MH-1C. Refer to item #4.2 above. We have no knowledge if any other conduits are installed in a ductbank.

5.10 On Drawing C-1: Have any of the "Ductbanks", as shown on this drawing, already been stripped of cables?

Reply: We have no knowledge if these conduits have cables still installed. Based on photographs of the interior of manhole MH-1C, it appears that cables may be abandoned in the ductbank.

5.11 Clarification #1: The S&C Switch that serves both the Springer & Biggs Building shall be included in Alternate #3.

5.12 Clarification #2: Due to the scope and magnitude of the project, the project construction period will be increased from 270 calendar days to 300 calendar days. This is reflected in the revised Bid Form.

End of Addendum #5

EF/ef
15-1177 Addendum #5

cc: All Registered Plan Holders

Attachments: Specification Section 00 41 13-Bid Form
Redacted Specification Section 26 05 26
Revised Drawing E16-05

DELAWARE HEALTH & SOCIAL SERVICES
HERMAN HOLLOWAY SR. CAMPUS
PHASE 1 PRIMARY UPGRADES &
EMERGENCY GENERATOR AT KENT/SUSSEX BUILDING
OMB/DFM PROJECT NO.: MJ3501000007

BID FORM

For Bids Due: 2:00 p.m. June 23, 2016 **To:** Mr. Joseph D. Seely
OMB/Division of Facilities Management
Thomas Collins Building, Suite 1- 3rd Floor
540 South DuPont Highway
Dover, DE 19901

Name of Bidder: _____

Delaware Business License No.: _____ **Taxpayer ID No.:** _____

(A copy of Bidder's Delaware Business License must be attached to this form.)

***(Other License Nos.):** _____

Phone No.: ( ) _____ - _____ **Fax No.:** ( ) _____ -

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

BASE BID #1: Provide all work identified on Contract Documents.

Amount: _____ ($)

ALTERNATES

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An "ADD" or "DEDUCT" amount is indicated by the crossed out part that does not apply.

Alternate No. 1: Lewis Building 12kV & 480VAC Services

DEDUCT: _____ ($)

Alternate No. 2: Biggs Building Data Center 12kV Services

DEDUCT: _____ ($)

Alternate No. 3: Biggs Building #2 12kV & 208VAC Services

DEDUCT: _____ ($)

Alternate No. 4: Springer Building 12kV & 208V Services

DEDUCT: _____ ($)

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Alternate No. 5: Carvel Building 12kV Services

DEDUCT: _____ ($)

Alternate No. 6: North West Loop 12kV & 208V Services

DEDUCT: _____ ($)

Alternate No. 7: Garden Café 12kv & 208V Services

DEDUCT: _____ ($)

Alternate No. 8: Powerhouse/Main Substation Switchgear Life Cycle Extension

DEDUCT: _____ ($)

ALLOWANCE ACKNOWLEDGEMENT

ALLOWANCE #1: We have included an allowance amount equal to $50,000.00 for miscellaneous costs not identified on the bid documents. I/We have reviewed and familiarized ourselves with the requirements contained in Specification Section 01 21 00 Allowances.

Acknowledged by: _____

ALLOWANCE #2: We have included an allowance amount equal to $10,000.00 for BAS System modifications in the Kent/Sussex Building by the resident Controls Contractor. I/We have reviewed and familiarized ourselves with the requirements contained in Specification Section 01 21 00 Allowances.

Acknowledged by: _____

ALLOWANCE #3: We have included an allowance amount equal to $15,000.00 for Utility Company Costs associated with work under Alternate #8.. I/We have reviewed and familiarized ourselves with the requirements contained in Specification Section 01 21 00 Allowances.

Acknowledged by: _____

UNIT PRICES:

There are no Unit Prices.

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BID FORM

I/We acknowledge Addenda numbered 1, 2, 3, 4, 5_____ and the price(s) submitted includes any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for thirty (30) days from the date of opening of bids (60 days for School Districts and Department of Education), and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid.

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

Should I/We be awarded this contract, I/We pledge to achieve substantial completion of all the work within **300** calendar days of the Notice to Proceed.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

_____
(State of Corporation)

Business Address:_____
_____
_____

Witness: _____ **By:** _____
(Authorized Signature)

(SEAL)

_____
(Title)

Date: _____

ATTACHMENTS

Sub-Contractor List
Non-Collusion Statement
Affidavit(s) of Employee Drug Testing Program
Bid Security
Bidders Qualifications (Others as Required by Project Manuals)

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BID FORM

SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor **must be listed for each category** where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the *Owner*, **it is REQUIRED that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.** This form must be filled out completely with no additions or deletions. **Note that all subcontractors listed below must have a signed Affidavit of Employee Drug Testing Program included with this bid.**

Subcontractor Category	Subcontractor	Address (City & State)	Subcontractors tax payer ID # or Delaware Business license #
1. Electrical			
2. Asphalt Paving			
3. Concrete Paving			
4. Excavation			
5. Stormwater Site Work			

END OF SUBCONTRACTOR LISTING

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BID FORM
NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date to the Office of Management and Budget, Division of Facilities Management.

All the terms and conditions of **OMB/DFM PROJECT: MJ3501000007** have been thoroughly examined and are understood.

NAME OF BIDDER: _____

AUTHORIZED REPRESENTATIVE (TYPED): _____

AUTHORIZED REPRESENTATIVE (SIGNATURE): _____

TITLE: _____

ADDRESS OF BIDDER: _____

_____

_____

EMAIL: _____

PHONE NUMBER: _____

Sworn to and Subscribed before me this _____day of _____ 20____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

DELAWARE HEALTH & SOCIAL SERVICES
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AFFIDAVIT
OF
EMPLOYEE DRUG TESTING PROGRAM

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite that complies with this regulation:

Contractor/Subcontractor Name: _____

Contractor/Subcontractor Address: _____

_____

_____

Authorized Representative (typed or printed): _____

Authorized Representative (signature): _____

Title: _____

Sworn to and Subscribed before me this _____day of _____ 20____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

5. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.
6. Bonding Jumper: Copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.
7. Tinned Bonding Jumper: Tinned-copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.

C. Grounding Bus: Predrilled rectangular bars of annealed copper, 1/4 by 4 inches (6.3 by 100 mm) in cross section, with 9/32-inch (7.14-mm) holes spaced 1-1/8 inches (28 mm) apart. Stand-off insulators for mounting shall comply with UL 891 for use in switchboards, 600 V and shall be Lexan or PVC, impulse tested at 5000 V.

2.4 CONNECTORS

A. Listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected.

B. Bolted Connectors for Conductors, Fence Posts and Pipes: Copper or copper alloy.

C. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions and at all buried ground rods.

D. Bus-Bar Connectors: Mechanical type, cast silicon bronze, solderless compression-type wire terminals, and long-barrel, two-bolt connection to ground bus bar.

2.5 GROUNDING ELECTRODES

A. Ground Rods: Copper-clad Steel; 3/4 inch by 10 feet (19 mm by 3 m)

B. Retain "Chemical-Enhanced Grounding Electrodes" Paragraph below if allowed by authorities having jurisdiction to enhance grounding performance. See Evaluations.

2.6 GROUNDING OF OUTDOOR PAD MOUNTED EQUIPMENT & GENERATOR YARD

A. At all new pad mounted equipment, provide a Ground Grid consisting of #4/0 AWG bare copper conductor around entire pad and exothermically welded to ground rods on maximum of 96" centers. Conductor shall be set 24" below grade. Test wells are not required.

B. Extend #4/0 conductor tail to equipment through pad in ¾" PVC conduit, within footprint of equipment at or near the bonding lug of the pad mounted equipment.

C. At generator pad, ensure tail to sub-base fuel tank rises outside of generator footprint, but within concrete pad.

D. Extend ground conductor to fence posts as shown and provide a mechanical connection to fence post. Do not exothermically connect conductor to post. At gates, connect braided jumper from gate to fence post to ground conductor.