INVITATION FOR BID (IFB)
CONSTRUCTION SERVICES FOR VARIOUS ENGINE HOUSE 4, 11, 12, 15, 20 AND TRAINING ACADEMY RENOVATIONS

Solicitation Number: DCAM-19-CS-IFB-0014

Addendum No. 1

Issued: July 18, 2019

This Addendum No. 1 is being issued and is effective as of the date shown above. Except as modified hereby, the Invitation for Bid (IFB) remains unmodified.

Item #1: Questions and Answers Spreadsheet is hereby attached as (Exhibit 1).

Item #2: Attachments J.1.1 to J.1.6 – Scope of Work have been updated and are hereby attached as (Exhibit 2).

By: ___________________________  Date: 7/19/2019
Franklin Austin, CPPB, CPM
Contracting Officer

- End of Addendum No. 1
EXHIBIT 1

QUESTIONS & ANSWERS SPREADSHEET

[EXHIBIT WILL APPEAR ON THE FOLLOWING PAGE]
INVITATION FOR BIDS (“IFB”)

QUESTIONS & ANSWERS SPREADSHEETS

CONSTRUCTION SERVICES FOR ENGINE HOUSES 4, 11, 12, 15, 20 AND TRAINING ACADEMY LAUNDRY EQUIPMENT UPGRADES AND LAUNDRY ROOM RENOVATIONS

Solicitation Number: DCAM-19-CS-IFB-0014

<table>
<thead>
<tr>
<th>No.</th>
<th>Questions</th>
<th>Department Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Can we arrange a site visit for our subs for all locations?</td>
<td>No. DGS will not be conducting a follow-up site walk.</td>
</tr>
<tr>
<td>2</td>
<td>The laundry layout shown for each location is blurry. Please send clear laundry room layouts for Engine House 4, 11, 12, 15, 20, and the Training Academy in Attachments J.1.1, J.1.2, J.1.3, J.1.4, J.1.5, and J.1.6.</td>
<td>See Addendum 01.</td>
</tr>
<tr>
<td>3</td>
<td>Please provide an existing floor plan for the Training Academy and Engine House #20 that shows where the mechanical and electrical rooms are located so we can determine the amount of conduits and plumbing (Training Academy only) required for plumbing and electrical work.</td>
<td>GC’s should contact Scott Benjamin with PAC Industries via his cell phone (410.299.4739) or email (<a href="mailto:scott@pacindustries.com">scott@pacindustries.com</a>). PAC’s is providing turn-key proposals to GC’s to include Laundry Equipment and all MEP items required for them.</td>
</tr>
</tbody>
</table>
| 4   | Per the site visit at the Training Academy, exposed conduits were encountered in the hallway ceiling and some of them may be between the electrical panel in the mechanical room and the laundry room. Additional clarifications should be addressed as follows: | a) Specify what size conduit and wiring should be included in our bid. See response to question #3.  
b) Specify what type of conduits should be used. See response to Question #3.  
c) Please confirm if new conduits can be exposed on walls and ceilings. See response to question #3.  
d) Should we include painting of exposed conduits in our bid? YES. |

Page 1 of 3
<p>| | | |</p>
<table>
<thead>
<tr>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>5</td>
<td>Per Attach. J.1.1 (Engine House 04), para. A.2 calls for patching/painting of surrounding area as needed. Additional information is needed to provide competitive pricing. For bidding purposes, please confirm if we should figure the perimeter of the room x 10 ft hi and both sides of two door openings (1 single and 1 paired) for patching and painting in our bid.</td>
<td>Confirmed.</td>
</tr>
<tr>
<td>6</td>
<td>The above question/comment applies to Engine House 11 (Attach. J.1.2).</td>
<td>See response to Question #5.</td>
</tr>
<tr>
<td>7</td>
<td>Question #4 applies to Engine House 12 except a partial room size is shown. Please confirm if we should figure 50 sq ft of wall (up to 9&quot; aff) and one door and frame both sides for patching and painting in our bid.</td>
<td>Confirmed.</td>
</tr>
<tr>
<td>8</td>
<td>Per para. 1.2 (MISC Improvements) for Engine House 15, it calls for a new door trim at the laundry entryway. Please provide specification or additional information on the door trim (wood, metal, plastic, thickness, etc.). Also, please confirm if trims should be included at both sides of door opening.</td>
<td>See Addendum 01 for clarification.</td>
</tr>
<tr>
<td>9</td>
<td>The following items pertain to additional electrical clarifications for Engine Houses #4, 11, 12, 15 and 20:  a) Confirm what size and type of conduits should be used.  b) Please specify wiring for Engine Houses #4, 11, 12, 15 and 20.  c) Can conduits be exposed and unpainted?</td>
<td>d) Confirm what size and type of conduits should be used. See response to question #3.  e) Please specify wiring for Engine Houses #4, 11, 12, 15 and 20. See response to question #3.  f) Can conduits be exposed and unpainted? NO.</td>
</tr>
<tr>
<td>10</td>
<td>During the site walk-through at the Training Academy, it was mentioned that the water (heater) has already been replaced. Para. C.2 calls for a new 120-gallon hot water</td>
<td>See Addendum 01 for clarification.</td>
</tr>
<tr>
<td>11</td>
<td>During the walk-through at Engine House No. 4, a new water tank needs to be connected to a hot water line which is located at the other side of the building on 2nd floor. Please provide an existing plumbing plan that shows a connecting plumbing pipe between the existing line and where the new water tank will be located.</td>
<td>GC’s should contact Scott Benjamin with PAC Industries via his cell phone (410.299.4739) or email (<a href="mailto:scott@pacindustries.com">scott@pacindustries.com</a>). PAC’s is providing turn-key proposals to GC’s to include Laundry Equipment and all MEP items required for them.</td>
</tr>
<tr>
<td>12</td>
<td>Other than the sizes given for the water tanks in the scope of work, please provide specification or make/model of the hot water tanks for Engine Houses #4 and the Training Academy (if required).</td>
<td>GC’s should contact Scott Benjamin with PAC Industries via his cell phone (410.299.4739) or email (<a href="mailto:scott@pacindustries.com">scott@pacindustries.com</a>). PAC’s is providing turn-key proposals to GC’s to include Laundry Equipment and all MEP items required for them.</td>
</tr>
</tbody>
</table>
GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF GENERAL SERVICES

INVITATION FOR BIDS  
CONSTRUCTION SERVICES FOR ENGINE HOUSES 4,11, 12, 15, 20 & TRAINING ACADEMY LAUNDRY EQUIPMENT UPGRADES & LAUNDRY ROOM RENOVATIONS

Pre-Bid Conference & Site Visit  
July 10, 2019 at 9:30 AM – 3:30 P.M.

<table>
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<tr>
<th>S. No</th>
<th>Site Name</th>
<th>Site Address</th>
<th>Time</th>
<th>Site Visit Held</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Training Academy</td>
<td>4600 Shepherd Pkwy, SW Washington, DC 20036</td>
<td>9:30 A.M.</td>
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<td>2</td>
<td>Engine House No. 15</td>
<td>2101 14th Street, SE Washington, DC 20020</td>
<td>10:30 A.M.</td>
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<td>3</td>
<td>Engine House No. 12</td>
<td>2225 5th Street NE Washington, DC 20002</td>
<td>11:30 A.M.</td>
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<tr>
<td>4</td>
<td>Engine House No. 4</td>
<td>2531 Sherman Avenue NW Washington, DC 20001</td>
<td>12:30 A.M.</td>
<td>✓</td>
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<td>5</td>
<td>Engine House No. 11</td>
<td>3420 14th Street, NW Washington, DC 20001</td>
<td>1:30 P.M.</td>
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</tr>
<tr>
<td>6</td>
<td>Engine House No. 20</td>
<td>4300 Wisconsin Avenue, NW Washington, DC 20037</td>
<td>2:30 P.M.</td>
<td></td>
</tr>
</tbody>
</table>

Sign-in Sheet

1. Name: James McQuigan  
   Phone: 202 235 0888  
   Company: Brownstone Construction Co  
   Email Address: jmccquiston@brownstoneconstruction.com  
   Is your company a small business enterprise? YES ☑ NO □  
   Type of services performed: GC  
   Interested in bidding as a prime or a subcontractor? YES

2. Name: Mampir Jaffa  
   Phone: 202 538 4300  
   Company: Leona Construction/Leona Tech LLC  
   Email Address: mjaffa@leonacstucture.com  
   Is your company a small business enterprise? YES ☑ NO □  
   Type of services performed: GC  
   Interested in bidding as a prime or a subcontractor? YES

3. Name: Vondell Louis  
   Phone:  
   Company: WYM Solutions LLC  
   Email Address: vondell@wymsolution.net  
   Is your company a small business enterprise? YES ☑ NO □  
   Type of services performed: GC  
   Interested in bidding as a prime or a subcontractor? YES

4. Name: Lorina Campbell  
   Phone: 202-529-2140  
   Company: RLS  
   Email Address: lorina@rlsconstructionco.com  
   Is your company a small business enterprise? YES ☑ NO □  
   Type of services performed: GC  
   Interested in bidding as a prime or a subcontractor? YES

Page 4 of 4
<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Company</th>
<th>Email Address</th>
<th>Is your company a small business enterprise?</th>
<th>Type of services performed</th>
<th>Interested in bidding as a prime or a subcontractor?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Jabbal Nash</td>
<td>908-577-0836</td>
<td>HEP Construction</td>
<td><a href="mailto:smsh@hepconstruction.com">smsh@hepconstruction.com</a></td>
<td>YES □ NO □</td>
<td>General Contracting</td>
<td>Prime Contractor</td>
</tr>
<tr>
<td>Alex Woldu</td>
<td>703-898-5535</td>
<td>National Service Contractor, Inc.</td>
<td><a href="mailto:awoldu@nscinc.com">awoldu@nscinc.com</a></td>
<td>YES □ NO □</td>
<td>GC</td>
<td>Prime</td>
</tr>
<tr>
<td>Jonathan Akinyele</td>
<td>206 545 8127</td>
<td><a href="mailto:iemail@statter.ype">iemail@statter.ype</a></td>
<td><a href="mailto:info@postdeworld.com">info@postdeworld.com</a></td>
<td>YES □ NO □</td>
<td>Prime</td>
<td>Prime</td>
</tr>
<tr>
<td>Scott B. Amiot</td>
<td>410-299-4735</td>
<td>PAC Industries</td>
<td><a href="mailto:scott@pacificindustries.com">scott@pacificindustries.com</a></td>
<td>YES □ NO □</td>
<td>Landscape</td>
<td>SB □</td>
</tr>
<tr>
<td>Oliver Keysor</td>
<td>410 909 9146</td>
<td>Ghianamide Construction Co.</td>
<td><a href="mailto:okes@cc-builder.com">okes@cc-builder.com</a></td>
<td>YES □ NO □</td>
<td></td>
<td>Prime</td>
</tr>
<tr>
<td>M. Glenn Mitchell</td>
<td></td>
<td>BEDD Group LLC</td>
<td><a href="mailto:mgmitchell@beddgroup.com">mgmitchell@beddgroup.com</a></td>
<td>YES □ NO □</td>
<td>Construction, Architecture</td>
<td>Prime</td>
</tr>
<tr>
<td>Ikpezo Okummadu</td>
<td>202-829-3316</td>
<td>Simon Development &amp; Construction Corp</td>
<td><a href="mailto:simondecc@simondeccorp.com">simondecc@simondeccorp.com</a></td>
<td>YES □ NO □</td>
<td>General Const G</td>
<td>Prime</td>
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<tr>
<td></td>
<td>Name</td>
<td>Phone</td>
<td>Company</td>
<td>Email Address</td>
<td>Is your company a small business enterprise?</td>
<td>Type of services performed</td>
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<tr>
<td>12</td>
<td>Khaled Tabieh</td>
<td>301-996-5010</td>
<td>Keystone Plus Construction</td>
<td><a href="mailto:Akhdere@keystone-plc.com">Akhdere@keystone-plc.com</a></td>
<td>YES ☑ NO ☐</td>
<td>GC</td>
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<td>Training Academy</td>
<td>4600 Shepherd Pkwy, SW Washington, DC 20036</td>
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<tr>
<td>Engine House No. 15</td>
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<tr>
<td>Engine House No. 11</td>
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<tr>
<td>Engine House No. 20</td>
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<td>2:30 P</td>
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<td></td>
</tr>
</tbody>
</table>

**Sign-in Sheet**

Name: **LEWIS KELLEY**
Company: **NSC**
Email Address: **LKELLEY@NSCINCI.COM**
Is your company a small business enterprise? **YES**
Type of services performed: **GC**
Interested in bidding as a prime or a subcontractor? **PRIME**

Name: **BARRY JON**
Company: **NSC**
Email Address: **JHARRJ@NSCINCI.COM**
Is your company a small business enterprise? **YES**
Type of services performed: **GC**
Interested in bidding as a prime or a subcontractor? **NO**

Name: ________________
Company: ________________
Email Address: ________________
Is your company a small business enterprise? ________________
Type of services performed: ________________
Interested in bidding as a prime or a subcontractor? ________________

Name: ________________
Company: ________________
Email Address: ________________
Is your company a small business enterprise? ________________
Type of services performed: ________________
Interested in bidding as a prime or a subcontractor? ________________

Name: ________________
Company: ________________
Email Address: ________________
Is your company a small business enterprise? ________________
Type of services performed: ________________
Interested in bidding as a prime or a subcontractor? ________________
EXHIBIT 2

ATTACHMENTS J.1.1 – J.1.6 – SCOPE OF WORK

[EXHIBIT WILL APPEAR ON THE FOLLOWING PAGE]
ATTACHMENT J.1.1

SCOPE OF WORK

ENGINE HOUSE 4
A. Laundry Facility Appliance Upgrades:

1. All work is to be performed during normal business hours and not be disruptive to operations of facility.
2. The General Contractor (GC) to remove laundry entrance door permanently to enable adequate access to new drying cabinet. Patch/paint surrounding area as needed.
3. PAC to salvage existing washer and dryer unit and deliver to DCFEMS storage facility.
4. PAC to furnish and install (1) MILNOR – 30022T6X – 60LB WASHER [with Electrical Configuration: 208-240/60/3] with 1 – 6” STEEL MOUNTING BASE:
   a. Mount and level a 6” steel base to enhance loading height of the washer to the existing concrete floor using an industry standard anchor bolt and grout procedure.
   b. Secure final connections to the existing 3/4” cold water line
   c. F&I Y-joint connection to the NEW 3/4” hot water line to adequately supply the dual hot water connections needed
   d. F&I plumbing supplies and connections from the new washer to the existing PVC drain and trough.
5. PAC to furnish and install (1) MILNOR – FC-6 – DRYING CABINET [with Electrical Configuration: 208/60/3 with a 50A breaker]
6. PAC to deliver appliances to job site, uncrate and rig into position per approved layout below.
7. Proposed **ENLARGED** layout below. GC to field verify and make adjustments as required to meet FEMS and manufacturer clearance requirements.

---

**ENGINE 4**

**EQUIPMENT LIST**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>MANUFACTURER</th>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>EXIST</th>
<th>PRPD.</th>
<th>OPT.</th>
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<tbody>
<tr>
<td>1</td>
<td>MILNOR</td>
<td>3022T6X</td>
<td>60 LB. WASHER/EXTRACTOR</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>MILNOR</td>
<td>FC-6</td>
<td>DRYING CABINET</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**B. Electrical Improvements**

1. **GC TO LOAD TEST ALL EXISTING AND NEWLY-INSTALLED ELECTRICAL TO ENSURE ALL ARE FUNCTIONING PROPERLY.**
2. **GC TO F&I (4) FOUR NEW LED WALL LIGHTS (1:1 REPLACEMENT); DISPOSE OF OLD LIGHTS. LIGHTS TO BE LOCATED IN EXISTING LOCATIONS EXCEPT FOR THE (1) ONE LIGHT WHERE THE NEW WALL WATER HEATER WILL BE INSTALLED; RELOCATE THIS (1) ONE LIGHT TO THE BACK WALL.**
3. **FOR WASHER: GC to re-use existing electrical outlet and disconnect. When no existing outlet and disconnect exist, F&I new per manufacturer requirements.**
4. **FOR DRYER: GC to furnish and install new electrical circuit, conduit, wiring, outlet, and disconnect for Dryer per manufacture requirements as follows:**
   a. **Demo existing gear washer and dryer circuits’ raceways and electrical devices as needed.**
   b. Install new conduit raceways and conductors as needed.
   c. Install **one 30 amp, 3 phase fused disconnect and one 60 amp, 3 phase fused disconnect.** Mark panel circuit on disconnect.
   d. Supply one spare fuse in each disconnect.
e. **Provide F&I** flexible conduit raceways with conductors and mark panel circuit connection on disconnects.

f. Provide support in final testing of equipment.

g. Seal all concrete penetrations.

h. **Provide F&I one 15 amp, 3 phase breaker.**

i. **Provide F&I CIRCUIT TO THE HOT WATER HEATER AND INSTALLATION OF A BREAKER IN THE DESIGNATED ELECTRICAL PANEL PER MANUFACTURER SPECIFICATIONS OF THE HOT WATER HEATER SUPPLIED BY THE GC.**

j. Install F&I hot water heater fused disconnect, provide spare fuse in disconnect and label circuit information on disconnect.

C. **Plumbing Improvements**

1. GC to furnish and install an 80-gallon/80k btus, floor 120K BTUS, WALL-mounted, gas-fired hot water tank in the laundry room INSTALLED BEHIND THE WASHER AND AT A MINIMUM OF 2-FEET ABOVE THE AIR TANK REFILLING AREA INSTALLATION TO INCLUDE TAPPING INTO THE EXISTING GAS LINE, ALL GAS PIPING, WATER CONNECTIONS TO EXISTING WATER LINES, REQUIRED ELECTRICAL HOOK-UPS, ALL DUCTING AND WALL PENETRATION FOR PROPER EXHAUSTING ALONG WITH SEALING, AND ALL SUPPLIES NEEDED TO PROPERLY DRAIN HOT WATER HEATER INTO EXISTING FLOOR DRAIN TO MEET ALL MANUFACTURER INSTALLATION SPECIFICATIONS.

2. PAC to furnish and install new connection hoses between hot water tank and washer machine.

D. **Chemical Supply Installation**

1. PAC to provide removal of existing chemical supply pumps and hoses. Dispose per EPA Standards.

2. PAC to furnish and install 3-pumps chemical dispenser assembly to adequately deliver the proper chemistry to the washer:
   a. 120 V OUTLET/DISPENSER.
   b. Dimensions of 3-Pump: Height 5.8”/Width 11.6”/Depth 6.3”/Weight 16 lbs.

3. PAC to furnish and install NFPA-approved chemicals for the initial start-up of the washer:
   a. Detergent: ECOLAB, TRI-STAR, DETERGENT OZ, 5 gallon, #6116561
   b. Neutralizer: ECOLAB, TRI-STAR, ADVACARE 120 SOUR, 5 gallon, #6114299

E. **Dryer Exhaust Improvements**

1. PAC to furnish and install new 6” exhaust duct including all supplies, connections and boring hole into the side wall to the outside for proper ventilation of the FC-6 drying cabinet. PAC to properly seal new wall penetration.

2. PAC to remove and dispose any unnecessary ducting.

F. **Installation Inspection**

1. Within [3 days] after the completion of the installation, PAC to schedule a factory-authorized PAC service tech on-site for review of the installation, connections and gear guardian programming.
2. PAC to perform start-up of all laundry machinery to ensure proper operation and perform operational, troubleshooting.

G. PAC Training
   1. PAC to provide manufacturer suggested daily/weekly, monthly, and yearly maintenance training as prescribed in the provided operational and maintenance manuals.
      a. DGS will provide pre-determined, on-site staff that will be responsible for future in-house training and equipment oversight to other staff.
   2. PAC to provide (3) manuals in both hard copy and digital.

H. Maintenance Program (estimated time 2 hours each visit)
   1. PAC to provide (2) two-hour planned maintenance visits for the first year of operation.
      a. The first visit will come 6 months after the signed off start-up date by a PAC factory authorized service tech.
      b. The second visit will come during the 12th month after the signed off start-up date by a PAC factory authorized service tech.
      c. Adhere to the service scope found within the attached pm checklists.
      d. Provide continuous training on pm and operation procedures.
   2. PAC to provide a full report of PAC technician’s findings during these visits to the DGS staff on site.

I. MISC Improvements
   1. GC to provide any and all additional work not listed above and required to have a complete and functioning system in the end.
   2. PAC to remove all new equipment crating and installation debris from site.

J. Vendor Contact Information:

   PAC Industries
   Attn: Scott Benjamin; 410.299.4739
   scott@pacindustries.com

   NOTE: GC Base Bids must be 100% based on PAC Industries design and specifications/cut sheets provided. Substitutions will not be accepted, and all bids will be considered to include specified items whether clarified or not by bidders.
ATTACHMENT J.1.2

SCOPE OF WORK

ENGINE HOUSE 11
A. Laundry Facility Appliance Upgrades:
   1. All work is to be performed during normal business hours and not be disruptive to operations of facility.
   2. GC to remove and reinstall laundry entrance door **ROUTED SOLID and NEW** door-jam to supply adequate width for the extraction of existing and delivery of new machines. Patch/paint surrounding walls as needed. **GC TO REMOVE METAL SHELF FOR WASHER AND DRYER INSTALLATION AND REINSTALL. GC TO REMOVE WOOD SHELF AND BRACKETS; SALVAGE FOR FIREHOUSE USE.**
   3. PAC to salvage existing washer and dryer unit and deliver to DCFEMS storage facility.
   4. PAC to furnish and install (1) MILNOR – 30022T6X – 60LB WASHER [with Electrical Configuration: 208-240/60/3] with 1 – 6” STEEL MOUNTING BASE:
      a. Mount and level a 6” steel base to enhance loading height of the washer to the existing concrete floor using an industry standard anchor bolt and grout procedure.
      b. Secure final connections to the existing 3/4” cold water line
      c. F&I Y-joint connection to the existing 3/4” hot water line to adequately supply the dual hot water connections needed
      d. F&I plumbing supplies and connections from the new washer to the existing PVC drain
   5. PAC to furnish and install (1) MILNOR – FC-6 – DRYING CABINET [with Electrical Configuration 208/60/3 with a 50A breaker].
   6. PAC to deliver appliances to job site, uncrate and rig into position per approved layout below.
   7. PAC to position the washer to not face the entrance door to allow appropriate space for operator.
8. Proposed **ENLARGED** layout below. GC to field verify and make ANY adjustments as required to meet FEMS and manufacturer clearance requirements.

---

### B. Electrical Improvements

1. **GC TO LOAD TEST ALL EXISTING AND NEWLY-INSTALLED ELECTRICAL TO ENSURE ALL ARE FUNCTIONING PROPERLY.**
2. **FOR WASHER:** Re-use existing electrical outlet and disconnect. When no existing outlet and disconnect exist, F&I new per manufacturer requirements.
3. **FOR DRYER:** GC to furnish and install new electrical circuit, conduit, wiring, outlet, and disconnect for Dryer manufacture as follows:
   a. Demo existing gear washer and dryer circuits, raceways, and electrical devices as needed.
   b. Install new conduits raceways and conductors as needed and provide breakers as needed in panel.
   c. **Install F&I one 30 amp fused disconnect and** one 60 amp disconnect and mark panel circuit on disconnect.
   d. Supply one spare replacement fuse in each disconnect.
   e. **Provide F&I** conduit raceways and conductors to panel room and provide **60** amp breakers in panel as needed.
   f. **Provide F&I** flexible conduit raceway with conductors and make final connections **TO DRYER DISCONNECT.**
g. Provide support in final testing of equipment to assure functionality of equipment.
h. Seal all concrete penetrations.

C. Plumbing Improvements
1. PAC to cap existing gas line.
2. PAC to furnish and install new connection hoses between hot water tank and washer machine.

D. Chemical Supply Installation
1. PAC to provide removal of existing chemical supply pumps and hoses. Dispose per EPA Standards.
2. PAC to furnish and install 3-pumps chemical dispenser assembly to adequately deliver the proper chemistry to the washer:
   a. 120 V outlet/dispen
   b. Dimensions of 3-Pump: Height 5.8”/Width 11.6”/Depth 6.3”/Weight 16 lbs.
3. PAC to furnish and install NFPA-approved chemicals for the initial start-up of the washer:
   a. Detergent: ECOLAB, TRI-STAR, DETERGENT OZ, 5 gallon, #6116561
   b. Neutralizer: ECOLAB, TRI-STAR, ADVACARE 120 SOUR, 5 gallon, #6114299

E. Dryer Exhaust Improvements
1. PAC to furnish and install new 6” exhaust duct including all supplies and connections of the 6” exhaust ducting for the FC-6 drying cabinet and transition the 6” duct into the existing 8” duct.
2. PAC to remove and dispose any unnecessary ducting.

F. Installation Inspection
1. Within [3 days] after the completion of the installation, schedule a factory-authorized PAC service tech on-site for review of the installation, connections and gear guardian programming.
2. PAC to perform start-up of all laundry machinery to ensure proper operation and perform operational, troubleshooting.

G. PAC Training
1. PAC to provide manufacturer suggested daily/weekly, monthly, and yearly maintenance training as prescribed in the provided operational and maintenance manuals.
   a. DGS will provide pre-determined, on-site staff that will be responsible for future in-house training and equipment oversight to other staff.
2. PAC to provide (3) manuals in both hard copy and digital.
H. Maintenance Program (estimated time 2 hours each visit)
   1. PAC to provide (2) two-hour planned maintenance visits for the first year of operation.
      a. The first visit will come 6 months after the signed off start-up date by a PAC factory authorized service tech.
      b. The second visit will come during the 12th month after the signed off start-up date by a PAC factory authorized service tech.
      c. Adhere to the service scope found within the attached pm checklists.
      d. Provide continuous training on pm and operation procedures.
   2. PAC to provide a full report of PAC technician’s findings during these visits to the DGS staff on site.

I. MISC Improvements
   1. GC to provide any and all additional work not listed above, and required to have a complete and functioning system in the end.
   2. PAC to remove all new equipment crating and installation debris from site.

J. Vendor Contact Information:

   PAC Industries
   Attn: Scott Benjamin; 410.299.4739
   scott@pacindustries.com

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ATTACHMENT J.1.3
SCOPE OF WORK
ENGINE HOUSE 12
A. Laundry Facility Appliance Upgrades:
1. All work is to be performed during normal business hours and not be disruptive to operations of facility.
2. GC to remove and reinstall laundry entrance door and NEW door-jam to supply adequate width for the extraction of existing and delivery of new machines. Patch/paint surrounding walls as needed.
3. **GC TO PERMANENTLY REMOVE THE (2) TWO LOCKERS IN THE BACK LEFT CORNER WHERE THE NEW DRYER WILL BE LOCATED; SALVAGE FOR ENGINE HOUSE. GC TO TEMPORARILY REMOVE (1) ONE GRAY AND (1) RED LOCKER BY ENTRY DOOR TO ENABLE LAUNDRY EQUIPMENT INSTALLATION; GC TO REINSTALL SAME TWO LOCKERS UPON COMPLETION OF LAUNDRY INSTALLATION.**
4. PAC to salvage existing washer and dryer unit and deliver to DCFEMS storage facility.
5. PAC to furnish and install (1) MILNOR – 30022T6X – 60LB WASHER [with Electrical Configuration: 208-240/60/3] with 1 – 6” STEEL MOUNTING BASE:
   a. Furnish and install a piece of C channel at the rear of the washer to accommodate the larger footprint. Mount and level the washer to the existing concrete floor using an industry standard anchor bolt and grout procedure.
   b. Secure final connections to the existing 3/4” cold water line
   c. F&I Y-joint connection to the existing 3/4” hot water line to adequately supply the dual hot water connections needed
   d. F&I plumbing supplies and connections from the new washer to the existing PVC drain
6. PAC to furnish and install (1) MILNOR – FC-6 – DRYING CABINET [with Electrical Configuration 208/60/3 with a 50A breaker].
7. PAC to deliver appliances to job site, uncrate and rig into position per approved layout below.
8. Proposed **ENLARGED** layout below. GC to field verify and make ANY adjustments as required to meet FEMS and manufacturer clearance requirements.

**ENGINE 12**

**B. Electrical Improvements**

1. **GC TO LOAD TEST ALL EXISTING AND NEWLY-INSTALLED ELECTRICAL TO ENSURE ALL ARE FUNCTIONING PROPERLY.**

2. **FOR WASHER:** Re-use existing electrical outlet and disconnect. When no existing outlet and disconnect exist, F&I new per manufacturer requirements.

3. **FOR DRYER:** GC to furnish and install new electrical circuit, conduit, wiring, outlet, and disconnect for Dryer per manufacture requirements as follows:
   a. **DEMO DRYER CIRCUIT RACEWAYS,** disconnects and electrical devices as needed.
   b. Install new conduits raceways and conductors as needed.
   c. **FURNISH AND INSTALL one 30 amp, 3 phase fused disconnect and one 60 amp, 3 phase fused disconnect.** Mark panel circuit on disconnect
d. Supply one spare fuse in each disconnects.
e. **Provide F&I** flexible conduit raceways with conductors and make final connections to **DRYER** disconnect.
f. Provide support in final testing of equipment to assure functionality of equipment.
g. Seal all concrete penetrations.
h. **Provide F&I** new breakers in panel and label as needed.
C. Plumbing Improvements
   1. PAC to cap existing gas line.
   2. PAC to furnish and install new connection hoses between hot water tank and washer machine.

D. Chemical Supply Installation
   1. PAC to provide removal of existing chemical supply pumps and hoses. Dispose per EPA Standards.
   2. PAC to furnish and install 3-pumps chemical dispenser assembly to adequately deliver the proper chemistry to the washer:
      a. **120 V OUTLET/DISPENSER**
      b. Dimensions of 3-Pump: Height 5.8”/Width 11.6”/Depth 6.3”/Weight 16 lbs.
   3. PAC to furnish and install NFPA-approved chemicals for the initial start-up of the washer:
      a. Detergent: ECOLAB, TRI-STAR, DETERGENT OZ, 5 gallon, #6116561
      b. Neutralizer: ECOLAB, TRI-STAR, ADVACARE 120 SOUR, 5 gallon, #6114299

E. Dryer Exhaust Improvements
   1. PAC to furnish and install new 6” exhaust duct including all supplies and connections of the 6” exhaust ducting for the FC-6 drying cabinet and transition the 6” duct into the existing 8” duct.
   2. PAC to remove and dispose any unnecessary ducting.

F. Installation Inspection
   1. Within [3 days] after the completion of the installation, schedule a factory-authorized Milnor service tech on-site for review of the installation, connections and gear guardian programming.
   2. PAC to perform start-up of all laundry machinery to ensure proper operation and perform operational, troubleshooting.

G. PAC Training
   1. PAC to provide manufacturer suggested daily/weekly, monthly, and yearly maintenance training as prescribed in the provided operational and maintenance manuals.
      a. DGS will provide pre-determined, on-site staff that will be responsible for future in-house training and equipment oversight to other staff.
   2. PAC to provide (3) manuals in both hard copy and digital.

H. Maintenance Program (estimated time 2 hours each visit)
   1. PAC to provide (2) two-hour planned maintenance visits for the first year of operation.
a. The first visit will come 6 months after the signed off start-up date by a PAC factory authorized service tech.
b. The second visit will come during the 12th month after the signed off start-up date by a PAC factory authorized service tech.
c. Adhere to the service scope found within the attached pm checklists.
d. Provide continuous training on pm and operation procedures.

2. PAC to provide a full report of PAC technician’s findings during these visits to the DGS staff on site.

I. MISC Improvements
1. GC to provide any and all additional work not listed above, but required to have a complete and functioning system in the end.
2. PAC to remove all new equipment crating and installation debris from site.

J. Vendor Contact Information:

   PAC Industries  
   Attn: Scott Benjamin; 410.299.4739  
   scott@pacindustries.com

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ATTACHMENT J.1.4

SCOPE OF WORK

ENGINE HOUSE 15
A. Laundry Facility Appliance Upgrades:

1. All work is to be performed during normal business hours and not be disruptive to operations of facility.

2. **DCFEMS TO REMOVE ROLLING BLACK TOOLBOX PRIOR TO INSTALLATION AND REINSTALL UPON COMPLETION.**

3. PAC to salvage existing washer and dryer unit and deliver to DCFEMS storage facility.

   a. Secure final connections to the existing 3/4” cold water line
   b. F&I Y-joint connection to the existing 3/4” hot water line to adequately supply the dual hot water connections needed
   c. F&I plumbing supplies and connections from the new washer to the existing PVC drain

5. PAC to furnish and install (1) MILNOR – FC-6 – DRYING CABINET [with Electrical Configuration 208/60/3 with a 50A breaker].

6. PAC to deliver appliances to job site, uncrate and rig into position per approved layout below.
7. Proposed **ENLARGED** layout below. GC to field verify and make ANY adjustments as required to meet FEMS and manufacturer clearance requirements.

![Diagram of ENLARGED layout]

**ENGINE 15**

B. Electrical Improvements

1. **GC TO LOAD TEST ALL EXISTING AND NEWLY-INSTALLED ELECTRICAL TO ENSURE ALL ARE FUNCTIONING PROPERLY.**

2. FOR WASHER: Re-use existing electrical outlet and disconnect. When no existing outlet and disconnect exist, F&I new per manufacturer requirements.

3. FOR DRYER: GC to furnish and install new electrical circuit, conduit, wiring, outlet, and disconnect for Dryer per manufacture requirements as follows:
   a. Demo existing gear washer and dryer circuits raceway, disconnects and electrical devices as needed.
   b. Install new conduits raceway and conductors as needed.
   c. **FURNISH Supply and install one 30 amp, 3 phase fused disconnect and one 60 amp fused 3 phase disconnect.**
   d. Provide flexible conduit raceways, circuits and make final connections in panel.
   e. Provide support in final testing of equipment to assure functionality of equipment.
   f. Mark disconnects to show panel circuit and location.
   g. **PROVIDE ONE 60 AMP SPARE REPLACEMENT FOR DRYER DISCONNECT.**
   h. Seal all connect penetrations.
C. Plumbing Improvements
   1. PAC to cap existing gas line.
   2. PAC to furnish and install new connection hoses between hot water tank and washer machine.

D. Chemical Supply Installation
   1. PAC to provide removal of existing chemical supply pumps and hoses. Dispose per EPA Standards.
   2. PAC to furnish and install 3-pumps chemical dispenser assembly to adequately deliver the proper chemistry to the washer:
      a. **120 V OUTLET/DISPENSER**
      b. Dimensions of 3-Pump: Height 5.8”/Width 11.6”/Depth 6.3”/Weight 16 lbs.
   3. PAC to furnish and install NFPA-approved chemicals for the initial start-up of the washer:
      a. Detergent: ECOLAB, TRI-STAR, DETERGENT OZ, 5 gallon, #6116561
      b. Neutralizer: ECOLAB, TRI-STAR, ADVACARE 120 SOUR, 5 gallon, #6114299

E. Dryer Exhaust Improvements
   1. PAC to furnish and install new 6” exhaust duct including all supplies and connections of the 6” exhaust ducting for the FC-6 drying cabinet and transition the 6” duct into the existing 8” duct.
   2. PAC to remove and dispose any unnecessary ducting.

F. Installation Inspection
   1. Within [3 days] after the completion of the installation, schedule a factory-authorized PAC service tech on-site for review of the installation, connections and gear guardian programming.
   2. PAC to perform start-up of all laundry machinery to ensure proper operation and perform operational, troubleshooting.

G. PAC Training
   1. PAC to Provide manufacturer suggested daily/weekly, monthly, and yearly maintenance training as prescribed in the provided operational and maintenance manuals.
      a. DGS will provide pre-determined, on-site staff that will be responsible for future in-house training and equipment oversight to other staff.
   2. PAC to Provide (3) manuals in both hard copy and digital.

H. Maintenance Program (estimated time 2 hours each visit)
   1. PAC to Provide (2) two-hour planned maintenance visits for the first year of operation.
      a. The first visit will come 6 months after the signed off start-up date by a PAC factory authorized service tech.
b. The second visit will come during the 12\textsuperscript{th} month after the signed off start-up date by a PAC factory authorized service tech.
c. Adhere to the service scope found within the attached pm checklists.
d. Provide continuous training on pm and operation procedures.

2. PAC to provide a full report of PAC technician’s findings during these visits to the DGS staff on site.

I. MISC Improvements
1. GC to provide any and all additional work not listed above and required to have a complete and functioning system in the end.

2. **GC TO CLEAN EDGES OF ENTRY WAY.** GC to furnish, install and paint new door trim at laundry room entryway using Rust-Oleum 7400 System Fire Hydrant Red Gloss Finish Industrial Enamel Paint.

3. Remove all new equipment crating and installation debris from site.

J. Vendor Contact Information:

PAC Industries  
Attn: Scott Benjamin; 410.299.4739  
scott@pacindustries.com  

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ATTACHMENT J.1.5
SCOPE OF WORK
ENGINE HOUSE 20
A. Laundry Facility Appliance Upgrades:
   1. All work is to be performed during normal business hours and not be disruptive to operations of facility.
   2. PAC to salvage existing washer and dryer unit and deliver to DCFEMS storage facility.
   3. PAC to furnish and install COMMERCIAL (1) MILNOR – 30022T6X – 60LB WASHER [with Electrical Configuration: 208-240/60/3].
      a. Secure final connections to the existing 3/4” cold water line
      b. F&I Y-joint connection to the existing 3/4” hot water line to adequately supply the dual hot water connections needed
      c. F&I plumbing supplies and connections from the new washer to the existing PVC drain
   4. PAC to furnish and install (1) MILNOR – FC-3 – DRYING CABINET [with Electrical Configuration 208/60/3 with a 50A breaker] – Furnish and install new 6” exhaust duct including all supplies, connections and boring hole into the side wall to the outside for proper ventilation of the FC-3 drying cabinet. Properly seal new wall penetration.
   5. PAC to deliver appliances to job site, uncrate and rig into position per approved layout below.
6. Proposed **REVISED** layout below. GC to field verify and make ANY adjustments as required to meet FEMS and manufacturer clearance requirements.

Electric Improvements

1. **GC TO LOAD TEST ALL EXISTING AND NEWLY-INSTALLED ELECTRICAL TO ENSURE ALL ARE FUNCTIONING PROPERLY.**

2. **WASHER:** Re-use existing electrical outlet and disconnect. When no existing outlet and disconnect exist, F&I new per manufacturer requirements.

3. **FOR DRYER:** GC to furnish and install new electrical circuit, conduit, wiring, outlet, and disconnect for Dryer per manufacture requirements as follows:
   a. **Demo EXISTING GEAR WASHER AND** dryer circuits, raceways and electrical devices as needed.
   b. Install new conduits raceways and conductors as needed and provide breaker as needed.
   c. **FURNISH AND** [Install one 30 amp 3 phase fused disconnect and one 60 amp 3 phase fused disconnect. Mark panel circuits on disconnect.]
   d. Supply one replacement spare fuse in each disconnect.
   e. Mark final panel destination on each disconnect.
f. **Provide FURNISH & INSTALL** conduit raceways and conduits to panel room as needed.
g. **Provide FURNISH & INSTALL** flexible conduit raceway with conductors and make final connections on **DRYER** disconnect. Provide new breakers and label as needed.
h. Provide support in final testing of equipment for functionality of equipment.
i. Seal all concrete penetrations as needed.

B. Plumbing Improvements
   1. PAC to furnish and install new connection hoses between hot water tank and washer machine.

C. Chemical Supply Installation
   1. PAC to provide removal of existing chemical supply pumps and hoses. Dispose per EPA Standards.
   2. PAC to furnish and install 3-pumps chemical dispenser assembly to adequately deliver the proper chemistry to the washer:
      a. **120 V OUTLET/DISPENSER**
      b. Dimensions of 3-Pump: Height 5.8”/Width 11.6”/Depth 6.3”/Weight 16 lbs.
   3. PAC to furnish and install NFPA-approved chemicals for the initial start-up of the washer:
      a. Detergent: ECOLAB, TRI-STAR, DETERGENT OZ, 5 gallon, #6116561
      b. Neutralizer: ECOLAB, TRI-STAR, ADVACARE 120 SOUR, 5 gallon, #6114299
      c. **GC TO PROVIDE 1 - 120V OUTLET/DISPENSER BEHIND WASHER FOR CHEMICAL PUMPS.**

D. Dryer Exhaust Improvements
   1. PAC to furnish and install new 6” exhaust duct including all supplies, connections and boring hole into the side wall to the outside for proper ventilation of the FC-6 drying cabinet. Properly seal new wall penetration.
   2. **PAC TO FURNISH AND INSTALL EXHAUST DUCT FOR RESIDENTIAL DRYER.**
   3. PAC to remove and dispose any unnecessary ducting.

E. Installation Inspection
   1. Within [3 days] after the completion of the installation, schedule a factory-authorized PAC service tech on-site for review of the installation, connections and gear guardian programming.
   2. PAC to perform start-up of all laundry machinery to ensure proper operation and perform operational, troubleshooting.

F. PAC Training
1. PAC to provide manufacturer suggested daily/weekly, monthly, and yearly maintenance training as prescribed in the provided operational and maintenance manuals.
   a. DGS will provide pre-determined, on-site staff that will be responsible for future in-house training and equipment oversight to other staff.
2. PAC to provide (3) manuals in both hard copy and digital.

G. Maintenance Program (estimated time 2 hours each visit)
1. PAC to provide (2) two-hour planned maintenance visits for the first year of operation.
   a. The first visit will come 6 months after the signed off start-up date by a PAC factory authorized service tech.
   b. The second visit will come during the 12th month after the signed off start-up date by a PAC factory authorized service tech.
   c. Adhere to the service scope found within the attached pm checklists.
   d. Provide continuous training on pm and operation procedures.
2. PAC to provide a full report of PAC technician’s findings during these visits to the DGS staff on site.

H. MISC Improvements
1. GC to provide any and all additional work not listed above, and required to have a complete and functioning system in the end.
2. PAC to remove all new equipment crating and installation debris from site.

I. Vendor Contact Information:

PAC Industries
Attn: Scott Benjamin; 410.299.4739
scott@pacindustries.com

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ATTACHMENT J.1.6
SCOPE OF WORK
FEMS TRAINING ACADEMY
A. Laundry Facility Appliance Upgrades:
   1. All work is to be performed during normal business hours and not be disruptive to operations of facility.
   2. **DCFEMS TO REMOVE COMPRESSOR AND ICE MACHINE.**
   3. PAC to salvage existing washer and dryer unit and deliver to DCFEMS storage facility.
   4. PAC to furnish and install (2) MILNOR – 30022T6X – 60LB WASHERS [with Electrical Configuration: 208-240/60/3] with 1 – 6” STEEL MOUNTING BASE:
      a. Furnish and install a piece of C-channel to accommodate the larger footprint of one washer. Mount and level the washer to the existing concrete floor using an industry standard anchor bolt and grout procedure. Mount and level a new 6” steel base to enhance loading height of the second washer to the existing concrete floor using an industry standard anchor bolt and grout procedure.
      b. Secure final connections to the existing 3/4” cold water line
      c. F&I Y-joint connection to the existing 3/4” hot water line to adequately supply the dual hot water connections needed
      d. F&I plumbing supplies and connections from the new washer to the existing PVC drain
   5. PAC to furnish and install (2) MILNOR – FC-6 – DRYING CABINETS [with Electrical configuration 208/60/3 and (2) 60A breakers (1 per drying cabinet)]
   6. PAC to deliver appliances to job site, uncrate and rig into position per approved layout below.
7. Proposed **ENLARGED** layout below. GC to field verify and make adjustments as required to meet FEMS and manufacturer clearance requirements.

![Diagram of laundry equipment layout]

**TRAINING ACADEMY OPTION 1**

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**B. Electrical Improvements**

1. **GC TO UPGRADE ELECTRICAL BOX. GC TO LOAD TEST ALL EXISTING AND NEWLY-INSTALLED ELECTRICAL TO ENSURE ALL ARE FUNCTIONING PROPERLY.**
2. **FOR WASHERS:** Re-use existing electrical outlet and disconnect. When no existing outlet and disconnect exist, F&I new per manufacturer requirements.
3. **FOR DRYERS:** GC to furnish and install new electrical circuit, conduit, wiring, outlet, and disconnect for Dryer per manufacture requirements as follows:
   a. Install 200 amp, 3 phase panel in vehicle bay at current location of gear washer and dryer equipment.
   b. Install 200 amp breaker in current Federal Pacific in switch gear room to feed new panel.
   c. Install all conduits, hangers, supports and conductors to feed new panel.
   d. Label 200A panel breaker in switch gear room.
e. Demo existing washer and dryer disconnect, wires, and conduits as needed to install new electrical equipment.
f. Install two new circuits in conduit raceway and two 60 amp disconnect to feed two new equipment dryers.
g. Install two new circuits in conduit raceway and two ONE 30 amp disconnect to feed equipment gear washer and install new breaks in panel and label as needed.

C. Plumbing Improvements
1. PAC to cap existing gas line.
2. GC to furnish and install a new 120 gallon at 36KW, electric, floor-mounted hot water tank located 100’ away in Mechanical Room and all associated piping, connections, electrical, etc. required for complete system. Remove and dispose of old hot water heater.
3. PAC to furnish and install new connection hoses between hot water tank and washer machine.

D. Chemical Supply Installation
1. PAC to provide removal of existing chemical supply pumps and hoses. Dispose per EPA Standards.
2. PAC to furnish and install 3-pumps chemical dispenser assembly to adequately deliver the proper chemistry to the washer:
   a. 120 V OUTLET/DISPENSER
   b. Dimensions of 3-Pump: Height 5.8”/Width 11.6”/Depth 6.3”/Weight 16 lbs.
3. PAC to furnish and install NFPA-approved chemicals for the initial start-up of the washer:
   a. Detergent: ECOLAB, TRI-STAR, DETERGENT OZ, 5 gallon, #6116561
   b. Neutralizer: ECOLAB, TRI-STAR, ADVACARE 120 SOUR, 5 gallon, #6114299

E. Dryer Exhaust Improvements
1. PAC to furnish and install new 6” exhaust duct including all supplies and connections of the 6” exhaust ducting for the FC-6 drying cabinet and transition the 6” duct into the existing 8” duct.
2. PAC to remove and dispose any unnecessary ducting.

F. Installation Inspection
1. Within [3 days] after the completion of the installation, schedule a factory-authorized PAC service tech on-site for review of the installation, connections and gear guardian programming.
2. PAC to perform start-up of all laundry machinery to ensure proper operation and perform operational, troubleshooting.
G. PAC Training
   1. PAC to provide manufacturer suggested daily/weekly, monthly, and yearly maintenance training as prescribed in the provided operational and maintenance manuals.
      a. DGS will provide pre-determined, on-site staff that will be responsible for future in-house training and equipment oversight to other staff.
   2. PAC to provide (3) manuals in both hard copy and digital.

H. Maintenance Program (estimated time 2 hours each visit)
   1. PAC to provide (2) two-hour planned maintenance visits for the first year of operation.
      a. The first visit will come 6 months after the signed off start-up date by a PAC factory authorized service tech.
      b. The second visit will come during the 12th month after the signed off start-up date by a PAC factory authorized service tech.
      c. Adhere to the service scope found within the attached pm checklists.
      d. Provide continuous training on pm and operation procedures.
   2. PAC to provide a full report of PAC technician’s findings during these visits to the DGS staff on site.

I. MISC Improvements
   1. GC to provide any and all additional work not listed above, but required to have a complete and functioning system in the end.
   2. PAC to remove all new equipment crating and installation debris from site.

J. Vendor Contact Information:

   PAC Industries
   Attn: Scott Benjamin; 410.299.4739
   scott@pacindustries.com

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