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A D D E N D U M N O . 1

PROJECT NAME: VA Reno Design of Blockhouse 12 Generator Sync / Load Sharing	VA PROJECT NO. 654-14-404 PK PROJECT NO.: 14056	DATE: 03/6/15
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This Addendum modifies the Bid Documents for the above work only to the extent indicated under the headings: Specifications, Drawings and Clarifications. All portions of the Bid Documents not specifically modified by this Addendum shall remain in full force and effect. All Addenda shall be added to and form part of the Bid Documents.

Bidders shall acknowledge receipt of this Addendum by inserting the above Addendum number in the space provided in the Bid Form prior to submitting bids.

ADDENDUM CONTENTS

1.0 Specifications

26 05 33: RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

CLARIFY: Revised Section D to include subsection 2, 2a and 2b to define PVC coated metal conduit requirements.

CLARIFY: Revised Section 3.2 to include subsection 11 to define conduit support requirements.

CLARIFY: Revised Section 3.2 to include subsection 12 to define below grade and through slab requirements.

26 23 13 33: GENERATOR PARALLELING CONTROLS

CLARIFY: Revised Section 2.1 to clarify paralleling gear and generator control requirements.

Revised section 2.13, added section B to clarify generator controls requirements.

2.0 Drawings

GENERAL

ITEM G-1: SHEET G002, SEQUENCING PLAN, STAGING AND PERIMETER FENCING

CLARIFY: Clarifications have been made and shown on G002 that adds additional details to temp. power sequencing plan, sections C, D, E and F.

Clarifications have been made and shown on G002 that identifies temporary cabling requirements for demolition of switchboards 'EMS and DP1.

Clarifications have been made and shown on G002 that clarifies PPE requirements for termination of ATS switches at paralleling gear PSG-1

ELECTRICAL

ITEM E-1: SHEET E001, ELECTRICAL & FIRE ALARM LEGENDS, SCHEDULES & DRAWING SCHEDULE

CLARIFY: Clarifications have been made and shown on E001 that adds Temporary Generator Cable Schedule.

ITEM E-2: SHEET E002, SCHEDULES, LOAD CALCULATIONS & ENERGY COMPLIANCE CALCULATIONS

CLARIFY: Clarifications have been made and shown on E002 that revises life safety, critical equipment and tem. power load calculation schedules.

ITEM E-3: SHEET E003, DETAILS

CLARIFY: Clarifications have been made and shown on E003 that adds additional dimensions to detail A/E003.

ITEM E-4: SHEET E004, DETAILS

CLARIFY: Clarifications have been made and shown on E004 that adds detail H/E004 to clarify expansion joint requirements.

ITEM E-5: SHEET ED001, DEMOLITION ONELINE DIAGRAM BUILDING 1D

CLARIFY: Clarifications have been made and shown on ED001 that adds note 3 and associated note references.

Clarifications have been made and shown on ED001 that deletes "(X) generator controls" from EG-8 and adds (X) to the "generators controls".

Clarifications have been made and shown on ED001 that adds sheet note 3 and associated note references to include temporary feeder requirements to

accommodate switchboard removal.

ITEM E-6: SHEET ED003, DEMOLITION ONELINE DIAGRAM BUILDING 12

CLARIFY: Clarifications have been made and shown on ED003 that adds note 7 and associated note references to include temporary feeder requirements to accommodate switchboard removal.

Clarifications have been made and shown on ED003 that adds temporary generator requirements to ATS-ME.

Clarifications have been made and shown on ED003 that adds (E) panel MDH2 to (E) DPEM1 switchboard.

Clarifications have been made and shown on ED003 that adds New Work General Note to clarify linotype.

Clarifications have been made and shown on ED003 that adds sheet notes 8 – 13 to clarify temporary generator installation.

ITEM E-7: SHEET ES003, NEW ONELINE DIAGRAM - BUILDING 12

CLARIFY: Clarifications have been made and shown on ED003 that adds (E) panel MDH2 to (E) DPEM1 switchboard.

ITEM E-8: SHEET ES004, NEW PARTIAL PSG-1 ONELINE DIAGRA – BUILDING 12

CLARIFY: Clarifications have been made and shown ES004 that revises feeder schedules rows 25003 and 25004 feeder quantities.

Clarifications have been made and shown on ES004 that adds general note 2 to include splicing requirements.

Clarifications have been made and shown on ES004 that adds sheet notes 17, 18 and 19 to clarify pump feeder requirements.

Clarifications have been made and shown on ES004 that revises fire pump circuit main C.B. size, feeder sizes, transformer size/details and fire pump horsepower rating.

Clarifications have been made and shown ES004 that adds sheet note callouts 17, 18 and 19 to clarify fire pump feeder requirements.

ITEM E-9: SHEET ES101, ELECTRICAL DEMOLITION PLAN - BASEMENT

CLARIFY: Clarifications have been made and shown on ES101 to revise sheet note 1 to include RGC requirements per NEC code references.

ITEM E-10: SHEET ES112, ELECTRICAL DEMOLITION PLAN FIRST FLOOR – BB12, BLDG 12 AND BLDG 1D

CLARIFY: Clarifications have been made and shown on ES112 that adds note 4 to EMS distribution board.

Clarifications have been made and shown on ES112 that adds (E) PNL MDH2 to location adjacent to (E) DPEM1.

Clarifications have been made and shown on ES112 that revises sheet note 4.

ITEM E-11: SHEET ES113, ELECTRICAL DEMOLITION PLAN SECOND FLOOR – BLDG 12

CLARIFY: Clarifications have been made and shown on ES113 that revise distribution board '(E) DPE' to (X) DPE for demolition.

ITEM E-12: SHEET ES212, ELECTRICAL POWER PLAN BASEMENT – BB12, BLDG 12 AND BLDG 1D

CLARIFY: Clarifications have been made and shown on ES212 that adds (E) panel MDH2 to electrical floor plan.

ITEM E-13: SHEET ES213, ELECTRICAL POWER & SIGNAL PLAN SECOND FLOOR – BLDG 12

CLARIFY: Clarifications have been made and shown on ES213 that adds detail callout to conduit route between building 12 and building 1d to include expansion joint requirements.

3.0 Request for Information Response

- Clarification 1: There seems to be a discrepancy in the height of the busway. Sheet E003, detail 'A' shows it at 16FT coming through the wall. Sheet ES213, note 1 shows it at 10'6". Please confirm which elevation is required.
 - **Response – Elevation is measured to finish floor in the second floor Load Share Room. Refer to attached sketch for clarification.**

- Clarification 2: Will the VA be responsible for temporary power to feed emergency sub-panels during the cut over of existing transfer switches?
 - **Response – It is anticipated that temporary power will not be required. The emergency sub-panels will be energized on normal power during cut over of existing transfer switches. Power outages will comply with direction on sheet G002, Detail A/E002 – Temporary Power Sequence, Section A, 3 for power outage requirements.**
 - **Temporary power requirements have been added for ATS-ME and shall be the responsibility of the contractor.**

- Clarification 3: The phasing schedule is talking about supplying temporary power to the facility during the required outages for integration of the new paralleling switchgear. It was said during the pre-bid job walk that the intent is to use the new 1.5KW generator to supply back-up power for the entire project, thus eliminating the need to rent a temporary generator. Is this correct?
 - **Response**
 - **Detail A/E002 – Temp. Power Sequence Plan is correct. Contractor shall utilize the new generator and paralleling gear to provide emergency power once each of the ATS's is switched over.**
 - **Emergency power will not be available during switch overs. Power outages will comply with direction on sheet G002, Detail A/E002 – Temporary Power Sequence, Section A, 3 for power outage requirements.**

- Clarification 4: The contractors cannot guess at the amount of fuel that may be required to feed the generator during this project. What is the amount of fuel we are to carry in our bids for unexpected outages? Is there a requirement for fueling the new generator?

 - **Response - Generator weight is as follows:**
 - **Diesel Generator = 40,000 lbs.**
 - **Full Day Tank (1800 Gallons) = 13,000 lbs.**
 - **Sound Attenuated Enclosure = 23,000 lbs.**
 - **Total = 76,000 lbs.**
 - **Contractor shall pump, filter and store existing DF-2 fuel in existing day tank and transfer to new generator upon completion of installation of new generator and day tank.**

- Clarification 5: The specifications refer to master labeling for the lightning protection system. The current lightning protection on the building is not sufficient to issue a master label per the specifications. The current master label (if there is one) will be void after any alterations. How are we to proceed with pricing this into our bids?

 - **Response - Upon completion of the installation of the lightning protection system the contractor shall have the installation inspected by a commercial, third-party inspector whose sole work is lightning protection, and shall be certified by this third-party inspector as compliant with NFPA 780.**

- Clarification 6: Is the portable load bank to be supplied with cables for temporary hook-ups. If so, what are the specifications of those cables?

 - **Response - The VA will be responsible for furnishing and installing cable from portable load bank to tap box separate from this project. Contractor shall furnish the cam lock connectors required for cable termination to match quantity and type furnished with load bank and load tap switchgear.**

- Clarification 7: What type of conduit will be required for the feeder to the fire pump?

 - **Response – a 2 hour fire rating for all power and control conduits per, 695.5 and 695.7, shall be installed from PSG-1 to controller. RGC conduit shall be acceptable. Refer to revised sheets for clarification.**

- Clarification 8: The drawings say to relocate existing generator EG-6 to the existing pad at the boiler plant with no electrical or mechanical connections. It also states to relocate the existing remote annunciator. Sheet note 5 on ES215 refers to a remote

annunciator. Are we to install a remote annunciator at that location? If so, where and what are the requirements?

- ***Response - Contractor shall disconnect the remote annunciator, relocate to new location and protect for future connection by others. No electrical or mechanical connections are required.***

- Clarification 9: (Asbestos Survey) – Will the survey only be conducted for Asbestos or will it also need to include testing for led and other materials? Please provide directive.
 - ***Response - Asbestos only, led testing is not required.***
- Clarification 10: Does the general contractor need to include a budget cost for abatement in the bid? Please provide directive.
 - ***Response - No, abatement would be an unforeseen condition and would be the responsibility of the VA.***
- Clarification 11: (Fire Suppression & Fire Alarm Contractor License) – Does this project require the Fire Suppression & Fire Alarm Contractor have a Nevada contractor's license?
 - ***Response - The contractor is required to be legally licensed to work in the State of Nevada. It is the contractor's responsibility to contact the necessary governing body to ensure compliance.***
- Clarification 12: There is no detail drawing of the conduits and expansion joint on the outside of building 12 to get to building 1D. Will the A/E be providing this drawing?
 - ***Response - A detail has been added. Refer to sheet revisions for clarification.***
- Clarification 13: Will the new feeder and control conduits to be installed between the two buildings be matching the existing conduit type, EMT?
 - ***Response - Control conduits will be EMT, unless noted otherwise.***
- Clarification 14: ES101 Note 1 states to comply with NEC 358 (EMT conduit) will this meet the requirements of NEC 695 and NEC 695.6B?
 - ***Response - Response – a 2 hour fire rating for all power and control conduits per, 695.5 and 695.7, shall be installed from PSG-1 to controller. Refer to revised sheets for clarification.***

- Clarification 15: What is the weight of the generator to be relocated? What size is the day tank? How many gallons?
 - **Response - Generator weight is as follows:**
 - **Diesel Generator = 40,000 lbs.**
 - **Full Day Tank (1800 Gallons) = 13,000 lbs.**
 - **Sound Attenuated Enclosure = 23,000 lbs.**
 - **Total = 76,000 lbs.**
 - **Contractor shall pump, filter and store existing DF-2 fuel in existing day tank and transfer to new generator upon completion of installation of new generator and day tank.**

- Clarification 15: Sheet note 5 on ES215 refers to a remote annunciator. Are we to install a remote annunciator at that location? If so, where and what are the requirements?
 - **Response - Response - Contractor shall disconnect the remote annunciator, relocate to new location and protect for future connection by others. No electrical or mechanical connections are required.**

4.0 Pre Bid Meeting Onsite Questions

Question 1: Can the distribution switchboard DPEM1, ATS-ME mechanical distribution system be de-energized during the ATS switchover and for how long.

Answer: The VA has indicated that ATS-ME can be left without emergency power for 8 days.

Question 2: What is the personal protective requirements for terminating the ATS feeders in the energized paralleling gear?

Answer: The paralleling gear secondary termination section is isolated from the primary bus and the adjacent vertical sections with electrically insulated partitions and barriers. Live conductors will be present in each section once secondary ATS feeder conductors are terminated on the secondary circuit breakers termination lugs. Contractor will be required to comply with all PPE requirements for work on and near energized equipment per NFPA 70E and the contractor furnished Arc Flash/Coordination study. Coordinate any power outage requirements with the VA representative per the "Temp. Power Sequence Plan".