STATE OF HAWAII DEPARTMENT OF DEFENSE OFFICE OF THE ADJUTANT GENERAL 3949 DIAMOND HEAD ROAD HONOLULU, HAWAII 96816-4495

ADDENDUM NO. 1

Construction of Parking and Photovoltaic System at B29, Kalaeloa, Oahu, State of Hawaii, Department of Defense, Hawaii Army National Guard, PN15150023, Job No. CA-1512-C1

The items listed hereinafter are hereby made a part of the contract for the above mentioned project and shall govern the work taking precedence over previously issued contract documents governing the items mentioned. Receipt of this addendum is to be acknowledged on page OF-8 of the proposer's packet.

Clarifications:

- 1. The Job No. of the project has been changed from CA-1512-C to CA-1512-C1.
- 2. The documents listed below have been modified from their previous revision as noted. All modifications on the drawings have been clouded with the appropriate revision number indicated in a triangle attached to the cloud.

The following are questions submitted prior to the due date of June 1, 2020.

1. OF-2 – Please clarify "Deductive Bid Item #2A: DBI #2A - Delete 50% of the PV System and Approximately 50% of the Superstructure" as DBI#2 and DBI#3 accounts for 100% of the PV System and Superstructure.

Answer: We anticipate that a Contractor-Designed and Engineered solution for the structural canopy, columns, footings, etc., may be more economical than the A-E Designed solution.

DBI #1 provides for a Contractor-Designed structural solution.

DBI #2 is the deletion of 50% of the PV system and 50% of the structure as designed by the AE.

DBI #2A is the deletion of the same 50% of the PV system and 50% of the Contractor- Designed structure.

DBI #3 deletes the remaining 50% of the PV system and structure.

2. OF-2 – Please reconfirm Note 1 requirement "This project falls under the requirement of the "Buy American Act." "

Answer: The Buy American Act requirement is correct.

- 3. SP-7 Davis-Bacon Act prevailing wage rates apply to all State of Hawaii Construction contracts over \$2,000.00. However, General Conditions 7.7.2 requires us to follow state prevailing wages schedule. Please confirm.

 Answer: Davis-Bacon Act applies.
- 4. S.601 shows 47 columns x 6 rows = 282 solar modules on the canopy, whereas E.401 keyed notes 5 states that there should be 288 solar modules as well as

specification 263100 2.4 A1.

Answer: The Photovoltaic module quantity indicated on drawing S-601 is diagrammatic only. Exact quantity to be 288 as indicated on the Electrical Drawing E.401. However, as the PV system is Contractor-Designed, the 288 modules is not a fixed number. See Attachment 3 and Attachment 9.

- 5. Is there preferred module brand that matched the PV Capacities and Characteristics specified on Section 263100-3 item 2.3 and drawings E.401 keyed notes 5 showing dimension 39.4" x 78.46".? Please name the manufacturer and model # or allow us to find a suitable a suitable module with 350W or higher and the canopy purlins can be adjusted to fit the chosen solar module dimension.

 Answer: The Basis of Design Module was the "SolarWorld, Sunmodule SWA 350 XL Mono". See Attachment 1- Cut Sheet for reference.

 Note: It is possible that this product is not available today. As the PV system is Contractor-Designed, any approved equal product that qualifies under the Buy American Act may be provided.
- 6. Please clarify on Specification 263100-5 Item C, 1 -The specification calls for Inverter Maximum Recommended PV input power is 27Kw while on Drawing E401, Keyed Notes 3 third sentence states that inverter shall be capable of connecting 50.4kw of solar panels. For DBI split, there must be at least 2 or 4 inverters for this 100.8 kW DC System.
 Answer: The Basis of Design Inverter was the Yaskawa Solectria Solar PVI 36TL. See Attachment 2 Cut Sheet for reference.

Note: It is possible that this product is not available today. As the PV system is Contractor-Designed, any approved equal product that qualifies under the Buy American Act may be provided.

- 7. Sheet E-401 Keyed Notes 3, first sentence- Provide 2- 36kw transformer less string inverter. On HECO Qualified Grid Support Interactive Inverters list dated 05/29/2020, there is no manufacturer that has approved inverter with 36kw rated.

 Answer: The Contractor must provide a HECO compliant system. Note: As the PV system is Contractor-Designed, any approved equal product may be provided.
- 8. E.601 There is no PVAC disconnect switch required by utility after the tie in point. *Answer: We are unclear what this statement is trying to indicate:*
 - 1) If you are saying that the (2) 100amp stainless steel disconnect switches shown at the PV Inverters is not required by HECO, then we will say that we want them provided anyway.
 - 2) If you are trying to indicate that the design is missing a HECO required disconnect switch, then we will say that the Contractor is required to provide a HECO compliant PV system and this includes all parts or components, equipment, etc., to make the PV System HECO compliant.
- 9. We were told at the pre-bid meeting that the underground conduit should extend underneath the electrical room and stub-out inside of the switchboard. This contradicts E.102 Keyed Notes 2. "Transition from PVC to rigid galvanized steel before stub-up at face of building, cap (1) conduit at 6" AFF, and extend (1) conduit up face of building to 10'-0" AFF, penetrate wall and extend conduit to existing MSB.

Paint conduit to match exterior finish." Please clarify how the penetration should be made. Is there elevation design drawing for the conduit penetration into the building's electrical room?

Answer: Please refer to revised Drawing E.102, Attachment 8, for conduit pathway requirements.

- 10. On E.102 Duct bank Detail, there is no conduit for data from the inverter to data source and where is the location of the Data Source?

 Answer: Please refer to revised Drawing E.102, Attachment 8, for data conduit requirements.
- 11. **Question**: The 350 W Modules may not be available by the time of construction so we would have to use a higher wattage module that is being produced today.

Here are the Questions - Which option would be most acceptable?

- Option 1 If we use higher watt modules should we keep the system size the same and reduce the module count to stay at 100 KW? Answer: Provide a 100KW system.
- 2. **Option 2** Should we keep the module count the same and increase the system size with the higher wattage modules?

 Answer: The exact module quantity is not critical. Provide a 100KW system.
- 3. **Option 2A** Assuming Option 2 is acceptable is there a maximum system size? *Answer: Answer: n/a. Provide a 100KW system.*

Replacements:

- 1. Specs: No change
- 2. Structural
 - a. S.001
 - i. Revise Risk Category from IV to II under snow loading in the Structural Design Criteria table.
 - ii. Revise Seismic Force-Resisting System type and associated Response Modification Coefficient, R.
 - iii. Revise Special Inspection table and section references.
 - iv. Add notes under the Special Inspection section indicating inspection and testing requirements for structural steel elements part of the seismic force-resisting system.
 - b. S.002
 - i. Add notes under Structural Steel section indicating weld requirements for Seismic Force-Resisting System testing.
 - c. S.301
 - i. Details 1 and 2 Protected Zone has been indicated.
 - ii. Details 1 and 2 Anchor bolts lengthened to embed into spread footing.

- iii. Details 1 and 2 Anchorage revised to include washers at the base of the anchors.
- iv. Detail 3 Embedment depth revised.
- d. S.501
 - i. Detail 1 Protected Zone has been indicated.
- 3. Electrical
 - a. E.102
 - i. Revise Keyed Notes 2 and 3.
 - ii. Detail 2 Added conduit for Data wiring.
 - b. E.401
 - i. Add General Notes 1, 2, and 3.
 - ii. Detail 2 Added conduit for Data wiring.

Attachments:

- 1. Sunmodule SWA 340 350 XL Mono Cut Sheet
- 2. Yaskawa Solectria Solar PVI 23TL/28TL/36TL Cut Sheet
- 3. PV System Builder
- 4. S.001 BASE BID DBI #1 GENERAL STRUCT. NOTES DESIGN CRITERIA
- 5. S.002 BASE BID DBI #1 GENERAL STRUCTURAL NOTES
- 6. S.301 BASE BID FOUNDATION SECTIONS & DETAILS (DBI #1, 2, 2A, 3)
- 7. S.501 BASE BID FRAMING SECTIONS & DETAILS (DBI #1, 2, 2A, 3)
- 8. E.102 BASE BID DBI #2, 3 PHOTOVOLTAIC SYSTEM SITE PLAN
- 9. E.401 BASE BID DBI #2, 3 ENLARGED PLAN

Stephen F. Logan Colonel Acting Adjutant General

Posted: June 4, 2020

PRE-BID CONFERENCE ATTENDANCE LIST

DATE:

May 29, 2020 at 9:30 AM

PROJECT:

Construction of Parking and Photovoltaic System at B29, Kalaeloa, Oahu, State of Hawaii,

Department of Defense, Hawaii Army National Guard, PN15150023, Job No. CA-1512-C1

NAME: Vic Caballes

TITLE: Design & Project Manager

COMPANY: HIARNG - FMO

PHONE: 808-672-1531

CELL:

EMAIL: vicente.b.caballes.nfg@mail.mil

NAME: SFC Corinthia Lum

TITLE: Brigade Transport/Logistic NCO

COMPANY: HIARNG

PHONE:

CELL:

EMAIL:

NAME: Raleo Nawahine
TITLE: OWNEr
COMPANY: Core Group
PHONE:
CELL: 208-867-5891
EMAIL: Raleouthecoregroup

(omban a

NAME: MICHAEL MATINS THE COMPANY: OHE MATINS THE PHONE: 864 9860
CELL:
EMAIL: MMATINS OF DEMAIN COM

NAME: KALAM TITIBONEAUX
TITLE: PM
COMPANY: TKIT CONSTITUCTION LLC
PHONE:
CELL: GOB-446-5856
EMAIL: TKITICITUM P GNATE COM

NAME: Kapowo / Imbolicous TITLE: Bi PM COMPANY: TICH CONSTRUTION LLI PHONE: CELL: BOB-269-8402 EMAIL: +Ki Kapowo amaid-comNAME: Donovan Gaboya

TITLE: Inspector

COMPANY: HIARNG - FMO

PHONE:

CELL:

EMAIL: donovan.c.gaboya.nfg@mail.mil

NAME: Rafe McAtee

TITLE: Project manager

COMPANY: Greenpath Technologies Inc

PHONE: 808 222 8063

CELL: "

EMAIL: rafe@ greenpath - 1ech.com

NAME: Paul Alyado
TITLE: pres
COMPANY: noa Pacific
PHONE: 590 - 8889
CELL:
EMAIL: Noapacific D yahro. Con

NAME: FOBERT DISON

TITLE: G-M

COMPANY: RESOLUTE PERFORMANCE

PHONE: FOT SIB 4600

CELL: 480 184 7860

EMAIL: POISON PRESOLUTERC. WAT

NAME: Greg Mann
TITLE: Managy Manhy
COMPANY: Maxum Construction
PHONE: 803 282-4482
CELL: 803 282-4432
EMAIL: 2 Many & Maxum hangis. Con

NAME: JARRINGTON

TITLE: I.M

COMPANY: Photon works Eng

PHONE: 808-2261098

CELL:

EMAIL: J- ARRING Ton & Photon works - COI

PRE-BID CONFERENCE ATTENDANCE LIST

Construction of Parking and Photovoltaic System at B29, Kalaeloa, Oahu, State of Hawaii,

Department of Defense, Hawaii Army National Guard, PN15150023, Job No. CA-1512-C1

May 29, 2020 at 9:30 AM

DATE:

PROJECT:

NAME: Charles Charles	NAME:
NAME: Charles Charles TITLE: President	TITLE:
COMPANY: Caneous path Trother lucies &	COMPANY:
PHONE: 205-214-15(1)	PHONE:
CELL: Dox-901 - 11 1	CELL:
COMPANY: Green path Technologies Inc PHONE: 805-741-4616 CELL: 805-741-4616 EMAIL: Charlis Quen path-tech-con	EMAIL:
NAME: ELLY PHONELANDRE	NAME:
TITLE: 611	TITLE:
COMPANY: MAUT KUPUNO RUTUBRESING PHONE: YOU 705-6779 369-6000 CELL: GUB 705-6790	COMPANY:
PHONE: 4200 240-1294) 349-1800	PHONE:
CELL: 208 795-C799	CELL:
EMAIL: PRO MANT YUPONO. COM	EMAIL:
NAME: Frame Flosi Te	NAME:
TITLE: De. Bisness Dorensman	TITLE:
COMPANY: ENERGE EXERCIN	COMPANY:
PHONE: CX - 800 - 1221	PHONE:
CELL: 808 - 306-6060	CELL:
EMAIL: FATEGI CENOSIE- ENERGY COM	EMAIL:
111111111111111111111111111111111111111	
·	
NAME:	NAME:
NAME: TITLE:	NAME: TITLE:
TITLE:	TITLE:
TITLE: COMPANY:	TITLE: COMPANY:
TITLE: COMPANY: PHONE:	TITLE: COMPANY: PHONE:
TITLE: COMPANY: PHONE: CELL:	TITLE: COMPANY: PHONE: CELL:
TITLE: COMPANY: PHONE: CELL:	TITLE: COMPANY: PHONE: CELL:
TITLE: COMPANY: PHONE: CELL: EMAIL:	TITLE: COMPANY: PHONE: CELL: EMAIL:
TITLE: COMPANY: PHONE: CELL: EMAIL:	TITLE: COMPANY: PHONE: CELL: EMAIL:
TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE:	TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE:
TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY:	TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY:
TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE:	TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE:
TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL:	TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL:
TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL:	TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL:
TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL:	TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL:
TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL:	TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL:
TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL:	TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL:
TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: COMPANY:	TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: COMPANY: COMPANY: COMPANY: COMPANY: COMPANY: COMPANY: COMPANY: COMPANY:
TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: COMPANY: PHONE: COMPANY: PHONE: TITLE:	TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL: NAME: TITLE: COMPANY: PHONE: CELL: EMAIL: