ADDENDUM No. Three

Project Name: Quarantine Support Facility
Brandywine Zoo

Project No.: WBZ-9

Contract No.: NAT20WBZ100-ZOO

Date of Issue: Wednesday, July 8, 2020

Notice No. 1: Attach this addendum to the Project Manual for this project. It modifies and becomes part of the Bidding Documents. Work or material not specifically mentioned herein is to be as described in the main body of the specification and as shown on the drawings.

Bids Due: Wednesday, July 15, 2020 at 2:00 PM
DNREC, Division of Parks and Recreation
89 Kings Highway, Dover DE 19901

Bid Opening: Wednesday, July 15, 2020 at 2:30 PM
To be conducted online via Webex.com
Meeting Number: 717 928 874
Call-in Number: 202-860-2110
Or by video via 717928874@stateofdelaware.webex.com

Questions and Responses (numbering continued from Addendum Two):

9. Question: Drawing M2.1 shows main HW/HR piping as 2”; however, the flow diagram on M5.3 shows this piping as 2-1/2”. Which pipe sizes are correct?
Response: The sizes shown on M2.1 and M5.1 are both correct. Provide a 2 ½” HS/HR to boiler and pumps as shown on M5.1 with two 2” branch lines (one to AHU and one to VAV terminals) as shown on M2.1.

10. Question: Refer to Sheet C106 Grading Notes - 1. – Can you clarify the intent of the note. If interpreted literally, the contractor will be unable to obtain any easements because they are not the property owner. Please advise.
Response: The intent of the note is to have any required easements in place before construction were to begin and disturbance to occur off of the property. The contractor is to work with the property owner/operator to obtain the required easements and work can’t be performed in this location until it has been received. The note is there as a reminder that the easement will need to be obtained, and that it is required prior to work commencing in the area where the easement is needed.

11. Question: Please provide wall heights for all retaining walls shown on sheet S-102.
Response: See top of wall elevations on architectural sheets A3.1 & AS.1.

12. Question: Please confirm the allowances to be included in the base bid. Section 012100 does not specify. Further section 012100 Allowances is not referenced in the Project Manual Table of Contents.
Response: Refer to Section 00 41 13 Bid Form for Allowances of Dewatering and Rock Removal. Section 01 21 00 Allowances, has been added to the Project Manual Table of Contents.
13. Question: Are CCR inspections necessary? Who is responsible for CCR inspection services for the project?
Response: CCR inspections are required by the City of Wilmington and will be provided by Delaware State Parks.

14. Question: CIP Concrete Spec 033000 call out slabs on deck as normal weight while the structural drawings call out light weight concrete. Please clarify if lightweight concrete is required and provide mix design.
Response: The slab on metal deck is intended to be lightweight concrete, this has been clarified in Section 03 30 00.

15. Question: CIP Concrete Spec 033000 section 3.9 Finishing formed surfaces. Please specify the desired finish to be executed on foundation walls exposed to view is paragraph B or C
Response: Paragraph B: Smooth-Formed Finish is the desired finish to be executed on foundations walls exposed to view. See revisions to Section 03 30 00 listed below.

16. Question: Is it safe to say when the next addendum comes out, the Bid Form will change with the correct Bid Due Date?
Response: The Bid Form has been revised and is included with this Addendum.

17. Question: I see in the specs it mentions walk pads for the roof, however there is not a layout in the drawings. If you can provide the layout?
Response: Walkway pad layout is provided on revised Sheet A1.2. See revisions to Section 07 54 23 for further information.

18. Question: We could not find a preferred manufacturer noted anywhere. Would you accept the use of Distech Controls products on this project?
Response: The allowable temperature control vendors are listed in section 230901 paragraph 2.1. Additionally, allowable vendors are listed for lighting controls and BAS interface are listed in the applicable Division 26 specifications. If Distech Controls wants to be considered for this Project they must submit a substitution request per Section 016000 – Product Requirements.

19. Question: I see the Propane tank is to be supplied and installed by Suburban Propane, Will they also be installing the Underground Gas Line?
Response: Yes, Suburban Propane with handle the install of the underground gas lines to a stub outside the building.

20. Question: Section 263213, 1.11 A. Please clarify number of visits required for generator maintenance during the 12 months. 2 visits or 4 visits?
Response: Per Specification 26 3213 – 1.11 A, include quarterly checks for exercising the generator to ensure proper starting, load transfer, and that the generator runs under load. Also include routine preventative maintenance as recommended by the manufacturer. These visits may be combined (quarterly checks and preventative maintenance). See item AD04-005 for further clarification.

21. Question: Section 263213, 2.3 A. makes mention of a sub-base fuel tank. Please confirm this is a LP generator and not a diesel generator?
Response: Correct, this is an LP Generator. A sub-base fuel tank is not required. Refer to the amended Section 26 32 13 attached to this addendum. See item AD04-005 for further clarification.

22. Question: Section 263213, 2.4, B. specifies to provide restrained spring type isolators for this generator. All Kohler generators are provided with integral vibration isolation from the factory. Appears this generator will be installed on grade level on a concrete pad. Per manufacturer recommendation additional external spring type isolators are not required for install. Please confirm that the integral vibration isolation from the manufacturer is acceptable and these spring isolators can be excluded?
Response: We take no exceptions to the manufacturers' recommendation of not providing the external spring-type isolators since they are integral to the generator set.

23. Question: Section 263600, 2.2, B. 1. Specifies each ATS shall be provided with withstand rating based on short circuit analysis or as indicated on one-line diagram, whichever is larger. Drawing E6.0 does not appear to indicate the required withstand ratings for ATS-1, ATS-2, or ATS-3. Please clarify what rating is required for each ATS as of now?
Response: Please see updated the Riser Diagram included as part of revised Section 26 36 00 that includes the Withstand Close Rating. See item AD04-006 for further clarification.

24. Question: Please clarify required number of poles for each ATS. 4 pole with switched neutral for all ATS?
Response: ATS shall be 4 pole, Specification Section 26 3600 2.2.A & 2.2.C. See item AD04-006 for further clarification.

25. Question: Section 263600, 2.3, N. 2. Specifies each ATS shall be provided with load shedding and peak shaving programming functions available. Section 263213 for the generator and the electrical drawings do not appear to indicate any load shedding is required for the emergency generator system. Please confirm this “load shedding” and “peak-shaving” functions are not required on ATS-1, ATS-2, or ATS-3?
Response: Load shedding and peak-shaving are not required, and these functions have been removed in the revised Section 26 36 00. See item AD04-006 for further clarification.

26. Question: Section 263600, 2.4, A. 3. Specifies contact is required on each ATS for “switch in maintenance bypass position.” It does not appear from the rest of Section 263600 that bypass/isolation type ATS's were specified. Please confirm that this contact for switch in maintenance bypass position and bypass/isolation feature is not required for any of ATS-1, ATS-2, or ATS-3?
Response: The contact for the switch in maintenance bypass position and bypass/isolation feature is not required and this will be removed as part of Section 26 36 00. See item AD04-006 for further clarification.

27. Question: Section 263600, 2.5, B. and C. specifies transfer switches are to open and shed load in reverse priority. Please confirm if this load shedding sequence is required and if it is please confirm only ATS-2 and ATS-3 would be shed since they are non-life safety loads while ATS-1 is indicated as life safety?
Response: Correct, ATS-1 shall remain on as this is life-safety loads.

28. Question: Section 263600, 2.6 B. please confirm all ATS shall be 3-cycle rated per this section or can all ATS be specific breaker rated using upstream coordinated circuit breakers?
Response: Correct, ATS shall be 3-cycle rated.

29. Question: Section 263600, 2.6 B. ATS-1, ATS-2, and ATS-3 are all 100-400 amps sized so please confirm if each ATS is required to meet the 3-cycle, 42,000 amp closing and withstand rating indicated in this spec line?
Response: Correct, ATS shall have 42,000 amp closing and withstand rating.

30. Question: Is there a written book specification section for the 600A generator docking station or is the information found on drawing E5.1, detail #1 all the spec available for this docking station?
Response: There is no book specification for the docking station. Basis of design generator docking station information is indicated on the site plan ES0.1 note 21 and Detail 1 on drawing E5.1 (See addendum #4 for Clarification). The generator docking station may be a functional equivalent meeting the same level of quality or the basis of the design unit listed.

31. Question: Please confirm that the fees associated with the propane tanks and gas service shown on 4/P5.2 and 5/P5.2 noted as “Provided by Propane Supplier” will be paid by the owner.
Response: Yes, fees associated with the propane tanks and gas service will be paid by the Owner.

32. Question: Please confirm that the GC is not responsible for filling the propane tanks.
Response: Yes, the Owner will fill the tanks.

33. Question: There are notes on drawings C-107 and AS.1 to design and provide underpinning as required where the sanitary line passes an existing building. Will the design be provided by the project architect/engineer at no cost to the general contractor? Can a scope of work or an allowance be established for this work, so that everyone is included the same amount of work or dollars in their bid?
Response: Civil and Architectural will not be providing the design, as it will be dependent on field conditions and work.

34. Question: Please confirm that the Delmarva fees for the new utility pole, electric service tie-in, and overhead conductors will be paid by the owner.
Response: Yes, the State will pay fees associated with the new service. Overhead conductor to be provided by Delmarva Power.

35. Question: There is a note on drawing AS.1 for the contractor to obtain a temporary construction easement from DELDOT. Are there fees associated with this temporary easement? If so, will the owner or GC be responsible for payment?
Response: The State of Delaware will pay for any easements fees if they arise.

36. Question: Drawing L201 labels the guardrail between the quarantine building and the mechanical yard as chain link. Drawing AS.1 labels this guardrail as 055213 – Painted steel guardrail. Please clarify if this guardrail is chain link or painted steel.
Response: Please refer to Drawing L201, the guardrail should be chain-link. Drawing AS.1 has been revised to match L201, see item AD04-009 for further clarification.

37. Question: All of the refrigerators and freezers on this project are labeled as owner provided, except for the small undercounter refrigerator shown as accessory item 7 on drawing A7.1. Please confirm that this too will be provided by the owner.
Response: The under-counter refrigerator per the ‘Accessory Schedule – General’ on sheet A7.1 will be owner furnished and contractor installed.

38. Question: Please provide a signage schedule.
Response: Refer to revised Section 10 14 00 – Signage, for signage schedule at the end of the spec.

Response: A cash allowance will not be provided, and this note has been removed from Section 10 14 00. Bidders will have to bid on signage according to the signage schedule provided in Section 10 14 00, see item AD04-004 for further clarification.

40. Question: Please confirm that soil and concrete testing is by the owner.
Response: Yes, soil and concrete testing to be provided by the State.

41. Question: Are CCR reports required? If so, will they be provided by the owner?
Response: Yes and they will be provided by the State.

42. Question: Please confirm that teledata and communications wiring and devices will be provided by the owner.
Response: Yes, the teledata and communications wiring and devices are to be provided by the State.

43. Question: Please confirm that security, cameras, and access controls are not part of this contract.
Response: There are no security, cameras, and access controls included within the scope of the project at this time. The contractor is to install conduits and boxes as shown in the documents for future camera and access control installations.

44. Question: Note 3 on drawing ES0.1 refers to an 800A generator docking station, while site plan 1/ES.01, note 21 on drawing ES.01, and 1/E5.1 all refer to this docking station as 600A. Please clarify.
Response: The Docking Station shall be 600A, refer to amended Sheet ES0.1.

45. Question: Who is responsible for the electrical meter?
Response: The electrical meter is to be provided by others.

46. Question: Drawing 1/A1.2 states to provide tapered insulation while drawing S103 states the joints/beams will be sloped. What should we provide?
Response: Provide tapered insulation as shown on 1/A1.2. The roof joists are not sloped, and the slope arrows are only indicating the slope of the tapered insulation on drawing S103.

47. Question: Spec calls for 080 TPO, but only calls for 20-year warranty. Just wanting to make sure this is the correct TPO required.
Response: Please provide .080 mils TPO per Section 07 54 23, however, please provide specified TPO with a revised 30-year warranty per AD04-003 listed below.

48. Question: What is the insulation requirement? R-30 minimum or 6” minimum?
Response: All roofing insulation should meet the R-30 minimum requirement.

49. Question: Spec calls for the membrane to be gray but then calls for the flashings to be white. How should we proceed?
Response: Flashings should be gray to match the specified membrane color per Section 07 54 23, see AD04-003 for additional clarification.

50. Question: Spec 075423-2.5-A-3 states the material to be .040 aluminum, clear anodized finish. Spec 076200-2.2-A-2 states the material is to be .050 aluminum, prefinished, color from manufacturers standard colors. Which thickness and finish should we provide?
Response: Copings are to be .050 aluminum, prefinished, and the color is to be selected from the manufacturers' standard colors per Section 07 62 00, see AD02-003 for further clarification.

51. Question: What is the approved thin stone that is to be on the building? Previous project was Nova Creek, Black and Modena. The supplier is Ace Stone Supply. Please confirm
Response: Thin stone veneer is to match the Nova Creak, Black, and Modena supplied by Ace Stone Supply used on the Lemur Exhibit project, see AD04-002 for further clarification.

52. Question: Regarding the New Natural Rock Wall, please advise on the following
a. Detail 8/L302 indicates boulders are minimum of 2’-6” but does not provide a schedule or elevation for the walls, so they can be quantified.
   i. Please indicate the number and sizes of boulders or provide an elevation indicating the size and showing the quantity
b. There is no reference to the stone specification. What type of rock are they?
c. Are there any specific shapes? 8/L302 shows diagrammatically an amorphous shape.
Response: Elevations of boulder walls were provided on Sheet L200. Refer to items AD04-007 and AD04-008 for revised Sheets L200 and L302 for quantities, sizes, shapes, and material types for the boulders.

Changes/Revisions to Project Manual/Specifications:

SECTION 00 41 13 – Bid Form
DELETE: For Bids Due
For Bids Due: Thursday, July 9, 2020 @ 9:00 am
ADD: For Bids Due
For Bids Due: Wednesday, July 15, 2020, at 2:00 PM

SECTION 00 0110 – Table of Contents
DELETE: Section in its entirety.
ADD: Reissued Section in its entirety.
REASON: Revised to include Section 01 21 00 – Allowances.

SECTION 03 30 00 – Cast-In-Place Concrete
DELETE: Paragraph 3.9.C as follows:
C. Rubbed Finish: Apply the following to smooth-formed finished as-cast concrete surfaces exposed to public view:
   1. Smooth-Rubbed Finish: Not later than one day after form removal, moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.

SECTION 07 54 23 – Thermoplastic-polyolefin Roofing (TPO)
DELETE: Paragraph 1.6.D.1
D. System Warranty: Provide manufacturer's system warranty agreeing to repair or replace roofing that leaks or is damaged due to wind or other natural causes.
   1. Warranty Term: 20 years.
ADD: Paragraph 1.6.D.1
D. System Warranty: Provide manufacturer's system warranty agreeing to repair or replace roofing that leaks or is damaged due to wind or other natural causes.
   1. Warranty Term: 30 years
DELETE: Paragraph 2.3.E.5
ADD: Paragraph 2.3.E.5
   5. Color: Gray
DELETE: Paragraph 2.3.N as follows:
N. Roof Walkway Pads: Non-reinforced TPO walkway pads, 0.130 inches by 30 inches by 40 feet long with patterned traffic bearing surface.
ADD: Paragraph 2.3.N as follows:
N. Roof Walkway Pads (Keynote: 075423-N): Reinforced TPO walkway pads, 0.156 inches by 30 inches by 50 feet long with patterned traffic bearing surface.
   1. Roll Weight: 74 lb.
   2. Install Dimensions: 30-inch-wide by 10 feet long.
   3. Elongation at Break: 300 percent, minimum, when tested in accordance with ASTM D412.
   4. Tearing Strength: 250 lbf, minimum, when tested in accordance with ASTM D624.
   6. Product:
DELETE: Paragraph 2.5.A.3
A. Parapet Copings: Formed metal coping with galvanized steel anchor/support cleats for capping any parapet wall; watertight, maintenance-free, without exposed fasteners; butt type joints with concealed splice plates; mechanically fastened as indicated; Firestone PTCF.
   3. Material and Finish: 0.040 inches thick formed aluminum, clear anodized finish; matching concealed joint splice plates; factory-installed protective plastic film.
ADD: Paragraph 2.5.A.3
A. Parapet Copings: Formed metal coping with galvanized steel anchor/support cleats for capping any parapet wall; watertight, maintenance-free, without exposed fasteners; butt type joints with concealed splice plates; mechanically fastened as indicated; Firestone PTCF.
   3. Material and Finish: 0.050 inches thick formed aluminum, pre-finished; matching concealed joint splice plates; factory-installed protective plastic film.

SECTION 09 67 00 – Fluid-Applied Flooring
DELETE: Paragraph 1.4.A.3 as follows:
   A. Construct mock-up(s) of fluid-applied flooring to serve as a basis for the evaluation of texture and workmanship.
      1. Number of Mock-Ups to be Prepared: One.
      2. Use the same materials and methods for use in the work.
      3. Location: Restroom #106.
ADD: Paragraph 1.4.A.3 as follows:
   A. Construct mock-up(s) of fluid-applied flooring to serve as a basis for the evaluation of texture and workmanship.
      1. Number of Mock-Ups to be Prepared: One.
      2. Use the same materials and methods for use in the work.
      3. Location: Lab #104 for Type A and Restroom #106 for Type B.
DELETE: Paragraph 2.1.A.1-5 & 10-11 as follows:

A. Fluid-Applied Flooring and Seamless Cove Base Type 1.02: Urethane, two-component, thermosetting, colored with mineral filler, with aggregate broadcast on the undercoat.
1. Base Coat: 1/8-inch-thick; color as selected by Architect from manufacturer's full range.
2. Undercoat: Two-component, high-solids epoxy bonding coat.
3. Aggregate: Small quartz chips, TBD color.
4. Topcoat: Urethane, two-component, thermosetting; 1/16 inch thick; clear.
5. System Thickness: 3/16-inch, nominal, when dry.

ADD: Paragraph 2.1.A.1-6 & 13-14 as follows:
A. Fluid-Applied Flooring and Seamless Cove Base (Keynote: 096700-A): Epoxy, two components, thermosetting; colored with mineral filler, with aggregate embedded in undercoat.
1. Room Applications: 101, 101A-C, 102, 103, 103A-C, 104, 105, & 105A-C.
2. Base Coat: 3/16-inch-thick; color as selected by Architect from manufacturers full range of colors.
3. Undercoat: Two-Component, high-solids epoxy bonding coat.
5. Waterproofing: as recommended by manufacturer.
6. Non-slip Surfacing: Mineral, color as selected.
7. Color: Selected by Architect from manufacturers full range of colors.
8. Product: Stonhard Stonclad GS with Stonseal PA7 or Approved Equal.

ADD: Paragraph 2.1.B as follows:
B. Fluid-Applied Flooring and Seamless Cove Base (Keynote: 096700-B): Urethane, two components, thermosetting, colored with mineral filler, with aggregate broadcast on the undercoat.
2. Primer: Urethane, two components, low viscosity, one coat.
3. Body Coat: 1/8-inch-thick with Primer, four components, 100% solids, one coat.
4. Undercoat: Epoxy, 100% solids, pigmented, one coat.
5. Aggregate: Small vinyl flakes, single color as selected.
6. Topcoat: Aliphatic polyaspartic, two components, UV resistant, clear gloss finish, two coats.
7. Overall System Thickness: 3/16-inch, nominal, when dry.
8. Tensile Strength: 1,750 psi, when tested in accordance with ASTM D638.
9. Compressive Strength: 10,000 psi after 7 days, when tested in accordance with ASTM D695.
10. Water Absorption: 1 percent, when tested in accordance with ASTM D570 for 24 hr.
11. Abrasion Resistance: Maximum weight loss of .01 g/1000 cycles, when tested in accordance with ASTM D4060.
14. Product: Stonhard, Inc.; Stontec TRF; Or Approved Equal.

SECTION 04 43 13 – Stone Masonry Veneer
DELETE: Paragraph 2.2.B

2.2 STONE
A. Surface Texture: Split face.
B. Color: To Match Lemur Lookout Exhibit, based on the existing stone on restroom building next to wildlife theater.

ADD: Paragraph 2.2.B

2.2 STONE
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A. Surface Texture: Split face.
B. Color: To Match Lemur Lookout Exhibit; Nova Creak, Black, and Modena as supplied by Ace Stone Supply or Approved Equal.

SECTION 10 14 00 – Signage
DELETE: Paragraph 1.1.A
1.1 SECTION INCLUDES
   A. Cash allowance for signs.
   B. Room and door signs.
ADD: Paragraph 1.1.A
1.1 SECTION INCLUDES
   A. Room and door signs.
   B. Emergency evacuation maps
DELETE: Paragraph 2.2.D
   D. Stenciling at rated construction required to have protected openings or penetrations. (IFC 703.7)
      1. Message Text: FIRE AND/OR SMOKE BARRIER—PROTECT ALL OPENINGS
ADD: Paragraph 3.3
3.3 SIGNAGE SCHEDULES

SECTION 26 32 13 – Generators
DELETE: Section in its entirety.
ADD: Section in its entirety.

SECTION 26 36 00 – Transfer Switches
DELETE: Section in its entirety.
ADD: Section in its entirety.

Changes/Revisions to Drawings:
DELETE Sheet CS.1, Abbreviations, Keynotes, & Symbols.
ADD Reissued Sheet CS.1, Abbreviations, Keynotes, & Symbols.

DELETE Sheet A1.1, First Floor Plans & Finish Schedule.
ADD Reissued Sheet A1.1, First Floor Plans & Finish Schedule.

DELETE Sheet A1.2, Second Floor & Roof Plans.

DELETE Sheet E5.1, Electrical Details, and Diagrams.
ADD Reissued Sheet E5.1, Electrical Details, and Diagrams.

DELETE Sheet L200, Site Layout Plan.
ADD Reissued Sheet L200, Site Layout Plan.

DELETE Sheet L302, Planting Notes & Details.
ADD Reissued Sheet L302, Planting Notes & Details.

DELETE Sheet AS.1, Architectural Site Plan.
ADD Reissued Sheet AS.1, Architectural Site Plan.

DELETE Sheet A3.1, Exterior Elevations.
ADD Reissued Sheet A3.1, Exterior Elevations.
DELETE Sheet E0.1, Symbols, and Abbreviations.
ADD Reissued Sheet E0.1, Symbols, and Abbreviations.

DELETE Sheet ES0.1, MEP Site Plan.
ADD Reissued Sheet ES.01, MEP Site Plan.

DELETE Sheet ES02, MEP Site Plan.
ADD Reissued Sheet ES.02, MEP Site Plan.

DELETE Sheet E1.3, First and Second Floor Plans - Power.
ADD Reissued Sheet E1.3, First and Second Floor Plans – Power.

DELETE Sheet E6.0, Electrical Schedules, and Risers.
ADD Reissued Sheet E6.0, Electrical Schedules, and Risers

Addendum Attachments:

- **Project Manual**
  - Section 00 01 10 – Table of Contents
  - Section 00 41 13 – Bid Form
  - Section 26 32 13 – Generators
  - Section 26 36 00 – Transformer Switches
  - Section 10 14 00 – Signage

- **Drawing Set**
  - L200 – Site Layout Plan
  - L302 – Planting Notes & Details.
  - AS.1 – Architectural Site Plan
  - Sheet A1.1 – First Floor Plans & Finish Schedule
  - Sheet A1.2 – Second Floor & Roof Plans
  - A3.1 – Exterior Elevations
  - Sheet CS.1 – Abbreviations, Keynotes, & Symbols
  - E0.1 – Symbols and Abbreviations
  - ES.01 – MEP Site Plan
  - ES.02 – MEP Site Plan
  - E1.2 – First and Second Floor Plans – Power
  - Sheet E5.1 – Electrical Details and Diagrams
  - E6.0 – Electrical Schedules and Risers

- **Contractor Staging/Storage Area**

Attachments
End Addendum Three