



State of Delaware  
Department of Natural Resources and Environmental Control  
**Delaware Division of Parks and Recreation**  
89 Kings Highway  
Dover, Delaware 19901

**ADDENDUM No. TWO**

Project Name: Lemur Lookout Exhibit  
Brandywine Zoo

Project No.: WBZ-7

Contract No.: 2019-WBZ-100

Date of Issue: Saturday 5, 2019

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: Thursday, October 10, 2019 at 1:00 PM  
Auditorium  
DNREC, Division of Parks and Recreation  
89 Kings Highway, Dover DE 19901

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Project Manual:

- 1 Refer to 00 41 12, Table of Contents: The Table of Contents has been revised to remove reference to Section 01 56 38 Temporary Tree and Plant Protection (DNREC) and is included with this Addendum.
- 2 Refer to 00 22 00 Unit Prices. This section is revised and included with this addendum.
- 3 Refer to 00 41 12, Bid Form: The Bid Form has been revised include an allowance for rock removal, to separate Paving and Hardscape subcontracts and to add a unit price for rock removal. The revised Bid Form is included with this Addendum.
- 4 Refer to 00 73 46 Delaware Department of Labor Prevailing Wage Rate: The Davis Bacon Wage rate was inadvertently omitted from the Project Manual and is included as part of this Addendum. The highest wage of each rate is to be selected.
- 5 Refer to 01 10 00 Summary: Paragraph 1.7A, Schedule has been modified. The revised Section is included with this Addendum.
- 6 Delete Section 01 35 91.
- 7 New Section 0 37 13, Shotcrete is included with this Addendum.

- 8 Refer to 01 22 00, Unit Prices: This Section has been revised to include Unit Price 14 and Unit Price 15.
- 9 Delete Section 01 56 38 Temporary Tree and Plant Protection (DNREC).
- 10 Section 07 54 19 PVC Thermoplastic Single Ply Roofing is revised and included with this Addendum.
- 11 Refer to Section 09 67 00 Fluid-Applied Flooring, Paragraph 1.8 Warranty has been added. The revised section is included with this Addendum.
- 12 Refer to Section 09 67 00 Fluid-Applied Flooring, Paragraph 2.1-A-9:
  - A. Bio-Flake is NOT accepted as an equal substitute for the basis of design. The specification calls for a maximum material loss of 30 mg (.03g) per 1,000 cycles of the abrasion resistance test (ASTM D4060). This product reports 70-90 mg loss.
  - B. Jetrock is NOT accepted as an equal substitute for the basis of design. Jet-Rock has an impact resistance of 60 in./lb. and the specification calls for a minimum impact resistance of 160 in./lb. We could not find a test result for the abrasion resistance test ASTM D4060, which is required per the specification.
- 13 Refer to Section 09 96 00 High-Performance Coatings, Paragraph 2.4-A-1: Incomplete information was provided to compare Saniglaze to the basis of design and is NOT approved as an equal.
- 14 Section 10 14 00 Signage has been revised and is included with this Addendum.

Drawings:

- 1 Delete Sheet G-02. Add Reissued Sheet G-02.
- 2 Delete Sheet C-107. Add Reissued Sheet C-107.
- 3 Delete Sheet ST203. Add Reissued Sheet ST203.
- 4 Delete Sheet AC.1. Add Reissued Sheet AC.1.
- 5 Delete Sheet A1.1. Add Reissued Sheet A1.1.
- 6 Delete Sheet A1.2. Add Reissued Sheet A1.2.
- 7 Delete Sheet A3.1. Add Reissued Sheet A3.1.
- 8 Delete Sheet A6.1. Add Reissued Sheet A6.1.
- 9 Refer to Drawing A8.1, Door Schedule: Delete requirement of Door 101A to be 20-minute fire rated. The door shall not be fire rated.
- 10 Delete Sheet S1.1. Add Reissued Sheet S1.1.
- 11 Delete Sheet E0.2. Add Reissued Sheet E0.2.
- 12 Delete Sheet E0.3. Add Reissued Sheet E0.3.

- 13 Delete Sheet E2.1. Add Reissued Sheet E2.1.

Questions and Responses:

- 1 Question: Is there an artificial rockwork specification for this work? I am not seeing one in the project manual.  
Response: The specification section is 22 52 00, Artificial Rockwork Fabrications and it is in the project manual.
- 2 Question: What is the thickness for the T&G roof decking? Its thickness will determine the type and length of standing seam fasteners that are required.  
Response: Refer to Sheet S1.5, Floor/Roof Construction Schedule at lower right of sheet for wood plank sizes. There is additional wood deck information on Sheet S0.3, Timber, Notes T8, T8.1, T8.2 and T8.3
- 3 Question: Section 22 52 00 2.1 A & B Reference Division 03 Section Shotcrete for Reinforcing and Concrete Materials. Are these sections available?  
Response: Section 03 37 13 Shotcrete will be issued.
- 4 Question: On drawing sheet A8.1 calls out GL-1 glazing to be 1" Clear Tempered Insulated Glass. The "GG" Door Elevation shows the glass to be GL-1 glazing. When you look at the Door Schedule door #101A, the schedule calls out the glazing to be GL-1, but with a 20 minute fire rating. Can you have the architect clarify the glazing for this door.  
Response: The 20-minute rating is not required at the door nor for the windows. GL-1 should be provided as specified for safety of animals and human occupants.
- 5 Question: There is a spec section referenced in the window frame details on Dwg 8.1 (085113-Receptor Frame) that isn't in the Project Manual. Do you have that available or is it meant to be a different spec referenced?  
Response: This detail shall reference spec section 08 54 13.
- 6 Question: The schedule of alternates in spec section 012300 is blank. Please reissue.  
Response: We will revise and reissue.
- 7 Question: Please confirm that testing (soil, concrete, etc.) is by the owner.  
Response: Testing of soil and concrete shall be by Owner.
- 8 Question: Please confirm that spec section 013591 - Historical Protection does not apply to this project.  
Response: This section is not required.
- 9 Question: Please confirm that project record transparencies and CAD file updates are not the responsibility of the contractor.  
Response: Record transparencies and CAD file updates are not required. The General Contractor shall submit record documents in PDF format and three paper copies.
- 10 Question: Is the new wood framing required to be fire treated?  
Response: Please refer to sheet G-03 for the fire resistive ratings required.
- 11 Question: Regarding spec section 101400 – Signage, please provide a schedule of the signage required.  
Response: We will revise and reissue the spec.

- 12 Question: The table of contents lists section 231314 – Underground Liquefied-Petroleum Gas Tank, but it is not included in the specifications. Please provide. Also, please confirm that this tank is part of this contract.  
Response: The tank will be provided by the propane vendor. The section will be removed from the table of contents.
- 13 Question: Please provide spec sections for: a. Stainless steel casework and b. Open wire utility shelving  
Response:
- 14 Question: Are CCR inspections required? If so, will they be paid for by the owner or the contractor?  
Response: Yes, they are to occur weekly. This will be an owner-provided service.
- 15 Question: There are conflicting sections regarding the steel railings at the walkway near the existing amphitheater. 4/ST703 shows core-drilled, while 4/S5.2 shows side mounted. Please clarify.  
Response: Provide detail per 4/ST703.
- 16 Question: Caging on detail 3/CG1.1 is called out as aluminum tubing frames, but specification section 05 59 64 calls out all caging as galvanized finish which finish is to be provided?  
Response: The caging system is to be aluminum
- 17 Question: Exhibit mesh support and guy cables on detail 6/ST701 are called out as galvanized with swage fittings and turnbuckles, but structural drawings S5.2 and S5.11 call out stainless steel cables with thimbles and wire rope clips. Which finish and termination detail is to be provided?  
Response: Provide detail per 6/ST701.
- 18 Question: Specification Section 05 59 68, 1.2, B mentions design and engineering. The structural drawings clearly identify all columns, base plates, anchors, concrete foundations, and cable sizes. The site drawings call out the mesh as 2"x2"x3/32". What design and/or engineering is required?  
Response: Required engineering for caging may include erection, fasteners, and fittings.
- 19 Question: The following specifications sections appear to be missing from the Project Manual: Section 01 78 23 Maintenance Data and 23 13 14 Underground Liquefied-Petroleum Gas Tank. If these are to be part of the Project, please provide these specifications.  
Response: Section 01 78 23 is provided in the project manual. 23 13 14 is not required at the propane supplier will provide the tank, we will revise and reissue the TOC.
- 20 Question: The following specifications sections appear to have been mislabeled: Specification Section 08 89 00 Louvers (as shown in TOC) versus 08 91 00 Louvers (as shown in Section in Project Manual) and Specification Section 32 12 16 Hot-Mix Asphalt Paving (as shown in TOC) versus 32 16 12 Hot-Mix Asphalt Paving (as shown in Section in Project Manual). Please clarify.  
Response: We will revise and reissue TOC.
- 21 Question: Addendum 1 and the Bid Form both indicate that here are two alternates on this project. Specification Section 01 23 00 Alternates, Part 3, 3.1 states that there are no alternates. Please clarify.  
Response:
- 22 Question: The following specifications are listed on the architectural drawings, but are not provided in the Project Manual: a. 044313 - Stone Veneer, first appears on Sheet AC.1 ; b. 105213 - Open Wire Utility Shelving, first appears on Sheet A1.1; 123100 - Stainless Steel Casework, first appears on Sheet A1.1; d. 092423 - 3 Coats Portland Cement Plaster System, first appears on Sheet A3.1 and e.

085113 - Receptor Frame, first appears on Sheet A8.1.

Please provide these specifications if these items are required on this project.

Response: 044313 - Stone Veneer is in the project manual. 105213 - Open Wire Utility Shelving will be revised to 10 57 23. 092423 - 3 Coats Portland Cement Plaster System will be revised to 09 24 00. 085113 - Receptor Frame will be revised to 08 54 13.

- 23 Question: Specification Section 113034 - Overhead Fan is listed on Sheet A2.1, but is not provided in the Project Manual. There is also a note stating "refer to electrical for more information". There is no information in the electrical specifications concerning this item. The only information on the electrical drawings concerning these fans is the power connections. Please provide specifications for this item if it is required on this project.  
Response: Refer to drawing sheets for basis of design fan.
- 24 Question: There is a note on Sheet S1.1 stating 6" bollards (Add/Alternate) (See Typical Detail). Are these bollards part of the base bid or are they another alternate on the project?  
Response: Bollards to be included in the base bid. Sheet S1.1 will be revised and reissued.
- 25 Question: Provide unit measures (i.e., square yard, cubic yard, ton, etc.) for Unit Prices Nos. 12 and 13.  
Response: Cubic yard; section will be revised and reissued.
- 26 Question: Will the PVC roofing system require an Overburden warranty? There did not appear to be anything in the specifications regarding this?  
Response: Overburden warranty is required.
- 27 Question: Can the fasteners for the metal panel clips penetrate through the T&G deck? These fasteners are typically 1" long which the T&G deck is also 1". Please advise.  
Response: Deck is nominal 3" thick, refer to drawing sheet S1.5.
- 28 Question: Will more specific details/elevations for MH 3 be given prior to bid?  
Response: MH 3 is a buried structure, which cannot be opened. The structure will need to be investigated during construction, and the proposed structure will need to match the existing. The pipe inverts in and out should match as well.
- 29 Question: What does the following symbol represent ? There are four of them indicated on the drawings. They can be seen most clearly on C-108; one is immediately below the bottom right corner of the restrooms and another off to the top right past the stairs? Also where is this feature detailed?  
Response: These are the locations of the dead man anchors. These have been referenced from the structural drawings, and are shown for reference purposes only, to coordinate utility placement.
- 30 Question: Sanitary clarification referencing C-107: The note for "22' of 4" sdr 26" arrow directly above the water main connection note along the right does not seem to point to anything.  
Response: This referenced a pipe that moved. The note will be removed on the revised plans.
- 31 Question: Sanitary clarification referencing C-107: As above but for the "match existing..." note directly above the previous note.  
Response: This referenced a pipe that moved. The note will be removed on the revised plans.
- 32 Question: Sanitary clarification referencing C-107: There is a cleanout indication inside the proposed lemur enclosure that doesn't seem to be attached to anything.  
Response: This referenced a pipe that moved. The note will be removed on the revised plans.

- 33 Question: Sanitary clarification referencing C-107: Can the note to connect the pool drain to existing sanitary pipe be explained further? There does not appear to be a description or detail for pipe material or inverts in the drawings.  
Response: The lines are shown for reference purposes. The pipe material and layout are shown on drawing ST402. The connection to the existing sanitary will occur based on the elevations of the pipe from the drain pad as needed.
- 34 Question: Sanitary clarification referencing C-107: Where the pool drain is shown connecting, there appears to be a concrete pad above it. What is the intent here?  
Response: The concrete pad is for the pump and pump filter equipment. The pad is shown for reference. Refer to sheet ST402, showing the pad.
- 35 Question: The civils seem to show a 4" DIP line entering the proposed building. Is this correct?  
Response: Will need clarification from the MEP engineer on size of domestic water. The existing feed on site is 4". The loop needs to be relocated due to site construction. The feed going into the building is shown on our drawings, but we did not indicate a size for the feed. The water line sizing teeing off from the 4" water line should be the size required by the MEP engineer.
- 36 Question: Water/storm clarifications referencing C-106/107: The plumbing drawings show foundation drains. How do they connect to the greater storm system?  
Response: The underdrain connects to C.B. #4. It is shown as narrow dashed line around the foundation and connects into the catch basin.
- 37 Question: Water/storm clarifications referencing C-106/107: The plumbing drawings show two water lines exiting the proposed building. The civils only show one and they also seem to differ in fittings. Please clarify.  
Response: The water lines exiting were shown for reference purposes only. The water lines should be coordinated with the plumbing drawings and sheet ST402. Sheet ST402 shows the feed locations for the animal drinker and the water level control.
- 38 Question:  
The following specifications section appears to be missing from the Project Manual: Section 01 78 23 Maintenance Data. If these are to be part of the Project, please provide these specifications.  
Response: Section 01 78 23 is provided in the project manual. 23 13 14 is not required at the propane supplier will provide the tank, we will revise and reissue the TOC.

Attachments  
End Addendum Two

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