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OFFICE OF DESIGN & CONSTRUCTION SERVICES and PHYSICAL FACILITIES

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SENT VIA: ☐ FAX ON THIS DATE
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HOLDERS OF PLANS AND SPECIFICATIONS:

22 Parking Structure Photovoltaic Project, Bldg. 254
Project No. FM120188L/986610
Addendum No. 4

July 25, 2012

Enclosed is **ADDENDUM NO. 4** to the Construction Documents on the above-captioned project.

Bid Date: Tuesday, July 31, 2012 at 3:30PM to be held at:

CONTRACTING SERVICES
Facilities Management, Bldg. 439
Door #E, Reception Counter
University of California, Santa Barbara
Santa Barbara, CA 93106-1030

Late arrivals shall be disqualified. Please allow time for unforeseen traffic delays, securing a parking permit and potential parking problems.

Greg Moore
Associate Director, Contracting Services

ADDENDUM NO. 4

to the

CONSTRUCTION DOCUMENTS

July 25, 2012

The following changes, additions or deletions shall be made to the following document(s) as indicated; all other conditions shall remain the same.

I. DRAWINGS

Item No.

1.1 Sheet A1.0 Keyed Notes: **Replace Key Note #2 in it's entirety with :** "2. Remove Elevator Cover Trellis System. Trellis system is not a part of the roof of the elevator tower. Install new metal flashing over pedestal after column is removed. Existing lighting circuits to be modified, see Sheet E1.3. Surfaces affected by the removal of the elevator cover trellis system to be patched and repaired and restored to match existing, adjacent surfaces of like materials and finishes.

Item No.

1.2 Sheet E4.2, Detail #8, **Replace the following note: " 4" stainless steel, conc. filled bollard" in its entirety with the following:**
4" diameter x 1/8" minimum wall thickness, steel bollard, galvanized, concrete filled with rounded top. Prepare bollard for painted finish, and paint with heavy duty steel paint, bright yellow to match existing bollards in parking structure.

II. SPECIFICATIONS

Item No.

2.1 TABLE OF CONTENTS, under Division 16, Electrical, **DELETE** in its entirety:
"Section – 16080 – Electrical Testing".

Item No.

2.2 Section 13650 Photovoltaic System, Paragraph 1.06.B, **ADD** the following sentence to the end:
"Warranties shall comply with all requirements of the Southern California Edison Solar Rebate Programs."

Item No.

2.3 Section 13650 Photovoltaic System, Paragraph 1.06.C & D: **Delete** both articles in their entirety.

III. GENERAL

Item No.

3.1 Refer to Attachment A for list of submitted Requests for Information (RFI's) and related responses.

END OF ADDENDUM NO. 4

Attachment A

Clarification Memorandum, Set No. 1
22 Parking Structure Photovoltaic Project, Bldg 254/FM120188L

The following questions and associated responses were either submitted to the University by potential bidders or are being offered by University staff to clarify the Bidding Documents. The University responses included in this Clarification Memorandum do not purport to contain all relevant information, and interested parties should conduct their own investigation and analysis regarding the accuracy, reliability and completeness of the information contained therein.

1. Can the structural steel design for the arrays be modified to optimize fabrication and erection and to improve the economics and savings to the University?

   Substitutions can only be considered after award of the contract. Refer to Specification Section 01640.

2. What is the classification and labor rate for the solar panel installer (the person setting the panels on the racking, not the person hooking up the electrical to each panel)? Per the labor code, when a classification is not clear the awarding body as to make the determination.

   Inside wireman per Determination STB-2012-1

3. What is the cutout/hole detail at the top of the column cap and beam (12/S3.1) for the wire from the base of the column? The top and bottom of the column need to have a hand hole to access/pull the wires. Please clarify.

   The contractor shall submit wiring hole size and locations on shop drawings

4. Can the field weld shown on detail 12/S3.1 be completed as a shop weld?

   Yes all noted field welds may be done in the shop. Flag denotes permission to perform in the field if desired.

5. What is the purpose of the hole offset from the center at the bottom base plate on detail 31/S2.1?

   This is for existing conduits located in the concrete columns that stub up in the storage room.

6. Is the parking lot next to the parking structure available for staging?

   Yes, the parking lot immediately north of the parking structure can be used for staging, but it cannot be used continuously during the course of the project. It can be closed occasionally to stage and lift materials onto the roof.

7. What is the maximum weight (lift or machine) allowed on the top floor of the parking structure? We plan on placing a reach lift on top of the structure which weighs 20,000 lbs. Is this ok?

   "Wide variation of forklift models and erection techniques makes absolute guidelines difficult to provide without being overly restrictive. All proposed equipment specifications and pick loading should be submitted to the University Representative for review. However, some general guidelines include:
   Pneumatic tires.
   Forklifts proposed should have longest wheel base, front axle to rear axle, and widest wheel track, left tire to right tire, as possible.
   Heavier forklifts, ±9500# equipment weight, with picks of ±4500#, if their use is approved, would be restricted to min. 30' spacing if more than one is in use.
   Lighter forklifts and/or smaller picks might permit closer spacing.
   Use of outriggers is encouraged to reduce point loading under front tires.
   Optional back-shoring of roof deck may be necessary based on equipment or work sequence proposed. Such closure of available parking will require coordination and approval of the University Representative.

   This deck is designed to meet CBC 2001 loading criteria, live load 30#/sf to the beams and 50#/sf to the slabs. Stockpiles should be staged as widely distributed as possible. Locate as close to columns as possible and above beams.

   Requests to use equipment or stockpiles on the roof (or other) decks shall include the following minimum submittals to the University Representative:

   Detailed dimensions of equipment and maximum imposed load capabilities.

   Specific locations and maximum dimensions of stockpiles and proposed method of building and distributing materials from same.

   For conditions not accepted by the University Representative in writing, the contractor will provide shoring designed by his Professional Engineer consultant."

8. Array #2 shows 7. Arrays #1, 3, 4, shows 6 on S3.0 On sheet E-4.1 the elevation shows 7 purlins for all the tilted arrays. How many 7X3 tube steel purlins are at the tilted arrays?

   Detail 7 of E4.1 is representative of array #2. The extra purlin at array #2 is due to the additional row of modules. Array #2 has (7) 7X3 purlins, arrays #1, 3, 4 have (6) 7X3 purlins.

9. Section 13650, Part 2.02 states that PV modules shall be currently listed in CSI's Eligible Equipment list. Because the Sanyo/Panasonic modules described in 2.02, B are not currently listed here, can another module be substituted? 2.02, A.9 states the requirement for 17% module efficiency. Since this is not common to solar modules currently readily available in the PV market, we would like to know if an exception can be made to this requirement?

   No, Bid per plans and specs.

10. The concrete pillars to the East and West edges of the parking garage appear to be integrated into a substantial side wall (those to the North and South are largely free standing). Are these part of the post-tensioning system in the slab and if the alternate installation is undertaken, will there be special provision for drilling here during the installation?

    East & West wall columns & parapet are not part of the post tensioned system.

11. Does a provision need to be made for rebar scans here and/or in the other pillars?

    Per S2.0, structure verification notes, contractor shall employ "non destructive" method.

12. On the upper North side of the garage there is a substantial trellis made mainly from aluminum. Will any of that need to be removed? While we should be able to install with it in place, we noted that much of the other trellis area was to be removed.

    Aluminum screen system on exterior walls shall not be removed. Retrofit per S2.1/3

13. Section 01010-2, Part 1.02 discusses site access, but is very vague about what access may be granted outside of the designated area. At the same time, this can considerably impact the pricing of the bid. What kind of temporary access from the ground outside of the designated area can be expected to be granted during construction? In particular, we are interested in the parking lot to the south of the garage as a temporary (perhaps a week or two total) staging area for lifting components to the roof, and the grassy and bike path area to the north of the garage (perhaps another week total). If the alternate is selected, area to the East and West may need to be temporarily used.

    The parking lot on the north side of the parking structure may be used for staging and lifting material and equipment onto the roof deck. No other areas can be used. Refer to previous Question #8.

14. Section 05210, Part 2.02 J calls for galvanizing of all structural steel assemblies that are exposed to the elements. Section 09660 calls for the painting of the steel support structure. Which is correct?

    Structural steel shall be galvanized, then painted to match aluminum screen system per 09960 2.01F.

15. Does section 05120, Part 2.01B (use of domestic steel) violate US commitments under the WTO, especially if steel cannot be used from the other 38 signatories to the Agreement on Government Procurement (these include steel producers Japan, Korea and Taiwan)? Is there any price threshold (i.e. 25% more expensive) beyond which exceptions will be made?

    Bid per plans and specifications.

16. What are the water line sizes?

    3/4" Lines to each hose bib fed from 2" main line into the building at SW corner of the parking structure.

17. What is the routing of the piping system?

    Contractor to submit routing drawings as part of the Submittal process per Section 01340.

18. Is the piping going through the support beams and columns or around?

    Refer to Note #9 on Sheet T1.0

19. How many total hose bibs are required?

    Refer to Key Note #3 on Sheet A1.0

20. What is the size of the pipe at the point of connection?

    Per Key Note #3 on Sheet A1.0, field verify.

21. There are different hose bibs in the Woodford Series 24, surface mounted or recessed box. Please specify which is preferred.

    To be selected when hose bib submittal is submitted after award of the contract.

22. Is pipe insulation required?

    Insulate if required by code.

23. Per sheet E5.0 key legend notes: is the covered driveway and walkway protection required for only the first level or does the protection required to be installed the full height of the parking structure?

    Covered walkways only occur at the level where walkways occur.

24. "Temporary full height fencing with privacy screening", where will this be installed? It is shown on first level, is it required at all levels?

    Fencing is required at all locations where noted on sheet E.5.0.

25. Is the fire alarm system currently being monitored?

    Fire alarm system is monitored by UCSB Campus Police Department.

26. Please provide the contact information for the fire alarm company who holds the monitoring contract for this system.

    System is monitored by Campus Police & Life Safety Services. Contact Tom Boren at 805-451-8993.

27. Do you have information regarding the water pressure on the 5th floor? (Due to the hose bibs required for cleaning the modules, there may be a fire pump required to get enough water pressure up to that floor).

    Existing pressure is +/- 90 lbs, field verify

28. Will the structural plans for the parking structure be provided?

    Upon award of the contract.

29. Does this project have to meet the California Division of State Architects (DSA) requirements?

No, but it must meet all applicable codes, ordnances and requirements governing this project and UCSB requirements.

30. The mandatory pre-bid sign in sheet lists Stellar Energy Inc. as an attendee when in fact they were turned away at the door due to their late arrival. Please confirm that Stellar Energy Inc. will not be eligible to participate in this bid in light of having missed the mandatory meeting.

    Only those interested bidders who arrived before the designated time were permitted to sign-in and be considered a bidder for the project.

31. In the event that deck penetrations are unavoidable, can such penetrations be made if we utilize a concrete X-ray/GPR company to locate reinforcing and tendons?

    Refer to Notes #9 on Sheet T1.o and #13 on Sheet S2.0.

32. Many of the products specified do not represent the best value to the University in terms of balancing cost, efficiency and performance; can contractor base their bid on a design-build system that will meet or exceed the University's annual production at a net savings to the University?

    Bid per plans and specifications.

33. Can a General Engineering A license act as the prime with a C-10 sub?

    Refer to Advertisement in the specifications.

34. Is there a minimum requirement for percentage of project completed by the prime?

    Refer to the California State Department of Consumer Affairs / Contractor's State License Board website.

35. Is a disconnect with a view window, allowing for visual inspection of the blades, required ahead of the tie in circuit breaker at main distribution "PS"? If so, please show location of disconnect and advise if it is acceptable to utilize "PS" as a wire way.

    Furnish and install an 800 amp LB disconnect with a view window. The disconnect is to be located on the north exterior wall of the Storage Room on the lower level of the building. It is to sit behind the inverter with a minimum of 42" clear between the front of the disconnect and the back face of the inverter. Provide a housekeeping pad for the disconnect per detail 4/E4.0 with 12" clear on the front and sides of the disconnect. Building a continuous pad for both the disconnect, transformer and disconnect is acceptable. Feed from the inverter through the disconnect and into the storage room to tie into the conduits going to the electrical room. Submit shop drawings for the installation for approval.

36. Section 13650 Photovoltaic System (2.02)A9 requires a photovoltaic module efficiency of 17% or higher. Solar world is requesting that this specification be modified to allow for a module efficiency of 15% or higher, while still meeting all other requirements of (2.02)A. It is SolarWorld's position that substantial savings in excess of $200,000 can be achieved for the University and it's students on this project if this specification is modified.

    Bid the project per plans and specifications

37. Will the University accept a module manufacturer with an efficiency of 15% or higher which meets all other requirements of section 2.02(A)?

    Bid the project per plans and specifications

38. Addendum #1 sheet AD01 shows a 75KVA transformer by others. There is no sub panel shown. Please confirm that a sub panel is not required.

    Sub panel is not required

39. Sheet E1.3, under symbols list, shows fixtures on circuits 16 and 21 to be provided with custom bi-level ballasts. Are all other fixtures to be supplied with standard ballasts?

    All fixtures are bi-level. Circuits 16 and 21 are referenced as symbol examples. Two fixture types will be installed:

    1. Total (8) EOF-ED-BL, 70W – This is a stock Bi-Level

    2. Total (40) EHB-ED, 150W – This will have to be custom ordered from the manufacturer with a bi-level ballast.

40. Sheet E4.1, detail 7, note 4 indicates the exit signs will require power. There is no power shown to these signs. Please provide the power source, conduit size, wire size, etc. for these exit signs.

    Contractor will utilize existing circuit conductors from old exit signs at the same locations.

41. Are the 3" PV output and communication conduits shown on sheets E1.0, E1.1, E2.0, E2.1 associated with arrays #5 and #6 part of the base bid or the alternate? Please advise.

    Power and communication conduits and wire/cable associated with arrays #5 and #6 are part of the bid alternate.

42. Sheet E1.0 shows nine combiner boxes at arrays #2 and #3. However, sheet E1.1 at storage room shows only eight 1.5" conduits from arrays #2 and #3. Please clarify.

    Sheet E1.1 should list (9) 1.5" conduits from arrays #2 and #3.

43. Is the demolition of the stairway trellis and the elevator cover in the base bid or alternate #1?

    Demolition of stairway trellis and elevator covers are in base bid.

44. Is the steel structure for array #5 and #5 on the East and West walls in the base bid or alternate #1?

    Steel structures for arrays #5 and #6 are in the alternate.

45. Is the infrastructure for array #5 and #6 in the base bid or alternate #1?

    Infrastructure for arrays #5 and #6 are in the alternate, except inverter capacity required for arrays #5 and #6 are in the base bid.