



DANE COUNTY DEPARTMENT of PUBLIC WORKS, HIGHWAY and TRANSPORTATION

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Commissioner / Director
Gerald J. Mandli

May 16, 2016

ATTENTION ALL REQUEST FOR BID (RFB) HOLDERS

RFB NO. 315037- ADDENDUM NO. 2

ADMINISTRATION BUILDING RECLADDING AND REROOFING HENRY VILAS ZOO

BIDS DUE: THURSDAY, MAY 19, 2016 2:00 PM. DUE DATE AND TIME ARE NOT CHANGED BY THIS ADDENDUM.

This Addendum is issued to modify, explain or clarify the original Request for Bid (RFB) and is hereby made a part of the RFB. **Acknowledge this addendum on the Bid Form.**

CHANGES TO BIDDING REQUIREMENTS:

None

CHANGES TO SPECIFICATIONS:

1. Section 26 31 10
 - a. In 3.02.J.2, change tilt angle to 10 degrees.
2. Section 26 31 11
 - a. Delete Section as written and substitute attached Section 26 31 11.

CHANGES TO DRAWINGS:

None.

Enclosures:
Section 26 31 11

SECTION 26 31 11

MOUNTING SYSTEM FOR SOLAR MODULES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Ballasted Roof Mount Fixed Angle PV Mounting System
- B. Accessories.

1.02 RELATED SECTIONS

- A. Section 26 31 12 – Photovoltaic Panels.
- B. Section 26 31 10 - Photovoltaic Generating System.

1.03 REFERENCES

- A. UL 2703 – Rack Mounting Systems and Clamping devices for Flat-plated Photovoltaic Module and Panels
- B. ASCE 7-05 - Minimum Design Loads for Buildings and Other Structures

1.04 DESIGN / PERFORMANCE REQUIREMENTS

- A. Structural Performance:
 - 1. Design to resist ASCE 7-05 - Minimum Design Loads for Buildings and Other Structures.
 - 2. Design all materials, assembly and attachments to resist snow, wind, and uplift loading at any point without damage or permanent set.
 - 3. Design to be suitable for Occupancy Category II, Risk Category II.

1.05 SUBMITTALS

- A. Submit under provisions of Section 01 00 00.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Layout and installation drawings showing all components with dimensioned locations, attachment locations, and ballast requirements per module. Layout shall be such that no shadowing occurs from 9:00 a.m. to 3:00 p.m. on the winter solstice.
- D. Design Data:
 - 1. Structural design calculations, bearing seal and signature of licensed professional engineer.
 - 2. Ballast requirement calculations bearing seal and signature of licensed professional engineer.
- E. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1 F. Manufacturer's warranties.
2

3 1.06 QUALITY ASSURANCE

4 A. Manufacturer Qualifications: Manufacturer with a minimum three years documented
5 experience in producing modular PV mounting systems.

6 B. Installer Qualifications: Installer with a minimum two years documented experience in
7 installing similar systems.

8 C. Pre-Installation Meeting:

9 1. Convene at job site, at least seven calendar days prior to scheduled beginning of
10 construction activities of this section, to review requirements of this section.

11 2. Require attendance by representatives of the solar module, roof support installer, the
12 solar module installer, the roof and roof insulation installers and other entities affected
13 by construction activities of this section.

14 1.07 DELIVERY, STORAGE, AND HANDLING

15 A. Receive, handle and store materials in conformance with the manufacturers printed
16 instructions.

17 B. Store products undercover, in manufacturer's unopened packaging until ready for installation.

18 C. Store materials in a dry, weather tight location. Protect materials from exposure to moisture.

19 1.08 SEQUENCING

20 A. Ensure that locating templates and other information required for installation of products of
21 this section are furnished to affected trades in time to prevent interruption of construction
22 progress.

23 B. Ensure that products of this section are supplied to affected trades in time to prevent
24 interruption of construction progress.

25 1.09 WARRANTY

26 A. Manufacturer's Limited Warranty: 25 years.

27 1.20 COORDINATION

28 A. Coordinate Work with module manufacturer and installer to verify collector mounting and
29 framework modules with material specified in Section 26 31 10 and 26 31 11.

30 B. Coordinate Work with other operations and installation of roofing materials to avoid damage
31 to installed insulation and membrane materials.

32 PART 2- PRODUCTS

33 2.01 MANUFACTURERS

34 A. Acceptable Manufacturers:

35 1. DCE Solar Eco-Top www.DCEsolar.com

36 2. AET Energy Rayport-B ECO www.AETenergy.com

37 3. Panel Claw Polar Bear III www.panelclaw.com

38 4. Solar Dock www.Solardock.com

39 5. Cablofil Delta Strut www.legrand.us/cablofil

1 B. Or other equivalent meeting technical specifications.

2 2.02 TECHNICAL SPECIFICATIONS

3 A. System to be ballasted, non-roof penetrating.

4 B. Materials to be steel, galvanized after fabrication, or aluminum.

5 C. Provide Class A fire rating.

6 D. Provide 25 year limited warranty.

7 E. Tilt to be 10 degrees.

9 2.03 COMPONENTS

10 A. Provide accessory hardware to connect combiners, inverters, etc.

11 B. Provide module jumpers to bond modules east-west.

12 C. Provide cable clips for wire management.

13 D. Provide EPDM slip sheets below modules.

14 E. Provide solid concrete ballast **blocks in accordance with ballast calculations**
15 **where indicated on installation drawing to stabilize system.**

16 2.04 FABRICATION

17 A. Supply components required for assembly.

18 PART 2 - EXECUTION

19 3.01 EXAMINATION

20 A. Examine installation area to verify the work can be performed in accordance with the
21 Drawings and structural calculations without interferences from other equipment or trades.

22 B. If preparation is the responsibility of another installer, notify Architect of unsatisfactory
23 preparation before proceeding.

24 C. Conduct a coefficient of friction determination on the actual roof material and provide this
25 information to the support module supplier for use in establishing the ballast requirement.

26 3.02 PREPARATION

27 A. Clean surfaces thoroughly prior to installation.

28 B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best
29 result for the substrate under the project conditions.

30 C. Remove any ballast stone in area receiving modules.

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32 3.03 INSTALLATION

33 A. Install in accordance with manufacturer's instructions.

- 1 B. Install components plumb and level, per manufacturer's direction, support spacing, torque, and
2 other recommendations. Provide thermal expansion allowance per Manufacturers
3 recommendations, Components to be accurately fitted, free from distortion or defects.
- 4 C. Do not leave mounting modules on roof unattended without ballast installed.
- 5 D. Exercise care when installing components so as not to damage finish surfaces. Touch up as
6 required to repair damaged finishes.
7

8 3.04 PROTECTION

- 9 A. Protect installed products until completion of project.

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END OF SECTION