

(Revised September 30, 2021)

**SECTION 01210**

**MEASUREMENT AND PAYMENT**

**PART 1 – GENERAL**

**1.01 BASE BID**

Payment for Work under this item shall be based on the lump sum bid and shall include the labor, materials, equipment, and incidentals, including the temporary facilities, required to construct the Project as shown on the Drawings and as specified.

**1.02 UNIT PRICE ITEMS**

Measurement for payment for Work performed under these items shall be for permanent facilities. Payment shall be based on the actual quantity installed, and shall be based on the unit price bid for the particular item. Payments made shall include labor, materials, equipment, and incidentals required to construct the Work in accordance with the Drawings and Specifications. Any unexpended portion of these Bid Items shall be credited to the **County** on the Final Pay Estimate.

**1.03 ALLOWANCES**

Measurement and payment for Work performed under this item, when authorized by the **County**, the **County** shall determine the method of payment for any Work so authorized. Any unexpended portion of the Allowance amount shall be credited to the **County** on the Final Pay Estimate.

**PART 2 – BID ITEMS (Refer to Attachment D)**

**2.01**

<b>ITEM</b>	<b>DESCRIPTION</b>
CY	Cubic Yards
LS	Lump Sum
SF	Square Feet

**2.02 Mobilization & Demobilization- LS (Bid Item 1 & 2)**

Measurement for payment will be lump sum not to exceed 3% of the bid items 1-19. Payment will constitute full compensation for all costs associated with mobilization and demobilization as directed by the County for the project. Payment will be remitted for mobilization of up to a maximum of 50% of the amount bid upon the Owner's verification that the Contractor has fully provided all necessary labor, equipment, materials, administrative items, etc. necessary to commence the Work. The remainder of the amount bid will be remitted upon satisfactory demobilization and restoration of the various project areas upon completion of the Work, provision of all project record documentation and any other close-out type of documentation required at the end of the

contract including any term renewal or extensions. No additional or separate payment will be made for mobilization or demobilization for the purposes of contract renewal or extension.

**2.03 Temporary Protection- LS (Bid Item 3)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials required to furnish and install the work complete as referenced in the contract documents.

**2.04 Demolition- LS (Bid Item 4)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials and all costs associated with and required for demolition and removal of structural, mechanical, and electrical items/equipment and ancillary equipment referenced in the contract documents.

**2.05 Remove Temporary Roof Truss Shoring Supports – LS (Bid Item 5)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials required to furnish and install the work complete as referenced in the contract documents.

**2.06 Concrete – LF (Bid Item 6)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials and repair of concrete floor slabs, pre-cast wall panels, CMU wall crack repairs and all associated concrete referenced in the contract documents.

**2.07 Masonry – Replace Damaged CMU & CMU Removed by Demolition (Bid Item 7)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials and all costs associated with required for demolition and removal of damaged CMU and CMU removed by demolition.

**2.08 Masonry – Drill & Grout – EA (Bid Item 8)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials required to furnish and install reinforcing dowls and pilaster blocks and all associated drilling and grouting referenced in the contract documents.

**2.09 Metals - New Truss Base Plates – EA (Bid Item 9)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials required to furnish and install new truss base plates and all associated installation referenced in the contract documents.

**2.10 Metals - Pre-Cast Wall Panel Lateral Support Anchors- EA (Bid Item 10)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials required to furnish and install new Pre-Cast Wall Panel Lateral Support Anchors and all associated installation referenced in the contract documents.

**2.11 Thermal & Moisture Protection – Wall Insulation- SF (Bid Item 11)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials required to furnish and install insulation for all wall repairs and replacements for the work complete as referenced in the contract documents.

**2.12 Thermal & Moisture Protection – Wall Expansion Joint- LF (Bid Item 12)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials required to furnish and install wall panel expansion joint repairs/replacement, for all walls for the work complete as referenced in the contract documents.

**2.13 Finishes – Ceiling Replacement - SF (Bid Item 13)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials required to furnish and install the work complete as referenced in the contract documents.

**2.14 HVAC Modifications- LS(Bid Item 14)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials required to furnish and install the work complete as referenced in the contract documents. Payment shall include the evaluation of existing conditions and new work plans for use in the calculation of heating, ventilation, and air conditioning (HVAC) loads to be used in design and selection of systems and equipment for upgrade or replacement. Payment shall also include temporary relocation and reinstallation of HVAC and associated equipment.

**2.15 Electrical- Removals and Modifications for CMU Wall Demolition (Bid Item 15)**

Measurement for payment will constitute full compensation for installation labor, equipment and materials required to trace existing cables to be removed, demolish existing conduit and cable located on wall to be repaired , and restore electrical systems due to wall demolition and repairs. Payment shall constitute the work complete as referenced in the contract documents.

Owner witnessed factory testing (also referred to as Factory Acceptance Tests – FAT) shall be performed in accordance with industry best practice standards and the activities/parameters agreed with the Owner.

**2.16 Commissioning and Testing (Bid Item 16)**

Payment will constitute full compensation for the performance of the equipment being tested to the satisfaction of the Owner before commissioning and in accordance with applicable General requirements referenced in the contract documents, however no partial completion shall be given. Testing and commissioning of the combined generator sets after installation is also required to demonstrate compliance with the full range of specified outputs against the specified efficiency requirement.

**2.17 Hach instrumentation equipment Installation & SCADA Connection- EA (Bid Item 17 & 18)**

Measurement for payment will constitute full compensation for installation labor and equipment required to install the work complete as referenced in the contract documents. Final system design and preparation of submittals and record drawings are also required. In addition, payment shall include any required project engineering, electrical design, mechanical design, drafting to perform final system design and to prepare submittals and record drawings. Payment shall also include labor for HMI software applications development and graphics design and PLC control strategy design and programming.

**2.18 Hach instrumentation equipment Calibration- EA (Bid Item 19)**

Measurement for payment will constitute full compensation for installation labor and equipment required to calibrate the analyzers as referenced in the contract documents. Provide installation supervision calibrations, startup, training, etc. as required by manufacturer's instructions and or specifications.

**2.19 Electrical installation or terminations for Hach instrumentation equipment - EA (Bid Item 20)**

Measurement for payment will constitute full compensation for the labor, equipment and materials required to furnish and install the work complete. Provide installation of conduit, wire, etc. as required by manufacturer's instructions and or specifications.

**2.20 Update PLC (MicroLogix to CompactLogix) and specified supporting component replacement. – EA (Bid Item 21)**

Measurement for payment will constitute full compensation for the labor, equipment and materials required to furnish and install the work complete.

**2.21 Update PLC (Siemens to CompactLogix) and specified supporting components conversion. (Bid Item 22)**

Measurement for payment will constitute full compensation for the labor, equipment and materials required to furnish and install the work complete.

**2.22 Update PLC (ControlLogix 1756 L61 to Logix5571) and specified supporting components upgrade. (Bid Item 23)**

Measurement for payment will constitute full compensation for the labor, equipment and materials required to furnish and install the work complete.

**2.23 Add Analog Current/ Voltage Input Module to CompactLogix (Bid Item 24)**

Measurement for payment will constitute full compensation for the labor, equipment and materials required to furnish and install the work complete.

**2.24 Concrete Pad, Plumbing/Drainage. – LS (Bid Item 25)**

Measurement for payment will constitute full compensation for the labor, equipment and materials required to furnish and install the work complete. It includes all the plumbing connections for the 12 instruments, installation of all required taps, water lines and associated drains and drainage areas.

It also includes 6 concrete pads, one for each enclosure.

**2.25 Owner's Directed Allowance – LS (Bid Item 26)**

An Owner Directed Allowance has been established as the value of this item. This allowance shall be used to pay for miscellaneous work to be accomplished at the direction of the County. It shall include items of work consistent with and related to the project which are not included in the named bid items, but which may be necessary to the successful completion of the Agreement. It is expected that work under this item will be accomplished utilizing construction items established under the other sections of these specifications. All work performed under this section shall comply with the various sections of these specifications which are appropriate to the specific items involved. No work will be allowed under this section without the prior written approval of the County. This work shall be further described, by the County, in written form and/or on modifications to the drawings or on supplemental drawings. This allowance may be used to pay the costs, where the amounts are determined as specified in the General Requirements, and as directed by the County.

**END OF SECTION**