PART 1 – GENERAL

1.01 All materials and permanently installed equipment (for example, traffic signalization equipment, sewer pumps, and other such items) furnished by the Contractor for the Work shall conform to the requirements of the Plans and Contract Documents, including the applicable City of Memphis Standard Construction Specifications and Design Standards.

1.02 Throughout the entire Project, all units of any one item of installed equipment shall be of the same manufacture and model unless otherwise approved by the Owner.

PART 2 – EQUIVALENT MATERIALS AND EQUIPMENT

2.01 Section 00710 Article 5 of the Contract General Conditions allows for the substitution of equivalent materials and equipment, with the written approval of the Owner.

2.02 Reference to a particular product by manufacturer, trade name, or catalog number establishes the quality standards of materials and equipment required for the Work. It is not intended to exclude products equivalent in quality and similar in design. Whenever any article, material, or equipment is identified by using the name of a manufacturer or vendor, the term "or approved equal" if not inserted shall be implied.

2.03 If the Contractor proposes to furnish materials or supplies other than those specified, he shall furnish complete descriptive data, including performance capabilities, specifications, and other data as required in Section 00710 Article 5 of the Contract General Conditions. The provisions of this substitution of materials shall not relieve the Contractor of the responsibility of meeting the requirements of the Plans and Contract Documents. All materials must be approved by the Owner before any installation will be permitted.

PART 3 – LIST OF MAJOR EQUIPMENT AND MATERIALS

3.01 The Contractor shall submit to the Owner for approval, with due promptness after award of Contract but in no case later than at the preconstruction conference, a list of major equipment and materials which he proposes to provide. The list shall include in sufficient detail to identify the materials, the name of the manufacturer’s model number of all material that is identified on the Plans or in the Contract Documents, including catalog literature for standard equipment and detailed scale drawings of any nonstandard or special equipment and of any proposed deviation from the Plans. A signed statement shall accompany this list stating that materials and equipment are in exact accordance with Project specifications. No charge shall be made to the Owner for any materials or equipment purchased, labor performed, or delay to the Work prior to approval of materials by the Owner.

PART 4 – SOURCE OF SUPPLY

4.01 The source of supply for each material to be supplied by the Contractor shall be subject to approval by the Owner before delivery is started.

PART 5 – SAMPLES AND TESTING

5.01 Representative samples of materials included for incorporation in the Work shall be submitted to the Owner for his examination and/or testing when so specified or requested.

5.02 All testing of materials shall be made in accordance with the standard methods of testing of the ASTM, AASHTO, NEMA, ITE, or other applicable standard specifications.
PART 6 – PROPOSAL QUANTITIES

6.01 The quantities appearing in the Proposal Sheet(s) of the Proposal are approximate and are proposed and shown for the comparison of bids and award of a Contract except that quantities shown on the Proposal Sheet(s) for Item No. 02315-01, Excavation (Unclassified) and Item No. 02330-01, Embankment (Unclassified) are absolute unless a Plans change is made. For all other items of construction, the Owner does not guarantee or assume any responsibility that the quantities indicated on the Plans or in the Proposal will hold true and accurate in the construction of the Project. The Contractor shall not plead deception or misunderstanding because of variation from these quantities. Unless otherwise provided in the Contract Documents, payment to the Contractor will be made only for the actual quantities of Work performed and accepted, and materials and equipment furnished and placed in accordance with the Contract. The Contractor is reminded of the limitation provided by Section 838 of the Charter of the City of Memphis which limits the total amount of the increase in the Contract Price, for any reason, to ten (10) percent of the original Contract award amount. There are no specific limitations on the amount by which the Contract Price and project quantities may be decreased.

PART 7 – MEASUREMENT

7.01 Measurement of Quantities

A. All Work completed under the Contract will be measured by the Owner according to United States standard measure.

B. The term “ton” will mean the short ton consisting of 2,000 pounds avoirdupois.

C. The determination of quantities for specific items will be made as set for the in the subsection titled “Measurement” under the applicable Sections of the Standard Construction and Material Specifications hereof, or of other Specifications provided for the Work.

D. Longitudinal and transverse measurements for surface area computations will be to the exact dimensions shown in the horizontal plane on the Plans or as ordered in writing by the Owner.

E. Structures will be measured according to the lines and exact dimensions shown on the Plans or as altered to fit field conditions by direction to the Owner.

F. In all cases where measurement of materials is based on certified weights, the Contractor shall furnish the Owner certified weigh bills showing the net weight of materials received in each shipment. In no instance will the Owner pay for materials in excess of the amounts represented by the certified weigh bills.

G. When certified scale weights are not used for measurement, all materials which are measured or proportioned by weight shall be weighed on accurate, approved scales, by competent, qualified personnel, at locations designated by the Owner.

H. Trucks used to haul material being paid for by weight shall be weighed empty at such times as the Owner directs, and each truck shall bear a plainly legible identification mark.
I. Measurements for payment will be made to the nearest fractional units specified below, unless otherwise specified herein or in the Contract Documents for the project.

<table>
<thead>
<tr>
<th>Unit of Measurement</th>
<th>Nearest Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear Foot</td>
<td>0.1 LF</td>
</tr>
<tr>
<td>Square Foot</td>
<td>0.1 SF</td>
</tr>
<tr>
<td>Square Yard</td>
<td>0.1 SY</td>
</tr>
<tr>
<td>Ton</td>
<td>0.1 Ton</td>
</tr>
<tr>
<td>Cubic Yard</td>
<td>0.01CY</td>
</tr>
<tr>
<td>1,000 SF Unit</td>
<td>0.1 Unit</td>
</tr>
</tbody>
</table>

END OF SECTION 01610