Scope of Work

I. Scope of Solicitation

Clemson is seeking to establish a contract to provide and install welded seam linoleum vinyl flooring for Campus as specified in Section III below.

This will be a one year contract, awarded to one Offeror based on bids, with the option to renew for an additional four years. Clemson reserves the right to add additional similar products if required.

II. Instructions to Offerors

Regardless of specific requirements below or in this document, Offerors are required to submit their proposal electronically through the Clemson University online bidding system. To do so you must login (registering first) at https://sciquest.ionwave.net/prod/default.aspx?company=clemson, and follow specific instructions for this solicitation. You should register several days in advance of the bid closing date so you can be approved and login in time to submit a response.

1. INFORMATION FOR OFFERORS TO SUBMIT - In addition to information requested elsewhere in this solicitation, Offerors should submit the following information for purposes of evaluation:

   A. The successful Offeror shall provide satisfactory evidence of all required insurance coverage and licenses PRIOR TO PERFORMANCE

2. Be sure to see the Event Activities in the online bidding system for details on deadlines for questions.

III. Scope of Work / Specifications

General Requirements:

The awarded contractor will be expected to work closely with the Project Manager coordinate scheduling, traffic control/safety precautions, etc. for each project. The contractor will provide
all labor, supervision, materials, equipment, etc. required to properly complete the work in a safe, clean and timely manner. Any work that is not properly installed will be repaired at no cost to the University.

Contractor shall be responsible for the supervision and execution of services by its employees. The site must be maintained in a clean and safe condition at all times within reason. The contractor will be solely responsible for any/all tools, supplies, and articles left on the premises at all times.

If University property is damaged, the damage must be repaired within a timely manner dictated by the University’s Project Manager. Materials and labor are to be provided by the contractor at no additional cost to the owner. Repairs are to be made at a level which either meets or exceeds the pre-damaged condition and to the quality and craftsmanship which matches its original finished appearance and/or the surrounding area’s finished appearance. Repair to damaged property is not confined to buildings and will include grounds and other environmental components on the owner’s premises.

Parking permits are required for all vendors who will be parking on campus. Please review the University Parking & Transportation Services website at http://www.clemson.edu/campus-life/campus-services/parking/parkingpermits/index.html for rules, regulations and to obtain a Vendor Parking tag. There is a fee associated with the parking permit that will be the responsibility of the awarded Offeror in addition to any citations and fines that are given.

There is no guarantee on the amount of work that will be required.

Invoices should reflect a breakout in pricing for man-hours and materials used as well as include the location of each jobsite.

**Product Description:**

Construction: Homogeneous floor covering made from natural ingredients including but not limited to linseed oil, rosin binders, wood flour, limestone and dry pigments which are mixed and calendared onto a natural jute backing. Chemical/Stain Resistance: Minimum double UV cured double layer coating to sustain colors over time. No initial maintenance or polymer application may be used after installation. The surface must be able to be repaired or refreshed in cases of accidents or after years of intensive use.

**Physical Characteristics (nominal):**

- Gauge-------------------1/10” (2.5 mm)
- Backing -------------Jute
- Width -----------------79” (2 meters)
- Length--------------105’ (32 meters)

**PRODUCT PERFORMANCE AND TECHNICAL DATA REQUIREMENTS:**

Reference Specification: Meet or exceed all technical requirements as set forth in ASTM F2034 Standard Specification for Linoleum Sheet Flooring Type I
Environmental Requirements:
• Platinum certification in accordance with SMaRT© Sustainable Products Standard, led by the Institute for Market Transformation to Sustainability (MTS).
• 100% USDA Certified BioBased Product.
• Compliant with CHPS 01350 requirements for VOC emissions and indoor air quality.

Contribute to the following LEED® credits:
Materials & Resources
Credit 4: Recycled Content (46.5% Pre-Consumer)
Credit 6: Rapidly Renewable Materials (33%)
Indoor Environmental Quality
Credit 4.3: Low-Emitting Materials (Listed on LEM Table)
Credit 4.1: Low-Emitting Materials (Adhesive complies with SCAQMD Rule #1168)

Static Load Limit:
450 pounds per square inch when tested in accordance with ASTM F 970-00, Standard Test Method for Static Load Limit.

Slip Resistance:
Meet or exceed A.D.A. recommendation of 0.6 for flat surfaces when tested in accordance with ASTM D 2047, Standard Test Method for Static Coefficient of Friction.

Castor Resistance:
Be suitable for office chairs with castors when tested in accordance with EN 425, Castor Chair Test.

Impact Sound Reduction-Must Exhibit the Following Results:
6db when tested in accordance with ISO 717-2, Impact Sound Insulation Test.

Resistance to Bacteria:
Provide a self-sanitizing quality in the form of a bactericidal effect.

Anti-Static Properties:
Must possess anti-static qualities to enhance cleaning.

Fire Testing-Must Comply With or Rate As Follows:
• Class 1 when tested in accordance with ASTM E 648/NFPA 253, Standard Test Method for Critical Radiant Flux.
• Meets 450 or less when tested in accordance with ASTM E 662/NFPA 258, Standard Test Method for Smoke Density.
• Class C when tested in accordance to ASTM E 84/NFPA 255, Standard Test Method for Surface Burning Characteristics.
• FSC1 – 150; SD – 160 when tested in accordance to CAN/ULC S102.2, Standard Test Method for Flame Spread Rating and Smoke Development.
Cigarette Resistance:
Resist cigarette burns. Burning cigarettes will leave only a brown mark, which can be rubbed out using steel wool or a scouring pad.

Chemical Resistance: (Exposure Time: One Hour)

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diluted Acids – Sulfuric, Nitric, Hydrochloric, Acetic, Lactic, Citric</td>
<td>No Effect</td>
</tr>
<tr>
<td>Sodium Hydroxide (5%)</td>
<td>Softening</td>
</tr>
<tr>
<td>Ammonia (5%), Acetone</td>
<td>Possible Softening</td>
</tr>
<tr>
<td>Soda Solution, Soap Solution (Slightly Alkaline)</td>
<td>No Effect</td>
</tr>
<tr>
<td>Gasoline, White Spirit, Paraffin, Benzene, Toluene, Methyl Alcohol, Methyl Ethyl Ketone, Ethyl Acetate, Ether, Mineral Oil, Vegetable Oil, Animal Fat</td>
<td>No Effect</td>
</tr>
<tr>
<td>Blood, Urine, Excrement</td>
<td>No Effect</td>
</tr>
<tr>
<td>Lipstick</td>
<td>No Effect</td>
</tr>
<tr>
<td>Formaldehyde, Hydrogen Peroxide 3%</td>
<td>No Effect</td>
</tr>
<tr>
<td>Hot Chili Paste, Shoe Polish, Iodine, Betadine</td>
<td>Staining</td>
</tr>
<tr>
<td>Silver Nitrate</td>
<td>Staining/Possible Softening</td>
</tr>
<tr>
<td>Bitumen, Salt Water</td>
<td>No Effect</td>
</tr>
<tr>
<td>Methylene Blue</td>
<td>Staining</td>
</tr>
</tbody>
</table>

Tested in accordance with ASTM F 925, Standard Test Method Resistance to Chemicals of Resilient Flooring.
Note: No requirement for resistance to prolonged exposure to high alkalis.

INSTALLATION:

General:
• Any installation must comply with manufacturers guidelines Site Condition/Substrates:
• Before Installation Commences, it must be agreed between contractor and Clemson Project Manager, that the manufacturers required conditions for installation and proper application of materials is met
• Before Installation Commences, it must be agreed between contractor and Clemson Project Manager, that the manufacturers required substrate conditions and requirements are met. Moisture tests may be required.

Adhesive:
• Only manufacturer approved adhesive may be used.
• Manufacturer recommended tools and spread rates must be complied with
• Heat welded application must use manufacturers recommended welding rods

Flash Coving:
• Only manufacturer recommended materials (roll up backing etc.) and adhesive may be used
Patching
• Proper and neat patching must be done with manufacturer approved materials, compatible with the flooring adhesives and materials.

Warranty:
• Minimum-Limited 5 year warranty

IV. APPENDICES TO SCOPE OF WORK

A – Pricing Spreadsheet; all vendors are to complete pricing as indicated and reattach sheet with their bid submittal. Please enter the total for all items (yellow highlighted cell) for the price entered into the online bidding system.
<table>
<thead>
<tr>
<th>Item</th>
<th>Materials:</th>
<th>Quantity</th>
<th>Price</th>
<th>Unit of Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Forbo/Marmoleum - Real with Topshield 2*</td>
<td>1</td>
<td>$</td>
<td>Square Yard</td>
</tr>
<tr>
<td>2</td>
<td>Cove Cap and Cove Stick for heat weld flash coving</td>
<td>1</td>
<td>$</td>
<td>Linear Foot</td>
</tr>
<tr>
<td>3</td>
<td>Cove Base 4&quot; Rubber</td>
<td>1</td>
<td>$</td>
<td>Linear Foot</td>
</tr>
</tbody>
</table>

Materials Total $-

<table>
<thead>
<tr>
<th>Installation:</th>
<th>Quantity</th>
<th>Price</th>
<th>Unit of Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Forbo/Marmoleum heat weld method</td>
<td>1</td>
<td>$</td>
</tr>
<tr>
<td>5</td>
<td>Cove Cap and Cove Stick for heat weld flash coving</td>
<td>1</td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td>Cove Base</td>
<td>1</td>
<td>$</td>
</tr>
</tbody>
</table>

Labor Total $-

* Price must include Forbo-Sustain 885 Adhesive and Forbo solid heat weld rod

**All installation must be performed by a Forbo Certified Installer

***All offerors must complete pricing above and attach to bid submittal