Recommendations: Solar Dok Picnic Charging Tables

The Solar Dok – charging picnic table committee would like the committee to consider funding a maximum of 10 tables (Option A) and a minimum of 6 Solar Dok picnic tables (Option B) installed in a variety of areas across campus to maximize student usage.

The recommended tables for all areas except Wellness Services would include the upgraded plugs and lights (base unit and upgraded options are outlined below). Wellness Services patio area has bright LED lighting already and has restricted use in the evening so upgraded lighting is not needed on those units.

The table below identifies the location, unit, and number of tables we recommend per location. All locations have the ability to host a table without any associated preparation costs beyond the cost of the unit, shipped and installed.

<table>
<thead>
<tr>
<th>Location</th>
<th>Desired Model</th>
<th>Option A # Units</th>
<th>Option B # Units</th>
<th>Land Prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commons Patio</td>
<td>fully upgraded</td>
<td>2</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>Between Rec Center &amp; Pool</td>
<td>fully upgraded</td>
<td>2</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Wellness Center</td>
<td>upgraded plugs</td>
<td>2</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Behind College of Business, w/ easy access from Heritage &amp; Presidents</td>
<td>fully upgraded</td>
<td></td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Lower patio adjacent to Bldg 13, 10, &amp; 18</td>
<td>fully upgraded</td>
<td>1</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Engineering Building</td>
<td>fully upgraded</td>
<td>1</td>
<td>0</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Total # of tables</strong></td>
<td></td>
<td><strong>10</strong></td>
<td><strong>6</strong></td>
<td></td>
</tr>
</tbody>
</table>

Cost breakdown for 10 tables:

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully upgraded</td>
<td>$9,595.00</td>
<td>9</td>
<td>$86,355.00</td>
</tr>
<tr>
<td>Upgraded plugs</td>
<td>$9,245.00</td>
<td>1</td>
<td>$9,245.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$95,600.00</td>
</tr>
</tbody>
</table>

6% Discount on 10+ tables $5,736.00

**Total cost for tables** $89,864.00

Shipping/Installation for first table $2,650.00

Shipping/installation for remaining tables $400

**Total shipping/installation costs** $6,250.00

**Total cost for 10 tables** $96,114.00

Cost breakdown for 6 tables:

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>fully upgraded</td>
<td>$9,595.00</td>
<td>5</td>
<td>$47,975.00</td>
</tr>
<tr>
<td>upgraded plugs</td>
<td>$9,245.00</td>
<td>1</td>
<td>$9,245.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$57,220.00</td>
</tr>
</tbody>
</table>

4% Discount on 5+ tables -$2,288.80

**Total cost for tables** $54,931.20

Shipping/Installation for first table $2,650.00

Shipping/installation for remaining tables $400

**Total shipping/installation costs** $4,650.00

**Total cost for 6 tables** $59,581.20

Cost per Unit:

<table>
<thead>
<tr>
<th>Base Cost</th>
<th>Upgrade-Lights</th>
<th>Upgrade-Plugs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$8450</td>
<td>$8900</td>
<td>$9245</td>
</tr>
</tbody>
</table>

- The base unit price of the Solar Dok includes:
  (1) Poly Recycled table with seating positions for 8 persons
  (2) 110 V/AC GFCI electrical outlets
  (2) USB type A power outlets
  (3) 45 watt solar panels mounted on southward facing panels and
Adjustable angular settings for canopy umbrella for optimal solar exposure on panels
Robust Gel-Cell maintenance free battery bank for solar energy storage for machine use day
or night.
Visibly mounted solar charge controller with digital readout for display of solar energy
production
Advertising or logo locations on “Sunbrella” awning panels
True “Off the Grid” implementation with no required grid tied feed
Solar Dok tables qualify for LEED points (Leadership in Energy & Environmental Design)

- The Solar Dok upgrade options available include:
  (2) 110 V/AC GFCI electrical outlets (Additional pole mounted outlet box)
  (2) 1000 Lumen high intensity LED lights operated with push button and timer for machine
  use at night.
  (1) 100 watt panel mounted on the roof canopy (Added to accommodate the additional 2 110
  VAC GFCI electrical outlets)

Shipping and Installation:
- $2650 for first table
- $400 for each additional table if shipped/installed at the same time.

Maintenance & Replacement Fees:
- Units are 1100lbs each and require no anchoring for wind load
  - A replacement schedule for batteries:
    - Batteries cost per unit is $600 and should last 7-10 years.
  - Maintenance schedule and responsible parties will need to be identified and will need to agree
    - daily wiping down of table/bench
    - monthly/bimonthly wiping down of solar panels
  - Procedures for severe weather/hurricane preparations will need to be outlined (solar panels can be
    removed during extreme weather, however each unit can withstand up to 150MPH winds)
  - All currently identified locations are set up for installation without any modifications needed. If an area is
    chosen that does not have a concrete pad, a 10’ x 10’ pad would need to be created with an estimated
    cost of $2500.