

**PERKINS  
 + WILL**

**Meeting Minutes**

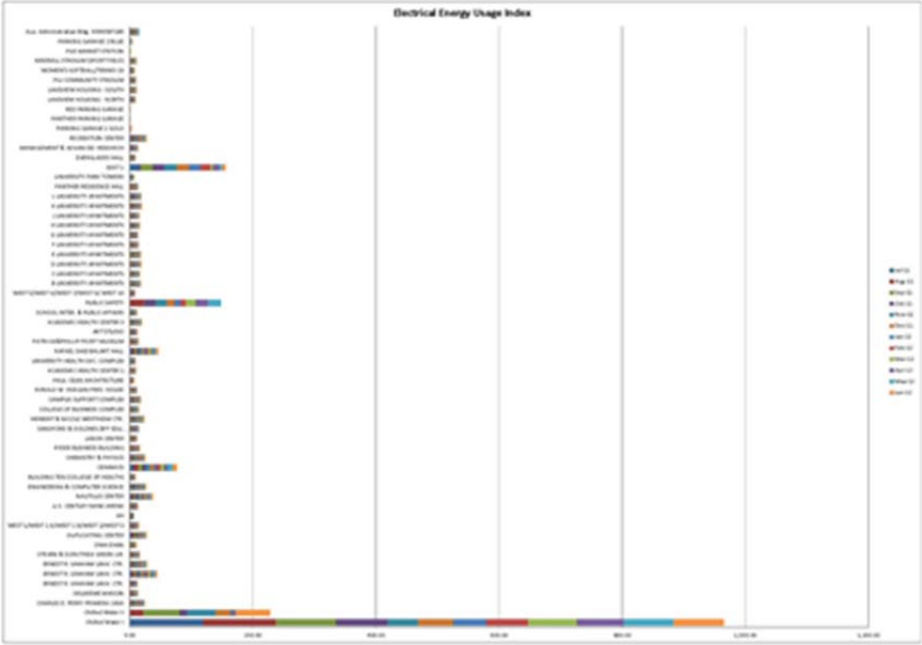
By:	Perkins+Will - GK	Date:	11/30/2012
Meeting Date:	10/03/2012	Project Name:	BT-857 FIU-Campus Master Plan Update 2010-2020
Meeting Time:	10:00am-12:00pm	Project No.:	810369.000
Meeting Location:	FIU CSC Rm 1123	Attendees:	<i>Focus Group Members:</i> -Amir Mirmiran, Steering Committee Advocate -Maria Drake (IT) -Danny Paan (FIU-FMCD) -Sergio Garcia (MD-WASD) -Jose Soto (MD-WASD) -Christina Amores (MD-WASD) -Nick DiCicacco (FIU-FMD)  -Bob Griffith, FIU -Stuart Grant, FIU  -Rodrigo Pigna, ML -Mike Kroll, ML -James Tatone, AEI -Daniel Cesar, AEI -Ben Sporer, P+W -Pat Bosch, P+W -Krisan Osterby, P+W -Gene Kluesner, P+W
Next Meeting Date:	December 5, 2012 10:00am-12:00pm		

The attached are meeting notes for **Work Session #2**

**FOCUS GROUP 5 – Infrastructure, Utilities, & Maintenance**

Item No.	Description
2.1	<b>Data/Schedule/Meetings confirmation:</b> additional data requests for Inventory and Analysis report, project schedule, and upcoming meetings were confirmed with committee.

Item No.	Description
2.2	<p><b>Review Focus Group discussions and homework summaries; FIU strengths, weaknesses, and best practices:</b></p> <p><b><u>Focus Group #5: Planning Precedents / Best Practices</u></b></p> <ul style="list-style-type: none"> <li>-Create Utility Use index by building: Update building standards for mechanical, electrical, water use</li> <li>-Reduce energy consumption by 10% per year: look at per student and per facilities classifications?</li> <li>-Consider alternate sources of energy: all strategies must have a payback</li> <li>-Increase wireless IT capacity throughout campus</li> <li>-Create utility / infrastructure / open space corridors as no-build zones: building locations are flexible within approved development zones.</li> <li>-Brand each campus for storm water management solutions.</li> <li>-Address FIU Greenhouse Gas Inventory: student commuting is increasing emissions                             <ul style="list-style-type: none"> <li>• Bike and car share</li> <li>• More public transportation access</li> <li>• Inter- campus shuttles</li> <li>• Electric charging vehicles</li> <li>• Near/ on-campus student housing</li> </ul> </li> <li>-Address capacity constraints with potential redevelopment of the County Fair property.</li> </ul>
2.3	<p><b>Utilities/Facilities Issues to Address:</b></p> <ul style="list-style-type: none"> <li>• Chilled water deficiencies in the south portion of the campus.</li> <li>• A new satellite plant should be considered for the 2020 plan. (in SE precinct)</li> <li>• Natural gas service recently added (approx. two years ago)</li> <li>• Centralized steam generation may be considered for the medical and research district.</li> <li>• Defined utility corridors. FPL has a blanket easement in lieu of prescriptive easements. Coordination meeting will be scheduled in the near future with FIU and MD-WASD.</li> <li>• Biscayne Bay may be branded as the “environmental” campus.</li> <li>• Chilled water BTU meters installed for 21 buildings on MMC and 1 building at BBC.</li> <li>• Chilled water energy will be assumed to develop the energy usage index for each building where metering information is not available.</li> <li>• The chilled water demand is not available on the existing meters. Chilled water demand for future buildings will be assumed to predict chilled water plant capacity requirements.</li> <li>• FPL metering information for FY2011-2012 has been received.</li> </ul>

Item No.	Description
2.4	<p><b>Utilities/Facilities Maintenance:</b></p> <ul style="list-style-type: none"> <li>• “Each Florida College and State University shall strive to reduce its campus wide energy consumption by 10%” The reduction may be obtained by either reducing the cost of energy consumed or by reducing total energy usage or a combination of both.</li> <li>• Some alternate sources of energy have been considered, i.e. co-gen, thermal storage, etc. Master Plan needs to include an executive summary indicating the results of the consideration.             <ul style="list-style-type: none"> <li>• Thermal energy storage not feasible due to high load factor, real estate and the amount of time required to make ice or chilled water</li> <li>• Potential: Co-gen plant not feasible due to lack of heat load but may be considered for medical and research district.</li> <li>• Geo-exchange has been considered and is not feasible.</li> </ul> </li> </ul>
2.5	<p><b>Energy Usage:</b> Electrical Energy Usage Index and Power Density for each building will be used to predict the future growth.</p>  <p>The chart displays the Electrical Energy Usage Index for various buildings from 2010 to 2015. The y-axis lists building names, and the x-axis shows the index value from 0 to 15,000. The bars are color-coded by year: 2010 (blue), 2011 (orange), 2012 (green), 2013 (purple), 2014 (red), and 2015 (yellow). Buildings like 'SUNSHINE CENTER' and 'SUNSHINE CENTER 2' show the highest usage, with 2015 values exceeding 10,000. Other buildings like 'SUNSHINE CENTER 3' and 'SUNSHINE CENTER 4' also show significant usage, while many others are below 5,000.</p>

Item No.	Description
2.6	<p><b>IT/Infrastructure:</b></p> <ul style="list-style-type: none"> <li>• Wireless service has been requested to be “more-friendly”, i.e. easier access.</li> <li>• Expand range of wireless availability to outdoor areas.</li> <li>• Ensure wireless capabilities are upgraded to keep on the cutting edge of technology.</li> <li>• IT has sufficient bandwidth capacity for future growth. Need to identify bandwidth requirements in the master plan.</li> <li>• A new data center was considered for location in the Student Complex Center. However, these plans appear to be changing as of last week. Another location on campus will be required.</li> </ul>
2.7	<p><b>Regulatory &amp; Permitting Agencies &amp; Host Communities;</b> Coordination activities with WASD and the host communities to assure there is sufficient capacity to meet the water consumption needs of future development at FIU. MD-WASD is in progress of updating the water and sewer modeling for FIU campus.</p> <p>Meetings planned or completed:</p> <p>Sept 18, 2012 - Miami-Dade County Water &amp; Sewer Department</p> <ul style="list-style-type: none"> <li>• Intergovernmental Affairs Section</li> <li>• New Customer Division</li> <li>• Planning</li> </ul> <p>Sept 26, 2012 - Miami-Dade County Permitting, Regulatory and Economic Resources (FKA - Environment and Regulatory Affairs - PERA)</p> <ul style="list-style-type: none"> <li>• 2010 Florida Building Code / Flood Protection Standards</li> </ul> <p>Oct 2, 2012 - Miami-Dade County Water Control Section</p> <p>TBD – City of North Miami</p> <p>TBD – Miami-Dade County Public Works and Waste Management</p>
2.8	<p><b>Meter readings required:</b> Water meter data still required from FIU. Most recent data is from 2005-2006.</p>
2.9	<p><b>County Fair Expansion Area:</b> will require estimated demand studies based on vision plan.</p>
2.10	<p><b>Next Steps:</b> Work Session #3-Focus Group Meeting on December 5, 2012, 10:00am-12:00pm</p>

**End of Work Session #2 FOCUS GROUP 5 – Infrastructure, Utilities, & Maintenance Meeting Minutes**

The foregoing constitutes our understanding of matters discussed and conclusions reached. Other participants are requested to review these items and advise the originator in writing of any errors or omissions.