

Proposed LID Curriculum Meeting Minutes

Date: October 29th, 2008 6:00pm - 7:30 pm

Members in Attendance: Buddy Tignor, Blair Bishop, Tommy Clements, Chad Bledsoe, Jon Calabria, Tim Ormand (sick sent input via e-mail), Andrew Bick (unable to attend sent input via e-mail), Michael Gruberman (unable to attend sent input via e-mail).

1. Everyone introduced themselves.
2. Low Impact Development Program description was reviewed. Point was made that LID has traditionally been associated with stormwater management. HCC's proposal broadens that scope to include many other facets of sustainable development, including a broad suite of technical skills.
3. Draft of proposed state curriculum standard was reviewed.
 - Initial discussions included two possible routes for program to develop. The first route of development is a two-year A.A.S. degree, the second route the certificate route would involve students taking just the core LID courses. It was mentioned that these core courses should be made available online.
 - While discussing the LID courses we reviewed the document entitled *Eight Steps to a Low Impact Design*. This is a preliminary outline to topics that would be covered in LID 111 Design Principles of LID. The suggestion was made that the Design aspects be covered in less detail and Permitting, Construction Support, and Operations sections be covered in greater detail. Defining the role of this tech level position in the LID industry is a new one and will have to be dynamic and regularly reviewed as we proceed with getting the curriculum approved. It was mentioned that a Tech should be able to take a baseline analysis and design and oversee construction.
 - When covering the Drafting and Design required subject area it was noted that the DFT CAD choices would require that instructors cover additional material that they may not be covering now. Current DFT CAD offerings are more associated with engineering and manufacturing industry and not landscape. It was thought that LAR offerings in the CAD area might be more important. Landscape CADD was considered to be the way to go. It was noted that John Sherman will be pursuing professional development opportunities in Land CADD. It was also noted that HydroCAD would be of great benefit to students. A brief discussion on the cost and procurement of software followed.
 - When covering the *GIS required subject area* the group noted the importance of this skill. Both GIS and GPS courses were considered appropriate, but several suggested that we might make more GIS courses an option in the proposed curriculum standard. GIS 121 Georeferencing and Mapping, GIS 246 Principles of Property Mapping, 245 Intro to spatial analysis.
 - When covering the Plant Materials required subject area it was suggested that FOR 121 Dendrology might also be added as a choice for the curriculum standard.
 - When covering the Soil Science section the importance of Hydrology in curriculum was mentioned multiple times. It was suggested that a hydrology course be added. The state combined course library will be reviewed for a hydrology course. If there is no course available we may need to create or add hydrology competencies to existing courses.

- Draft of local Program of Study for Haywood Community College was reviewed:
 - There was discussion about Environmental Biology and Environmental Sciences courses. Both were deemed important, but as curriculum develops it may be possible that we eliminate one course in order to add more LID technical courses to the curriculum.
 - MAT 120 and MAT 140 were discussed. Although both deemed important MAT 120 is a necessity for GIS and CST suggested courses.
 - It was also mentioned that students interested in a 2+2 agreement would need to take higher level math courses.
- The 4 proposed LID courses were reviewed and everyone was OK with current format. Again the balance between design and technical skills for our graduating students was discussed. There was a lot of uncertainty about how 2-year graduates would fit into existing environmental engineering and landscape design firms with 4-year graduates. It was thought that both would initially fill the same employment slot, but that 4-year graduates would move up faster. However, several thought that there would be a unique niche for these students with their broad skillset enabling them to do additional CAD and GIS work at the firm, although it was agreed that this work may not be as exciting as some of the other work. Jon Calabria also mentioned that we should use the projects as the Arboretum for some of the LID 112 field laboratories.
- Committee then reviewed all e-mail and survey comments from employers and absent committee participants. Understanding Erosion Control and stormwater was critical. Focus on stormwater, regulation, and permitting might help graduates avoid the 'CADD' cage that some job descriptions fall into. Jon Calabria also brought along information on several certifications that our graduates might get while completing a A.A.S. or certificate:
 - USEPA Online Training in Watershed Management
 - Stormwater BMP Inspection & Maintenance Certification (NC Cooperative Extension)
 - BMP Annual Maintenance Certification Protocol (Durham, NC --- example of municipal cert)
 - Sustainable Sites Initiative
 - Leed based accreditation (present and future categories)
 - Certified Professional in Erosion and Sediment Control (CPESC)

It was discussed that this was a great idea and encourage students to get additional 'external' certifications in several of our natural resources programs.
- Discussion followed about making sure ongoing discussions about the program were dynamic. There is a need to differentiate GIS and Survey Tech programs from the LID Tech program. There was also the desire to pursue 2+2 agreements to further the professional opportunities of graduates in the program.