

APPENDIX “D”

Purdue University North Central Campus Design White Paper

February 27, 2008

Premise:

The campus community supports and endorses the sequence of projects described in our current facilities master plan. As the plan is implemented, the issues of promoting sustainability, conserving and protecting the natural environment on campus, and enhancing the quality of existing and planned instructional space must be central to all design schemes and decisions.

Goals and Objectives

- I. Campus facilities and operations will be models of sustainability.
 - a. Strategies
 - i. Assess environmental impact of facilities and operations
Action Items:
 - Calculate carbon footprint of campus
 - Set date to achieve carbon neutrality
 - Quantify volume and components of solid waste stream
 - ii. Reduce energy consumption
Action Items:
 - Assess feasibility of performance contracting to retro fit:
 - Lighting systems
 - More efficient fixtures
 - Motion/presence sensors
 - Solar lighting for landscape/walkways
 - HVAC control systems
 - Assess feasibility of alternative power:
 - Solar power
 - Wind power
 - Co-generation
 - Examine alternative methods of heating and cooling
 - Geo-thermal
 - Solar heating
 - Update and fully implement energy management system
 - iii. Reduce consumption of natural resources
Action Items:
 - Retro fit to low-flow flush valves and toilets

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- Install flow restrictors on faucets and showers
- iv. Design new facilities to meet Leadership in Energy and Environmental Design (LEED) accreditation standards
 - Action Items:
 - Determine appropriate level of LEED certification
 - Modify current Purdue construction standards
 - v. Reduce waste stream
 - Action Items:
 - Reduce paper consumption –expand electronic media
 - Expand recycling program
 - Paper
 - Plastic
 - Aluminum
 - Batteries
 - Computer components
 - Printer cartridges
 - Kitchen grease
 - Purchase recycled or recyclable products
 - Paper
 - Furniture
 - Carpet
 - Purchase “green” products where available
 - Cleaning chemicals
 - Alternative fuel vehicles for campus fleet

Funding Sources: S & E, Development Funds, Capital Requests/State Appropriations

Goals and Objectives:

- II. Conserve and protect the natural environment by treating the campus as a living laboratory.
 - a. Strategies
 - i. Integrate instruction with available natural features
 - Action Plans:
 - Use natural features as laboratory and research facilities:
 - Wetlands
 - Beech forest
 - Maple forest
 - Ravine and glacial moraine topography

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ii. Provide facilities to support outdoor instruction

Action Plans:

- Increase number and use of nature trails
- Establish tall-grass prairie
- Use natural space for art exhibits
- Construct boardwalk and overlook platforms at ravine and beech forest
- Construct outdoor classroom shelters at various locations

iii. Include design elements to enhance communication and information sharing

Action Plans:

- Install flat screen monitors at entrances to list events and announcements
- Provide outdoor kiosks on which students may post notices
- Integrate signage and way finding system

iv. Acquire adjacent properties that contain significant environmental features.

Action Plans:

- Arrange to have properties donated
- Initiate capital campaign to fund purchase

Funding Sources: S & E, Development Funds, Capital Requests/State Appropriations

Goals and Objectives

III. Enhance existing and future instructional space

a. Strategies

i. Improve appearance of current classrooms and labs

Action Plans:

- Paint existing classrooms where needed
- Avoid “institutional” colors and design palate

ii. Improve functionality of current classrooms and labs

Action Plans:

- Equip classrooms with moveable tables and chairs, which are strongly preferred over fixed seating or tablet-arm chairs
- Improve classroom lighting levels and quality

iii. Improve technology in all classrooms and labs

Action Plans:

- Install “smart” technology in all classrooms and labs

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- Provide ubiquitous wireless coverage
 - Replace outdated equipment in science labs
- iv. Incorporate design features in future classrooms
- Action Plans:
- Make classrooms large enough to accommodate tables and chairs
 - Follow appropriate width-to-depth proportions
 - Install up-to-date instructional technology
 - Provide light, easily moved furniture
 - Enhance natural lighting

Funding Sources: Capital Requests/State Appropriations

Members of the Campus Design Sub-committee

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Meeting Dates

The committee members met on: January 17, 24, 31, February 14, 21

Date of Open Forum: February 7, 2008