College of Saint Benedict Landscape Sustainability Goals April 2013 Barr Engineering Co.

Big Picture

- 1. The campus landscape will reflect the Benedictine values of the College.
- 2. The College recognizes the impacts of climate change and will design landscapes to be more resilient in the face of anticipated weather extremes.
- 3. The campus landscape will display a unified aesthetic of beauty, safety, and sustainability.
- 4. The landscape management carbon footprint will be cut in half by 2050.
- 5. The campus landscape will serve as a sustainability education resource.
- 6. Recycled and reused materials will be examined as a first alternative for landscape materials along with locally sourced materials.

Campus Ecology:

- 7. Turf areas on campus will be reduced by 50%.
- 8. The species diversity of campus plantings will be significantly increased.
- 9. Signature species of local native habitats will be used in strategic locations throughout the campus landscape along with climate change resilient species.
- 10. The soils on site are naturally regenerating; porosity and organic matter content is increasing, and stormwater easily soaks into the ground.
- **11**. Integrated pest management will continue to be implemented as a means to decrease dependence on pesticides in landscape maintenance.
- **12**. Song bird habitat will be created where possible and aesthetically appropriate.

College Image and Perception:

- **13**. The campus landscape will be a beautiful place to learn.
- 14. The campus landscape will reflect an image of good land stewardship practices
- **15**. The campus landscape will reflect the College of that Saint Benedict's commitment to innovation and creating special outdoor spaces.
- **16**. The campus landscape will be a central part of a visitors' first impression of the College.
- 17. Campus entrances are striking and inviting while demonstrating the sustainable land ethic of the college.
- **18**. Prospective students will be attracted to the College in part because of its commitment to sustainability as reflected in its living environment.

Student and Employee Health:

- **19**. Fertilizer and pesticide use will be minimized in landscape maintenance and only as a part of an Integrated Pest Management (IPM) approach to management.
- 20. The campus landscape will facilitate active lifestyles for students, staff and faculty by providing easy opportunities to walk in natural areas and convenient to park bicycles.

Safety and Security

- 21. The campus landscape will be designed with safety in mind.
- 22. The campus landscape will allow people to quickly and safely move between buildings, and allow people to quickly and safely move through emergency exits to outdoor assembly areas.
- 23. The campus landscape will incorporate traffic calming strategies along College Avenue to allow for safe pedestrian crossing.

Financial:

24. It is acknowledged that the improved campus landscape will require more resources to maintain. Resources will be conserved by reducing the need for machines and gasoline, but will result in the need for more human capital.

Student Life

- 25. Campus landscape will encourage students to take more advantage of the walking trails and beautiful outdoor gathering areas on the adjacent Sisters of Saint Benedict property.
- **26.** Students will find the campus landscape attractive, useful and be proud of the environmental ethic reflected in the landscape.
- **27**. Students will learn about sustainable landscapes through every day experience.
- 28. Beautiful views from inside buildings improve student and staff experience.
- **29.** Outdoor classrooms are created on campus.
- **30**. Bike parking is convenient.

Plantings

- **31**. Plantings are healthy and resilient because they are well adapted to the growing conditions on campus.
- **32**. The natural areas of campus have a diversity of native plants while invasive, exotic species are kept to a minimum through regular management.
- **33**. Outdoor rooms (framed by plantings) will be created to establish comfortable usable outdoor space, and to take advantage of microclimates to extend the season of use.
- **34**. Actively used lawn on campus will be retained to accommodate recreation and other uses.

Parking Lots:

- **35.** Pervious surfaces will be incorporated into newly constructed or renovated lots.
- **36**. At least 20% of parking surfaces will be shaded by trees. Parking lot trees will be watered by stormwater running off the pavement.
- **37.** Parking lots will be pedestrian friendly.
- **38**. Snow storage and plowing will be made easy through efficient parking lot design.

Energy:

- **39**. Tree plantings are used to improve building energy efficiency by shading east and west facing windows and by blocking wind where appropriate.
- **40**. Campus landscape maintenance will increasingly rely upon human energy as opposed to fossil fuel energy.

41. Energy efficient lighting is phased into use in exterior campus lighting.

Water Use, Water Conservation, and Stormwater Management:

- **42**. Stormwater will be treated as a resource, not a waste product, through reuse in irrigating landscape plantings rather than entering storm drains.
- **43**. Stormwater runoff from impervious surfaces will be captured and infiltrated in shallow depressions (rainwater gardens) where possible as a means of improving stormwater quality and watering the landscape.
- 44. Potable water used for irrigation will be significantly reduced.
- 45. Campus landscape plantings will incorporate drought tolerant/low water-use species.
- **46.** Roof water collection and distribution in the landscape will be demonstrated where practical.
- 47.
- 48. Stormwater runoff volumes will be decreased by minimizing impervious surface area.

Education, Demonstration, and Experimentation:

- **49**. Students will continue to be involved in sustainable landscape maintenance.
- **50.** Edible plants will occasionally be included in campus landscape plantings to demonstrate local food production.
- **51.** Interpretive signage will be installed to explain landscape sustainability on campus where appropriate. Also, public art and artful design will be used as a means of drawing attention to ecological function.
- 52. An online component will be maintained to explain landscape sustainability on campus.