Masters Project Proposal

Green Community Development

SNRE Academic Advisor:

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Client:

Peter Allen

Team Members:

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Executive Summary

A multi-disciplinary team of environmentally-conscious University of Michigan graduate students has begun to research the economic feasibility of an environmentally responsible (green) community development in the city of Ann Arbor. The team is comprised of landscape architecture, architecture, resource ecology and management, environmental policy, law and urban planning students. The site selected for the study is the DTE/MichCon site near the Broadway Bridge, and initial work is already underway. The Green Broadway Project will be an intensive, year-long study of the economic feasibility of providing the city with an environmentally conscious development. Ultimately the team will deliver design solutions for an ecologically responsible mixed-use development. The terms "green" and "sustainable" are two words that have acquired various definitions through increasing use for different concepts. Throughout this paper we will refer to the concept of "green" as the minimization of impacts to the environment, incorporation of energy efficiency, water conservation, waste minimization, pollution prevention, resource-efficient materials, and indoor air quality in all phases of development.[1] "Sustainability" references will signify a development that will not compromise the health of the environment or the associated health and well being of the building's occupants, builders, the general public, or future generations.[2]

Green urban renewal applies green and new urbanism design principles to the redevelopment of existing urban spaces to create communities that are more compact, livable and community oriented; less car dependent; and more environmentally friendly. This involves the redesign of an area into a sustainable community by fusing together commercial, residential and industrial interests with environmentally beneficial elements such as green building design,

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[1] City of Seattle, Sustainable Building Action Plan, 1998.

innovative storm water management, green roof construction, habitat restoration, and alternative energy technologies.

Ann Arbor prides itself on its sustainability efforts; by restoring and redeveloping preexisting sites within its current boundaries, the city can curtail urban sprawl and minimize the development of undisturbed land. The design plan for the MichCon/DTE site will focus on the feasibility of creating a livable community structured around green design; it will therefore be a product of community needs and our own research and analyses. To accomplish this, the team hopes to create a coalition of stakeholders from the local government and community to provide feedback on site use and design.

The MichCon/DTE site straddles the Broadway Bridge on the north side of Ann Arbor. There are two sections of the site: one area extends 12.5 acres south of the Broadway Bridge, and the other extends 3.5 acres north of the bridge. (See Appendix A for map) The MichCon portion of the site, on the south side of the Huron River, was an old coal gasification plant that now sits unused by DTE. This portion of the site is considered a Brownfield area due because of soil and water pollution resulting from former coal gasification practices. A site is designated as being a brownfield due the presence or potential presence of a hazardous substance, pollutant, or contaminant as defined by the Environmental Protection Agency Brownfield Glossary.[3]

The team will evaluate the legal and policy issues surrounding MichCon's Brownfield designation and see how these issues might affect the site design plan and the funding options for cleanup and redevelopment. Both sites are currently owned by Detroit Edison and may soon become available for development. Peter Allen, a major local real estate developer, recently expressed interest in redeveloping this site for mixed commercial, community, and residential

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[2] Landman, M. Tufts University, Department of Urban and Environmental Policy, Spring 1999.
[3] http://www.epa.gov/brownfields/glossary.htm