

Building Green for the Future

Case Studies of Sustainable Development in Michigan

Bailey's Grove, Kentwood



UrbanCatalystAssociates

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Mick McGraw created Bailey's Grove with the goal of building a unique community that respected and integrated the natural surroundings within the development.





Project type	Residential
Project scale	Site
Construction type	New Construction - Greenfield
Date completed	Fall 2005
Address	2130 Enterprise SE, Kentwood, MI 49508
Subjects	Development Processes
	Site Planning
	Social Benefits
	Cost Benefit Analysis
Total project costs	Not provided
Total Acreage	364 acres



Kentwood, Michigan

Bailey's Grove

History

Bailey's Grove, a mixed-use community developed by Eastbrook Homes in Grand Rapids, is a 364-acre community of 1000 homes and condominiums, and 45 acres of wooded open space. The initial idea for the development began in the early 1990s, when local Grand Rapids developer and CEO of Eastbrook Homes Mick McGraw, and land planner David Jensen toured the undeveloped site, immediately recognizing the beauty of the natural surroundings. Their goal was to develop and build a unique community with modern amenities that respected and incorporated the natural surroundings.

*“We made natural features marketing tools.
And we’re proving that using these concepts can help
sell houses faster.”*

Mick McGraw

Development Processes

Bailey's Grove was created as a sustainable living environment that stressed community, human interaction, and a connection to the natural surrounding. Developer Mick McGraw wanted to build a village-like living environment where people from varying social and economic backgrounds could live and play together. According to McGraw, diversity is increasingly important when building residences and developments. With these goals, Bailey's Grove looks different from traditional greenfield developments. In place of the typical suburban design where suburban-style tract houses side-by-side dominate, Bailey's Grove incorporates greater green space, smaller streets, and more pedestrian-friendly walking paths.

Bailey's Grove is the only large-scale development of its kind in the state of Michigan. With the design and size of the development (364 acres), McGraw worked more closely with city officials, community leaders, and environmental organizations to get the development successfully built. Sharing the vision of the development with these groups was relatively easy for McGraw, but achieving approval for it was more challenging. One of the principle struggles was convincing city officials to allow for the construction of narrower streets throughout the development. Smaller streets give the development a more intimate feel, allow for more green space preservation, reduce the amount of impervious surface, and help reduce infrastructure costs.

First, McGraw gathered support and developed several "champions" among city officials who supported Bailey's Grove. Second, he developed trust with city officials, community organizations, and the environmental community who opposed elements of the development. He listened and addressed their concerns, and followed through on actions he promised them. And third, McGraw expressed his feelings about what he thought was important for the development. Throughout, he remained committed to his vision and goals and was steadfast in fighting for those elements he believed were crucial to the development.

Community and recreational activities are important to Bailey's Grove residents and have become a major selling point in attracting new customers and retaining existing residents.



On addressing urban sprawl: "The only population growth in Michigan is birth over death. People and development are not creating urban sprawl, mandated large-lot sizes are a principle cause of urban sprawl."

- Mick McGraw

Compared to traditional greenfield developments, Bailey's Grove incorporates proportionally more green space alongside smaller streets and more pedestrian-friendly sidewalks.

Site Planning

Site Planning and integrated design were crucial to Bailey's Grove. The development included over 350 acres, and McGraw found it most effective to work backwards from his ultimate vision of how the development would look and feel. The master plan relied heavily on natural environment inclusion, and McGraw and his development staff spent significant



time throughout the entire development process walking the site and surveying the land and its natural features. According to McGraw, this sensitivity to the environment is an element often overlooked. "Developers worry too little about nature and too much about sewer and infrastructure issues," McGraw says. "Working with the land is as much art as it is science and, we developers must understand when enough is enough. It is important to understand the land and know how much it is willing to give."

As part of the preservation efforts, McGraw took a natural features inventory to determine what needed to be saved, with special attention paid to saving the existing trees on the site and moving those that would be in the way of houses elsewhere on the property. In total, 1,000 trees were uprooted and moved to other locations on the site. By preserving existing trees, McGraw not only saved money, but preserved the rural atmosphere that he wanted for Bailey's Grove. In fact, in 2003, Bailey's Grove won the prestigious "Building With Trees Award of Excellence", an award presented annually by the National Arbor Foundation to developers who employ environmentally friendly techniques to complement the natural surroundings.

Another important natural preservation goal was wetland protection. Originally, there were almost 10 significant wetlands on the property, all of which were integrated into the overall design. In addition, the development team designed a massive wetland on the property to attract birds and create species habitat. In the process, McGraw discovered that to preserve and maintain the wetlands, there must be a constant source of water as well as constant care and attention to the wetlands' preservation. The wetlands act as a natural stormwater system and their integration into the development assists in the overall goal of natural preservation.

On working with environmentalists and preservationists: "We are often more aligned with their (environmentalists) thoughts. We have developed an understanding of what we're both trying to do. At the end of the day I think those in the development community have a great desire not to use any more land than we have to."

- Mick McGraw

Social Benefits

Bailey's Grove was designed to accommodate people with a range of economic backgrounds and lifestyles. Homes range from single apartment units to large 4-5 bedroom single-family homes, and are not segmented by type within the development. The different units complement and mesh with one another within the development. This distinct diversity that Bailey's Grove creates is usually found only in urban areas; McGraw managed to create such diversity in a suburban environment.

Bailey's Grove adapts to people's changing lifestyle needs and is responsive to the changing housing demands of its residents. McGraw is building long-term relationships with his customers and reports that Bailey's Grove residents who must move due to changing family needs are moving to new homes within the development rather than outside of Bailey's Grove. "A family could move three or four times over several decades, yet could remain in Bailey's Grove for the entire time," says McGraw. From a sales and marketing perspective, this benefit attracts and retains homebuyers and owners. The very elements that attracted customers to Bailey's Grove are the same elements that are keeping them.

Cost Benefit Analysis

McGraw believes in two methods for residential development: (1) traditional use of available land so that each homeowner owns a spacious lot, and (2), McGraw's preferred way, condensed individual lots to incorporate community open space into the overall development. McGraw says that "Builders confined to two-acre lot sizes are frustrated because fixed-lot sizes cost more money in infrastructure and other costs, and they eat up valuable land."

Bailey's Grove is an example of cluster development designed to have an average of 4 units per acre. McGraw placed more homes on less land to save on land acquisition and infrastructure costs.

Used	Homes per acre	Total Number of Units	Total Acreage Used
Traditional Development	2.5 residential units	1,638 units	655 acres
Bailey's Grove	4.5 residential units	1,638 units	364 acres

A planned community can consume about 45% less land, cost 25% less for roads, 15% less for utilities and 5% less for housing (Watershed Protection Techniques).

Awards

- National Arbor Day Foundation, Building With Trees, 2003
- 2003 Conservationist of the Year, Issac Walton League of America
- Deemed partner in water quality preservation efforts by MDEQ, 1997
- Acknowledged by the Grand Valley Metro Council for injecting community-stabilizing principles into the Bailey's Grove plan, 2000

The Bottom Line

Innovative new development projects like Bailey's Grove face the same challenges that traditional projects face, in that community input, city approval, and continued commitment to a goal are all essential elements. Mick McGraw worked through these challenges to create a development that respects and preserves the natural environment.

Environmental preservation is often viewed as a hindrance to development, whether it is in an urban, suburban, or rural setting. The Bailey's Grove development proves that environmental preservation and sensitivity can coexist with development. Furthermore, not only are they not mutually exclusive, but integrating components of nature and conservation as a marketing tool helps sell homes and retain customers.



Bailey's Grove was designed to have an average of 4.5 units per acre. Traditional development typically has 2.5 units per acre.

References

- "Eastbrook Homes' McGraw Lands on Land-Use Council," David Cruzak, Grand Rapids Business Journal, March 3, 2005
- "Builders and Developers Honored for Tree Conservation Efforts," National Association of Home Builders, Land Development. Volume 16, Number 4, Fall 2003
- Interview with Kristy Harrington (Eastbrook Homes)
- Interview with Mick McGraw (Eastbrook Homes)

Contact Information

Developer	Mick McGraw CEO, Eastbrook Homes, (616) 455-0200
Land Planner	David Jensen, David Jensen Associates, Inc. (303) 369-7369
Engineer	Medema VanKooten, Dale VanKooten, (616) 451-0639

Resources for further information
www.eastbrookhomes.com

www.arborday.org/programs/BuildingwithTrees/ (Building with Trees Award)

Urban Catalyst Associates

Urban Catalyst Associates

Urban Catalyst Associates (UCA) is an interdisciplinary team of recent University of Michigan graduate students who have combined their experiences, interests, and educations to create a positive impact on the future of the State of Michigan. The team holds a strong passion for fostering innovative, sustainable development that will shape the evolution of the new urban environment.

In collaboration with the Michigan Department of Environmental Quality, Urban Catalyst Associates developed this handbook to serve as inspiration and ready reference to the development community and other interested groups. As the State furthers its investment in green development, the UCA team hopes that this handbook will encourage developers to infuse elements of environmental sustainability into their planning and development processes.

Urban Catalyst Associates can be contacted via email at uca@uca-michigan.com. See the contact information below for information on contacting individual team members.

Zeb Acuff

Zeb holds Master's degrees from the School of Natural Resources and Environment and the Taubman College of Architecture and Urban Planning, both at the University of Michigan in Ann Arbor. He is also a 2001 graduate of the College of Agriculture and Natural Resources at the University of Delaware. Zeb has extensive experience in farmland preservation and local planning research, as well as familiarity working with demographic and social science media. His professional interests include parks and recreation planning, non-motorized transportation, trails and greenway development, and public transit systems. Zeb and his wife currently reside in Dexter, Michigan. Zeb can be contacted via email at zeb@theacuffs.com.

Bryan Magnus

Bryan graduated from the University of Michigan in April, 2005, with an MBA from the Ross School of Business and a MS from the School of Natural Resources. His undergraduate degree is in Finance and Actuarial Math from Bryant University in Smithfield, Rhode Island. Bryan has extensive knowledge of socially and environmentally responsible business with an emphasis on renewable energy and alternative transportation. He has interned with General Motors' Fuel Cell Activities Group as well as Honeywell's Transportation Systems, and is currently employed by Honeywell TS as a Marketing Analyst. Bryan, his wife Lynn, and their "child" Meadow (dog) live in Ann Arbor, Michigan. Bryan can be contacted via email at magnusb@umich.edu.

Aaron Harris

Aaron will complete his final year at the University of Michigan in spring 2006 with both an MBA from the Ross School of Business and an MS from the School of Natural Resources and Environment. Prior to Michigan, Aaron co-founded Harris Brothers LLC, a real estate development/management company based in Chicago and focused on green building design and environmentally sensitive renovation projects. Upon completion of graduate studies, Aaron plans to return to the real estate field to pursue urban brownfield redevelopment projects. Aaron graduated from the University of Wisconsin-Madison with a BA in Sociology (Honors) and a Certificate in Environmental Studies. Aaron can be contacted via email at aaronmh@umich.edu.

Allyson Pumphrey

Allyson graduated from the School of Natural Resources & Environment with a Master's degree in Landscape Architecture in April 2005. Prior to attending the University of Michigan, she received her BS in Landscape Horticulture & Design from Purdue University in West Lafayette, Indiana. Allyson has experience in residential site design and urban redevelopment projects. Her professional interests include urban trails and greenways, brownfield redevelopment, and urban design. Allyson is employed by InSite Design Studio, Inc. in Ann Arbor, Michigan. Allyson can be contacted via email at apumphrey@insite-studio.com.

Larissa Larsen

Larissa Larsen, Ph.D., is an assistant professor with positions in both the School of Natural Resources and Environment and the Urban Planning Program at the University of Michigan. Larissa has a Master's in Landscape Architecture degree from the University of Guelph in Canada and a Ph.D. in regional planning from the University of Illinois at Urbana-Champaign. Prior to becoming a professor, Larissa practiced landscape architecture and urban planning in Chicago. Her current research investigates the ecological and social impacts of urban settlement patterns. Larissa can be contacted via email at larissal@umich.edu.