

James W. Hawks, Jr., ASLA: Polychrome Land Development in the Upper Midwest

Jon Bryan Burley, Luis Loures, and Mengwen Feng

Abstract— Planners, designers, academics, and governmental agencies are interested in the knowledge base concerning developing sites that contain restraints and difficulties that hamper the thoughtful use of land. Unlike green fields, gray fields, and brown fields, often each site has unique characteristics (political, economic, cultural, and environmental) that make these land parcels individual and specialized cases; thus the term polychrome fields. In this investigation, the procedures and practices of James W. Hawks, Jr. in coordination with Centurion Company in the late 1970s and early 1980s illustrate the development of polychrome sites. The study area is in the eastern suburbs of the Twin Cities (Minneapolis/St. Paul), Minnesota. In addition, we present the formative period in Mr. Hawk's career, when he was a partner in Midwest Planning and Research, Inc., originating in 1956 through the early 1980s.

Keywords—Landscape architecture, environmental design, landscape engineering, landscape planning, urban design, and housing.

I. INTRODUCTION

Developing land for housing, industrial parks, transportation, and commercial areas is an activity in the United States of America that is widely engaged by landscape architects and planners [1, 2, 3, 4]. As an urban area expands, the land that is often first consumed is known as green fields [5]. These are environments on agricultural land, usually with few limitations prohibiting development. In the urban mosaic, the land that is typically the last to be developed are environments with unique characteristics that inhibit quickly built projects. Often these more difficult environments to develop are like planning and design puzzles that require knowledge and experience to become successful. Investors who speculate in land development may lose money in these difficult to develop environments.

Relatively little research or case study reports exist concerning methods and procedures to develop such sites. In part, this is due to the notion that much of the information is

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proprietary, "in-house" knowledge. Meaning that firms or developers who publish such information may be "giving-away" their competitive edge. Instead, investigators conduct field research on topics such as landscape habitat, soil compaction, environmental psychology, and real estate values or institutes and non-governmental organizations produce handbooks describing the basic considerations that an emerging young professional should understand [6, 7, 8, 9, 10].

James W. Hawks, Jr. a landscape architect and planner was an expert at developing these difficult environments and could advise investing teams about how to successfully develop such lands. Mr. Hawks Jr. was a partner (with Howard N. Dahlgren and Barbara Lukermann) in the largest planning and design firm in Minnesota (Midwest planning and design) during the 1960s and 1970s. The firm started in 1956 and was incorporated in 1960 [11]. Jim worked upon many projects and had many clients. In the 1970s, the three partners sold their business and Jim expected to professionally retire. However, one of Jim's clients, a former brick mason and then developer, Richard A. Neslund with his firm Centurion Company desired to employ James W. Hawks Jr. as an advisor to develop land. Jim agreed and came to financial terms with the company. This investigation is about the formative experiences of James W. Hawks Jr. during his partnership in Midwest Planning and Research, Inc., and a description of some of the developments that James W. Hawks Jr. gave advice upon in the creation of projects primarily for housing ranging across the western suburbs of the Twin Cities (Minneapolis/ St. Paul, Minnesota) during the late 1970s and early 1980s.



Figure 1. Jim W. Hawks, Jr. [11].

II. MIDWEST PLANNING AND RESEARCH, INC. CASE STUDY

Midwest Planning and Research, Inc. was a planning and design firm comprised of three major partners [11]. Jim W. Hawks Jr. (Figure 1) studied engineering at Glendale College in California, obtained a Bachelors of Science degree in

Landscape Architecture at Iowa State University, and studied urban planning at the University of California, Berkeley. He was the founding president of Midwest Planning and Design, Inc. He was a member of both planning and landscape architectural institutes/societies. Before founding Midwest Planning and Research, Inc., Jim had a broad set of professional experiences in planning and landscape, plus working with architects. He had professional work experience as a principal planner for Thorshov and Cerny, Gardner Associates and as planning director for the City of Rock Island, Illinois. He was also an assistant planner director for the City of Muskegon, Michigan, a planning technician for the City of Berkeley, California, a planning technician for both the city and county of Tuscon, Arizona, and a landscape architect for May Corporation, Shenandoah, Iowa.

Thorshov and Cerny, Gardner and Associates was an architectural firm with origins dating back to 1876 in Minnesota, established by Franklin Long. George Robert Cerny, FAIA (1908-1985) joined Roy Norman Thorshov (1905-1992), also an architect, whose father Olaf Thurshov, an architect from Oslo, Norway had formed a partnership with Long (1842-1912). May Corporation was started by Earl May (1890-1946) and his spouse Gertrude. The firm continues today as a quality nursery and garden center business.



Figure 2. Howard N. Dahlgren [11].

Howard N. Dahlgren (1925-2008) (Figure 2) was the executive vice president of the firm [11]. He graduated from the University of Minnesota with a Bachelor of Arts in Architecture and earned a Masters of City Planning, University of Liverpool. Both he and Jim had worked at Thorshov and Cerny, Gardner and Associates. Mr. Dahlgren also had work experience with Sir William Graham Holford (1907-1975) with office locations in Liverpool and London, England. Holford was an English architect, town planner, and educator born in South Africa, knighted in 1953, and known for his work in the UK, Brazil, and Australia. After Midwest Planning and Research, Inc., was sold, he eventually formed the firm Dahlgren, Shardlow, and Uban. (from the firm Howard Dahlgren & Associates). Howard was also known for

his visionary work in guiding the development of the Twin Cities (Minneapolis/St. Paul) great metropolitan area and for his planning abilities in other cities such as Brainerd, Minnesota (Figure 3) [12, 13].



Figure 3. A land-use plan for Brainerd, Minnesota, developed by Midwest Planning and Research, Inc. [11].



Figure 4. Barbara Lukermann [11].

The third partner in the firm was Barbara Lukermann (1930-2009) (Figure 4), vice president of research. She earned a Bachelor of Arts in Geography from the University of Cambridge, England, and a Masters of Arts in Geography

from the University of Minnesota. She was also an employee at Thorshov and Cerny, Gardner and Associates, before forming Midwest Planning and Research, Inc. [11]]. She also had work experience teaching at Tonbridge, UK. After Midwest Planning and Research, Inc. was sold, she taught at the University of Minnesota's Hubert H. Humphrey Institute and held significant positions on planning commissions in the Twin Cities area [14, 15].

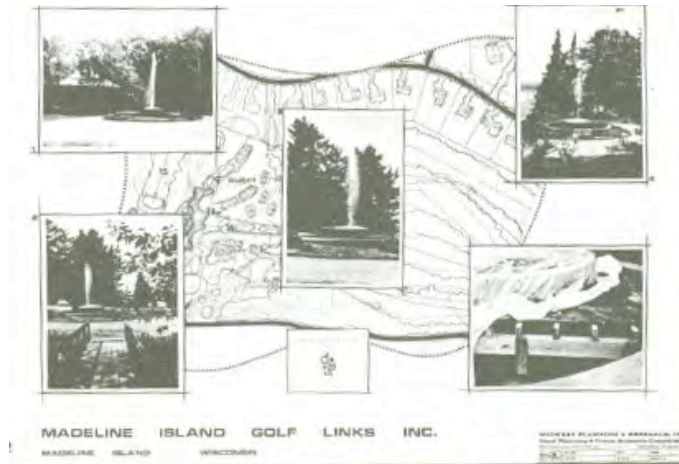


Figure 5. Design work for Madeline Island, Wisconsin golf course [11].

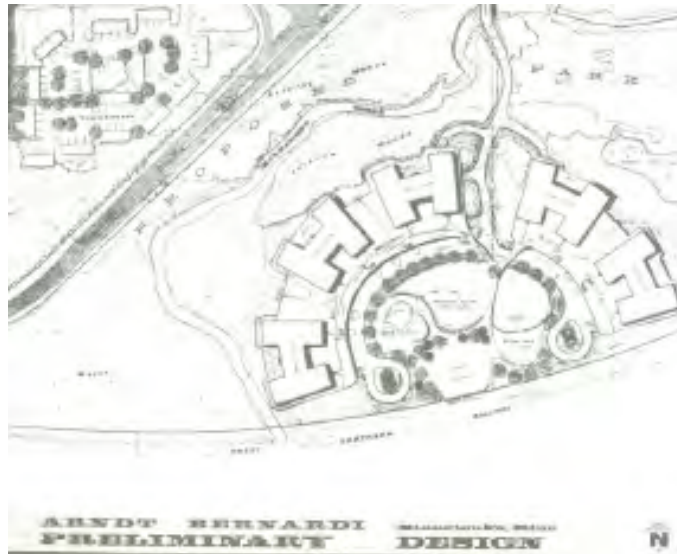


Figure 6. Site planning work by Midwest Planning and Research, Inc., [11].

Together, Jim, Howard, and Barbara had the largest planning and design firm in Minnesota, with around 50 employees. They produced numerous reports, plans and designs. Two of their most notable reports are: "A survey and analysis of 24 rivers in Minnesota, for the purpose of recommending those which should be considered as the Minnesota recreational River System" and "Transit options for the Twin Cities metropolitan region" [16, 17]. Midwest Planning and Research had several other influential planners on the team: Thomas Blum, John Darling, Jr., Larry Geisler,

Laurence Jung, James Utley, Donald Rey, Bruce Pankonin, and Richard Shelter, The firm had notable architects and landscape architects including Thomas Bechtel, Don Hess, Tom Dunbar, Terry Jacobs, Jon Dean Bailey, Lorin Galpin, and George W. Larson They were responsible for numerous site designs, site plans, and landscape analysis (Figures 5, 6, 7). The firm had offices in Casper, Wyoming, Minneapolis, Minnesota, St. Paul, Minnesota, and Madison, Wisconsin [11].

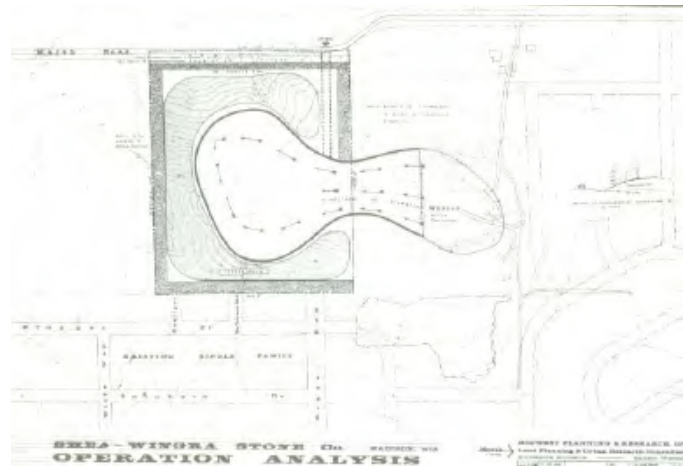


Figure 7. Site analysis work by Midwest, Planning and Research, Inc., [11].

This was the comprehensive collaborative professional environment that Jim and his partners had created. Jim's expertise was valued by many. While Jim was expecting to retire, he had clients who were still interested in his skills and abilities.

III. CENTURION COMPANY CASE STUDY

Land development can be a lucrative business and many individuals are seeking opportunities to make a profit. At Centurion Company, offers and suggestions to purchase land would come into the office almost on a daily basis. While each and every offer may be taken seriously, in any given year, only a couple of offers were forwarded to James W. Hawks Jr.. These would be offers where the company accountants and owner considered true opportunities to develop land and make a reasonable profit. Purchasing land at a premium (at the time \$10,000.00 per acre) was not considered good economic sense. The secret to making a profit was buying low and selling high; not buying high and hoping to sell even higher [18, 19, 20].

Often, land that could be bought at low prices was land where the seller could not wait for better economic times and had to sell quickly. Usually this was during poor economic times, where individuals needed cash and had to sell. Holding land cost money in the form of taxes and people in difficult economic stress often had to unload land at a discounted price. In addition, many land parcels would have circumstances that required extra investment before the land could be developed. People economically stressed could not develop such land and so were looking for buyers. Often in stressed economic times there are few buyers, meaning that the competition is low and

the land may have to be sold at a great discount. The management at Centurion Company would attempt to position themselves to hold their cash reserves and buy land at a very good discount. It was this discounted land that James W. Hawks Jr. would examine.



Figure 8. Jim Hawks making an initial site visit (copyright © 1979 Jon Bryan Burley, all rights reserved, used by permission).

Jim would make a site visit (Figure 8), meaning he would walk the site with his assistant, taking photographs and notes. Then in the office, he would get the zoning maps, soil maps, and local ordinances and relatively quickly develop several plans and options concerning the design of the site, maximizing the number of homes, honoring zoning requirements, and also configuring the design to be a pleasant place to live with amenities such as a swimming pool, walking/exercise trails, and ornamental vegetation. Then within a day or two, the ideas would be presented to the management of Centurion Company. If the plan made financial sense, the company would explore options to purchase the land, contingent upon approval of a designed development plan. An engineering firm might be hired to develop a lay-out plan carefully surveyed. If the plan seemed promising at the local governmental level, an architect may be hired to design structures. Jim would be involved in the development process after the engineers and architects had completed their tasks. As a landscape architect and planner, he was the primary design consultant being associated with the property from initial considerations to purchase the property, until the property was “handed-over” by the developer to the home-owner’s association.

In the early 1980s several projects in the western suburbs of the Twin Cities had been guided by James W. Hawks Jr. and developed by Centurion Company. Many of these projects had complex site limitations. Three projects: Auburn (in St. Louis Park, Minnesota), Auburn South (St. Louis Park Minnesota), and Lohman’s Amhurst (St. Louis Park Minnesota and Hopkins, Minnesota, bordering Minnetonka, Minnesota), illustrate the complexities and unique properties of land and land development. Figure 9 is an aerial view of Auburn before development. The land is relatively low with soft organic soils and a small creek moving through it. The former land-use was a landscape nursery. In order for the site to be developed the soft soils must be excavated and replaced with engineered soils to support a footing and foundation walls. Engineered soils are expensive to haul and place on a building site, making the site difficult to develop.



Figure 9. An aerial view of Auburn before development (copyright © 1982 Jon Bryan Burley, all rights reserved, used by permission).



Figure 10. An aerial view of Auburn South during development and the removal of excess sand (copyright © 1982 Jon Bryan Burley, all rights reserved, used by permission).

Figure 10. is an aerial view of Auburn South. This site had the opposite problem as Auburn. Auburn South was comprised of a large hill of sand. Developing the site would mean the removal of substantial quantities of sand, another expensive proposition for anyone wishing to develop the site. However, if one owned both the Auburn and Auburn South land parcels, one could import the sand from nearby Auburn South and save substantial hauling fees and charges for the sand from a sand and gravel operator. Both sites were purchased by Centurion Company. They have a related name because they were planned and developed at the same time. The name Auburn has no significant meaning other than it was a name that was appealing and had not been yet used in the county (Hennepin County), as each place must have a unique name within a county. If the organic soils from Auburn could be used locally and hauled to a third nearby site even more money could be saved. The third site was Lohman’s Amhurst.

Of the three projects, Lohman’s Amhurst was the largest. Lohman’s Amhurst (Figure 11) was a difficult parcel to develop as a protected creek (Minnehaha Creek) was on the north side and part of the property would be used for the right-of-way for Hennepin Country Road 18 (Figure 12). But for many years the alignment was not certain and so a land owner could not get permission to develop the site until the alignment was known. This meant that the landowner would

have to pay property taxes for many years before the site could be developed. Lohman's Amhurst was also purchased at a discount because of this problem. It is known as Lohman's because the site was part of the Lohman farm and was sold with the stipulation that the name Lohman be used. In addition, Amhurst was selected as a name by Richard Neslund invoking images of wealth and prosperity.



Figure 11. A photograph of Lohman's Amhurst before development, looking west from the edge of a shopping mall. Country Road 18 would eventually traverse the site in the foreground (copyright © 1978 Jon Bryan Burley, all rights reserved, used by permission).



Figure 12. A photograph of the new County Road 18 being built in the early 1980s looking south with Lohman's Amhurst on the right. The organic soils from Auburn were used as fill to create the berm behind the noise wall (copyright © 1980 Jon Bryan Burley, all rights reserved, used by permission)..

Before a single dwelling unit can be sold, there is a substantial investment in site infrastructure. The site must be cleared. Organic soils must be removed, engineered soils must be placed, and site drainage must be accommodated, meaning the creation of swales, retention and detention ponds. Otherwise, the site will remain wet after rain storms, inhibiting construction. This is an expensive proposition for developers, as no money is coming in, only going out. One of the tactics for Centurion Company was to start building in

economic downturns when prices from contractors were substantially discounted, as construction firms were simply happy to have enough work to keep the business afloat during tough economic times. This gave Centurion Company a competitive edge, because as the economy turned around, the developer already had a plan approved, infrastructure in place at a discounted price, ready to sell homes. Meanwhile, others who felt more comfortable finally developing a site were already behind schedule and would have to pay premiums for site development.

In the 1970s and 1980s, Centurion Company developed and practiced many sustainable and recycling practices long before it was fashionable. In part this was due to Jim Hawks' thoughtful approach to both save the developer money and be ecologically sensitive. For example, as the site of Lohman's Amhurst was being cleared, small trees were harvested and chipped on the site, being used as mulch for future plantings (Figures 13, 14 and 15). At the same time, protected trees such as oaks were fenced around their drip-lines to prevent grading, driving over the roots, and compaction of the soil around the tree (Figure 16).



Figure 13. Tree removal at Lohman's Amhurst. Each tree was marked and identified for removal or to remain. Contractors would only cut the trees marked for removal. (copyright © 1979 Jon Bryan Burley, all rights reserved, used by permission).



Figure 14. Cut trees were then hauled to a site for chipping. This location in this figure, was the site of one of the detention ponds and had to be excavated early in the process to facilitate site drainage. (copyright © 1979 Jon Bryan Burley, all rights reserved, used by permission).



Figure 15. Cut trees being chipped and used later as mulch for planting. (copyright © 1979 Jon Bryan Burley, all rights reserved, used by permission).



Figure 16. A young oak tree fenced and protected from construction damage (copyright © 1979 Jon Bryan Burley, all rights reserved, used by permission).



Figure 17. Oak stumps being chipped on site and incorporated into the organic soils (copyright © 1979 Jon Bryan Burley, all rights reserved, used by permission).

At Lohman's Amhurst, large trees that were felled required the stumps to be chipped (Figure 17). Some developers would excavate such stumps and haul them to a landfill at a premium. Vegetation that could be transplanted was often moved to other sites that were

further along in the development process. Many wetland plants were moved to swales, detention, and retention ponds on other projects. Vegetation from Auburn was removed and planted at Lohman's Amhurst (Figures 18 and 19) along the Western edge of the property. The Western edge was adjacent to existing single family homes. The homeowners in this community were concerned about the visual and environmental quality impacts that this development would bring, as these homeowners had been use to enjoying a farm landscape. Therefore, during the planning and design process, Jim Hawks Jr. negotiated with the neighborhood a plan to have the buildings lowered along this property edge, keeping an existing vegetation buffer, installing new plantings, and placing a rambling fence weaving through the vegetation (Figure 20).



Figure 18. Vegetation being removed from Auburn (copyright © 1979 Jon Bryan Burley, all rights reserved, used by permission).



Figure 19. Vegetation from Auburn being installed at Lohman's Amhurst. Single family homes in the background (copyright © 1979 Jon Bryan Burley, all rights reserved, used by permission).



Figure 20. The wooden running fence at Lohman's Amhurst. (copyright © 1980 Jon Bryan Burley, all rights reserved, used by permission).

Satisfying the needs and requirements of existing homeowners and neighbors is an important aspect of developing sites with existing nearby residents. If this aspect is not handled diligently and thoughtfully, the project can be delayed. Jim's approach to handling such issues was to get a list of the concerns and an agreement that if these concerns are successfully addressed, the adjoining property owners and governmental agencies would not object to the project.

Figure 21 presents the final configuration for one of the retention ponds (intended to permanently hold water) and detentions ponds (intended to store and slowly release water). Site drainage is essential at the beginning of the project in order to have dry areas to make roads and structures. In addition, the rate of run-off must be landscape engineered and calculated to be no greater in post-development as it was during the farmland predevelopment landscape. The hydrological calculations and the plan must be approved by the watershed district and the local government before construction can begin. Thus water entering the Minnehaha Creek system would not add to additional flooding of downstream neighbors. Even before the creation of the pond and often before much site clearing, site drainage structures are installed to connect the ponds and construction is started on the sanitary sewer (Figure 22). Then the site is ready for the creation of essential roads to bring in heavy equipment and building materials (Figures 23 and 24).



Figure 21. A pond area created to facilitate site drainage. Notice the surveyor's stakes to guide the proper grading elevation of the pond. The pond is made quickly during the non-rainy season and ready to accommodate spring runoff (copyright © 1980 Jon Bryan Burley, all rights reserved, used by permission).



Figure 22. Installation of water conveyance systems (copyright © 1980 Jon Bryan Burley, all rights reserved, used by permission).



Figure 23. The spring conditions of the road bed (copyright © 1980 Jon Bryan Burley, all rights reserved, used by permission).



Figure 24. Mid-spring installation of the base gravel course and curbs in preparation for the base asphalt course (copyright © 1980 Jon Bryan Burley, all rights reserved, used by permission).

The building of the roads and structures at Centurion Company were accomplished in a methodical manner, allowing people to move into their new homes while construction proceeded in an unobtrusive manner across the

IV. CONCLUSION

Developing polychrome fields requires thoughtful insight into the development process. It is very easy to lose money on such projects. The methods of James W. Hawks, Jr. and Centurion Company were creative and patient. Their methods and ideas are still very applicable to land development around the globe. Centurion Company no longer exists today as the owners of the company are no longer in the land development business to the extent they were in the past. Therefore the ideas presented in this paper can be shared with readers.

Many of the people who are described in these two case studies have either retired or passed away. Even the knowledge about Minnesota's largest planning and design firm in the 1960s and 1970s is relatively undocumented with the exception of the many planning reports that exist in local governmental libraries. But these reports do not include much information about the firm or the people in the firm. Knowledge can fade quickly and is often only passed on from individuals who work in the firms affiliated with these people and through those willing to write case studies before the knowledge has dissipated, as exemplified recently by several authors [21, 22, 23, 24]. This case study especially illustrates that thoughtful planning and design practices were present before recent activities related to sustainability and responsible site design became fashionable.

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Dr. Burley is a Fellow in the American Society of Landscape Architects, and a life member in the Ecological Society of America, and the American Society for Mining and Reclamation. In 2005 he was awarded the American Society of Mining and Reclamation Researcher of the year. He has won numerous teaching, planning, and design awards.

Luis Loures is a Landscape Architect, Professor at the ESAE in the Polytechnic Institute of Portalegre, who holds a Ph.D. in Urban Planning. Since he graduated he has published several peer reviewed papers at the national and international levels and he has been a guest researcher and lecturer both at Michigan State University (USA), and at University of Toronto (Canada) where he has developed part of his Ph.D. research with the Financial support from the Portuguese Foundation for Science and Technology (Ph.D. grant).

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