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VOLUME 3 • ISSUE 1 • SPRING 2011

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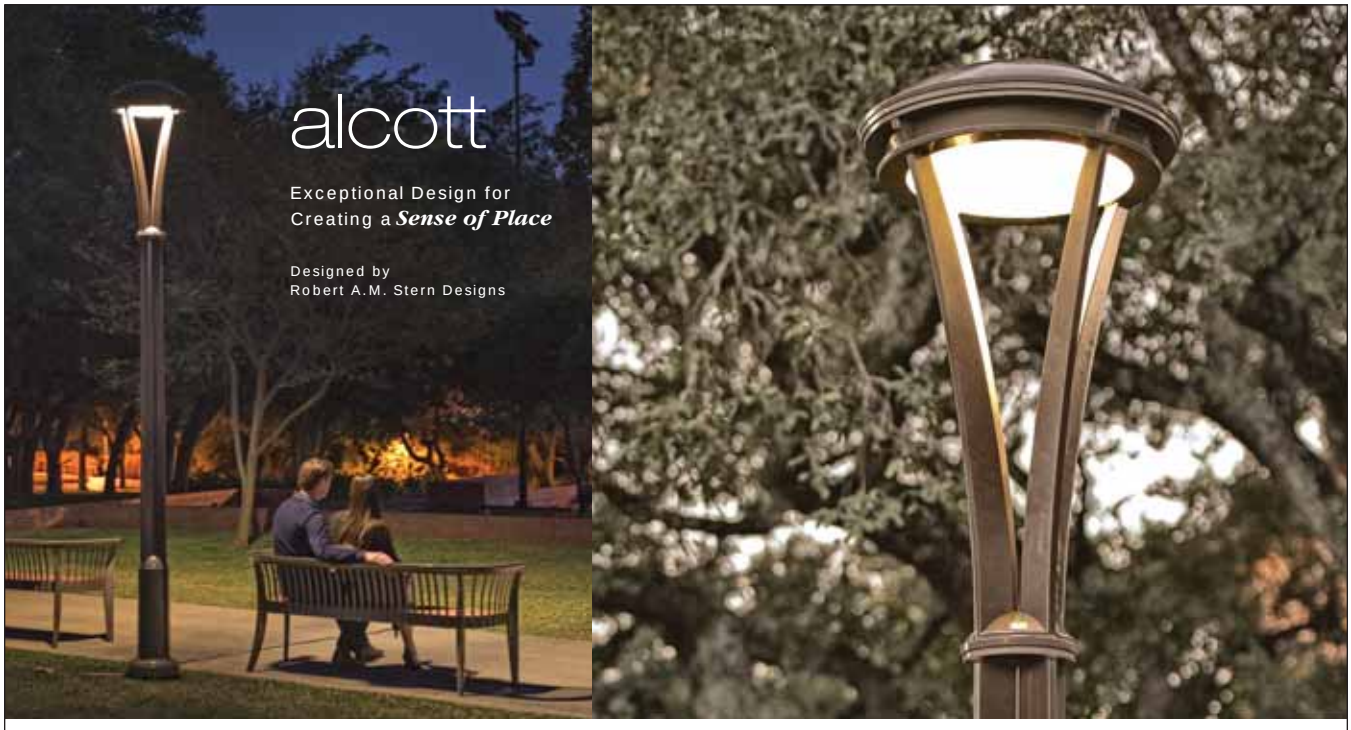

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CNGA PLANT IDENTIFICATION SEMINARS

Perennials – July 19, 2011 (9:00 am - 4:00 pm),
Gulley Greenhouse, 6029 S. Shields, Ft. Collins
Trees – August 2, 2011 (9:00 am - 3:00 pm),
Fort Collins Nursery, 2121 E. Mulberry St., Fort Collins
Shrubs – August 9, 2011 (9:00 am - 3:00 pm),
CSU Greenhouse Room 114, Fort Collins

The Colorado Nursery & Greenhouse Association (CNGA) offers Colorado plant identification seminars as a part of its Certified Nursery Professional (CCNP) certification program. Landscape Architects that need some brushing up on or an introduction to plant ID can attend these seminars without pursuing certification. The cost is $25.00 per class. Lunch is provided for all seminars.

To inquire about other details or to register, call Michelle Munoz at the CNGA office at 303-758-6672, or mmunoz@coloradonga.org.

DETAILING MASONRY CONNECTIONS TO OTHER MATERIALS

August 10, 2011 (11:30),
Rocky Mountain Masonry Institute,
686 Mariposa, Denver

When you are detailing the connection between one material and another you can usually find tons of technical information about each material but nothing about how to join the two. Dissimilar materials move differently in response to changes in temperature, and here in Colorado the temperature drops about 30 degrees every night. This leads to cracks where one material meets another. This seminar will give you information on how to manage this potential failure point.

If you are interested in attending please contact RMMI at 303-893-3838.

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On the cover

Tiers Crafted Residence, Aspen, CO

Photo courtesy of Bluegreen, a landscape architecture and planning studio located in Aspen, CO.

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Summer is in full swing and I hope everyone is enjoying it as well as staying busy. There is a lot happening at both the state and national level and the best way to take advantage of it is to get involved. Please take some time to come out to one of our many events this year or get involved with one of our committees that are making things happen.

The national ASLA mid-year meeting and lobby day for the Chapter Presidents Council and Board of Trustees was held in Washington DC May 19th-21st. There were four representatives from Colorado who attended: Kurt Munding (president), Brian Koenigberg (president-elect), Mark Tabor (trustee) and Ryan Sotirakis (national student representative from UCD). One of the most exciting developments with national is a new focus on a coordinated public relations campaign with every chapter in the country to inform and educate the public about who we are and what we do as landscape architects. National is funding this campaign and will be sponsoring our communications and public relations chair Courtney McRickard to go to the first summit in July. We are excited to have Courtney working on this here in Colorado.

We have a lot of exciting events happening here in Colorado in the next six months and would love to get our membership out to as many of these as possible. I will highlight a few of the events below but for a full list and all the details please go to the calendar section of our web site (www.aslacolorado.org/calendar). Our annual golf tournament will be on August 19th this year at Raccoon Creek in Littleton. Join as an individual or sponsor a foursome and come out and join us for a great day of fun, prizes and networking. We have just begun working with ProGreen last week in planning the design track sessions for the 2012 ProGreen Expo. This year was a huge success; we believe next year will be even better. In February we started a monthly social gathering (the Happiuest Happy Hour) at LoLa's in Denver. We meet for drinks and networking on the 3rd Wednesday of every month from 5:30-7:30, if you have not already been, please join us soon. The big event of the year will be a celebration of our chapter in early December at the Four Seasons Hotel in Denver. This event will be a combination of the annual awards presentations, JSR award presentation and the JSR silent auction. We are working on keeping the ticket process low to make this a thank you to all our members and supporters for your continued support.

Over the next six months we will be working on establishing the committees that will help us carry out our goals for next year so please stay tuned for the many opportunities you will have to get involved with the chapter.

Enjoy the rest of the summer and I hope to see you at some of our events.

Thanks,

Kurt Munding, RLA, CID, CLIA, ASLA
Colorado Chapter President

Executive Committee

The Executive Committee is the governing body of ASLA Colorado and is chaired by Kurt Munding, Chapter President. The committee meets monthly to provide guidance and direction relating to the activities and finances of the association. Meetings typically occur on the first Wednesday, beginning at 4:30 pm, and are held at member offices along the Front Range. Attendees typically include voting and non-voting board members, and all chapter members are welcome to attend or to participate in person or by teleconference.

The April meeting was held one week early (March 30) to coordinate with Colorado State University's "LA Days". Neal McLane distributed a draft copy of the chapter's licensure brochure, a document that highlights the work of landscape architects and recognizes the impact of licensed professionals on public health, safety, and welfare. The committee also discussed ASLA National's membership qualifications review, and effect changes would have on individual membership.

The May meeting was held at the Taxi Building in Denver. The committee began by discussing upcoming social events, including the Spring Mixer at Little Valley Nursery, Brighton, and the monthly Happiest Happy Hour. The committee noted that members outside the Denver metro need events in closer to home, and the additional social/educational events in Fort Collins and Colorado Springs were discussed. Ryan Sotirakis introduced himself as the new National Student Representative to ASLA. The committee congratulated him on his election to this high level position.

The June meeting was also held at the Taxi Building in Denver. Pat Mundus reported on the activities of the Jane Silverstein Ries (JSR) Foundation, the charitable arm of ASLA Colorado. He noted that the foundation, now in its 14th year, has hosted numerous social and educational events, and awarded several student scholarships. The foundation is currently developing a "Great Places Great Spaces … Endangered Landscape Program" for Colorado.

Courtney McRickard reported on current planning for the annual Awards Event. Plans are to reformat the event into a "holiday celebration" for all chapter members. The committee is currently working on securing an upscale venue in the heart of downtown Denver.

Volunteer opportunities for interested members are always available. If you are interested in volunteering for a committee or an event that is hosted or supported by ASLA Colorado contact Judith Ward, Volunteer Coordinator, at jward@criticalhabitats.com. For more information on current ASLA Colorado events, be sure to visit www.aslacolorado.org and review the "Calendar" tab located on the website's title bar. If you have a design event you would like listed on our Chapter's social media pages, please email details to social@aslacolorado.org. To be placed on an upcoming agenda contact Kurt Munding, Chapter President, at kurt@mundingdesign.com. Contact information relating to Executive Committee members can be found by clicking on the "About Us" tab on the main title bar.

Government Affairs

The Government Affairs/Advocacy Committee continues to focus on compliance outreach and advocacy. This includes outreach to local government agencies and allied professions, as well as self-enforcement. We also need to prepare for the sunset review of the State Landscape Architects Professional Licensing Act in 2017. Discussions with legislators and others have underscored the importance of proactively approaching the sunset review process as early as possible.

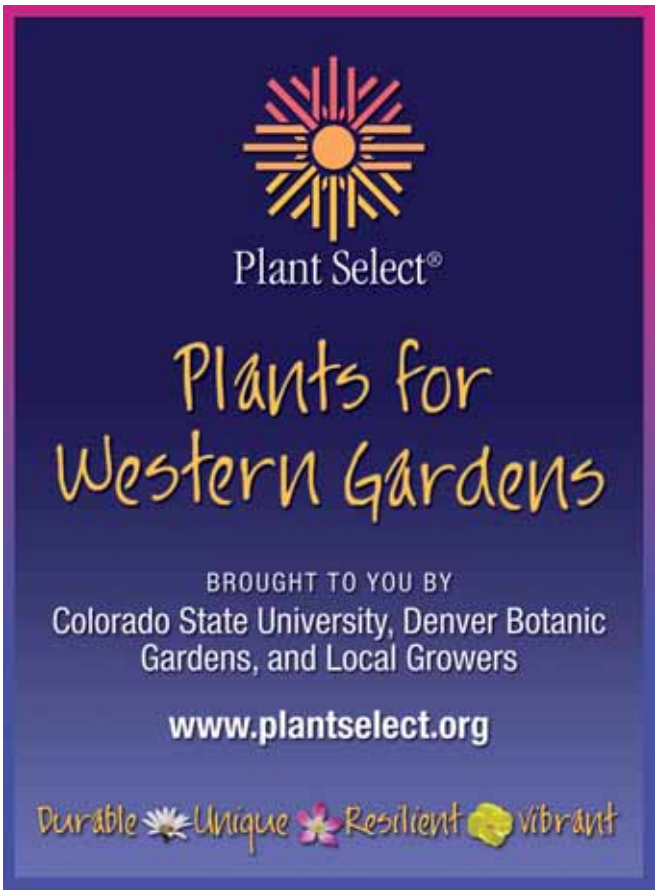
The first step in our Advocacy Outreach program is to promote compliance by municipal and county government agencies, with the State Licensing Act. While some local governments have updated their codes and procedures, other jurisdictions have not. Many local government agencies have not addressed provisions requiring landscape architects to sign and seal drawings. Some local planning and public works departments still require architects or engineers to stamp plans prepared by licensed landscape architects. Decisions are often made and actions are taken within local jurisdictions, on issues that clearly affect the functional and aesthetic use of public lands, without input and guidance from licensed landscape architects. Unfortunately there are many such examples of non-compliance with the State Landscape Architects Professional Licensing Act.

Our "Advocacy Package" is nearing completion and will soon be distributed to key personnel at local government agencies. These advocacy packages will be a great tool to help us to encourage non-compliant agencies to update their codes and policies to reflect State law. The package includes a letter from the president of ASLA Colorado, an 8 page promotional brochure, a copy of a letter from the Colorado State Board of Landscape Architects encouraging compliance with the state law, and two different examples of how communities have implemented the Licensing Act. ASLA Colorado was recently awarded a grant from ASLA National in the amount of $3500 to cover printing and distribution expenses for the advocacy packages. ASLA Colorado has provided matching funds, which will be met in part through in-kind contributions. With ample funding secured, we realized that the brochure can serve as a multi-purpose document. It will be included in the advocacy package to support our efforts with local compliance, but it can also be used in a variety of ways to promote our profession in Colorado. The central theme is how Colorado Landscape architects benefit our communities. A special thanks goes to Belt Collins, West, for generously providing Pro Bono design services, and the exceptional graphic design skills of Kathryne Hoogerwerf. With Katy's help we have an im-

pressive professional marketing piece filled with inspiring illustrations from recent ASLA Colorado design awards. The brochure will be a great resource in promoting our profession in Colorado.

The Executive Committee was fortunate to have Angie Kinnard Lee, Program Director, and Cristy Thomas, Enforcement Supervisor, from DORA attend our March meeting. DORA is supportive of our outreach efforts to Local government agencies, and is willing to contact reluctant government agencies and advise them about the "Landscape Architects Professional Licensing Act". When asked about their position on a continuing education requirement for landscape architects, Angie indicated that DORA still favors the "Continuing Competency" model, which would require periodic self assessment of a licensee's strengths and weaknesses. The Architects had a similar provision in their continuing education act, which they were successful in getting removed in 2010. ASLA Colorado spoke at a Senate hearing in support of the Architect's position, and in favor of repealing the Continuing Competency portion of the Architect's CE requirements. Implementing a continuing education requirement would likely require the State to monitor compliance with CE unit requirements. The expense of monitoring could result in an increase in professional licensing fees.

ASLA Colorado meets regularly with the GreenCo Legislative Committee (and their lobbyists) to keep apprised of ongoing and upcoming issues of legislative and regulatory importance. When an urgent issue of importance arises it is conveyed to the membership as an advisory in the bi-monthly E-News Bulletin. ASLA Colorado is represented in the legislature and before state agencies by the Colorado Council of Landscape Architects. Gregory Williams of Redpoint Resources LLC, and Scott Meiklejohn of Meiklejohn Consulting LLC are under contract from December-May to monitor state legislative activity and regulatory developments. Scott Meiklejohn They also represent ASLA Colorado at meetings involving other allied organizations on new and ongoing issues of mutual concern. Neil McLane is Vice President of Government Affairs and chair of the ASLA Colorado Government Affairs committee. This committee also oversees the activities of the Colorado Council of Landscape Architects. Neil can be reached at neil@mclaneassoc.com.



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OPEN SPACE OPTIMISM

Hovering in the background, development is an ever-present threat to Douglas County's open lands. (Photo courtesy of D.A. Horchner/Design Workshop)"

By Sarah Chase Shaw

In 1994, Douglas County, with its population of 88,000 people, was heralded as the fastest growing county in the nation, its popularity based on its close proximity to metro Denver and the seemingly endless vistas of open space and recreational opportunities. It was a dream destination for executives and young families. Ever duplicitous by nature, popularity took its toll on the County, rendering all privately-held open lands a target for development. Agriculture and ranching were defenseless in the face of 35-acre lots, and continuous strip development was all but a reality along the Interstate 25 corridor, threatening to merge the cities of Denver and Colorado Springs into one large metropolis.

Fast-forward to 2011, and Douglas County, anchored by the fast-growing communities of Highlands Ranch, Franktown, Parker, and Castle Rock, is now home to almost 300,000 people. It is the 10th most populace county in the nation, experiencing a 64% increase in growth between 2000 and 2009. And, a 2011 Forbes study lists it as the 7th richest county in the United States—based on median household income—ranking it, and Los Alamos County (New Mexico), right up there with the suburbs of Washington DC and New York City. Money Magazine listed unincorporated Highlands Ranch, with its 8,100 acres of open space, as the 12th best small city in which to live.

Typical Douglas County sprawl along the Interstate 25 corridor. (Photo courtesy of Douglas County)

Approximately 50,000 vehicles, driven by commuters and travelers alike, pass through the I-25 corridor between Denver and Colorado Springs on daily basis. Points of interest along this major thoroughfare include the Park Meadows Mall to the north, Castle Rock with its iconic geologic "castle" and factory outlet stores, and the Douglas/El Paso County line to the south where a line of decks and doors marks the literal and figurative spot where the

two entities come together. But there's also approximately 48,000 acres of preserved open space, a critical respite in an area of rapid and intense development. Like an army that is surrounded but not about to surrender, Douglas County, with assistance from a team of conservationists, public officials, private planners, a supportive populace, and lest we forget, ample resources, has set in motion the preservation of valuable open space and a vision for the future that maintains the rural character of this region for generations to come.

The story really begins in 1980 when then State Treasurer Roy Romer called the Boulder office of The Conservation Fund requesting that they join him on a visit to the Greenland Ranch, a 25,000 acre ranch that spans both sides of the interstate just south of Castle Rock. The land had just gone on the market and Romer, seeing its close proximity to I-25, knew that it would be just a matter of time before Greenland was overtaken by development. "When you drive into that valley, all that green grass is spectacular. It reminds me of something out of a movie, some beautiful lost valley," said Romer. "I've always seen it as one of the most gorgeous examples of the way Colorado was." And, in fact the Greenland Ranch was one of the largest shipping points for livestock in the State of Colorado. Its location between the Denver & Rio Grande and Atchison Topeka and Santa Fe Railroad tracks meant that thousands of animals were rounded up and driven to Greenland for transport to market in the fall.

When you drive into that valley, all that green grass is spectacular. It reminds me of something out of a movie, some beautiful lost valley. (Photo courtesy of Douglas County)

Romer's vision was not achieved in 1980, but his foresight spurred The Conservation Fund, armed with significant grant monies from Great Outdoors Colorado (GOCO), to engage in a planning study of 100,000 acres of land in southern Douglas County which included the Greenland Ranch and other large ranch parcels adjacent to I-25. The plan, initiated in 1995, set in motion the preservation of valuable open space and a vision for the future that insures that metro-Denver and Colorado Springs will never blend into one regional metropolis and, more importantly, maintains the rural character and superb vistas of the Front Range in perpetuity.

At the same time that The Conservation Fund was working on its open space planning study, the Douglas County Open Space Program was created with the passage of a sixth-of-a-cent Open Space Sales and Use Tax. Netting $2.1 million the first year of its existence, the County now sees an annual average of $6.5 million in revenue. This means that 17¢ of every $100 in sales at big retail centers such as Park Meadows Mall and the Outlets at Castle Rock goes to the protection of open space. In the past 15 years, the program has protected over 45,000 acres of land (equal to an area of about two Highlands Ranches), some through purchase and some through conservation easements completed in conjunction with the Douglas County Land Conservancy. With the success of its tax and a hefty amount of open space protected, Douglas County open space officials are confident about the future of land protection in their area. "The I-25 Conservation Corridor Plan established a vision for the future and as a result, we have completed almost everything that we set out to do," says County Open Space and Natural Resources Director Cheryl Matthews. "Because we have been so proactive in protecting lands, we are able to secure GOCO grants and continue our work well into the future."

Similar taxes exist elsewhere throughout the state. Larimer County's quarter-cent sales and use tax which has effectively preserved over 43,000 acres since its inception in 1995. Boulder County voters instituted a sales tax which, combined with property taxes and state lottery funds has preserved almost 98,000 acres of open space. In nearby Jefferson County, over $285 million (bond and sales tax revenues) has been spent since 1972 to acquire over 51,000 acres of land, water and facilities.

The partnership between Douglas County and The Conservation Fund has achieved enormous success in southern Douglas County over the years, preserving more than 33,000 acres along the Interstate 25 Corridor, 25,000 of which was identified in the initial planning study as critical natural areas and wildlife habitat. Several years after its execution, the plan attracted the interest of public and private entities whose varied interests in land conservation facilitated the purchase of Greenland Ranch by The Conservation Fund in a 5-way partnership with Great Outdoors Colorado (GOCO), Douglas County, Colorado Division of Wildlife, Colorado State Parks and John Malone, a cable baron who, in February 2011, surpassed Ted Turner as the largest private land owner in the United States. The ranch, still visible by its landmark red barn is now protected with conservation easements and a very limited development plan. Malone funded a conservation easement on the 21,000-acre ranch. He then bought 17,000 acres east of I-25, spending a total of $55 million to take it out of the hands of developers and turn it into a working cattle ranch. Douglas County and Great Outdoors Colorado spent $20 million to buy the remaining 4,000 acres east of I-25, including the original townsite of Greenland.

With the success of its tax and a hefty amount of open space protected, Douglas County open space officials are confident about the future of land protection in their area.

According to Sydney Macy, Colorado Director of The Conservation Fund, the value of the lands protected in easement and fee in Douglas County is over $105 million. The County's investment is estimated at about $20 million, so the bulk of the money has been leveraged from private philanthropic donations, a job that the Fund—an organization staffed by a skilled team with real estate, finance, legal, investment and science expertise—takes seriously. Says Macy, "We were on point on most of the land negotiations in this project. We are all trained to cut the best deal we can. When I'm talking to other counties, I refer to this project as an example where we helped leverage the County's money at a cost that was one-fifth the actual value of the lands protected."

The Open Space Sales and Use Tax sunsets in 2023, but Matthews has high hopes that Douglas County voters will renew it due to their overwhelming support of the conservation that has already occurred. A 2010 Douglas County voter opinion poll revealed that citizens rank open space higher than any other county-provided service including community safety and road maintenance. Macy attributes this success to Douglas County's proactive approach of making the conserved properties accessible to the public. And now, the two entities are teamed up again to finish what they started, namely to conserve a corridor of open space adjacent to the upper Cherry Creek watershed, the headwaters of which are located in southern Douglas County. Dotted with smaller land holdings (the largest of which is 5,000 acres), this project will be a challenge to cobble together. Not one to be deterred, Macy refers to a recent poll that The Conservation Fund conducted in conjunction with the Trust for Public Land. "The results of the poll were really interesting because we found that, even though the majority of the population of Douglas County is concentrated to the north in communities like Parker and Highlands Ranch, the overwhelming response from residents was that people want to put their money toward preserving the critical open space in the south that includes wildlife habitat and stream corridors. They're not concerned with having more soccer fields and organized recreation. What they really value—even if they don't see it every day - is open space, and that is a good thing because finally people realize that the land is only going to be there for so long."

Sarah Chase Shaw is a landscape architect and free-lance writer. She is the author of New Gardens of the American West: Residential Landscapes of Design Workshop (2003) and Garden Legacy: the Residential Landscapes of Design Workshop (2010). Sarah has also written for Garden Design, Western Art & Architecture, Aspen Sojourner and Western Home Journal. Contact her at www.sarahchaseshaw.com.

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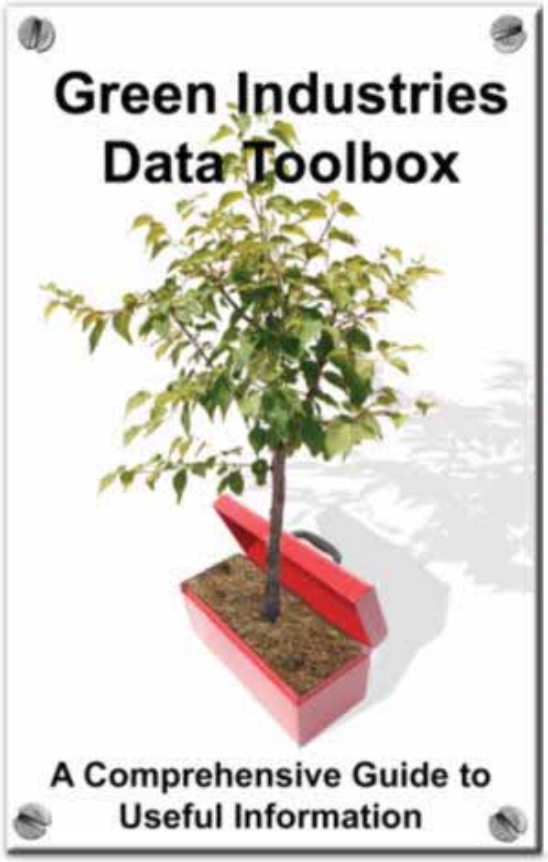

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SUSTAINABILITY STARTS WITH THE SOIL

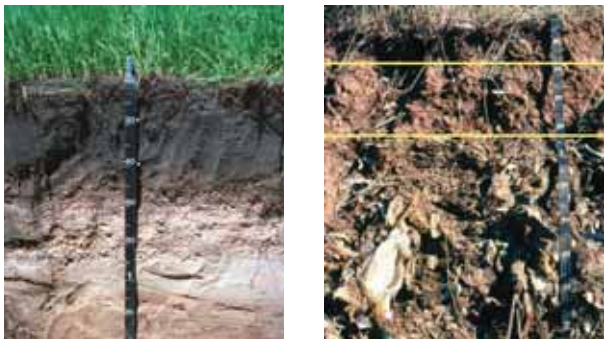
Soil profile in central Iowa shows depth of topsoil, dark color. Iowa's average topsoil depth decreased from 14-18 inches to 6-8 inches from farming during the 20th century. (Photo by Lynn Betts, USDA Natural Resources Conservation Service.)

By Jean Reeder

People moving to Colorado from other parts of the country often are surprised at how hard it can be to get plants to grow well here. A short-season semi-arid climate is an obvious major contributor to plant problems in much of Colorado, but an even more important factor is the condition of the soil. Soil is the fundamental component of a healthy, sustainable landscape. The soil provides plants with nutrients and water for plant growth, and oxygen for root metabolic processes. And yet, soil is the resource we tend to largely disregard when establishing and maintaining landscapes. Focus in landscape design usually is on plant selection, but healthy sustainable landscape vegetation starts with the soil. We need to know as much about our soil as we do about our plants if we are to achieve success.

Landscape or urban soil fundamentally differs from the original native soil it was derived from because construction activities drastically alter the chemical and physical properties of the soil. Digging, mixing, piling, and scraping all result in landscape soils that generally are highly variable, compacted, and low in nutrients, oxygen and organic matter. Characterizations of a site's soil properties, and the variability of those properties across the landscape, are therefore important first steps in landscape planning and design. Soil characteristics should strongly influence plant selection since many plants are sensitive to soil properties, and some of those soil properties, such as pH and texture, cannot be readily altered.

An assessment of soil characteristics provides basic information needed to determine the plant growing potential of a site, and to a large degree also determines how the finished landscape should be managed. A standard soil analysis by a soil testing lab offers much of the needed information by providing data on soil texture, pH, lime content, salinity, organic matter content, and plant-available nutrients.



These two images show the visual characteristics of a natural soil profile (left) with and urban soil profile (right). Notice the debris from "human activities" in the C Horizon in the urban soil.

Texture

Texture, or particle size analysis, is a measure of the relative proportions of sand, silt and clay in the soil. Perhaps more than any other soil property, texture shapes landscape management decisions such as irrigation design and management and fertility management. This is because texture impacts so many soil properties: water movement and retention, soil temperature, gas exchange, erosion potential, and fertility. Clayey soils have high water and nutrient holding capacities, but drain slowly because of predominately small pore size, making them prone to aeration problems. Clay soils also are prone to crusting, compaction, and salinity buildup. In contrast, sandy soils have low water and nutrient holding capacities and drain rapidly because of predominately large pore size. Sandy soils are less prone to aeration, compaction or salinity buildup problems. Since soil texture cannot readily be changed, selecting plants that are tolerant of existing soil texture will result in a higher probability of achieving a healthy sustainable landscape.

Soil pH

Soil pH is a measure of the acidity or alkalinity of a soil. On the pH scale, 7.0 is neutral (equal amounts of acidity and alkalinity), while values below seven are acidic and values above 7 are alkaline, or basic. Typically, areas with limited rainfall have alkaline soils while areas with higher rainfall have acid soils. Most Colorado soils are alkaline, particularly along the Front Range where most Coloradoans live. Soil pH strongly influences plant selection and nutrient availability. Most landscape plants prefer soil pH in the range of 6.0 to 7.2, and many have a high susceptibility to iron chlorosis. Iron becomes less available as soil pH increases, so iron chlorosis is a common problem in plants growing in our alkaline soils. Phosphorus, manganese and zinc also become less available in highly alkaline soils, and deficiencies are occasionally observed in some plants. Native plants, or plants that evolved in a similar climate, are tolerant of alkaline soil pH, and are less sensitive to the lower plant-available iron, phosphorus, manganese and zinc contents typically found in alkaline soils.

Lime Content

Soils containing measurable free lime (calcium carbonate) are called calcareous. Alkaline soils often are calcareous. The importance of lime content lies in the fact that soil pH cannot be effectively lowered if the soil contains measurable free lime. The calcium carbonate in the soil neutralizes any and all acidifiers (e.g. elemental sulfur) added to the soil. Thus efforts to lower soil pH to accommodate plant preferences are temporary at best.

Salinity

Soil salinity is a measure of the amount of soluble salts in the soil. The conventional laboratory measure of soil salinity is electrical conductivity (E.C.), in units of dS/m, or mmhos/cm. Sensitivity to soil salinity differs among plant species and also with their state of growth (seed germination and seedling growth are more sensitive to salt stress than mature plants). Colorado soils are rarely naturally saline, but improper management can increase soil salinity to levels detrimental to plant growth. Over-fertilizing and over-amending soils with organics such as compost are two common landscape management problems that can lead to salinity build up in the soil. Because commercially available organic amendments and "topsoils" can be very salty and can cause salinity problems for plants, analysis of these products is recommended before application to the landscape.

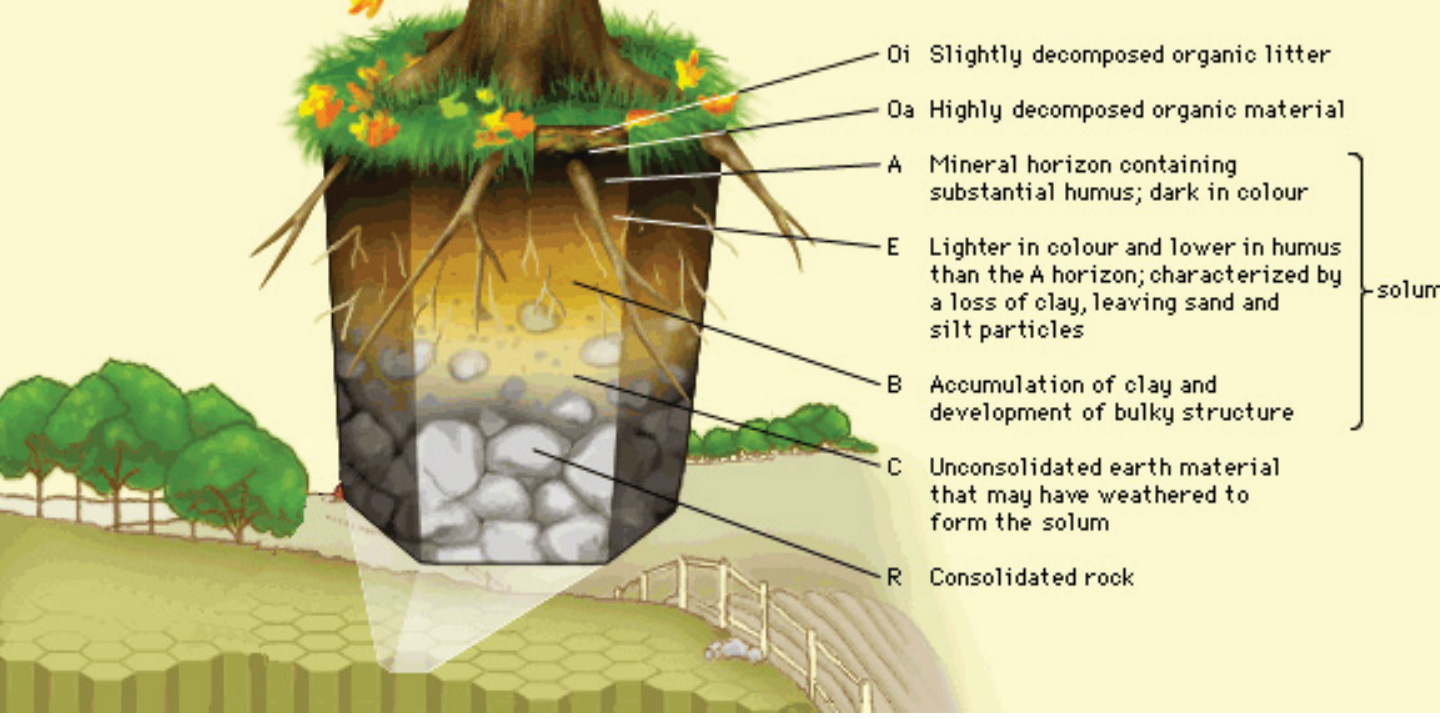
Organic Matter Content

Soil organic matter provides many useful benefits. It improves soil water retention and release to plants, increases soil nutrient holding capacity, improves soil structure and aeration, and provides a slow release of plant nutrients. Most Colorado soils are naturally low in organic matter, and many popular landscape plants prefer a higher level of organic matter than our soils provide. With the exception of native and xeric plant species that prefer soil with low organic matter content, adding organic matter to the soil is an important component of landscape establishment and management. However, over-amending is common and can be detrimental to the overall health and sustainability of the landscape. About 5% organic matter content is considered a good level for most landscape plants. Higher levels are unnecessary, and may lead to salinity buildup and excessive levels of nutrients that can become detrimental to plant health and ecosystem balance.

Plant-Available Nutrients

Analysis of the amounts plant-available nutrients in the soil determines whether nutrients are deficient, sufficient, in excess, or toxic for plant growth. Fertilizer application should be based on soil test results and specific plant requirements. Adding fertilizer when it is not needed or adding more fertilizer than is needed, create potential sources of pollution, increase the soil salt level, cause nutrient imbalances in the soil, and can result in nutrient levels sufficiently high to be toxic to plants.

Although soil testing provides valuable information for landscape design and management, it is does not address all concerns in characterizing the soil properties of a site. Most importantly, a soil test cannot determine whether or not the soil is compacted. Compaction reduces the amount of large pore space in the soil, thus restricting air and water movement into



and through the soil. Low soil oxygen caused by soil compaction is the primary factor limiting plant growth in landscape soils. Compaction also enhances nutrient deficiencies and restricts rooting volume. It is difficult to correct in an established landscape; thus the time to deal with soil compaction is before landscape plants are planted.

Landscape sustainability is intricately tied to the conditions of the soil. Analyzing soil properties, and using this information to guide plant selection and landscape design, are key determinants to plant health and landscape sustainability.

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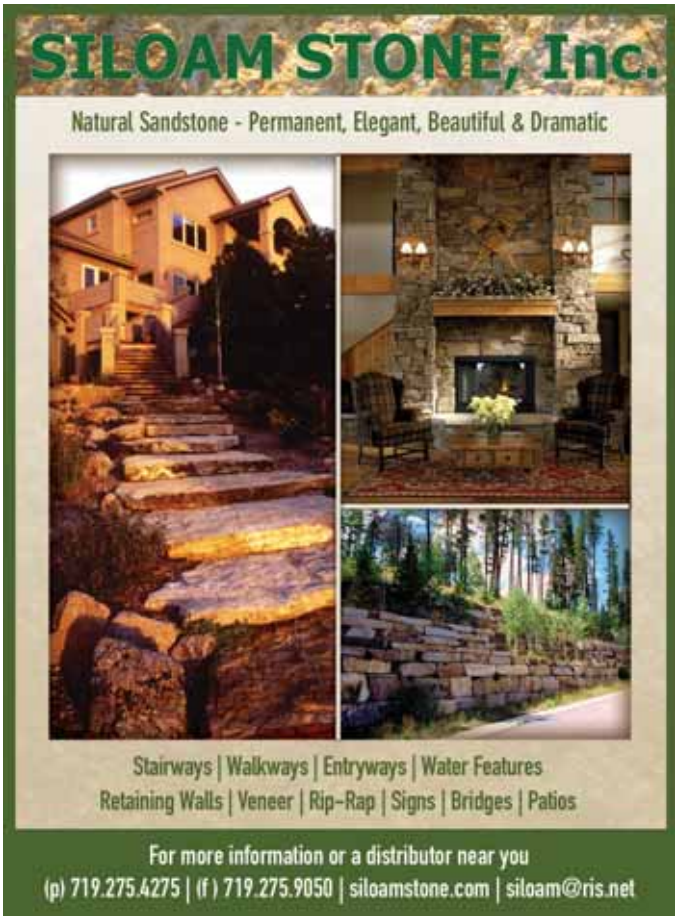


GIRL TALK: MARION MAHONY GRIFFIN, FRANK LLOYD WRIGHT AND THE OAK PARK STUDIO

Presentation drawing of Susan Lawrence Dana House, Springfield, Illinois. By Marion Mahony et. al. (for Frank Lloyd Wright). (From Wright's Ausgefûhrte Bauten, 1911; courtesy of Laura Avey)

By Alice T. Friedman

The Frank Lloyd Wright scholar Leonard K. Eaton, one of the few specialists to have looked at the architect's work in relation to the economic, social and cultural status of his clients, emphasized the contributions of middle-class "men of business" like Edwin Cheney, Darwin Martin and Frederick C. Robie to the success of Wright's early practice; yet it is clear that Wright's women clients played a formative role in shaping the new approach to domesticity that is arguably his most outstanding contribution to 20th-century architecture. Both as heads of households in their own right and as the wives of prominent patrons of architecture, clients like Susan Lawrence Dana, Queene Ferry Coonley, Mamah Borthwick Cheney and Aline Barnsdall—to say nothing of Wright's own family, including his wife Catherine, his mother Anna, and his aunts Nell and Jane Lloyd Jones—not only provided him with opportunities and financial resources to build many of his most important and highly visible early houses, but also served as active participants in the redefinitions of family life, education, religion, and domestic ritual that inspired and shaped these projects.

No doubt Wright's reputation as a progressive architect and insider within Chicago-area reform circles drew these clients to his Oak Park practice, thanks to his family ties to liberal Unitarianism, his affiliation with such institutions as Hull House and the Chicago Arts and Crafts Society, and his decision to make his own home something of a model laboratory for early childhood education—to name only a few of his many connections to this milieu. Yet it is also significant that between 1895 and 1909 Wright's studio was distinguished by the presence, albeit only intermittent after 1903, of the architect Marion Mahony, a designer, teacher and illustrator whose progressive credentials equaled and even exceeded Wright's own. The unusual overlap between Mahony's own feminist predilections, her close association with Chicago's reform circles, and the interests and connections she shared with Wright's family, clients and friends raises important questions about the origins and implementation of Wright's evolving philosophy of domesticity and family life. Although scant evidence has come to light on which to base any new claims for Mahony's authorship on specific projects, there are nonetheless a surprising number of circumstantial details, reexamined here, that suggest that Mahony served not only as close family friend and professional associate in Wright's Oak Park home and studio during the years leading up to his departure for Europe in 1909—a break that launched him and his lover Mamah Borthwick Cheney on a journey deep into a far more radical world of feminist reform than his Oak Park circle could have imagined—but also that Mahony's liberal values and distinctive approach to architectural representation and interior design, honed within the aesthetic and cultural milieu of women's reform circles in

Chicago, contributed a look and character to Wright's early architectural designs that his women clients found familiar and appealing.

When we first hear Marion Mahony's distinctive, passionate voice as it rises up from the pages of "The Magic of America," the memoir and manifesto she compiled during the 1940s, we know immediately that we are in the presence of a force of nature, a woman of no uncertain opinions, a person possessed of deep convictions and profound spiritual experiences. And from the very first pages we learn three important things about her: first, that she saw herself as an architect and a professional and conceived of her talent as an artistic gift to be integrated into a life filled with many other creative energies and interests; second, that she idolized her husband, the architect Walter Burley Griffin, and chose as the mission of her life to support, promote and memorialize his contributions to the field of architecture; and third, that she hated Frank Lloyd Wright with a blinding passion, and viewed him as having done irrevocable harm not only to herself and her husband but also to the architectural cause to which she had given her life—that of creating a progressive, democratic, modern American architecture.

Each of these components of Mahony's identity is significant for our understanding of her life and work, and each shaped her career and her reputation among architects and historians. Indeed, although the first component represents a substantial milestone for women in architecture, it could be argued that the latter two played equal if not more significant roles in determining Mahony's historical reputation, ultimately distorting our understanding not only of her contributions as an independent practitioner, but also of her influence on the male architects—notably Wright and Griffin—with whom she worked so closely during her long career. As we learn more about Mahony's biography and activities, particularly in the first decade of her professional practice and association with Wright, she emerges as an architect of substantial creativity—one who was, moreover, both a pioneer among women in design and an important member of feminist reform circles. Mahony's distinctive political outlook, shaped by her formative experiences as part of an influential group of feminists, religious reformers, artists and intellectuals who gathered around her mother, Clara Perkins Mahony—herself a pioneer in public education and a lifelong leader in the campaign for women's rights—complemented and overlapped with Wright's well-known views on domestic and educational reform. Indeed, though Wright would ultimately come to reject and publicly renounce his former association with Mahony and her husband, both of whom had worked closely with him at Oak Park, one might easily wonder whether Wright's very public expressions of disdain and disrespect for his former assistants were fueled by insecurities and disappointments exacerbated by their earlier closeness.

Marion Mahony, soon after graduating from the Massachusetts Institute of Technology in 1894.

Early Influences

Marion Mahony was born in Chicago in 1871 to parents of modest means but rich ambition in the realms of art and education. Her father was a school teacher, poet and journalist. Following his death in 1882, her mother became a school administrator whose distinguished tenure as principal of Chicago's Komensky School brought her into contact with an important group of like-minded educators. The intellectual and artistic milieu created by and around her parents was clearly a formative influence on Mahony's development. Moreover, as she makes clear in "The Magic of America," Mahony's childhood in Hubbard Woods, the rural North Shore community to which her family had moved in the 1870s, and her later life as a teenager living in Chicago were characterized by an unusual degree of freedom, offering her and her siblings the opportunity to explore the surrounding countryside and the burgeoning industrial city. These experiences inspired a lifelong love of nature and a commitment to a nature-based American architecture in the tradition of Louis Sullivan, whose teachings she embraced. ...

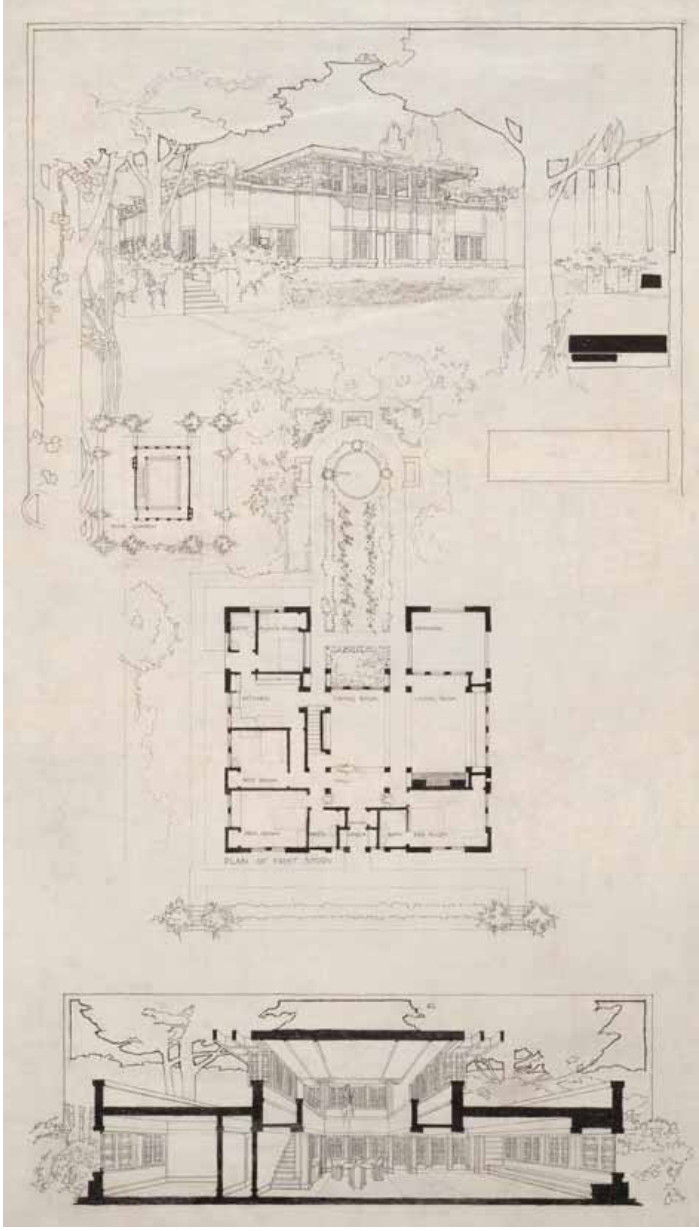
Mahony graduated from MIT with a degree in architecture in 1894, the second woman in the history of that institution to have done so. The following year, she joined the architectural practice of her cousin Dwight Perkins—himself a former MIT student, although he did not complete the degree—and began her on-the-job education in the practicalities and professional standards of her chosen field. Perkins had spent much of his childhood in and around the Mahony home, having lost his father at an early age, and Marion viewed him as an intimate member of her tight-knit family circle and someone with whom she shared her reforming ideals. During her time in his office, she considerably advanced her skills in drafting and design; in January 1898 she became the first woman licensed to practice architecture in Illinois.

This overview of Mahony's early career is easy to rattle off from the comfortable distance of more than a century, and from the vantage point of historians who have benefited from a generation of feminist histories of architecture, but we should re-emphasize here how extraordinary Mahony's accomplishments were in her day. In the late 19th century and much of the 20th, women architects were frequently viewed with contempt and suspicion, not only by fellow practitioners but also by members of the building trades and potential clients; their marginal status

obviously limited their scope and effectiveness as practitioners. Moreover, very few established architects were willing to offer women the sorts of jobs or learning opportunities with which to make a professional start. In a field in which apprenticeship was the norm and professional contacts a necessity, this created almost insurmountable obstacles for women in the early stages of their careers.

The example of Sophia Hayden, the first woman graduate in architecture at MIT and a close contemporary of Mahony, is a case in point. As is now well known, Hayden's professional career in the early 1890s was short-lived and tragic: having won the competition to design the Women's Building at the Chicago World's Columbian Exposition, she confronted the challenges of this substantial project with little support from her male colleagues, whose work at the fair represented a who's-who of American architecture, and with little guidance or assistance from fair officials. In the end, Hayden was forced—by ill health and what was described as "nervous exhaustion"—to abandon the project and even to leave the field of architecture entirely. Such a high visibility collapse by a woman architect was obviously not good for the fortunes of other women in architecture, and the widely circulated magazine American Architect and Building News seized on the example of the Women's Building to editorialize against them: "If the building of which the women seem to be so proud ... is to mark the physical ruin of its architect, it will be a much more telling argument against the wisdom of women entering this especial profession than anything else could be."

We are able to look more closely at how these prejudices affected Marion Mahony's early career thanks to an article about women's professional struggles by the noted author Miles Franklin, a close friend of Mahony's from the National Women's Trade Union League, who would later rekindle their friendship in Australia. The article, published in Life and Labor—the WTUL journal, edited by Franklin—in February 1914 focuses on the career of a little-known architect, Elisabeth Martini. Nevertheless, with the exception of a photograph of Martini herself, the piece is illustrated entirely with examples from Mahony's work, notably the Mueller House in Decatur, Illinois, and the Church of All Souls in Evanston. These buildings are specifically credited to "Marion Mahony Griffin," a "brilliant member of the profession," but are not discussed in the text. Instead, Mahony is cited together with two other women practitioners as one of a small band of "pioneers in an old profession" who not only were able to surmount the substantial obstacles placed in their way as they attempted to enter the male-dominated world of architecture, but who also successfully passed the licensure examination in Illinois (Franklin notes that Mahony passed the first examination for architects ever held in the state) and embarked on notable careers.



F.P. Marshall Dwelling, Winnetka, Illinois, 1910 (not built). Walter Burley Griffin, architect; Marion Mahony Griffin, delineator. [Courtesy of the Mary and Leigh Block Museum of Art, Northwestern University, Gift of Marion Mahony Griffin, 1985.1.100]

The article makes it clear that the treatment of these professional women followed a now familiar pattern. One potential employer of Martini's was reported to have exclaimed when he greeted her at his office (she had submitted her application using her first initials and last name only) that "we wouldn't under any circumstances allow a woman in the drafting room!" Another told her that "when a requisition is sent in for a draftsman, a man is a man, in no case is he a woman." Despite this response, and a brief retreat from architecture to work as a typist and organizer at the Women's Trade Union League in 1910–11, Franklin reports that "Miss Martini is enthusiastic about architecture as a profession for her sex, especially the designing of dwellings, in which branch she means to specialize." Moreover, Franklin adds, although "being a full-fledged architect does not diminish the prejudice against a woman being engaged as a draftsman ... not all men are so

ruled by superstition that they have sought to block progress by sweeping back the waves." One man who was not so ruled was Walter Burley Griffin, who, Franklin notes, was associated in practice with his wife and had recently won the competition for the "capital of the Australian Commonwealth" and "been engaged by the Commonwealth Government to superintend the growth of the new city."

These contemporary observations remind us just how rare Mahony and her fellow women architects were in the profession during the late 19th and early 20th centuries, and how difficult their lives must have been as they struggled to gain a solid professional footing. Nevertheless, Mahony's position on this issue, as stated in "The Magic of America," was that women should continue to enter the architectural profession, and that they should be willing to do so as equals of men, putting up with the same sacrifices and physical challenges as men did without expecting special concessions. According to Mahony, it didn't matter whether an architect was a man or a woman, as long as she could do the job. Such blunt talk was typical of her flinty personality and fierce commitment to equality, but in light of the struggles she went through and her accomplishments both as an individual and in partnership with men, it is clear that her professional life was shaped by her gender more than by any other factor.

"An Architect and a Collaborator"

Mahony was first and foremost an architect, but of a very particular sort: a collaborator in a field of individualists, a builder of communities and connections in an increasingly fragmented and competitive professional world. This self-representation is the basis of her second main theme in "The Magic of America": being an architectural collaborator and comrade in arms with her husband was the foundation on which the second half of her career was built. Combining the professional with the personal in this way makes perfect sense when Mahony describes it in her own distinctive language: she writes that she was "first swept off [her] feet by [her] delight in his achievements in [her] profession, then through a common bond of interests in nature and intellectual pursuits and then with the man himself." This sequence of events, so candidly revealed, is entirely consistent with her liberal views and those of her social circle on questions of love, friendship and relationships—whether between men and women or between people of the same sex. In every case the most important concerns were character, integrity, democracy and truth to artistic expression. The search for individual fame and glory, of the sort that she unfailingly chastises Wright for pursuing, was unworthy of a truly evolved man or woman. Thus Mahony devoted the last years of her life to creating a work of history and autobiography intended to publicize Griffin's accomplishments and demonstrate the originality of his life's work, a career inextricably linked with her own. Her own voice and work as an individual artist was consistently suppressed in favor of his.

For Mahony, who was raised in a world that fostered gender equality and collaboration in a range of pursuits—from progressive educational philosophies that redefined the nature of teaching and learning, to shared household management and economic interdependence among family members and friends, to political activism in campaigns for women's suffrage and improved working conditions—being an architect and a collaborator were not mutually exclusive conditions. On the contrary, they were the building blocks of her identity as a professional, as a social reformer, and as a woman. ... During the years of her upbringing and education, women and their male supporters led the great movements of social reform collaboratively, creating the public face for many progressive organizations and initiatives. In later life Mahony viewed her reform mission as inherent in her design work with Griffin; at the outset of her career, I propose, she had made the same commitment to Wright through her contributions to his burgeoning young practice.

Looking at examples of Mahony's architectural drawings from the early years—examples such as the K. C. DeRhodes House in South Bend, Indiana (1906), drawn for Wright, or the F. P. Marshall House (1910), a design of Walter Burley Griffin's—one might convincingly argue that her greatest contribution to architecture was her ravishingly beautiful draftsmanship, and especially the unusual system of delineation that she perfected around 1910, which combined perspective, plan and section on one sheet. The originality, clarity and sheer graphic force of her images—in which buildings are bordered by flattened and highly stylized outlines of trees and flowers that both frame them and place them in suspension between the surface of the page and the deep fictive space of the drawing—clearly reflect her skill and originality as an artist and illustrator. Yet it is their unique contribution to the recording of complex three-dimensional architectural information, using the unlikely medium of pen and wash on a richly textured surface of colored fabric "with the careful outline of an etching and finished in transparent water-colors mixed with glue"—creating a combination of "plan, perspective, section, [and] decorative details worked together into a unified mural panel," as Mahony puts it—that makes these drawings so significant in the history of architectural delineation. Their status both as luxurious art objects—fine pieces that evoke the decorative qualities of the soft, Japanese-influenced women's fashions of the time—and as precisely rendered drawings captures the distinctive mix of professional and private identities that are at the core of Mahony's fascinating yet ambivalent career. ...

Mahony's earliest experiment with the middle-class domestic program, and especially her efforts to integrate public and private functions within one coordinated artistic composition, are tantalizing for historians because they offer evidence of her independent interest in this area before she joined Wright's Oak Park studio. Moreover, [her MIT thesis, The House and Studio of a Painter] raises questions about her role in the studio, and suggests the possibility of a formative contribution to Wright's development and thinking in [domestic architecture]. Our understanding of Mahony's contribution clearly requires that we read between the lines of historical testimony and conventional evidence; if we

limit ourselves to such things as signed drawings or other signs of individual authorship, much less Wright's own testimony, we will never move beyond the familiar historical picture—formed by the conventional understanding of professional hierarchies and influences within the male-dominated profession—that has consistently placed Mahony in the role of a mere "assistant" and delineator. Indeed, to arrive at a more complex and accurate reading of the record, we have to strip away not only the animosity toward Wright that she expressed so vehemently in "The Magic of America," but also our familiarity with the towering, heroic figure that Wright himself was to become. We must focus instead on a time when both architects' careers and ideas were beginning to take shape, a period during which Wright was drawing on influences from a range of sources.

Oak Park Years

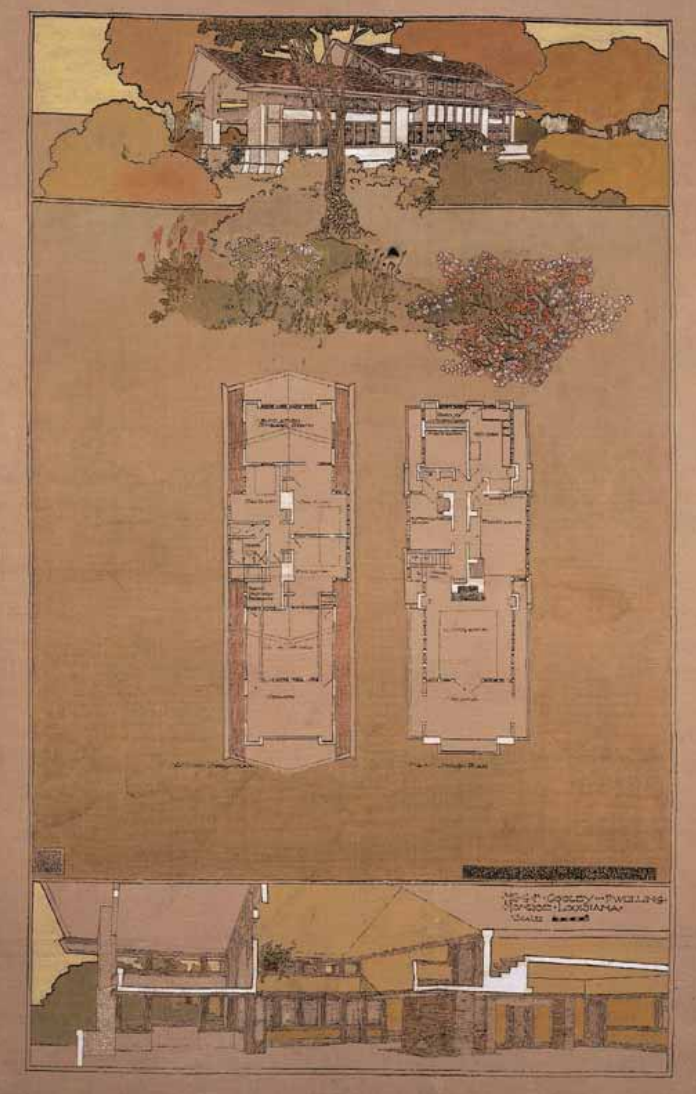
The years between the mid-1890s, when Wright established his Oak Park practice, and 1909, when he closed his office and left for Europe, were ones in which he grew and experimented with many ideological and visual themes that would ultimately reshape American architecture. Because Wright abandoned his wife and family and set off on an extended journey of work and study abroad in the company of Mamah Borthwick Cheney, his former client and neighbor, his role as an advocate for progressive reform in family life was not simply obscured but effectively erased from the record; it has been seriously reexamined only in recent years. Moreover, Wright's effectiveness as an advocate for women—and as a favorite among women clients—was seriously compromised by his actions and public reputation: in the context of his own family relationships, such a claim appears laughable to many observers. Nevertheless, new approaches to American domesticity were the focus of Wright's attention during these years, and he dedicated himself to their theory and design in collaboration with two strong women—his wife and Mahony—among many others. Ironically, it was this openness to liberal ideas, and his commitment to a broad reform agenda, that ultimately drew Wright to Cheney, herself a teacher who had earned both undergraduate and graduate degrees from the University of Michigan. Indeed, Cheney, together with Kitty Wright, had been a member of a progressive women's study group in Oak Park, of the sort then popular among middle-class housewives, which focused on such issues as children's education, art appreciation and literature.

During this period Mahony was an intimate member not only of Wright's office but of his household as well, a close friend of his wife and a comrade in arms in creating and publicizing an entirely original approach to the American home. When that close-knit world—founded on passionately held beliefs and a sense of shared mission—came crashing to the ground, and those emotionally charged relationships abruptly ended, Wright and Mahony each blamed the other for the pain and loss that ensued, drifting into recrimination, name-calling and bitterness. This—and her loyalty to her husband, who hated Wright for his own reasons—form the context for Mahony's frequent gibes at Wright in "The Magic of America." Throughout that text she casts aspersions on Wright's work and character, calling him a "cancer sore" in the body of the Chicago school, who "originated very little," and blaming his "malicious vanity" for irredeemably delaying the progress of American architecture. [17] For his part, Wright never let go of his anger at either Mahony or Griffin, denouncing them in 1914 as unskilled hacks and plagiarists and calling their work "dead forms ... grinning originalities for the sake of originality," and "an endless string of hacked carcasses." Yet despite all these attempts to hide their disappointment with tough words, it seems clear that these architects' mutual contempt in later years stemmed at least in part from their deep disappointment in the loss of their earlier friendship, and their failure to usher in the new world of ideas that they had struggled to create together.

That world had first begun to take shape in Wright's Oak Park home and studio. Starting with the house itself, constructed in 1889 soon after his marriage to the 18-year-old Catherine Tobin, Wright was intent on creating a laboratory in which to try out his ideas. Beginning with the example of the conventional shingle-style house, a type first encountered in the office of his first architect mentor, Joseph Lyman Silsbee, Wright simplified the shapes of the three-dimensional composition of his home to their essential building-block-like forms, creating an architecture of strong geometric shapes, clear lines and solid masses that tied the house to the ground. Wright would remain preoccupied with these design concepts—building block, module, ground line, site—for his entire career, and they quickly emerged around the turn of the century as his focal concerns as he developed and refined the Prairie-style homes that became his trademark architectural statements.

Equally important to Wright was the evolving program of the American single-family home, which would reflect its value as an environment for education and community within the family. Thus Wright and his wife were continually tinkering with the Oak Park house and its contents: the most significant changes were the addition of a large playroom at the back of the lot in 1895 and of an architectural studio, library, and office in 1898, facing the main thoroughfare to the north. The new playroom not only afforded Wright's six children ample space to play, but also served as a space for the kindergarten classes Mrs. Wright offered for neighborhood children. Fitted out with a piano, and with tiered seating that could be used as either stage or seating when plays or musical productions were produced, the playroom, with its ample fireplace and high ceiling, also became a lively gathering place for adult parties and cultural evenings.

The playroom represented an important expression of the Wrights' vision of how the American home could be transformed. As is well known, Wright's mother Anna, who lived next door with Wright's younger sister, and his aunts, who ran the progressive Hillside Home School in Spring Green, Wisconsin, were all active in the educational reform movement and took a particular interest in kindergartens and early childhood development. This no



G.B. Cooley Dwelling, Monroe, Louisiana, 1910 (built 1926). Walter Burley Griffin, architect; Marion Mahony Griffin, delineator. [Courtesy of the Mary and Leigh Block Museum of Art, Northwestern University, Gift of Marion Mahony Griffin, 1985.1.112]

doubt influenced how the young architect—still in his twenties in the early 1890s—and his even younger wife approached their own home and family life. In this context of reformist zeal, the Wrights' private world began to take shape as a testing ground for new ideas, both architectural and educational.

Wright's most ambitious addition to the form and function of his home was the substantial studio complex itself, the main space of which was a large double-height work room with a balcony where draftsmen, artists, sculptors and even visiting artists—including Mahony's sometime collaborator, the sculptor Richard Bock—found space to work on their projects. It was here that Marion Mahony came to work with Wright and his assistants, taking part in informal design competitions (which she frequently won); creating sketches, presentation drawings and designs for sculpture and furniture; and, most notably, talking all the while with Wright and the others in her eccentric, theatrical manner. One of the young draftsmen remarked upon her "mordant humor" and remembered that he particularly looked forward to the days on which Mahony was present because of the lively exchanges of conversation and ideas—the "sparkle," as he called it—that passed between Wright and Mahony. Although she was the senior member of the design team, whom Wright referred to in 1908 as "a capable assistant" of 11 years' standing, Mahony occupied a very unconventional role, at times taking part in design projects, and at others apparently focusing on specific projects, notably her famous presentation drawings, on a contract basis. In 1902 and 1903 she even gave up architecture altogether and worked as a teacher. Thus it would seem that, at least in the later period of her association with Wright's studio, she came and went as she pleased.

Two projects created by Wright for women clients, both drawn by Mahony for publication in 1911 but designed and built much earlier, are particularly significant in this context: the Cheney House in Oak Park, built in 1904 for Edwin and Mamah Borthwick Cheney and their children, and the Susan Lawrence Dana House and gallery, built the same year in Springfield, Illinois. These can be viewed against the background of a handful of other projects in which women took the lead, including the Hillside Home School (1901–2), designed for Wright's aunts, the Coonley House (1908), in Riverside, Illinois, and the Isabel Roberts House (1908) in River Forest. After leaving Oak Park in 1909, Wright also completed two more major projects for women clients: Taliesin (1911), his home and architectural studio in Spring Green, Wisconsin, built for Mamah Cheney and himself, and the Aline Barnsdall House and "Art-Theatre-Garden" (1919–23), an extensive multibuilding project that developed in part as a result of Wright's ongoing connections with literary and feminist circles in Chicago.

As with other Wright buildings, it is extremely difficult to identify the contributions of any architects beside Wright himself. Nevertheless, as the work of [historian] Paul Kruty on Walter Burley Griffin suggests, there are strong affinities between Wright's Cheney House and the characteristic type forms of domestic architecture that began to emerge through Griffin's independent practice soon after his departure from Wright's office. More strikingly, Wright's Dana House bears a distinct resemblance to a number of projects Mahony completed in her own name in 1910 and 1911, while working in partnership with the architect Herman Von Holst in Chicago after Wright left Oak Park. The flow of ideas cannot have only been in one direction, despite what Wright would have had us believe. Indeed, throughout "The Magic of America," Mahony refers to her own contributions to the work of Wright's studio, and to the high esteem Wright had for her work. (She reports that Wright had asked her to take over the office before he left for Europe—an offer she refused despite her later business partnership with Von Holst, who assumed responsibility for the practice.) Further evidence of her status as a respected independent professional comes from her later decision to retain "complete control of design" in the Mahony–Von

Holst office, where she was responsible for designing the Amberg House in Grand Rapids, Michigan, the Robert and Adolph Mueller houses in Decatur, Illinois, and the Henry Ford House in Detroit.

Moreover, as noted above, a great deal of evidence suggests strong ideological and intellectual affinities between Mahony and Wright during the period in which the new domesticity of the Prairie House was conceptualized. Just as the home and studio were envisioned as a laboratory in which to test new ideas, combining the traditional functions of a suburban house with the more public functions of a kindergarten and an architect's office—to the mutual benefit of both—so too were the relationships within the studio meant to be mutually enriching and collaborative. In his 1908 article "In the Cause of Architecture," for example, Wright referred to the Oak Park studio as "our little university," suggesting a free exchange of ideas about subjects of all kinds. Given the nature of Wright's interests as manifested in his writings and lectures, and the sorts of questions Mahony returns to again and again in "The Magic of America," one assumes that the topics they discussed included the arts, education, women's rights, childhood, American democracy, individualism, the landscape of the Midwest, spirituality, domesticity—and of course the architecture of the home.

"Capable Assistant"

Certainly the relationship between Wright's family and his "capable assistant" was unconventional. A photo of Mahony and Catherine Wright, taken by Wright himself, suggests an unusual closeness and intimacy. Mahony and her friend are shown in an informal, sentimental pose—one that focuses our attention on the beauty of the women, their easy familiarity and the directness of Kitty Wright's gaze. From behind the camera, Wright clearly viewed both women in a highly intimate way, and both women appear comfortable with his role as the observer of their world. Although the photograph is an isolated scrap of evidence, it makes one wonder about the role Mahony played in creating the special artistic atmosphere of the Wright home and studio. (It was she, rather than either of the Wrights, who had prior experience of such a world, after all.) The home and studio were crafted by Wright not only as a place for family life and education, but also for the practice of architecture in, as he put it, "an environment that conspires to develop the best there is" in the person of the creative artist. Wright's photograph of his wife and Mahony bears the stamp of a new, feminized philosophy concerning the importance of the domestic sphere as a place of artistic and spiritual growth; it represents a hothouse world in which the boundaries between personal and professional life are clearly blurred. ...

Marion Mahony and Catherine Tobin Wright, ca. 1895. Attributed to Frank Lloyd Wright. [Courtesy of the Frank Lloyd Wright Preservation Trust, Gift of Lloyd Wright, H&S H213]

By the time the playhouse was built, Wright had already left Oak Park with Mrs. Cheney. His relationships with Marion Mahony and Walter Burley Griffin, to say nothing of his marriage to Catherine Wright, had dissolved into bitter acrimony. The story of the Wrights and their home and studio, of Marion Mahony and of the struggle to create a progressive American architecture, was not supposed to end the way it did. The alliances between these people were based on trust, and on a belief in a bright future for the studio under Wright's charismatic leadership—a future that Wright destroyed in the fall of 1909 by leaving his family, closing the studio, and very publicly transferring his love, energy and vision for the future to a life shared with others. The pain caused by his betrayal was made even harder to bear by the fact that Wright and the beautiful Mrs. Cheney were soon spouting phrases from the works of the Swedish feminist philosopher Ellen Key, which Cheney herself had translated. If Cheney wasn't exactly an ardent feminist in Oak Park, she certainly became one once she took up with Wright and discovered Key, whose anti-marriage philosophy she and Wright found particularly inspiring. But this also was not all it seemed at first: perhaps Mahony's rage at Wright was compounded by the fact that Wright's new feminist guru came out publicly against women's suffrage and women's work outside the home, supporting instead a philosophy that emphasized the importance of heterosexual passion as

well as women's special affinity for the domestic realm and the care of children. These ideas seemed to run counter to all that the Mahony circle believed in most fervently.

Worse still, Wright took little notice either of his wife or of his faithful assistant once he left town. Although the ever-loyal Mahony rallied around Kitty after Wright's departure, and effectively continued the work of the Oak Park practice [through her collaboration with Von Holst], Wright—whom she referred to as "the absent architect"—"didn't bother to answer anything that was sent over to him," as she put it, and thus decisively abandoned her both as friend and as colleague. The loss of Wright's companionship clearly opened a huge, painful gap in her life, which her anger and her devotion to Burley Griffin would ultimately fill.

For Wright, Oak Park was only a stage in a long journey that would ultimately take him to Spring Green and inspire him to build Taliesin as a home and workshop for himself and Cheney, who wrote to Key in December 1911 that the house was "truly founded upon Ellen Key's idea of love." For many of those who watched it take shape in the Wisconsin countryside, Taliesin seemed to represent a break from all Wright had known before. Yet viewed through the lens of the feminist activism that shaped so much of his work during the Oak Park years, Taliesin seems not so much a break but a culmination: a hybrid plan dedicated to work and community, a home and studio for artists based on principles of gender equality, a home embedded in and inspired by landscape, and a retreat inspired by the writings of the Welsh poet Taliesin and by his passionate Celtic understanding of the animate land. This sounds so much like Marion Mahony, both in her early career and in her later life in Australia, that it is difficult to believe she wasn't a part of it, although we know very well that she was far removed from Wright and his practice by the time Taliesin was conceived and constructed.

Mamah Borthwick Cheney wrote excitedly to Key in the summer of 1914 to describe visits to Taliesin by school groups, Sunday school picnics on the estate grounds, and lively parties and receptions for the many artists and writers—including Charlotte Perkins Gilman and the editor of the Dial—who ventured out from Chicago. She was clearly proud of the artistic community she and Wright had created, and we can well imagine how easily Mahony would have fit into this milieu, filled as it was with the passionate pursuit of creativity and liberal ideals. Ironically, although she was no longer a presence in the architect's life when Taliesin was built, it is certain that Mahony's progressive, democratic example—as a feminist, artist, activist and intellectual—left a mark on Wright's heart and mind that helped shape his vision for the future and for the community he hoped to create around him. So, too, did Mahony carry Wright and her Oak Park experience with her as she strove to invent a new fusion of the personal and professional in her life with Walter Burley Griffin and the other members of the Castlecrag community in Australia. Though both she and Wright would disavow their connection for the rest of their lives, it remains a cornerstone in both their careers—one that, despite their complaints, should not be forgotten by historians as we seek to create a more balanced and accurate account of the extraordinary richness of architectural creativity in and around Chicago in the first decade of the 20th century.

Girl Talk is excerpted from Marion Mahony Reconsidered, edited by David Van Zanten, which will be published by the University of Chicago Press.

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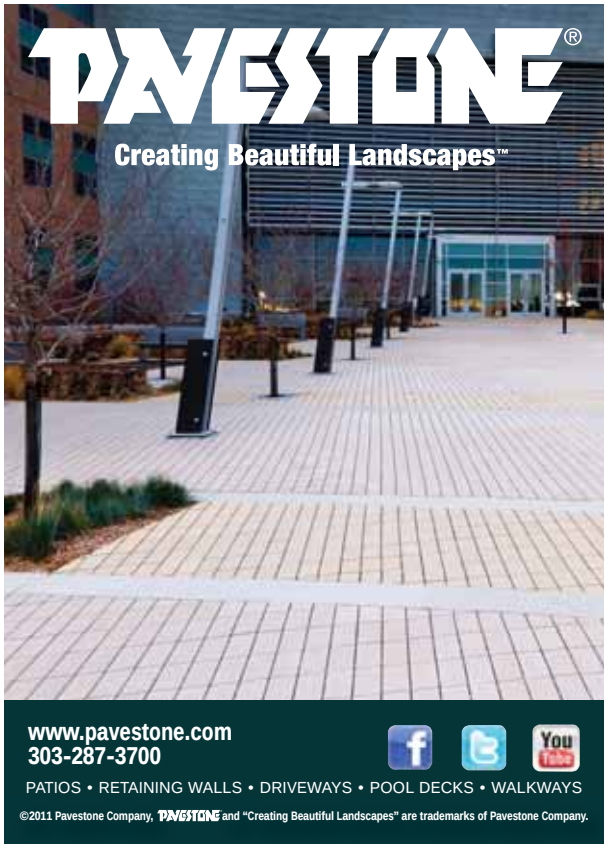

Carbon Eating Cement

Novacem has developed a new cement based on magnesium oxide which will address the carbon problem faced by the cement industry, and as a result will contribute significantly to an overall shift to a low carbon world. Production of Novacem's cement is carbon negative; more carbon dioxide (CO2) is absorbed during the process than is emitted. They aim to offer cost parity with traditional cement, even before any cost of carbon is factored in, and also performance parity. Abundant accessible sources of the magnesium silicates they use to produce magnesium oxide exist on Earth, and will support large scale roll out of Novacem cement production.

The Challenge & Opportunity in Low Carbon Cement

Cement is a $170 million industry facing a challenge to transform its highly carbon intensive production process to a more sustainable one. A massive opportunity exists for technologies which can meet this challenge. The industry supplies 2.9 billion tons of cement to support global economic development every year. Supply is expected to grow at 3-5% per annum, particularly driven by development needs in India and China.

However, the cement production process accounts for up to 5% of man-made emissions of CO2, making the industry one of the largest industrial emitters. Production of one ton of ordinary Portland cement, the most widely used type of cement, emits an average of 800 kg of CO2. Of the total emissions created in the cement production process, 50% derive from the raw material used (calcium carbonate), 45% from the fossil fuels needed to drive the main chemical reaction and the remaining 5% relate to transport.

In the recent Cement Sustainability Initiative Technology Roadmap—which incorporated views from the world's largest cement companies—the cement industry acknowledges a need to embrace lower carbon solutions. However, currently proposed solutions will either not deliver the scale of the change needed (partial replacement of ordinary Portland cement with waste products) or are unproven and uneconomic (carbon capture and storage).

One Possible Solution

Novacem has developed a new class of cement which will offer performance and cost parity with ordinary Portland cement, but with a carbon negative footprint. It is uniquely positioned to meet the challenge of reducing cement industry carbon emissions.

This cement is based on magnesium oxide (MgO) and hydrated magnesium carbonates. The production process uses accelerated carbonation of magnesium silicates under elevated levels of temperature and pressure (180oC/150bar). The carbonates produced are heated at low temperatures (700oC) to produce MgO, with the CO2 generated being recycled back in the process. The use of magnesium silicates eliminates the CO2 emissions from raw materials processing. In addition, the low temperatures required allow use of fuels with low energy content or carbon intensity (i.e. biomass), thus further reducing carbon emissions. Additionally, production of the carbonates absorbs CO2; they are produced by carbonating part of the manufactured MgO using atmospheric/industrial CO2. Overall, the production process to make 1 ton of Novacem cement absorbs up to 100 kg more CO2 than it emits, making it a carbon negative product.

Novacem was founded in 2007 as spin-out from Imperial College London. Investors include Imperial Innovations, the Royal Society Enterprise Fund and the London Technology Fund. They have received additional support through the Technology Strategy Board and from the Carbon Trust

ASSOCIATION HAPPENINGS

Little Valley Nursery Mixer

On June 9th there was a mixer at Little Valley Wholesale Nursery. It was a great event, educational and informative. A big thank you goes out to all those at Little Valley who helped put together such a wonderful event, John Pinder, Ron Arpin, Jan Tunner Keith Williamson and Cindy Throngren. It was a great opportunity to brush up on many of the plants in our region. If anyone would like a personal tour of the nursery please contact Keith Williamson - 303-659-6708 and he would be more than happy accommodate.

FIRM NEWS

ASLA Member volunteers on environmental improvement project

GOLDEN, Colorado – The Institute for Environmental Solutions (IES) would like to give special thanks to Kevin Lyles of Confluent Design for his outstanding volunteer work on the "Trees for Healthy Kids and Community" strategic tree planting project. On May 1, 2011, 35 trees were planted along the north and northwest edges of Mitchell Elementary School in Golden, to reduce wind, noise pollution and improve air quality and stormwater management. The school's close proximity to Highway 93 is an ongoing concern for the Mitchell community due to the potential health impacts of the exposure to highway pollution. Kevin Lyles, Principle Landscape Architect, Confluent Design, volunteered his professional services in preparing a detailed plan for this project, along with a long-term master plan for the entire school grounds.

This initial planting will complete the first portion of Kevin's multi-phase landscape design plan. It includes tree species specially selected to address the pollution problems and to grow well in this location. His ideas for the future include several ecologically diverse learning areas such as 'Prairie' and 'Woodland,' as well as ways to reduce irrigation needs by increasing stormwater infiltration on site. His interest in sustainable design, in addition to his thirteen years of professional experience, attracted IES to Kevin's work. His commitment and contributions successfully advanced the goals of the project and laid the foundation for continued implementation. Mitchell Elementary parents, teachers, students, and staff members are excited about the new trees and hope to continue with the proposed landscape plan. Each classroom at Mitchell will adopt a tree to care for and learn about.

The planting project was accompanied by a detailed environmental analysis by IES and comprehensive education programs in the school about trees and their environment. Funded by Xcel Energy, "Trees for Healthy Kids and Community" was made possible through the collaboration of many stakeholders including Mitchell Elementary, Jefferson County School District, City of Golden (Dave High, City Forester), Confluent Design and IES.

New ALSA Colorado Members

Welcome New Members

Adam Barbe, Associate ASLA – Bluegreen

Fred E. Casey, ASLA – Arapahoe Sign Acts Inc

Zachary A. Cinkel, ASLA

Bethany Clark, Associate ASLA

Jerry Cunningham, Affiliate ASLA – Cold Spring Granite

Jennifer Marie Dolecki, ASLA

David Dunn, Associate ASLA

Nancy Ellwood, Associate ASLA

Michael E. Larson, ASLA

Kelly Moore, Associate ASLA

Aaron J. Olson, Associate ASLA

Jean R. Schwartz, ASLA – Jefferson County Open Space

Thomas J. Russell, ASLA – Painted Desert Landscaping

Cara Scohy, ASLA – CS Design, Inc.

Michael Tunte, ASLA

Kristen M. Walsh, ASLA – Design Workshop

Caitlin Weller, Associate ASLA – Bluegreen

Landscape Forms Founder Remembered with Deep Respect and Affection

KALAMAZOO, Michigan – Landscape Forms remembers with admiration and gratitude its founder, John E. Chipman, who died on April 2, 2011. John was a friend and mentor, a gregarious man who took pleasure in people and special joy in his family. He was an outdoorsman, a skilled woodcraftsman and a visionary businessman. Born in Ypsilanti, Michigan on February 26, 1931 he graduated in 1953 from Michigan State University with a degree in landscape architecture and six years later started Chipman Landscaping in Kalamazoo. His foray into furniture manufacturing is part of Landscape Forms lore. Loath to lay off his landscaping employees during the long Michigan winters, he began making benches and planters to keep them working year round. He was good at and in 1969 turned his attention full time to furniture, founding Landscape Forms. Under his leadership as CEO and Chairman of the Board the company grew to become North America's leading designer and manufacturer of furniture for outdoor spaces and a standard-bearer for quality and fine design

John Chipman believed it was important to be different. He didn't like the word 'corporate' and all that it implied. He created a business run in a different way. A significant number of Landscape Forms employees have worked for the company long enough to remember John walking through the plant, talking to people every day about what they did and how they did it. He wanted to know how everything worked. "John knew that welders or painters or landscapers, if they are the right people, know their job and you should listen to them about what they know," Main says.

John valued openness, expected people in the company to contribute, respected their contribution and rewarded them for it. Part of his genius was finding a way to build-in these values as the company grew and the business became more complex. Thirteen years after founding the company he brought to Landscape Forms a pioneering corporate governance plan called Scanlon Principles, which focuses on labor/management cooperation, open book management and employee profit sharing. "That's unusual today, but it was really odd when John started doing it back in the 80s," Main explains. With Scanlon, John found a way to translate his values into guidelines that other people could use. They were formalized and made part of the company structure where they continue to guide the way the company operates today.

John Chipman was interested in people and design and he successfully combined the two. "He was pioneering good design in outdoor furniture and building a business that reflected his personal values about people. He made Landscape Forms a place where you could come and do your best work – whether you were a welder or a designer," Main explains. While he resigned from the day-to-day operation of the company in 1993 and from his role as Chairman of the Board in 2003, John Chipman's focus on first-rate design and on the people who make it happen still defines the culture today. His family remains part owners of the company with the people of Landscape Forms. John's son John A. sits on the Board of Directors, his daughter, Becky is VP for People, and nephew Bob Chipman, a landscape architect, designs beautiful Landscape Forms products.

In addition to his legacy at Landscape Forms, John Chipman made serious contributions to the larger community. He was a generous supporter of his alma mater, Michigan State, and contributor, with his wife Patti, of 228 acres of family property in Kalamazoo to the Southwest Michigan Land Conservancy. The Chipman Preserve, site of the original nursery on which John started his career, is one of the largest and most public of the Conservancy's preserves, a place with public trails and heritage fauna and flora, which he tended into his eighth decade. In 2000 John established the John Chipman Scholarship Endowment for Overseas Study to provide opportunities for Michigan State landscape architecture students to study abroad and in 2002 was named the university's Landscape Architecture Alumnus of the Year. In 2004 he received the Scanlon Leadership Network's most prestigious honor, its Stewardship Award, in recognition of his demonstration of Scanlon Principles in his work and community.

John Chipman was an exceptional man. The people of Landscape Forms remember him with deep respect and affection. Bill Main speaks for many when he says, "John was a rare person and it was my good fortune to know him."

studioINSITE Celebrates 10 Years of Successful Urban and Campus Placemaking

DENVER, Colorado – March 23, 2011 marks studioINSITE's tenth year creating Meaningful and Memorable places throughout Colorado, the country and the world. Please join us as we celebrate this incredible milestone, expanding our online project library to showcase the breadth of our work.

studioINSITE would like to introduce our new online portfolio, showcasing a few of our most notable projects from the past ten years. We are very fortunate to have so many tremendous clients, collaborators and friends to which we contribute our success. We appreciate your commitment to studioINSITE.

We would like to personally invite you to view our new site at www.studioinsite.com. As you view our expanded project library, we hope you will join us as we celebrate projects from our past and present and join us as we look forward to many new opportunities to come.

studioINSITE offering expanded client services with new design team contributors

DENVER, Colorado – Upholding studioINSITE's philosophy of continuing collaboration and communication, we are pleased to announce new services that are now available to our clients. Professional visualization, financial strategy and real estate planning are now being provided by new, highly experienced collaborators. These services have proven to be invaluable on previous higher education projects, and we are proud to expand these offerings to upcoming clients.

studioINSITE welcomes Jim Leggit, FAIA; Dean Wolf and Tom Nycum. studioINSITE is pleased to announce Jim Leggitt, FAIA architect, author, illustrator; Dean Wolf, former Executive Vice President Auraria Higher Education Center; and Tom Nycum, former V.P. Finance and Administration at Colorado College have joined the collaborative firm offering architectural illustration, financial strategies and real estate planning to its Higher Education clients.

Jennifer Hinkley-Karnuisky Earns CDFA Certification

DENVER, Colorado – The Denver Chapter of the Society for Design Administration (SDA) is pleased to announce that Jennifer Hinkley-Karnisky has recently earned the credential of Certified Design Firm Administrator ("CDFA") after successfully completing the CDFA exam developed and administered by the Society for Design Administration.

Jennifer has been an employee at H+L Architecture, with offices in Denver and Colorado Springs, for almost 15 years and has a Masters of Business Administration from Regis University. She is currently Secretary for the local chapter of SDA and Public Relations Chairperson. She has been a member of the Society for Design Administration since 2001. "Earning the CDFA designation clearly demonstrates a commitment to personal excellence and to the A/E/C industry," said Melodee Futch, SDA National President.

Established in 1959, the Society for Design Administration is the largest organization directed to Architecture/Engineering/Construction Administration. SDA's mission is to promote the exchange of ideas and to educate its members in the related disciplines of design firm administration and management. To become certified, an applicant must have experience in A/E/C firm management and administration, pass a thorough examination of competencies, and adhere to a professional code of ethics. For more information about SDA or the CDFA certification process, visit www.sdadmin.org.

Exhibitor and Sponsor Opportunities for the AIA Colorado 2011 Design Conference

DENVER, Colorado – AIA Colorado has released the Call for Exhibitors for the AIA Colorado 2011 Design Conference on Friday and Saturday, Oct. 14 and 15, at the Keystone Conference Center. AIA Colorado's signature event, the conference continues to grow and included more than 450 architects and design professionals coming together for two days of state-required continuing education and networking last year. Download the Call for Exhibitors and Sponsors.

The design conference also includes the largest trade show floor in the Western Mountain Region with more than 110 booths and tabletops. An exceptional opportunity to showcase your products, projects and services, exhibitors include general contractors, engineers, consultants, product vendors and service providers from across the country. The pricing on display space was actually reduced this year and each exhibit includes one or two conference registrations, which feature access to all sessions and meals during the two days. Additionally, there are a wide variety of sponsorships available, several of which include complimentary registrations to attend and all of which highlight your firm as a leader in the industry.

The trade show will sell out again this year so please register soon to ensure one of your top space selections. Additionally, professional affiliate members in good standing with AIA Colorado are also eligible for to save an extra $300 on an exhibit booth, allowing you to pay for the majority of the $395 annual dues with a single discount. Please contact AIA Colorado Director of Programs Nicolle Thompson at nicolle@aiacolorado.org or 303.446.2266, ext. 111, for more information.

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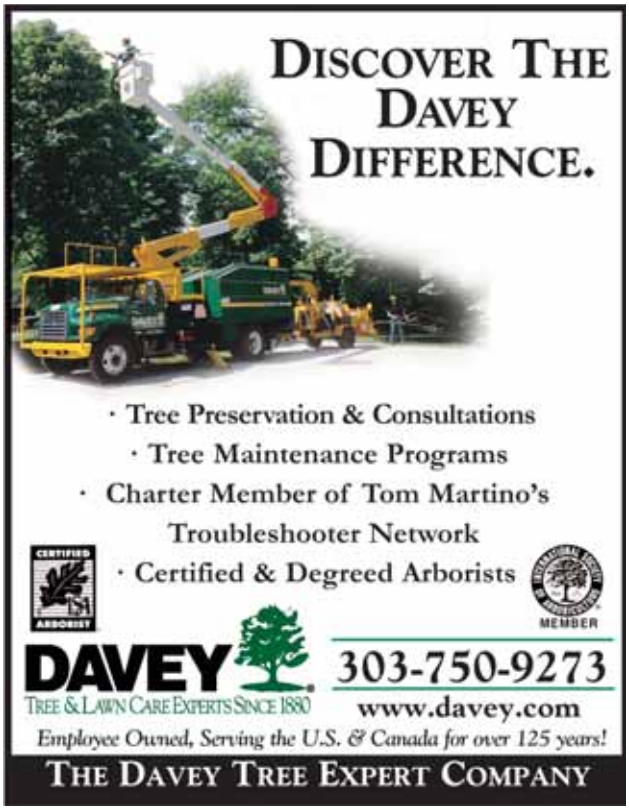

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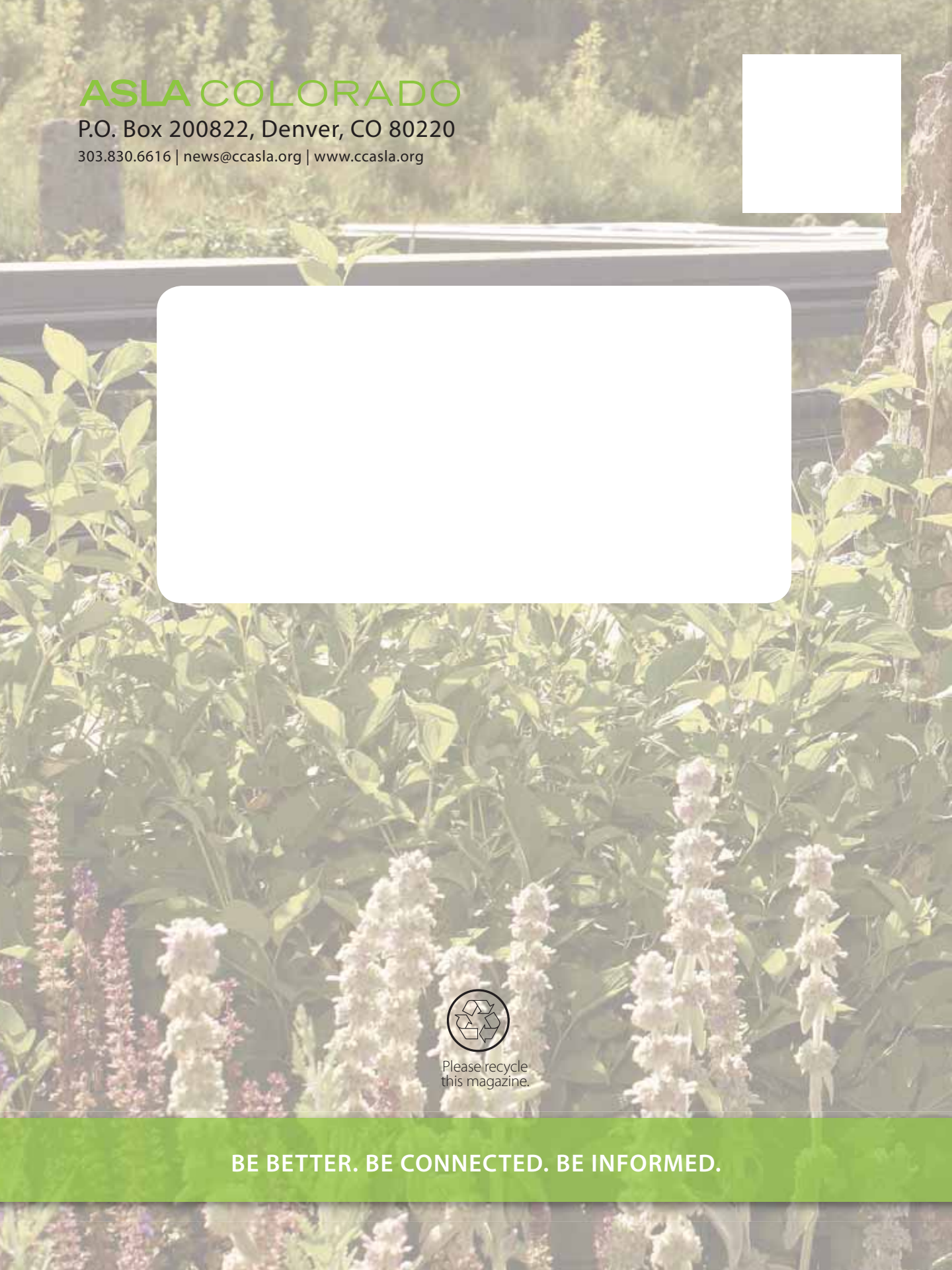

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