An aerial photograph of a dense forest with a winding path. The trees are small and green, creating a textured, mosaic-like pattern. The path is a dark, narrow line that curves through the forest. The overall color palette is dominated by various shades of green and brown.

# SUSTAIN- ABILITY ACTION PLAN

**Eskew+Dumez+Ripple**  
June 2012 Edition





The Mississippi River as linear datum along which the spatial relationships of Eskew+Dumez+Ripple projects are constrained. 2011.

# 2030 COMMITMENT

The AIA 2030 Commitment provides a national framework for firms evaluate the impact design decisions have on an individual project's energy performance. To achieve the energy reduction goals of 2030, Eskew+Dumez+Ripple apply the principles of sustainable design to every project from its inception and early design through project completion and ongoing building operations.

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## WHO WE ARE FIRM PROFILE

Eskew+Dumez+Ripple is a design-driven studio producing diverse projects in architecture, interior environments, and urban strategies. By blending a signature collaborative process with professional talent, creative thinking and emerging technologies, we meet the needs of our clients through unique and efficient problem solving.

We create distinguished projects of their own time and place whose authenticity is expressed in each aspect of massing, scale, urban siting, design details and sustainable materials. Our commitment to enhance and protect both the cultural and natural environments of the communities we serve is evident in the beauty and technical craftsmanship of our designs and the long-term sustainability of our projects.

Based in New Orleans, we use the world-renowned cultural heritage of our city as inspiration for a design practice of national range and recognition. The result is a vibrant portfolio that includes research laboratories, marine facilities, interpretative centers and museums as well as office buildings, hospitality spaces, academic and health care facilities.

Seven firm Principals lead our cross-disciplinary studio of professionals, promoting design excellence, efficient project delivery, and mastery of technical construction systems. We actively pursue environmental sustainability, elegant craftsmanship and spirited collaboration with our clients and our communities.



# WHO WE ARE STATEMENT OF PURPOSE

We believe that design excellence combines beauty, function, economy, and performance. Our goal is to make places that both function and inspire. We challenge our staff to base their design on an analysis of site and climate, design to use energy & water sparingly, and consider the consequences of materials choices on the health of occupants, the greater community, and the environment. Some call this approach 'sustainable design.' We believe it is just good design.

This philosophy affects both what we design and how we run our business. We set and track goals throughout the design, construction, and evaluation process. We reinforce this way of thinking in the way we work with clients, how we attract and grow our staff, and how we operate our workplace.

This plan describes where we are as a studio today, and the steps we will take to work more responsibly in the future and create better projects for our clients.



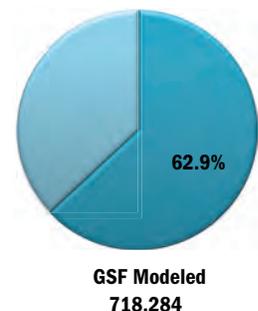
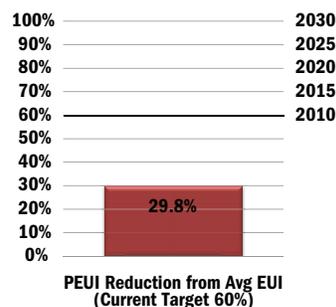
# WHAT WE DO ENERGY: 2030 COMMITMENT

As a signatory to the AIA 2030 Commitment, Eskew+Dumez+Ripple has joined the ranks of firms pursuing aggressive reductions in utility-supplied energy use. The 2030 Commitment measures building energy use of new & renovated buildings against a baseline survey of existing buildings. Specifically, it tracks the Energy Use Intensity (EUI—the annual energy use divided by project floor area) for buildings and compares it with a comprehensive survey of different building types compiled in 2003. Design work in the 2010-2015 period targets a 60% reduction from these baseline comparables in utility energy use. Not every project can achieve these savings, but every project can be improved by a serious examination of the opportunities for savings.

At the start of each project, Project Managers are expected to identify performance benchmarks against which the project will be compared throughout the design, construction, and occupancy phases. These benchmarks can include average energy use of comparable buildings in the region and leadership projects that establish best practices for the building's program type. We use computer simulation tools to model energy use, daylight and electric light throughout the design process, and compare predicted performance with these benchmarks. For projects in design phase during 2011, 63% of the work (by floor area) was being energy modeled. This compares favorably with 57% for the firms in the 2030 Commitment reporting in the same year. Our goal in 2012 is that all projects over 10,000 sf in size will be energy modeled, and

that we will grow skills within our firm and in our partner engineering firms to move enable models to be built for all projects by 2013.

For projects in design phase in 2011, the aggregate predicted Energy Use Intensity was 30% lower than comparable existing buildings. This is well short of the 60% reduction targeted by the 2030 Commitment, but not far from the 35% average reduction aggregating all firms reporting in 2011.





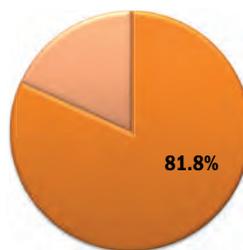
## WHAT WE DO TRACKING RESULTS

We request that all clients share with us the electric and gas utility usage data for 24 consecutive months after the project is complete. We compare these data with design-phase predictions. On selected projects, where the Client so desires and collaborates with us effectively, we work with our engineers, the general contractor, and the Owner's staff, to look for opportunities to 'tune' performance after occupancy. We are now experimenting with measuring achieved thermal conditions and occupant-reported comfort—since the real goal is not just to save energy but to deliver comfortable spaces at the lowest energy use.

We first began tracking actual energy performance on selected projects in 2010. By 2011, projects comprising 81% of the floor area in our whole-building project portfolio had agreed in principle to allow collection of utility data once these projects are complete. This compares favorably with the average 45% for all firms reporting their progress on the 2030 Commitment in the same year.

We have found that as the complexity of mechanical systems has increased over time, buildings—even those receiving commissioning—require a significant “shakedown” period after occupancy for the building systems, the operator, and the occupants to all learn to work effectively together. At our own expense and with the collaboration of engineering and construction partners, we have initiated pilot studies on several projects to understand ways of building that shorten the time between building opening and full-performance operation.

In 2012, in collaboration with our newly appointed Research Fellows, we will set up a portfolio tracking system (following the framework of EnergyStar Portfolio Manager) to allow us to compile performance data while preserving client privacy.



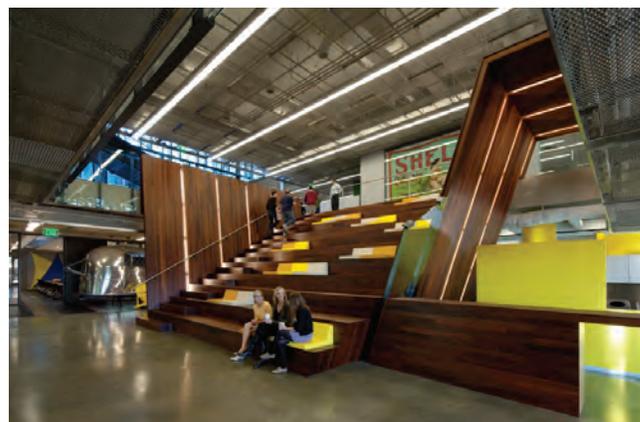
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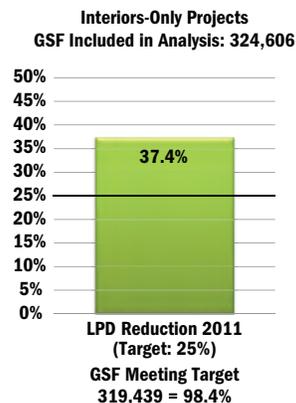
# WHAT WE DO INTERIORS PROJECTS

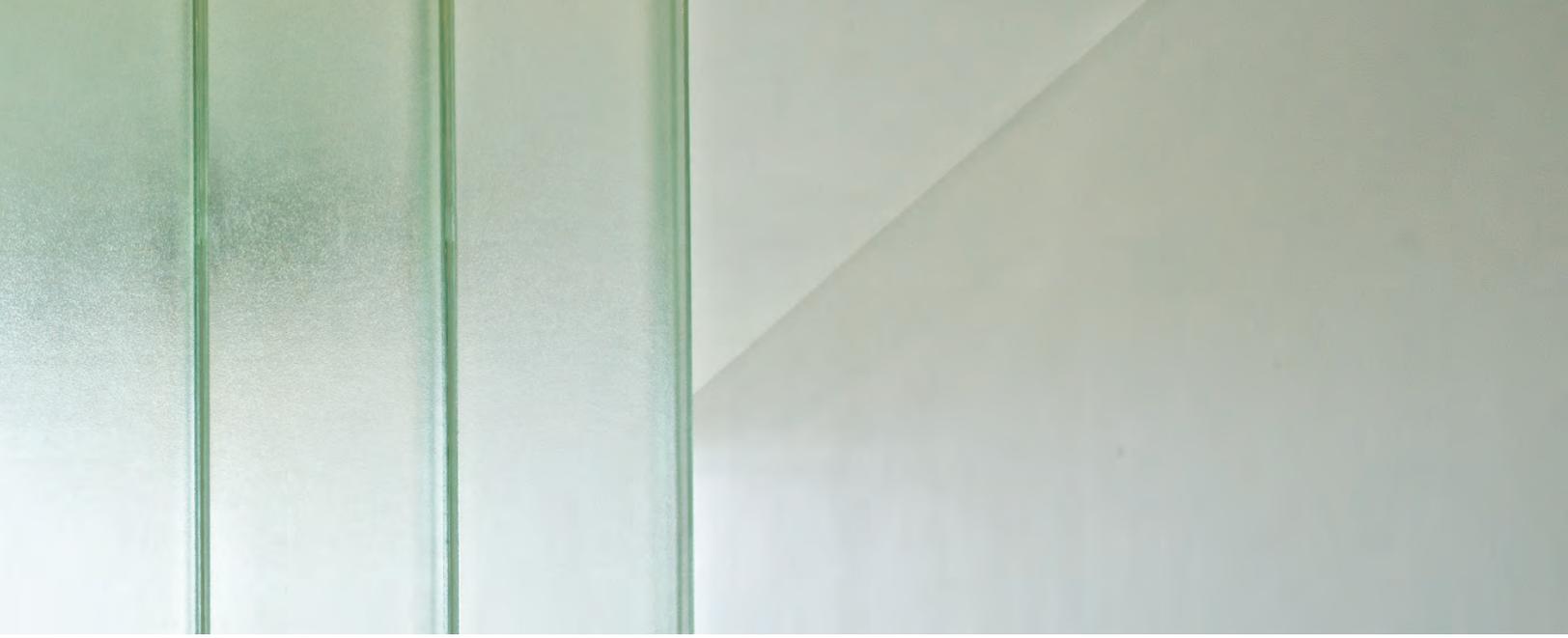
Interiors-only projects frequently involve modifications to, or replacement of, lighting systems. When they do, we look for opportunities to achieve great lighting quality while reducing energy consumption by selecting high-performance light fixtures and good lighting controls. We aspire to track and report the Lighting Power Density (LPD—the maximum power consumption of all lighting fixtures divided by the project floor area) for all projects. Our target for 2012 is to meet and exceed best-practice standards for lighting quality and quantity at a lighting power density 25% lower than the applicable energy code limits.

We began this tracking exercise for projects in the design phase during 2011. Among our interiors-only projects, the aggregate LPD was 37% below the code limit, comparing favorably with the 21% average reduction for all firms reporting on their progress as part of the 2030 Commitment in the same period. In 2012, we target that at least 90% of the floor area of projects in design phase will be tracked.



Lamar Advertising Corporate Headquarters  
Baton Rouge, Louisiana  
Completed 2012





## WHAT WE DO MORE THAN JUST ENERGY

While the AIA 2030 Commitment focuses on energy consumption, a commitment to healthy, high-performance buildings involves looking at more than energy—water, site impacts, materials, and air quality. Since you can't manage what you don't measure, we use national best-practice standards and rating systems to measure our designs and track their performance. Depending on the situation, and the specific owner's goals, we track our projects against at least one of these frameworks :

- Leadership in Energy and Environmental Design (LEED)
- EnergyStar
- Green Globes
- Living Building Challenge
- AIA Committee on the Environment (COTE) Top Ten Projects

Whether or not a client chooses to pursue certification or recognition under one of these frameworks, tracking against these systems allows clients to see where their projects stack up. We have found that some Owners develop an interest in pursuing certification or recognition midway through the design process, and so we work to keep their options open.

For example:

- Our 'Basis of Design' finishes and fabrics are cost-competitive choices that meet recognized criteria to preserve indoor air quality. These choices are considered not just at time of construction but over the building life; for instance, some resilient flooring choices require chemical strippers and sealers while others can be cleaned with just water. Our baseline choices are LEED compliant.
- Our approach to site design coordinates Civil and Landscape elements to detain stormwater onsite. Where possible, we use 'working water features' to add property value while reducing the size and cost of drainage systems
- We shape our designs to provide occupants with plentiful access to daylight and views.
- We work with our engineers to configure lighting, heating, cooling, and ventilation systems that allow the greatest degree of individual control.

Up until now, this process has been largely intuitive and left to individual project managers. In 2012, we will finalize the incorporation of this into our internal Project Development Management Process, by requiring all Project Managers to show where each project stands by providing either a LEED Scorecard or a AIA COTE form at each design phase review.



# WHAT WE DO DESIGN FOR RESILIENCE

Being rooted in New Orleans, and situated right in Hurricane Alley, Eskew+Dumez+Ripple is acutely aware of the importance that projects are resilient—able to withstand and bounce back quickly after natural and man-made disasters, and able to adapt to the changing needs of owners with a minimum of expense and waste.

While building codes attempt to anticipate natural disasters—requiring that structures be designed to withstand, for example, a 100-year storm or earthquake, they often assume that all civil systems work perfectly. Instead, we ask questions like, “How can the building remain usable if the power is knocked out for a week or two?”

Our internal Quality Assurance review process seeks to ensure that, for example, windows and other penetrations

in the building envelope are detailed well, and are designed to stand up to harsh conditions now and long into the future.

Reconfiguring buildings to meet the changing needs of owners is also a major expense and a major source of construction waste. We want the building to meet the Owner’s program at building opening, and be easy to adapt as needs change with a minimum of waste and cost. This idea is sometimes described as designing for “long life / loose fit.”

In 2012, we will implement a resilience review as part of the EDR Quality Assurance process.

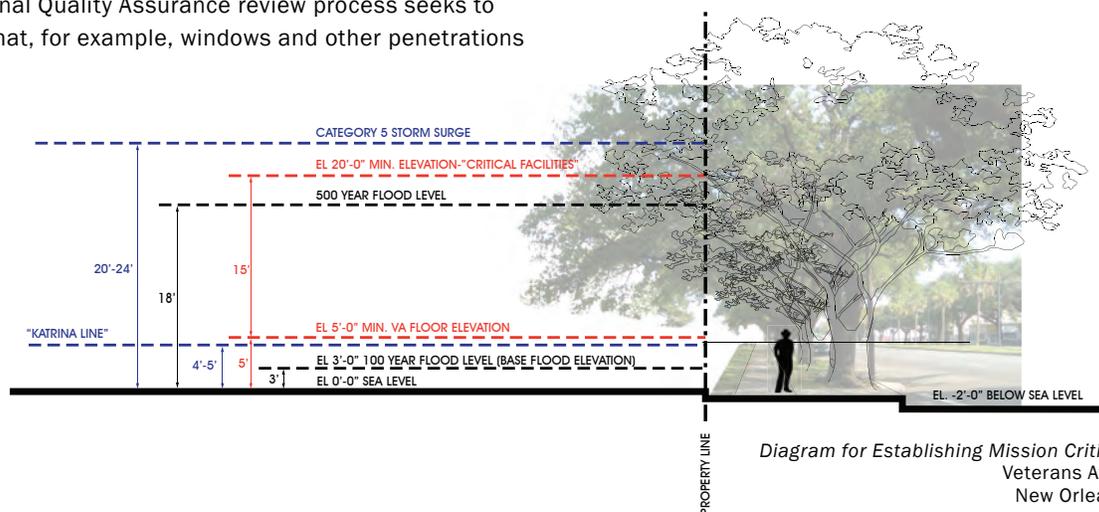


Diagram for Establishing Mission Critical Elevations  
Veterans Affairs Hospital  
New Orleans, Louisiana



## HOW WE DO IT

# STUDIO BUSINESS STRATEGY

Eskew+Dumez+Ripple has established itself as nationally ranked firm through its focus on design excellence with projects that show an awareness of place and that engage, rather than fight, local climate. In recent years, we have increased our investment in quantitative support for this design emphasis—more tools and training to allow design choices to be informed by hard numbers. We have also launched new initiatives in building performance monitoring and analysis. We aspire to be - from top to bottom - a firm that consistently combines design excellence with high performance.

Our firm positioning in this area is being reinforced by how we communicate our projects when we present them within the industry or apply for awards, the type of projects and clients we pursue, and the strategic relationships with engineering firms that can work with us to achieve common goals. We have invested significantly in research on sustainability and building performance and plan to deepen that investment in 2012. In the long term, we believe there are significant business opportunities made possible by staying engaged with our projects after construction is complete.





## HOW WE DO IT

# ORGANIZATIONAL LEADERSHIP

In 2012, Eskew+Dumez+Ripple created a new position titled Director of Sustainability & Building Performance, with a firm-wide mission to enable every project and the firm as a whole to raise its sights. As peer to our Director of Design, Steve Dumez, this position reinforces for our staff and our clients the importance of this work. Firm leadership has selected Z Smith, PhD, AIA, LEED AP BD+C to this role, leading a comprehensive review of all projects in the studio for their meeting of these criteria. Z is actively engaged in managerial decision making, and as a result, influences all of our holistic business decision making through this specific lens of responsibility.



Steve Dumez, FAIA  
Director of Design



Z Smith, AIA, LEED AP BD+C  
Director of Sustainability  
& Building Performance



## HOW WE DO IT

# STAFF TRAINING

While we have for many years conducted regular staff training sessions focused on best practice construction techniques, in 2011 we augmented this with regular sessions on building performance. Topics in these bi-monthly lunch sessions have ranged from measured performance of some of our projects to advanced techniques to measure and reduce air infiltration.

While the LEED rating system is not appropriate for all projects, LEED is currently the green rating system most widely accepted by the marketplace. We encourage staff members to become LEED Accredited Professionals, and reimburse testing expenses for those that pass their exams. We host USGBC continuing education programs for LEED APs from around the city in our own studio as well. In 2011, LEED AP's and Green Associates comprised 32% of our staff. In 2012 and 2013, we plan to increase this percentage of our team to at least 50%.

We also have recognized that in order for computer simulation to be able to affect design at an early stage, it may be necessary to develop or train on tools that our own architectural staff can use, rather than relying on supporting engineers.

- In 2010, we gained experience with using daylighting modeling tools that work within our Revit 3D building information model for one demonstration project. In 2011, we rolled this out to two more projects. Our goal for 2012 is to use this tool on all Revit-based projects.

- In 2011, we used Ecotect to study the performance of different solar shading options on two projects. In 2012, we hope to expand use of this tool and the number of staff able to use it.

- In 2012, we will also explore using relatively simple modeling programs, such as eQuest, and Green Building Studio, to provide whole-building energy data to inform design choices, with the goal of narrowing in on the best baseline tool for our studio's use in 2013



## HOW WE DO IT

# SUSTAINABLE OPERATIONS

To be credible when we encourage our clients to pursue sustainable, high-performance strategies, it helps if we are diligent about following them ourselves. Here are some of the steps we have taken so far, and our plans for improvement.

### *OFFICE ENERGY & WATER*

While planning an expansion of our studio facilities in 2011, we committed to pursuing LEED certification for the project. Our studio occupies part of one floor of a 32-story office tower constructed in 1978 that did not provide for sub-metering of tenant energy or water use.

- Part of our expansion involved implementing sub-metering of electrical use for lighting, appliances, computers, and other equipment. This metering is allowing us to establish a baseline for future improvements. As of December 2011, our average consumption for lighting and plug loads is 4 kWh/sf/yr, or 1000 kWh/yr per employee. As soon as we have a year of baseline data, we will begin a program to encourage and track reductions. To put this in context: the whole-building average energy use for this all-electric building is 20 kWh/sf/yr; it is expected that heating, cooling, and process loads (elevators and pumps) dominate overall energy use.
- The office expansion allowed us to replace our existing lighting—which averaged 2.0W/sf lighting power density—with much more efficient fixtures averaging 0.6W/sf while maintaining and improving lighting quality.
- We have implemented a policy of purchasing only EnergyStar appliances, computers, and office equipment.
- Our staff kitchen provides durable, rather than disposable, cups, glasses, plates, and utensils, and a pair of water-efficient dishwashers for cleaning.
- In 2012, we plan to complete LEED certification submissions on the office expansion project.
- The majority of water use for our office is dominated by the washrooms provided in the building core, not within tenant space. In 2012, we will pursue working with the building's management company to explore improving water efficiency in these common facilities.



## HOW WE DO IT

# SUSTAINABLE OPERATIONS

### *SUPPLIES / CONSUMABLES*

Currently, we have basic recycling facilities in place, paying for separate recycling of office paper, cardboard, and beverage containers. In 2012, we plan to explore further recycling opportunities for additional materials consumed in our studio, as well as for materials consumed by our employees outside of the studio on a personal basis.

Specifically, in regard to paper, a large source of waste in the architectural industry, in 2011, we switched our service supplier for plotting from one that would not use recycled paper stock to one that would. We also implemented procedures to make it easier for test prints of letter and tabloid-sized sheets to be printed on the blank side of previously used sheets.

In 2012, we plan to begin compiling baseline data on paper use and rewarding reductions in unnecessary printing.

The office consistently contracts with local establishments for its catering needs, lending to the belief that sustainability also entails sourcing local produce and supporting local economies. We plan to expand that practice by contracting with catering companies that also reduce, reuse and recycle their serving ware and utensils.



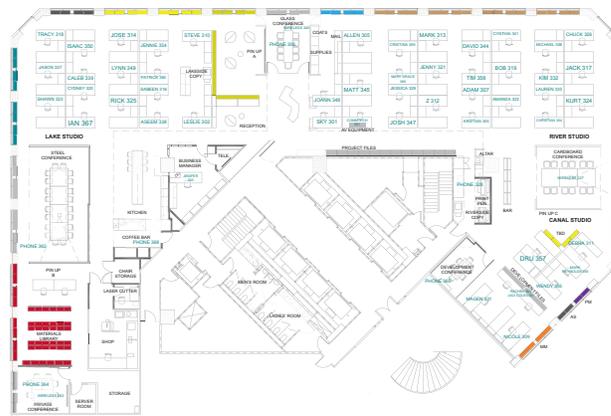
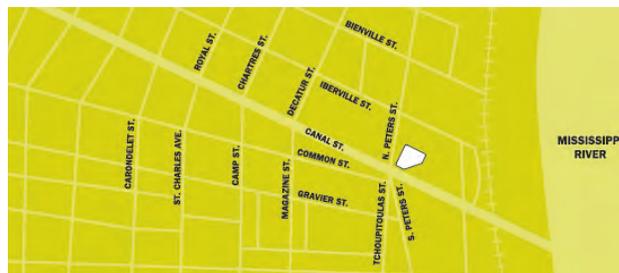
# HOW WE DO IT SUSTAINABLE OPERATIONS

## TRANSPORTATION

As transportation use is responsible for 25% of energy use and carbon emissions nationwide, we expect that transportation use by firm staff may be a significant part of our overall environmental footprint.

In 2012, we will begin tracking firm-sponsored travel and computing energy & carbon emission equivalents. We also plan to work with individual staff members to benchmark the footprint of home energy use and personal travel, and develop company-wide measures to encourage and reward staff who reduce their footprint.

We have purposefully situated our office directly on the CBD edge of the French Quarter in an attempt to shorten employee, client and consultant commutes. We have also made it a point to open our conference rooms to civic, community and cultural organizations to host their meetings in a central place, thereby reducing the carbon footprint to commuting.



Studio Floor Plan



# HOW WE DO IT SUSTAINABLE OPERATIONS

## *SUSTAINABILITY ACTION TEAM*

In early 2012 we established an official team of staff members drawn from across the firm that works to identify opportunities to improve the sustainability of our work product and work processes. Further concepts under discussion for 2012 include:

- Office
  - + Computer shut-down policy
  - + Task lights enabled with occupancy sensors
- Transportation
  - + Promoting carpooling, bike, public transit commuting
  - + Make shared car available for job site visits for those using the above
  - + Rental car policy when on company travel requiring energy efficient vehicles
  - + Carbon offsets for plane travel
  - + Acquire / promote tools that allow meetings without travel
- Training
  - + Recognizing growth in sustainable design skills annually
  - + Awarding a trip to Greenbuild among staff for innovative efficiency leadership
  - + Expand construction materials choices to avoid those identified by independent agencies as 'items of concern' for health impact, when cost-

effective alternatives are available.

- Advocacy
  - + Expand presentations to schools & universities as environmental improvement ambassadors
  - + Publish case studies and research as developed so others might use baselines we have developed

This team will refine these concepts and propose the best to senior management for full implementation prior to 2013.



## HOW WE INFLUENCE & ADVOCATE EDUCATION

We contribute to advancing the understanding of sustainable design and building performance among students through engagement at the high school and university level. With support from the firm:

- Staff members serve as mentors to area high school students in the design and construction fields through the ACE mentoring program
- Staff members serve as guest critics at universities regionally and nationally
- Staff members participate in Career Day events at the high school and university levels educating students on the growth opportunities in the profession
- Staff members teach courses in sustainable design and in building science & environmental controls

### *EDR FELLOWSHIP PROGRAM*

In 2012, we launched the EDR Fellowship Program. A broadly advertised talent search accepted applications from design students and recent graduates interested in conducting research within the setting of a design firm for a period of either 3-month or 1-year. While the area of focus will change from year to year, this year's class of two EDR Fellows will focus on the topic of building performance. While many firms run internships, providing students with the chance to gain practical experience in ongoing design projects, the EDR Fellowship allows for dedicated staff

time toward advancing our more thorough understanding of practice without being subsumed into the day-to-day crunch of particular project deadlines.

### *NCARB PRIZE*

NCARB, the National Council of Architectural Registration Boards, holds an annual competition for grants to promote collaboration between the academy and industry. In late 2011, we developed a joint grant proposal with Tulane School of Architecture [TSA] to entitled "Field Studies for Healthy, High-Performance Buildings". This proposal requested funds to purchase measurement equipment and promised as its primary deliverable the development of a university course to train students in methods to measure and understand building performance and occupant comfort. Our application was one of six to be selected as NCARB Prize winners. The course being developed will actually serve as a teaching module within TSA's required building environmental controls course "Buildings, Climate, Comfort" being taught by an EDR staff member.

Our goals for 2012 include better documenting these efforts in research and education, and sharing the results learned through presentation and publication. In 2013, we hope to collaborate on further studies like this to continue to grow the data available in the Southeastern United States Region.

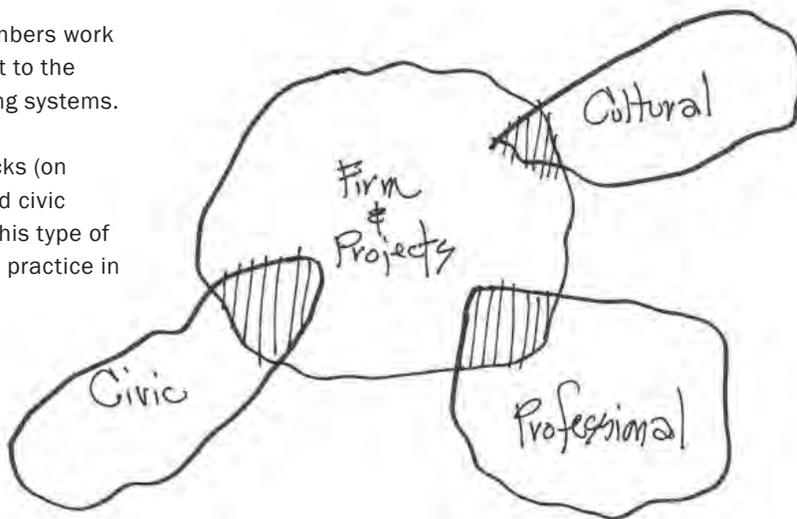


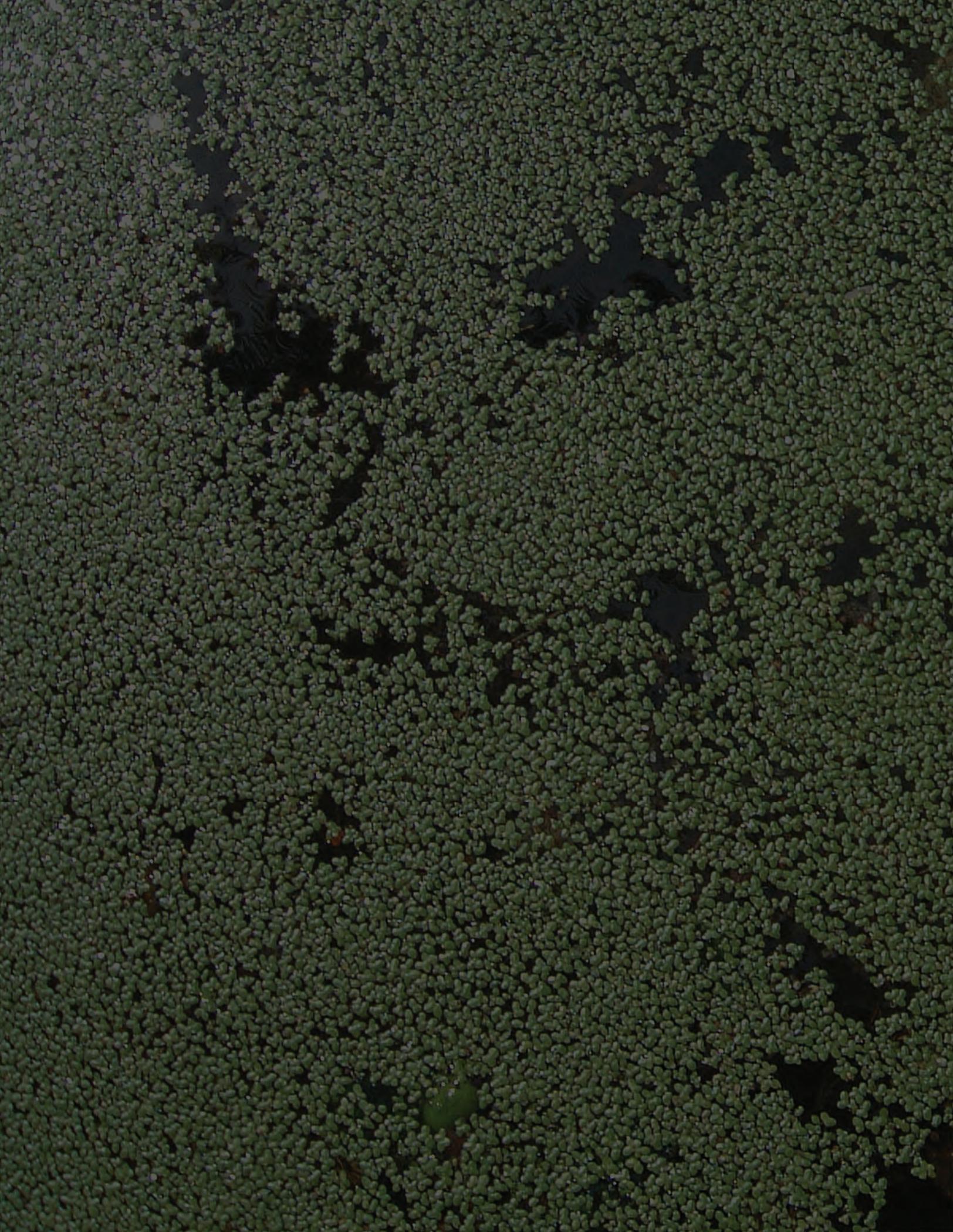
# HOW WE INFLUENCE & ADVOCATE ENGAGEMENT

Eskew+Dumez+Ripple plays an active role in promoting the understanding of what can make for better buildings in the communities in which we practice. We support staff time contributing to a number of professional organizations that work in this area, including

- US Green Building Council: One staff member serves as Vice Chair of the State of Louisiana Chapter of the USGBC
- American Institute of Architects: Several staff members serve on the AIA New Orleans Sustainable Design Committee, organizing public lectures and conferences
- Construction Specifiers Institute: Staff members work in the regional CSI organization and present to the group on topics such as green building rating systems.

Eskew+Dumez+Ripple also encourages and tracks (on a yearly basis) staff memberships to cultural and civic organizations in the region. It is our belief that this type of engagement enhances our ability to sustainably practice in our communities.





An aerial photograph of a dense forest canopy, showing a vast expanse of green trees with some darker patches and a few small, light-colored structures or clearings visible. The overall tone is dark green and somewhat somber.

# CONTACT

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