GrayWay

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The first of two GrayWay issues featuring sustainable building practices.

Building Green
smart and profitable

Sustainable Principles Come of Age

When we wrote about "green building" in a 1998 *GrayWay*, it was a new and untested field. To many, the idea of green buildings and related sustainable concepts were the folly of dreamers and tree huggers. Much has happened since then and the movement has gained widespread support. Among the new believers are mainstream companies and organizations that are recognizing the social and economic benefits of resource conservation, efficiency and reuse.

Interface Still Leads The Way

In 1998, Interface, Inc., headquartered in Atlanta, was a corporate leader in embracing sustainable concepts. That year, we met with company officials of the billion-dollar carpet and textile company to learn more. When we checked up on Interface recently, we were delighted to learn that their sustainable commitment is stronger than ever.

Between 1995 and 2002, cumulative cost savings attributable to sustainable concepts at a single Interface plant in La Grange, Georgia exceeded $81 million! Globally, Interface's green buildings returned more than $200 million in waste elimination activities during that same period. In addition, as a direct result of reuse and conservation, energy consumption per yard of fabric produced was down 18%, CO^2 emissions were 29% lower, and water use per yard was reduced 33%. This type of track record clearly shows that "going green" pays.

"But It Costs Too Much"

As the Interface Annual Report explains, "financial success is the key to achieving sustainability." Non-believers are faced with the mental hurdle of differentiating between the budget for constructing a new facility and the budget for long-term operations and maintenance.

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Building Green

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("But It Costs Too Much")

Gray's vice president of planning and design services, Dennis Bopp, AIA, sums it up this way: "Most companies segregate these two cost components. They reward the achievement of a lower 'first cost,' while ignoring what it means in terms of a potentially higher long-term cost of operation.

Green design concepts produce excellent life cycle returns, but often owners are reluctant to make the investment in order to stay within a tight initial budget," he says.

Bopp explains that more and more frequently, the Gray family of companies encounters customers in both the private and public sectors who want their facilities to embrace sustainable "green" concepts. "Going green is about two things – making smart choices that have a long-term impact on cost efficiencies and reducing the impact of society on our finite resources and our environment," he says.

In this issue of *GrayWay*, we are going to take a look at some customers who currently are working on green building projects.

Feds Embrace Green Building

Recently, Gray's Government Business Unit has been involved with a number of "green" projects for Federal agencies. The Fed's involvement began some time ago when Congress established the requirement that all federal construction projects include sustainable elements. Government agencies have since utilized two methods for meeting sustainable requirements: LEED certification for U.S. Navy and other agencies, and "Spirit" certification at the U.S. Army Corps of Engineers.

Physical Fitness Center, Naval Air Station, Lemoore, CA

Physical Fitness Center, Camp Geiger, NC

Physical Fitness Center, Camp Geiger, NC

LEED (Leadership in Energy and Environmental Design) is a voluntary, consensus-based national standard for developing high-performance sustainable buildings. Members of the U.S. Green Building Council, representing all segments of the building industry, developed LEED and continue to contribute to its evolution. "Spirit" is based on the LEED model for certification, but is specific to the U.S. Army Corps of Engineers (USACE).

"The government takes the sustainability issue very seriously."

As with the private sector, separating "first cost" from long-term operational costs has proven challenging. The conflict between federal acquisition policies and the federal budget process has been a potential barrier to sustainable construction. Executive Order 13123 and other federal guidelines require life cycle costing. This implicitly recognizes that in some circumstances, additional money invested in design and construction can yield significant cost savings over the life of the facility. In addition, Senator James Jeffords (I-VT) announced on April 30, 2003 that he is, "working to introduce bipartisan legislation to promote buildings that incorporate energy efficiency, waste reduction and other green design features."

Jefford's announcement was based on the report, *Building Momentum: National Trends and Prospects for High-Performance Green Buildings,* released the same day by the U.S. Green Building Council. According to the report, the design, construction and operation of the more than 76 million residential and nearly five million commercial buildings in the United States accounts for 20% of the economy and more than 40% of energy consumption, pollution and waste.

Gray Meets The Challenge

Elements of Gray-supplied scope of work are traditionally part of LEED and "Spirit" guidelines for every government project. These include sediment/erosion control plans; limited site disturbance; mitigation of off-site impacts; building commissioning, measurement and verification; use of regionally manufactured materials; operation and maintenance plans; low VOC materials; thermal comfort standards; and noise control.

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News Briefs

Jim Gray Steps Up

Jim Gray has been elected President and CEO of Gray, Inc., succeeding his older brother Howard, who remains Chairman. Jim joined Gray more than 30 years ago and is responsible for organizing and directing a marketing and sales program that moved Gray into the elite "Top 100" design-build firms in the U.S. Now comprising 13 offices in eight states, Gray will continue to grow strategically under Jim Gray's leadership. In 1997, Jim accepted a fellowship to Harvard University and subsequently returned to Gray to direct the company's investment activities. Lois Gray, company co-founder, remains Senior Chairman. Franklin Gray (James N. Gray Company), Bob Moore (I.C.E. Builders), Alan Nager (Operations Associates) and Ray Donnell (WS Construction) were re-elected Presidents of the operating subsidiaries at the Gray, Inc. board meeting in September.

Texas Next Up For Gray

Franklin Gray's initiative to grow the company through a regional presence moved forward in August with the opening of the new Southwest office in Austin, Texas. Catalyst for the Texas expansion is the planned Toyota assembly plant in San Antonio and the accompanying automotive suppliers. Gray has other projects currently underway in Corpus Christi and Fort Worth. Gray's experience in the Southwest region gives the company the ability to confidently and successfully compete for industrial and distribution projects. The Austin office joins Richmond, Virginia and Birmingham, Alabama in the march to position Gray for regional growth.

New Faces

David Inglis recently joined Gray, with his home base in Atlanta, and will head up business development efforts in the southeast. David has more than 30 years of experience with state government and construction-related companies. His background encompasses economic development, marketing, business development and sales.

Seong-Pill Shin ("Phil") will be working out of Gray's Birmingham office where his background in construction engineering and management are a perfect fit with the company's needs in the southeast. Phil's experience with a major Korean construction company, as well as his command of English, Japanese and his native Korean language, will be an asset as Hyundai and its supplier companies establish themselves in Alabama.

Gray Wins Again In Safety!

The U.S. Army Corps of Engineers has recognized James N. Gray Company for "Sustained Superior Safety Performance" for its work on the Tactical Vehicle Maintenance Facility at Fort Bragg, North Carolina. Citing Gray for "quality construction while upholding the highest standards in safety performance," the Corps noted that Gray's dedication to safety "gives great credit to you and the U.S. Army Corps of Engineers." Congratulations to the Gray Project Team at Fort Bragg for this honor!

I.C.E. Builders Capture The Sun

Gray's California Sister Company Deeply Involved In Solar Energy

Bob Moore, President of I.C.E. Builders, proudly reports that his company is successfully meeting its supplemental energy goals. I.C.E. has recently completed work involving the direct incorporation of Photovoltaic (PV) Solar Panels into the energy design of facilities.

The company is also partnering with industry leaders, PowerLight and Shell Solar, on several current and upcoming projects. They recently completed a solar array installation for Shell Solar at their PV manufacturing plant in Camarillo, California. The installation will be used for demonstration purposes for their wholesale customers.

On the manufacturing side, I.C.E. is engaged in numerous endeavors. The company is currently completing a $1.2 million nitrate oven project that is part of the solar panel production process. I.C.E. has also expanded Shell Solar's silicon ingot growing plant in Vancouver, Washington, and has completed multiple co-generation plants. In addition, the company's Camarillo facility has been immersed in the design and installation of a manufacturing area for a Sputterer machine used in making PV cells. There are many other projects in the works as well.

"We continue to develop strategies for determining how we can offer more value to our customers," says Bob Moore. "We are always looking at incorporating efficient energy systems in building design as ways of lowering energy costs in an environmentally friendly way."

Feds Embrace Green Building

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Optional low-cost/high environmental impact elements provided by Gray include increased site density, proximity to transit system, bike racks and showers, car pool parking, storm water treatment, site ecology, CFC reduction, construction waste recycling, indoor air monitoring, 75% day lighting and 20% water usage reduction.

Other high-cost/lower impact elements include recyclable water fixtures, grey water systems used for irrigation, no-water landscaping and use of green power sources. Not all projects can include all elements, and the level of "greenness" depends on the location, budget and commitment of the owner to accept non-traditional government building procedures.

Recently, Gray has been active in a number of government projects that include sustainable elements and are expected to be certified under LEED or "Spirit" guidelines. Among them are:

- Tactical Vehicle Maintenance Facility – Ft. Bragg, North Carolina
- Security Gate Upgrades – Kittery, Maine and Groton, Connecticut
- AIMD Aircraft Engine Maintenance Facility – Ft. Worth, Texas
- Fire and Emergency Services Center and Emergency Medical Services Headquarters – Ft. Lee, Virginia

"The government takes the sustainability issue very seriously," says Terrence Hainley, AIA, a Gray architect and government project specialist. "Our in-house capabilities reflect Gray's commitment to providing responsible, high-quality design and construction projects for government installations across the country."

Breaking News From The Gray Companies

I.C.E. Builders reports continued growth in its relationships with West Coast Aerospace giants. I.C.E. is involved in concurrent large scale projects at three Boeing facilities as well as multiple projects for Raytheon, Jet Propulsion Laboratories (JPL) and the rocket launch facilities at Vandenberg Air Force Base. More on this in upcoming issues.

In addition, I.C.E. Builders has completed a 60 kW roof-mounted solar panel system atop the student union building of the University of California – Berkeley. This is the first solar power system of several the university is planning for campus buildings. This project included full electrical power conversion from DC to AC and tie-in to the buildings' power system and the local utility power grid. Special seismic restraints ensure both power stability and safety during an earthquake. The PV power system is made by PowerLight Corporation (www.powerlight.com), the nation's largest grid-connected solar project manufacturer and developer. I.C.E. Builders installed PowerLight's patented PowerGuard® roof tile system, which allows solar power installation on a flat roof without mechanical attachment. I.C.E. Builders is pleased to continue working with PowerLight, their strategic partner in solar power production facilities. I.C.E. Builders and PowerLight are working together or are in planning for a number of jobs in the western U.S. and Europe.

Operations Associates, our industrial consulting company in South Carolina, has revealed a bit of good news for the balance of trade. OA has been involved in several projects for customers considering moving their manufacturing operations to Mexico. In one case, they were able to save the domestic production by increasing efficiency in the existing U.S. operation! Way to go OA! More on this will be covered in the next issue.

WS Construction's Ray Donnell (far left) and Ron Smith (center) recently attended Metallic Building Company's national meeting in San Diego. Keith Fisher, president of Metallic, presented WS Construction with the "Top Twenty-Five Award" for the fourth time. Ray Donnell has also been asked to serve on Metallic's President's Advisory Council for 2004 and 2005.

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