

IMAGINATION



DELIVERED

A Newsletter for Clients, Employees, and Friends of Borton-Lawson

Summer 2008 Vol. 14 No. 1

happy 20th Borton-Lawson



Knowledge, Dedication, and Customer Service are the values that have guided Borton-Lawson in the professional design industry over the past twenty years, allowing us to achieve the reputation and level of success that we enjoy today. While we have outgrown our humble beginnings of a six employee firm to a company of more than 130 individuals, we continue to remain successful by being receptive to change while never compromising these beliefs. Our talented staff has always been at the core of who we are as a company, and over the past 20 years, we have worked with some excellent people.

Because people are our most valuable asset, we kicked off our 20th year anniversary with a luncheon to celebrate with the six employees who have been with Borton-Lawson since its conception in 1988. The event revealed many memorable experiences within the firm in addition to our employees' rare perspective on the industry. From the decision to buy the first fax machine, to the various office spaces that were home to Borton-Lawson, these employees have definitely made unique memories; but more importantly, they take pride in their work and are always up for the challenge of a new project.

In fact, it all started when Chris Borton convinced his colleague, and fellow Penn State graduate, Tom Lawson to join

him in this new venture. Borton, a 1977 Penn State graduate with a B.S. in Water Resource Management, acquired a variety of engineering experience in his position with Smith Miller & Associates, Wilkes-Barre. Lawson earned his B.S. in Civil Engineering in the early 1970's and had spent five years working with the Army Corps of Engineers on Wyoming Valley flood recovery when Borton's offer was extended. Within the first year, they recruited some help with their increasing workload. These hires included a Civil Designer, Dave Yefko; an Administrative Assistant, Ruth Lemanowicz; two Structural Designers, Mike Hannagan and George Mehallo; as well as a few other staff members who have since left the company. The hard work and loyalty of our employees over the last 20 years has been the key to our success.

Growth

To celebrate our anniversary, we have constructed a memory wall throughout our office halls where employees are encouraged to post photos and write memories from their time at the company. You are invited to come and see our celebratory wall and post your Borton-Lawson memories on your next visit, so that we can reflect on these experiences at our next milestone celebration.

Senator Musto Drive

New environmentally-friendly road at Camp Kresge

State Senator Raphael Musto joined the Wilkes-Barre Family YMCA and the community to celebrate the completion of a newly surfaced road at Camp Kresge, which was paved with environmentally-friendly materials that will provide better access for its guests.



The new road has been named “Senator Raphael Musto Drive” because of the Senator’s staunch support of the YMCA and its family of community programs. “Camp Kresge has always been an inviting place, but this new road paves the way for an even better outdoor experience for anyone who comes here”, states Senator Musto.

Located south of Wilkes-Barre in the scenic Pocono Mountains, Camp Kresge is an 1100-acre camping facility and retreat/conference center owned and operated by the Wilkes-Barre Family YMCA.

Borton-Lawson’s involvement in this project was instrumental to improvements on the existing entrance by constructing this path according to the principles of Environmentally Sensitive Maintenance Practices (ESMP), which is a technique that prevents surface erosion, reducing cost and frequency of road maintenance by using Drive Surface Aggregate (DSA).

DSA is a mixture of crushed stone developed specifically as a surface wearing course for unpaved roads. It is designed to maximize packing density and produce durable road surface that performs better than conventional materials.

DSA is beneficial to the environment because it does not contain any silt or clay particles and does not grind into dust, which can pollute the local water systems. Drainage has also improved with the installation of storm pipes and swales along the roadway. This technique is being encouraged on dirt and gravel roads by area Conservation Districts and showcases Borton-Lawson’s growing use of alternative greening processes.



progress
&
conservation
a balancing act

At Borton-Lawson, we have always been “green” as well as energy conscious looking for the best and most efficient way to design each project. As a professional design firm, it is always a balancing act between progress and conservation of resources, but our strength is finding that best solution.

Innovative

Borton-Lawson has a portfolio of projects that clearly demonstrate minimizing energy consumption, reducing emissions, and shrinking our carbon footprint. Here are just a few examples of projects that we have completed that illustrate that balance between economic growth and environmental stewardship.

- Large glass furnace conversions and modification programs that have resulted in tremendous reductions of fuel consumption and emissions.
- Energy Audits for the United States Department of Energy where some of our employees, certified as Steam System Experts, completed energy assessments at several U.S. manufacturing facilities. These audits identified millions of dollars in energy and cost savings.
- Modernization of compressed air and steam as well as space heating systems at Kimble Glass in Vineland, New Jersey. As part of this project, our team identified synergies between the two systems to develop a single, cost-effective project that would modernize both and handle future expansion.

Helping clients achieve their goals while increasing efficiency and reducing energy consumption makes us feel pretty green on our 20th birthday.

Borton-Lawson takes on technology

Picture having a three-dimensional, virtual image of your project that can be handed from the professional design team to the contractor and finally to the client, each adding their own discipline-specific knowledge while tracking changes and capturing maintenance information. You can stop dreaming, Building Information Modeling (BIM) can do all of those things, and Borton-Lawson now has it.

BIM is a three-dimensional design/development tool which allows for the creation of intelligent objects. The American Institute of Architects has defined BIM as “a model-based technology linked with a database of project information”. It is a set of information generated and maintained throughout the lifecycle of a building that captures the details of the project from the construction to facilities operations. One of the most obvious benefits of this project is the designer’s ability to showcase three-dimensional renderings of a proposed project to a client. This software allows them to visualize the end product,

minimize change orders, and more easily discuss design details and options. BIM is able to model representations of the actual parts and pieces being used to build a building, which is a shift from the traditional Computer Aided Drafting (CAD) method of drawing with vector-based lines.

BIM is an evolving concept; one that will continue to change as the capabilities of technology and our own ability to manipulate this technology improves. BIM has the potential to decrease errors made by design and construction team members as a result of the software’s ability to inform team members about parts of the building in conflict through detailed computer visualizations of each part. The software’s ability to reduce errors in the design phase is a great part of cost savings realized by all members of a project.

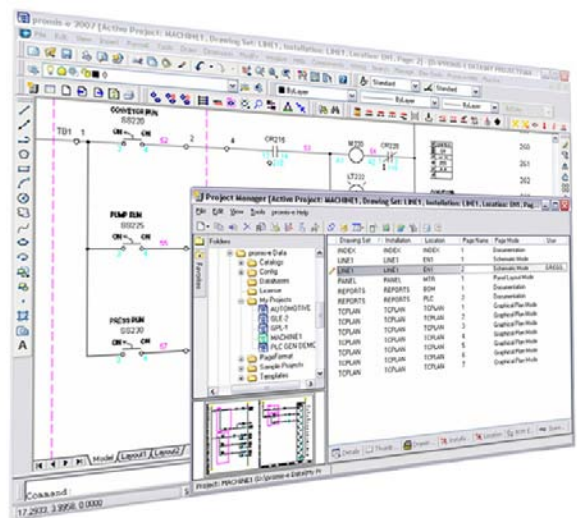
Borton-Lawson has also recently invested in software to better design industrial control systems called *Promis•e*. This program integrates elements such as electrical schematics, connection lists, and panel layouts which allow the user to work in a quicker and more efficient manner.

Some of the benefits include project-based workflow, automated error checking, and an integrated parts database. Due to the program’s superior reporting and documentation capabilities, our automation team has already seen an increase in efficiency through the use of this product.

Borton-Lawson is currently training staff across all disciplines on the functionality of BIM and new CAD platforms. Our team’s response has been positive, and we are all excited to have the latest tools to best serve our clients!



Service



technology

Governor's Award for Environmental Excellence

Borton-Lawson received this award for our work on the Pine Street Revitalization in Hazleton

Nine organizations from across Pennsylvania were honored for innovative projects that demonstrate their environmental stewardship and promoting economic development in Pennsylvania. From advances in clean energy to community revitalization, each of this year's winners have made invaluable contributions to improving the health of Pennsylvania's natural resources.

Borton-Lawson was selected as a recipient for their work on the Pine Street Revitalization, which has been acclaimed for utilizing "Green Technology" and "Smart Growth" as part of a residential development. The Pine Street Neighborhood Revitalization encompasses a three-block area of downtown Hazleton. The area traditionally served the city as a light industrial district but for the past decade, a change in the city's demographic caused the area to become largely vacant and no longer viable.

Borton-Lawson, in partnership with the Housing Development Corporation of Northeastern Pennsylvania, Mayor Louis Barletta's office, and other government agencies, financial institutions and community groups, spearheaded the 24 single-home complex.

Pine Street Homes have highly efficient heating, cooling, ventilation, lighting and appliances. Energy efficient construction



paired with these features can provide energy cost savings of about 30 percent over standard construction. The inclusion of solar electric systems on the southern-sloped roofs to supplement the domestic hot water heaters enables residents to produce their own solar energy, thereby cutting down on utility costs.

Additionally, through net metering, residents have the ability to transfer any energy surplus to the local utility, in return for reductions in the level of billable energy consumption. Pine Street

homeowners can expect to spend about \$700 a year for energy costs, as opposed to more than \$1,100 a year for owners of a traditional home built to code. In addition, ventilation heat recovery systems were used recapturing 70 percent of the heat.

"The 2008 Governor's Award was highly competitive. It was a challenge to choose from among the best of the best. Applicants are to be commended for their efforts in putting in place projects that take on environmental problems in ways that build new businesses, enhance the bottom line and engage residents in a renewed commitment to investing in their communities."



fun fact:

If you had an extra hour in your day, what would you do?



“Repairs around the house”

Name: Frank Callaio, Jr.

Position: Structural Designer



“Beat my 11 year old son at *Guitar Hero*”

Name: Bill McFarland, PE, RPA, FMA

Position: Senior Electrical Engineer

new hires



“I could use the extra hour to sleep”

Name: Suzanne Ciavola, EIT

Position: Civil Designer



“Work on my house and exercise”

Name: Bob Montgomery

Position: Senior Architectural Designer



“Hang out with friends”

Name: Bernie Gurka

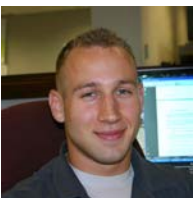
Position: CAD Technician



“Learn to make pottery”

Name: Michelle Moshey

Position: Architecture Administrative Assistant



“Eat”

Name: Jim Kash

Position: Civil Designer



“Sleep”

Name: David Murosky, EIT

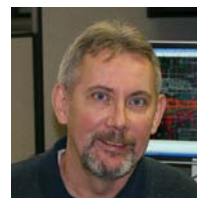
Position: Transportation Designer



“Play with my kids”

Name: David Kollar

Position: Senior Mechanical Designer



“Sleep”

Name: Michael Scavone, PE

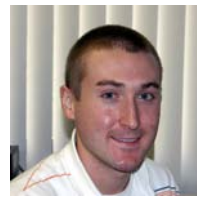
Position: Structural Engineer



“Take an art class”

Name: Lynda Kollar

Position: Civil Administrative Assistant



“Play video games”

Name: Brandon Shadle

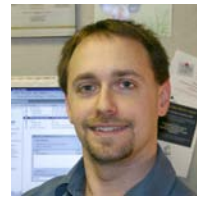
Position: Network/PC Technician



“Play with my son”

Name: Chris Kresge

Position: Senior Architectural Designer



“Enjoy the outdoors”

Name: John Stachyra

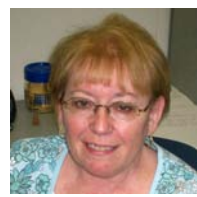
Position: Project Automation Specialist



“Read more”

Name: Laura Marino

Position: Human Resources Assistant



“Read”

Name: Lorraine Wagner

Position: Transportation Administrative Assistant



**Borton
Lawson**

**ENGINEERING
ARCHITECTURE**

Management Staff:

Christopher L. Borton, P.E.
President

Thomas E. Lawson, P.E., P.L.S.
Executive Vice President

Thomas M. Maheady, P.E.
*Vice President Facilities
Engineering Division*

Christopher D. McCue, P.E.
Vice President Civil Division

Patrick J. Endler, AIA, LEED AP
*Vice President Architecture
Division*

Joseph P. Gillott, P.E.
*Vice President Transportation
Division*

Mary Ellen Petcavage, SPHR
*Vice President Human
Resources*

Geoffrey S. Fix, CPSM
*Business Development
Manager*

Crystal L. Mathew
*Marketing Communications
Manager*

Health and Fitness 101

Employees are increasingly finding ways to get healthy!

As a company, we have been encouraging healthy choices from the way we eat to increasing physical activity to managing stress. Our Human Resources department has coordinated an office-wide Wellness Initiative focused on lifestyle changes as well as rewards for success.

Over the course of the last year, we have had two employees quit smoking, and they have been successful for 10 months and counting. Several employees have organized sports teams or events, and we have seen a lot less snacking since anything with refined sugars or trans fats were removed from our office snack box.

With the current problems surrounding health insurance, simple choices can greatly improve our quality of life and reduce some of the burden of our healthcare system. Check out some initiatives we are participating in:



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