Contents

President’s Perspective 3
EHS Spotlight 4
A quarterly view of Environment, Health and Safety
Corner Office 6
An interview with William Jensen
E.E. Cruz uses innovative techniques to rebuild the Bronx-Whitestone Bridge 7
Crews install I-15 Manderfield Bridges project in 57 hours 8
Flatiron completes ninth footbridge with Bridges to Prosperity 10
Faces of Flatiron 12
Interview with project engineer Behin Phua
Willits Bypass breaks ground 13
Field Notes 14
Construction? There’s an app for that 16
Ruskin Dam work ramps up 17
Second Quarter Highlights 18
People & Events 20
7 tips to get fit and stay fit this summer 22
Final Segment 23
Employee discounts
Cover photo
A worker unloads one of the 522, 90-foot-long, 24-inch-diameter pilings used on the Willits Bypass project in Willits, Calif. Photo credit: Duwayne Bahnsen
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with an annual construction volume of more than $1 billion, builds heavy civil infrastructure for the transportation, energy and water sectors in North America.

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Structurally Speaking is a quarterly newsletter published by the Communications Department of Flatiron Construction Corp., a HOCHTIEF company. Please direct comments, suggestions and subscription inquiries to Elizabeth Fison Hudson at 720-494-8132 or efisonhudson@flatironcorp.com.

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President’s Perspective

Working together towards a winning strategy

In 1968, twelve-time NBA all-star and Boston Celtics center Bill Russell said he would root for the other team in the NBA playoffs. What? His competition? Bill wanted to compete against a team giving their all, because when you’re challenged, you really find out what you’re made of.

Recently COO Dale Swanberg and I were reviewing Flatiron’s progress in the past quarter. We believe the tide has changed, and we are moving along well. Together we have all overcome some big challenges and (sorry for another sports analogy) are getting base hits.

We’ve made improvements to our risk management approach, including a recent “back to basics” training held with our business managers. In the two-day session we all agreed on how to simplify reports, more effectively use technology, and create better collaboration between headquarters and the districts.

We’ve also won a number of jobs recently, and although we still need additional wins to achieve our new work goals this year, we’re finding good work and are on the right track.

In this edition of Structurally Speaking you will read about projects in California, Utah, British Columbia and New York and hear from Western Region leader William Jensen. Please take the time to read the article on Bridges to Prosperity in this issue of the magazine. I want to commend all the Flatiron volunteers who took two weeks out of their lives to build footbridges for communities in need in Nicaragua. I wish the best of luck to the last team of 2013, who departed in late July. By the end of this year, Flatiron, along with Turner and E.E. Cruz employees, will have built ten bridges as part of this impressive volunteer program.

Another remarkable Corporate Social Responsibility initiative is Flatiron’s Build-A-Bridge program in California. Our employees helped train the next generation of engineers and construction managers in the fundamentals of our business and awarded $15,000 in college scholarships. Thanks to all the employees who help make this program possible.

We all face challenges every day and at some point must reach inside ourselves and find a way to win. Let’s keep going and ask each other for help and guidance along the way.

- John

John DiCiurcio
Chief Executive Officer
Fallen workers remembered in Canada

by Sara DeRose | On April 28, people across Canada honored workers who have been killed, injured or disabled at their place of work in a National Day of Mourning.

For Flatiron workers on the Steinhauer Bridge project, this particular day of remembrance hit close to home.

Last fall, a fatality at another company’s industrial site up the road from the Steinhauer Bridge project was mistakenly reported by radio stations as a Flatiron employee. This prompted widespread concern as families attempted to reach their loved ones at Flatiron. After the site shut down to allow workers to contact their family members, Flatiron crews immediately began collecting funds for the family of the worker who was killed. Workers presented the $465 raised to the superintendent and safety manager for Bird Construction, the company of the fallen worker, who were moved to tears by the generosity and compassion of the team.

On the most recent Day of Mourning, workers on the Steinhauer Bridge project gathered in three locations, shut down all equipment, and took a moment of silence to remember the fallen construction worker and the other 144 workers in Alberta who lost their lives over the last year—and renewed their continued commitment to on-site safety.

“As of May 2013, there have already been 39 fatal workplace incidents reported in Alberta,” said Steinhauer project manager Brian DeHaan. “This is why we must continue to be diligent about safety in the workplace and reinforce Flatiron’s Don’t Walk By program.”

Employees on the Steinhauer project have worked more than 700 days without a lost-time incident.

Top Photo
Workers on the Steinhauer Bridge project gather for a moment of silence honoring the 145 workers across Alberta who lost their lives at work last year.
When thinking about asbestos abatement, certain images come to mind: destruction of old buildings, people in white suits, and the knowledge that the asbestos was put there as a fire deterrent or for another specific purpose. At the Calaveras Dam project, however, crews are dealing with a different kind of asbestos—naturally occurring asbestos.

Naturally occurring asbestos comes from a variety of places. At the Calaveras Dam, it primarily comes from the Franciscan group of mineral rock types, specifically the Serpentine group and the Amphibole group. Airborne asbestos fiber can stick to clothing and skin and if inhaled in sufficient amounts can cause lung cancer or mesothelioma, both of which are serious health problems.

Asbestos exposure is typically controlled using Tyvek suits and respirators. These suits prevent asbestos from lodging on workers’ clothing, skin and hair. At the end of the day, these suits are rolled down the body to contain asbestos particles. In addition, negative pressure respirators can be used to prevent inhalation.

It is standard practice for crews to use water to suppress dust. As an example, water trucks, water cannons and firefighter nozzles are used to spray a fine mist of water to knock down particulate matter. Sometimes the use of high pressure, high velocity fine-water aerosol systems are used to improve dust controls for specific equipment.

Blue schist, one of the most potent of the naturally occurring asbestos minerals, prompted the safety innovations. Water does not soak the asbestos fiber, making it more difficult to control, requiring a higher level of protection and enhanced decontamination procedures.

Workers are also now using air—instead of water—for decontamination. After following normal decontamination procedures, workers often use an air shower instead of a wet shower as a final cleaning step. Air showers use high-speed air jets to fluff clothing and re-suspend any remaining fibers, then removes them using ultra high-efficiency filtration. This technique is the first of its kind in this field and is similar to what high-tech companies use to prepare people for working in a cleanroom.

Exposure monitoring, extensive training and signage warning people of the presence of asbestos are also required on the project. Nearly 2,000 air samples have been collected for nearly every operation, piece of equipment and workers. Because of this extensive exposure data, Cal/OSHA sometimes calls project personnel for advice on specific operations. These innovative sampling strategies have led to a greater understanding of potential risks to both worker and off-site sensitive receptors. This has enabled Flatiron to provide effective risk reduction procedures to better protect workers and community members at locations outside of the project limits.

All of these new procedures and innovations are contributing to the safety of the crews working at the Calaveras Dam project. In the future they may also be adopted by other entities—and even by Cal/OSHA—as the best practices for dealing with naturally occurring asbestos.
What are some of your immediate priorities for the region?

Project cost controls, training and work acquisition. Cost control drives our bottom line, so that’s the first priority. Our processes and procedures for cost control have grown cumbersome, and people are unsure about expectations. We are actively working on simplifying our processes and modifying our systems so the data is easier to access to prepare forecast reports.

Training is the second priority. We need training in three areas: safety, scheduling and cost control.

Work acquisition is always a priority for us. We are in a good position in the Western Region, with our entire 2013 backlog booked already and about two-thirds of our backlog booked for 2014. However, we need to get out there and hit some jobs to be secure for 2014 and 2015.

Do you expect your region to grow, contract or remain about the same size in the coming years?

We’ll remain about the same size. This year we will have completed about $585 million worth of work. That represents a little growth over 2012, but for 2014 we’re forecasting about the same volume. We are among the largest contractors in the region, and that’s a healthy amount to perform every year.

Where do you see the most opportunities?

Historically we’ve gotten the bulk of our work from state departments of transportation. But for 2013, the California Department of Transportation program was about half of what it normally is, and in 2014 it’s not going to be any better. So we’re looking elsewhere. There are a lot of other agencies in California that have healthy programs, such as transit authorities and municipalities. Los Angeles is a big port city, so there is also a lot of work in ports.

What is the biggest challenge right now, and how are you meeting that challenge?

Resolving the large number of claims we have on several projects is a big challenge. We have to resolve claims in a timely manner, or they can bog us down. We have started to prioritize this and are making good progress.

What makes a good leader?

Someone who surrounds themselves with a good team. You’re just one person, and if you don’t have a good team, you’re going to fail. As a leader you also need to be able to provide your team with opportunities, and then once you’ve done that, step aside and empower them to do their job. Outline your expectations, and then get out of the way. But also be there and recognize when they need help.

How has your leadership style changed over time?

As a younger person I had a more aggressive style, a ‘one size fits all’ leadership style. I’ve learned to tailor the solution to the issue and involve other people to build consensus in determining the solution.

What’s your best career advice?

I would say develop your skills in all areas so you’re well rounded and opportunities will happen naturally. Trust in your abilities and work on improving your weaknesses.

What kind of traits do we look for at Flatiron?

I look for people who are passionate about their job and who are willing to do just about anything. For example, as a project manager, you sometimes have to also be an engineer, an administrator or an accountant. If you can find that kind of person, they’ll be successful.

I also look for employees that are not afraid to do new things. Some people are very reluctant to step outside their comfort zone, but you want employees who are not afraid of a new challenge.
E.E. Cruz uses innovative techniques to rebuild the Bronx-Whitestone Bridge

By Dave Busick | Work continues on schedule with the Bronx-Whitestone Bridge project. The bridge, which crosses New York City’s East River, connects Queens and the Bronx and is in the middle of a complete overhaul. E.E. Cruz and joint venture partner Tully are replacing 1,010 feet of elevated roadway. The project includes the staged removal and replacement of the existing Queens approach superstructure and substructure. Once complete, the work will support new safety shoulders and 12-foot-wide lanes.

Crews are essentially demolishing the bridge from underneath and rebuilding it from below. The final two piers that make up the concrete superstructure were poured in December 2012 and February 2013. In January, installation of the architecturally finished precast segmental T-wall blocks were completed adjacent to the east and west wing walls. Stay-in-place forms, edge of deck forms and rebar were installed for the deck in March. Concrete deck placement for the deck followed in April.

Throughout the project, the joint venture team has been well prepared to tackle the miscellaneous structural steel repairs on the existing bridge, which first opened to traffic 74 years ago. Crews have encountered deteriorated floor beams, stringers, parapets and have completed pothole repair to the existing roadway.

Crews began installing a methyl methacrylate-based seamless slurry wearing course with aggregate broadcast in 2012, which will be a marked improvement to the existing bridge deck overlay system. The protective polymer slurry overlay is applied to the existing orthotropic deck, giving the suspended span roadway an improved riding surface. The existing surface was well-worn and needed replacement.

Also included in the contract is an innovative drainage and filtration system for water runoff, as well as the construction of a new playground. Crews installed two stormwater pollutant separators along with reinforced concrete pipe, manholes and catch basins. The new playground opened in May 2012 and is in full operation as the bridge rehab continues.

In late May, crews completed the first major traffic switch on the job—taking the bridge from the existing six lanes of live traffic down to five. The middle lane is reversible and can be switched depending on rush hour traffic. In June, once the temporary shoring installation is complete, demolition of the existing bridge structure began. Demolition is scheduled to last a full year, and the new bridge will be complete by December 2014.

Dave Busick is a project engineer on the Bronx-Whitestone Bridge project.

Where is this project?
Queens, New York

Project Details

July 2011
Start date

December 2014
End date

$108.8 Million
Value

Bid-build
Contract type

Metropolitan Transit Authority – Triborough Bridge & Tunnel Authority
Owner

Joseph Freglette
Project manager

Top Photo
E.E. Cruz is replacing 1,010 feet of elevated roadway on the Bronx-Whitestone Bridge, which crosses New York City’s East River and connects Queens and the Bronx.
by Elizabeth Eoin Hudson | In late May, Flatiron crews completed the company’s second accelerated bridge construction project, the Interstate 15 Manderfield Bridges. The project is on I-15 in central Utah, just north of Beaver.

Crews built two new bridges on either side of the existing bridges on temporary falsework over a period of three months, and abutments were also built under the existing bridges. Crews were given a 67-hour window to move traffic to one bridge, demolish the other, slide the new bridge into place, and complete grading and paving. The same process was followed for the second bridge within the same time window. Despite some extra time spent over-excavating unforeseen soft soils, crews finished in just under 57 hours—leaving about ten hours to spare—a huge feat.

“We came up with multiple schedules, including best- and worst-case scenarios,” said project manager Chris Mari. “Each schedule allowed for asphalt paving during the required temperatures.”

The project was Flatiron’s second using accelerated bridge construction techniques. Flatiron’s first ABC project, the Interstate 80 bridges over the Weber River in Echo Junction, Utah, followed a similar construction model, but with a few key differences. First, on this project, both bridges were moved in one window, which complicated the operation.

“This was challenging because we had to incorporate a traffic switch between the two bridge moves,” said Chris. “We had to maintain one lane of traffic on I-15 at all times, which meant two crossovers north of the bridges, and two south.”

Second, the Manderfield Bridges were built with the approach slabs attached, instead of using prefabricated slabs installed after the move. This meant a bigger bridge and more falsework during construction.
Another key difference was how the bridge was moved. Crews jacked up the bridge shortly before the operation, installed slide tracks, and hooked up 75 megaton hydraulic rams to the bridge. The rams then pushed the 700-ton bridge 60 feet to its final position.

The I-15 corridor is the major north-south highway through Utah, and connects the state to Las Vegas. Before construction, the Manderfield Bridges were in need of repair—the crew had to install temporary shoring to help support the bridges before other work began.

Owner Utah Department of Transportation calls ABC construction “the future of bridge construction in Utah.” They have implemented ABC techniques on a number of projects across the state because of the decreased impacts to the traveling public, increased quality, and increased safety the technique affords.

The project originally used hybrid composite beams, but the Utah Department of Transportation changed these to traditional precast concrete girders with precast concrete deck panels. This accelerated the project even more, but required almost a complete redesign of the bridge structures.

With the bridge move complete, crews wrapped up remaining work on the project in June.

Watch a video of the operation on Flatiron’s YouTube channel: youtube.com/flatironconstruction
Flatiron completes ninth footbridge with Bridges to Prosperity

10th bridge scheduled for completion in August

Flatiron completed its ninth footbridge with Bridges to Prosperity, the El Dorado hybrid suspension bridge, in Esteli, Nicaragua, on May 18. U.S. Ambassador to Nicaragua Phyllis M. Powers attended the bridge inauguration and took the first walk across the bridge with a local schoolgirl. Hundreds of community members followed anxiously behind, celebrating the achievement of the combined volunteer team of Flatiron Construction and Turner Construction, with members of Bridges to Prosperity and the El Dorado community.

The El Dorado footbridge is also the first Bridges to Prosperity has built from a hybrid design of suspension and suspended footbridges. This hybrid design allows Bridges to Prosperity to build footbridges in locations with height differences, a common occurrence in the region. Equally important, this hybrid design also allows Bridges to Prosperity to build near footpaths already being used by communities, making these bridges as locally integrated as possible.

For much of the rainy season, communities are faced with a difficult choice: crossing the raging water to get to work and school, or stay home. The footbridges provide a safe river crossing year-round.

Flatiron has partnered with Bridges to Prosperity since 2010, building footbridges in Guatemala, El Salvador and Nicaragua.

Learn more about the projects and check out construction photos at the Bridges to Prosperity website www.bridgestoprosperity.org
Which job were you on as an intern with Flatiron?

I first started off in the Richmond, B.C., office doing estimating. I really wanted to get some experience in the field, so when we won the job, I helped estimate Thickwood Boulevard in Fort McMurray, and Blair Brandon suggested I go up to help with the Thickwood project and the Athabasca River Bridge project.

I was up there for two months, and it was a really good experience. I worked directly under Rick Morrison—he’s an amazing mentor. I mostly did turbidity testing. We had fun ripping up and down the river. When I was there, we had just started building the berm around for the foundation to go in.

My second internship was on the Northwest Anthony Henday project in Edmonton helping with traffic coordination. After I graduated, I went back to the Henday project as a field engineer, mostly working on barriers and expansion joints. Now I’m working on the Edmonton Tunnel.

So you’ve gone from above ground to below ground?

Yes. It’s really new for almost everyone at Flatiron. I’m a project engineer, so I learned a lot about earthwork and excavation. It’s interesting because I’ve never worked on a tunnel project before, and there are a lot of European tunnel construction rituals that I didn’t know about.

For example, before digging started, we performed a ceremony to protect the tunnel. A female is chosen to be the guardian. On our site, we have three women, so I was chosen to be one of the guardians for one of the tunnels. As the guardian of the tunnel, I had to light a candle and smash a bottle of champagne where we were going to dig. A statue of Saint Barbara [best known as the patron saint of artillerymen, military engineers, miners and others who work with explosives because of her old legend’s association with lightning] is always outside the tunnel with the candle lit next to her so she’s guarding the tunnel while the guys are in there.

Did you imagine that your job description would include tunnel guardian on this project?

No, not at all! I can now add guardian of the tunnel to my resume.

What else have you learned on this project?

I’m so used to working on bridge projects that are wide and open, so transporting materials is pretty easy if you need something. But being in a tunnel, you have only one entrance and one exit, so logistics became a big issue and made me think a lot more about how critical coordination and transporting materials is on this job.

What made you decide to become a civil engineer?

Originally, I wanted to be an architect. I’ve always found buildings and interior design fascinating. In Canadian universities, architecture is a master’s degree, so I figured the best thing to do was get my bachelor’s degree in civil engineering and then my master’s in architecture. But once I started doing civil engineering, I found it a lot more practical—there are a lot more jobs, so you’re always in demand. I enjoy the structures aspects of it, too, and I don’t think my portfolio would have been as good as others’ since I stink at art.

If you like interior design and architecture, there must be an artist in you somewhere.

Yeah, I’m sure I have that artistic talent somewhere in me. I do draw stick figures out here!

Interview conducted by Tonya Sandman
Willits Bypass breaks ground

by Sara DeRose | Flatiron broke ground on Willits Bypass in February, a momentous beginning to a long-awaited project.

“The California Department of Transportation website [for the project] has a photo from the 1950s of an engineer telling the town about the proposed bypass,” explains project manager Nick Reker, “so it’s a pretty big achievement just to get started.”

Flatiron, in a joint venture with DeSilva Gates, is constructing a new segment of Route 101 in California that will bypass the town of Willits in Mendocino County for Caltrans, aiding in relief of the congested traffic, delays and safety concerns that commuters experience on the main north-south route. Traffic becomes congested in this location in part due to the last five stoplights that exist on Route 101, which the project will eliminate.

The project includes constructing 5.9 miles of highway, two interchanges and 15 bridges, one of which is a 6,000-foot structure over a flood plain. This is only one source of the extensive environmental concerns on the project.

“Just about every square foot of the job is considered either a ‘water of the state’, or other environmentally sensitive area,” says Nick. Crews have to take special concern with their equipment to stay compliant—washing each piece carefully before using it on the job and rejecting any equipment that hasn’t been washed properly. Equipment, materials or waste products also can’t be stored within 150 feet of state waters.

According to Nick, tackling these environmental challenges is just a matter of good planning.

Taking cues from Flatiron’s successful safety programs, the project team employed new environmental processes in planning every operation. From creating an Environmental Hazard Analysis for better communication of environmental hazards to the pile driving crew, to integrating permit, wildlife and pollution concerns into the daily operations, environmental protection continues to be a top priority on the project.

Over the summer, the pile driving crew ramps up operations, having started production in two locations in July and driving 15-20 piles daily over the next few months. The project team also hopes to be able to move into foundation and substructure work during that time as well, although the wildlife in the area might have a say about it.

“With 250 active bird nests in the area, what we actually get to work on can be a little up in the air — pun intended,” jokes Nick. “But good planning will keep us moving forward.”

The project is scheduled to be complete in 2016.
1. Carpenter Road Bridge  
Modesto, Calif.

Flatiron is strengthening the Carpenter Road Bridge, making seismic improvements that include retrofitting the abutment and bridge railing, as well as removing the deck overhang. The bridge carries traffic across the Tuolumne River, providing a transportation route from Modesto to rural farmland west of the city and serving as a major artery for the rural area west of the river. In order to keep the project on schedule, Flatiron proposed using a rock trestle instead of a conventional steel or timber trestle.

“Getting approval for our rock trestle concept required a lot of hard work,” said project manager Dan Erskine. “But this concept has allowed us to continue working through the winter months.”

Using a conventional trestle would have restricted work on the river from July to September, giving Flatiron just a two-month work window.

“Without approval of the rock trestle, we would have been constructing this project for two more years. Instead, we’re wrapping up on schedule in November,” said Dan.

2. Interstate 880/High Street Bridge  
Oakland, Calif.

Flatiron crews have wrapped up the Interstate 880/High Street Bridges project in Oakland, Calif., for the California Department of Transportation. The $63 million project took 43 months to complete and included the replacement and widening of two 1,700-foot-long bridges over High Street and 42nd Avenue which were seismically unsound.

The project is on the busy I-880 corridor, and crews kept traffic moving throughout construction. The new bridges were constructed adjacent to the existing structures, and traffic moved to the new structures to allow crews to demolish the old bridges. With the demolition done, crews added an additional 30 feet to each new bridge to complete the project.

The southbound and northbound bridges were completed in June. Crews also completed paving and pump station work and moved traffic to its permanent alignment on June 8. The remainder of the month was spent completing punch list work and closing out the project.
3. NYU Medical Center 
New York, New York

E.E. Cruz recently completed the New York University Tisch Elevator Expansion. The project adds a new four-elevator bank to ease congestion and speed access to the upper floors of the 18-story building.

The project began in January 2011, with work focused on the elevator tower. Crews drove 70 micropiles, installed pilecaps and built foundation walls before moving to the site’s second location, the MSB shell space and excavation work. In late 2012, E.E. Cruz began loading in formwork and shoring for the roof slab. The formwork was erected and rebar installed just before Hurricane Sandy hit. The hospital and jobsite, adjacent to the East River, were shut down for over two weeks for cleanup and recovery. The hospital remained without power for almost six weeks.

Once the jobsite was back up and running, E.E. Cruz was able to pour the MSB roof slab and began backfilling. Waterproofing installation, protection board and concrete installation on top of the waterproofing came next. After completion of some additional backfilling, crews demobilized. Final punch list items were completed in June.

Field Note contributed by Dan Wortley

4. Perris Water Filtration Plant Reject Recovery Facility 
Perris, Calif.

Flatiron crews are in the home stretch on the Perris Water project for the Eastern Municipal Water District in Perris, Calif., located in Riverside County. The $8 million project is the first water project of several coming up for Flatiron Electric Group. They are in the process of completing all of the electrical and instrumentation work for the recovery facility.

The facility recovers previously unusable water and treats it to make it usable for the surrounding community.

“Water is like gold in Southern California,” advises project manager Chris Wehsener, “So this project is important for the surrounding community and Flatiron is proud to be a part of this project.

The next several months will be critical to the project, as crews work to complete the slab-on-grade work. After that, crews will begin setting the Motor Control Center and the Supervisory Control and Data Acquisition Control Cabinet, along with many other local control panels as they push to finish the work while remaining on-time and on-budget.

The project is slated for completion in November.
Adoption of time- and money-saving apps in the construction industry is on the rise, according to a recent Engineering News-Record survey. In an industry that is often falsely accused of being slow to embrace technology, contractors are quickly incorporating cloud-based technology to help them get the job done more efficiently. And with 97 percent of general contractors and 87 percent of subcontractors using mobile devices, it’s not hard to see why the use of construction-specific apps—from estimating and bidding to design and document management—is on the rise. Here are just a few of the construction apps receiving rave reviews across the nation.

**Bluebeam Revu**  
Document Management  
This app lets users view PDF plans, mark-up and edit project files and collaborate with multiple teams easily.  
**Device:** Apple iPad  
**Cost:** $9.99

**Crane Hand Signals**  
Safety  
This app gives users instant access to all necessary crane hand signals. Every signal included is compliant with the OSHA Cranes and Derricks Standard.  
**Device:** Apple, Android  
**Cost:** Free

**OSHA Heat Safety Tool**  
Safety  
This app provides the heat index for your work site and recommendations to prevent heat illness.  
**Device:** Apple, Android  
**Cost:** Free

**Aconex Mobile**  
Project Management  
This is a useful app that enables contractors to access and capture important project information on-site. Users can share videos, images and project documents, as well as send marked-up documents to other project team members and store records for offline access.  
**Device:** Apple  
**Cost:** Free

**Autodesk BIM 360 Field**  
Construction Management, BIM  
This app brings construction management and building information modeling together. It lets users commission, punch-list and document project forms as well as render 3D files. If you lose signal, no problem: it lets you save your data and synch later to the cloud.  
**Device:** Apple, Android  
**Cost:** Varies

**HeavyJob Mobile**  
Project Management  
HeavyJob Mobile allow users to perform the job-planning tasks they do in HeavyJob out in the field: schedule resources, enter time cards, track safety meetings and more. Bonus: it integrates with the HeavyJob software for a seamless experience. Install through Flatiron.  
**Device:** Apple, Android  
**Cost:** $15/month

Remember: check with your manager before purchasing or downloading apps on your Flatiron smartphone.
Ruskin Dam work ramps up

by Elizabeth Fion Hudson | Flatiron is retrofitting the Ruskin Dam and Powerhouse in Mission, British Columbia, about 60 kilometers (37 miles) east of Vancouver on the Stave River for owner BC Hydro.

Crews are halfway through the powerhouse superstructure upgrade. Flatiron is retrofitting the three-story, 15,000-square-foot building which houses, among other equipment, three large turbine generators. Crews have demolished walls and built new concrete ones in their place and replaced the bulk of the windows in the facility.

The biggest challenge so far has been completing the retrofit in an active facility. The existing facility will remain online during construction, which requires special safety measures and close coordination with the plant operators.

“There is a heightened awareness of electricity and hot work due to electricity,” said construction manager Randy Bowman. “It means a lot of lock-out-tag-out with the owner.”

The safety procedures add layers of protection to ensure a disabled power source isn’t accidentally turned on in areas with active work.

The powerhouse, originally built in 1930, also carries other hazards in the form of toxic materials. Crews have encountered asbestos, lead and silica during the retrofit. Crews recently completed the demolition of asbestos panels from the existing walls and are replacing the wall with cast-in-place concrete. The powerhouse retrofit, which will also include installation of a new elevator and 240-ton-capacity overhead crane, will be complete by the end of this year.

On the Ruskin Dam itself, crews are preparing to replace the existing gates, piers and road deck over a period of two and a half years. The work will happen in three stages as crews move across the dam. The new dam will have five gates, replacing the existing seven.

So far, Flatiron has installed a tower crane base on the right abutment with crane erection to follow. Crews have also assembled a Terex 275 crawler crane on a 19 flexi-float barge in the lake behind the dam in preparation for the dam work ahead. In June, crews began assembling the temporary works bulkhead, a system that will fit against the back of the dam to hold back the lake and allow demolition of the piers. Demolition work began in mid-July.

Currently the lake is drained to approximately 11 meters below normal levels to allow for installation of the bulkhead. Water levels will rise again in August after installation is complete.

There are about 30 Flatiron personnel on site, plus four major subcontractors. At the height of each of the three construction phases, Randy estimates the team will grow to about 50. Work for the first phase will peak this fall.

Randy, who previously worked on Flatiron bridge projects in California, North Carolina and British Columbia, said that while working on a dam project is different, it’s not completely new.

“It’s pretty much the same as anywhere else,” he said. “The biggest difference is understanding all the operating rules in a live power plant.”

Upon completion, the facility will provide power to 33,000 homes and will be able to withstand a 10,000-year earthquake.
New benefits portal

We’re very excited to introduce a new and improved online benefits center to our salaried employees that launched August 1. From there you’ll be able to not only elect and review your benefits, but also easily and quickly research benefit terms, find providers and communicate with the benefits department. Look for an email from Claire Sideri with more information.

Flatiron wins three California Transportation Foundation awards

Flatiron won in all nominated categories at the Annual California Transportation Foundation awards on May 23. Three Flatiron projects were honored as projects of the year in various categories. The State Route 65 Lincoln Bypass project (pictured above) was named Freeway/Expressway Project of the Year, the Point Bonita Lighthouse Pedestrian Bridge won Bicycle Pedestrian Project of the Year and the State Route 76 Middle Section project took home the Conventional Highway Project of the Year award. Congratulations to everyone who helped contribute to these successful projects!

Presidio work ramps up

Presidio Parkway has ramped up construction activities. The project team has been working through some difficulties due to a protracted permitting process that is requiring additional attention. Staff and resources are ramping up to prepare for a very busy summer of construction and a shortened construction period.

Flattend at the Homefront

Two employees on the Drayton Valley Bridge project on Highway 22 in Alberta rescued a baby moose from a near-drowning this spring. A mother and two baby moose tried to swim across the river near the project site, but the river was too deep and the baby moose were swept downstream. One washed ashore near the project site and Flatiron structures foreman Troy Schuck and laborer Travis Neumann came to the rescue, pulling the moose onto shore and safety. The moose was later reunited with its mother.

Flatiron earns No. 51 Spot on ENR top contractors list

Engineering News-Record released their annual ranking of the Top 400 Contractors, with Flatiron coming in at No. 51. Flatiron also earned the No. 11 ranking on the Top Transportation Contractors list, No. 14 on the Top Domestic Heavy Contractors list, No. 18 on the Top Contractors Working Abroad list, and No. 32 on the Top Contractors by New Contracts list.

Point Bonita Lighthouse Pedestrian Bridge wins AGC California award

The Point Bonita Lighthouse Pedestrian Bridge is once again an award-winning project. The Associated General Contractors of California awarded the Point Bonita Lighthouse Pedestrian Bridge an Excellence in Project Management Award in the category of Projects $10 Million or Below. Project manager Joel Dodd and general superintendent Dan Sherlock accepted the award on behalf of Flatiron on May 4.

Structurally Speaking honored

Structurally Speaking was recognized by Ragan Communications with two Employee Communications Awards, honorable mentions, for Best Employee Magazine and Best Employee Newsletter. Other honorees included publications from American Airlines and Air Canada.

Yadkin River Bridge project wins NCDOL safety award

Flatiron and joint venture partner Lane received a 2013 Safety Award from the North Carolina Department of Labor. Flatiron’s Jesus Rivera, project safety manager, accepted the award on Flatiron’s behalf on May 15 from North Carolina Commissioner of Labor Cherie Berry.
Flatiron wins top AGC Utah safety award

Flatiron won a 2012 Platinum Safety Award from the Associated General Contractors of Utah. Flatiron was presented with the platinum award, the organization’s highest safety honor, given to companies whose safety records are 25 percent below the national industry average. Flatiron operations manager Billy Shaddox accepted the award on Flatiron’s behalf on April 24.

Bruce Trott joins Flatiron

Bruce Trott has been appointed senior vice president of operations at Flatiron. Bruce has more than 27 years of experience in civil construction and engineering. He will oversee operations in the central United States. Bruce previously served as president of PCL’s heavy civil construction operations in the United States. Bruce has served in various roles in field, district and executive management throughout his career on projects in Canada and the United States. Please join us in welcoming Bruce to the Flatiron team.

Flatiron awards $15,000 in scholarships as part of Build-A-Bridge program

Flatiron awarded $15,000 in scholarships to 11 high school students as part of its Build-A-Bridge program in California. The students participated in 10-week courses taught by Flatiron employees that included instruction on engineering fundamentals, plan reading and estimating. The program culminated in a final project, and the best of the best were offered paid summer internships with Flatiron.

Congratulations to the students and to the Flatiron employees who helped make this program possible: Samer Aboujudom, Julie Bowen, Jaime Cochran, Jamie Dodd, Dan Elshire, Carlos Gomez, Tony Inocencio, Deeann Isaacs, Dave Mauro, Tina McGilvery, Bill Mitchell, Troy Neuenswander, Christina Newton, Gary Quach, Bryan Seeger, Eddie Serna.

Fun team building event in Washington

by Debbie Young | We sure know how to have fun up here in Washington! Our design-build project office not only houses Flatiron employees, but is also home to employees from the Washington State Department of Transportation, URS, KPFF, Transpo, DKS, PBS Engineering and Environmental Inc., and Kleinfelder.

We host team-building events to facilitate collaboration, most recently hosting a potluck barbecue and softball game on May 23. Teams were selected randomly, so employees from all the companies played together. There was so much interest that the project was able to field four teams. It was a great opportunity for all to work together as a team with no near misses or injuries to report. After the games, Flatiron’s Mike Day and Matt Taylor manned the grills. Another match is planned for later this summer.

Team D (pictured above) won the tournament. Pictured left to right: Paulina Hampton, Nick Johnson (Elcon), co-Captain Jacob Zacharda, Russ Vinyard, Adam Kraft, Edward Cook, Nick Chambers, co-captain Stephanie Parker. In front: Bob Vanhorn (WSDOT) and Zach Gaul.

Flatiron/B2P El Rodeo Bridge Honored by ENR

The El Rodeo Suspension Bridge (pictured above), built by Flatiron volunteers in Nicaragua in 2012 won an Award of Merit from Engineering News-Record as part of their first-ever Global Best Projects competition. Congratulations to the El Rodeo Team!

Flatiron employees fundraise for Ronald McDonald House

Flatiron employees collected donations for the Ronald McDonald House on Red Shoe Day, June 27. Thirty-one employees stationed in three intersections raised $4,637 for the charity, their second year doing the event. Way to go!

Q2 New Projects

Electric Group
Highway 101 Willits Bypass Electric Work $744,000
Orangethorpe Avenue $1,895,400
Interstate 805 DAR $1,360,588
Avenue 12 Overcrossing $1,223,797
Highway 580 Ramp Metering $923,483
Route 198 Lemoore $818,648
Interstate 80 Dixon Overlay $556,100
Plus nine additional project worth a total of $2.3 million

Intermountain District
Aspen AABC Pedestrian Underpass $5,336,628

Los Angeles/Orange County District
Orangethorpe Avenue Grade Separation $45,137,137

San Diego District
Blue Line Trolley Stations $57,881,000
Wing Avenue Flood Control $5,522,833
People & Events

Welcomes

Benicia District
Billy Auston, Jr., Meaghanh Ingram, Philip Lappe, Bill Spencer, Brad Wink
Interns: Kelly Dudek, Christopher Duty, Steven Espinoza, Bahar Hajian, Alyssa Incoceno, Ryan Niese, Jimmy Quach

Canadian Division
Alisha Adams, Brooklyn Andre, Lee-Ann Barber, Joe Berthier, Kevin Boness, Stacie Brayton, Aaron Cherniwchan, Simon Church, Patrick Dillabough, Eamonn Goggin, David Grenier, Samuel Hsieh, Tiffany Kirk, Nick Manfredini, Kristine Obillo, Adriana Ramirez, Cindy Stewart, Chad Williams, Wayne Yates
Interns: Conrad Bingham, Michael Chute, Joshua Gibson, Harmandeep Gill, Lindsay Hill, Mark Jama, Matt Kolec, Nicholas Lambert, Peter Long, Brandon Martin, Loren Muth, Craig Nyboer, Simon Pelta, Isabelle Piche, Andrew Singh, Siobhan Small, Evan Smith, Annie Stancheva

Corporate
Erm Centofanti, Kevin Popp, Steve Simmons, Stacy Smith, Josh Wilson

E.E. Cruz
John Benas, John Leper, Jason McKenna, Valerie Rodriguez
Interns: Liron Berisha, Christian Briggs, Gregory Cundari, Brian Manning, Yarissa Subervi, McGregor Sylvain

Flatiron Electric Group
Michael Bradfield

Heavy Civil Division
Mike Blasi, Sean Self, Bruce Trott

Los Angeles/Orange County District
Travis Airola, Tenisha Fifita, Vincent Pirano
Interns: Alexandra Butorovich, Stephen Handy III

San Diego District
Christopher Allio
Interns: Kristina Jester, Lauren Laing, Mason Lewis, Mark Moreno, Patrick Nagle, Ryan Smith

Washington
Zachary Gaul, Jacob Zacharada

Transfers

Canadian Division
Mick Wilson from the Ruskin Dam project to Fort McMurray Operations
Adem Aganbegovic from the Steinhauser Bridge project to the Northeast Anthony Henday project
Craig Chute from the Port Mann Bridge project to the Interior to Lower Mainland Transmission Line project
Kyle Hendrikx from Fort McMurray Operations to the Interior to Lower Mainland Transmission Line project
Kevin Healy from Fort McMurray Operations to the Drayton Valley project
Matt Harrison from the Steinhauser Bridge project to the Northeast Anthony Henday project
Kevin O’Neal from the Port Mann Bridge project to the Interior to Lower Mainland Transmission Line project
Frank Mydlinski from the Port Mann Bridge project to the Interior to Lower Mainland Transmission Line project
Nestor Soroka from Fort McMurray Operations to the Drayton Valley project
John Adams from the Port Mann Bridge project to Fort McMurray Operations

Heavy Civil
Christie DeLuca from the Firestone office as the director of training & communications to the Heavy Civil Division as the marketing director

Tonya Sandman from the Firestone office as the corporate trainer to the Heavy Civil Division as proposal manager

Births

Fae Baxley Mignone, daughter of Tiffany and Paul Mignone, born on April 2
River Lee Allington, son of Nina and Justin Allington, born on June 25
Jaidon Daevyd Correia, son of Andrea and Pedro Correia, born on April 6

Wedding

Congratulations to Franz Laki who wed Kelly Buechner on May 25.

Kudos

Joe Malandro, president and chief operating officer of E.E. Cruz, was recently elected to serve as president of The Moles, a prestigious heavy civil construction industry group, for the 2013 - 2014 term.
Corporate equipment manager Warren Schmidt has been elected as a vice chairman of the Association of Equipment Management Professionals executive committee for 2013 and 2014.

Mike Gould, PE, recently passed his QSD exam, showing his mastery of the art of SWPPP. Well done, Mike!

Congratulations to Paul Hopkins, who received his Professional Engineer designation from the Association of Professional Engineers and Geoscientists of British Columbia in May.

Nick Reker (left) and Chase Wirtz (right) have recently passed their exams to become Flatiron’s newest Professional Engineers. Congratulations on this tremendous achievement.

Sereno Brown recently passed his California Professional Engineer certification exams. Well done!

Kudos to Shawn Marvin, who recently earned his Design-Build Professional Certification from the Design-Build Institute of America.

Congratulations to Rochelle Sink, who passed her Professional of Human Resources exam for certification in June.

Kudos to Tony Breinholt for passing the B-100 certification exam for his State of Utah Contractors License.

Elizabeth Fison Hudson has been promoted to corporate communications manager, taking over responsibilities from Christie Deluca, who has transferred to the Heavy Civil Division. Elizabeth is now the managing editor of Structurally Speaking. Please contact Elizabeth at efisonhudson@flatironcorp.com with any future communications or branding needs.

20 Years
Jim Keep, Diane Wagner

10 years
Russell Facer, Juan Gonzalez, Dan Martinson, Anthony Osorio, Drew Phillips, Ken Tanner, Bret Taylor, Oscar Teposte

5 years
Justin Allington, Francisco Aviles, Juan Ayala, Jeremy Bradford, Jose Carreno, Cesar Guerra Curiel, Michael Day, Jorey Deml, Nereyda Flores, Theodore Herd, Brandon Houx, Edward Izydorek, Nathan Johnson, Eric Logue, Ryan Lovely, Armando Maldonado, Jayson Marquez, Pedro Rodriguez Martinez, Christopher McMillen, Rafael Ramos, Sven Stranzenbach, Wayne Veatch, William Vee
7 tips to get fit and stay fit this summer!

by Claire Sideri

Get motivated
Try on your favorite summer outfit or work shirt and imagine how great it will look after you tone up or lose just a few pounds. Take a picture of yourself in the outfit, hang it where you can see it, or record your goals and put them where you can see them every morning so you start out with the right mindset.

Enjoy the flavors of the season
Fresh fruit is plentiful and inexpensive during the summer months, so load up on mango, watermelon and other favorites. The sweetness will satisfy your sweet tooth while the water fills you up and the fiber keeps you feeling full.

Burn more calories than you consume
Record your calorie intake and burn for one week to see how they measure up. You’ll be surprised how many miles you have to walk to burn off your Saturday barbecue!

Take advantage of the weather
Summer is a great time to get outdoors and take a hike, go for a swim or play kickball with your family and friends, all while burning calories. Plus, longer summer days mean you can stay outside later. Whatever you do, stay hydrated and be sure to apply plenty of sunscreen.

Drink water
Water fills up your stomach and can quiet hunger pangs, as many people mistake thirst for hunger. Plus, water will flush out your system and reduce bloating. Drinking lots of water is easier these days with free and inexpensive water bottles everywhere you turn. There are also many calorie-free ways to flavor your water, from store-bought options to dropping a few lemon slices in your bottle.

Participate in a fitness challenge
Many health clubs and other communities host fitness challenges in the summer to help inspire people to get into shape and stay in shape. Or better yet, start your own challenge with friends!

Eat outside
Research shows that you eat more in front of the TV and less in bright light. So head outside and enjoy the sunshine, birds and a nice, fulfilling meal.
Employee Discounts

Did you know that as a Flatiron employee you have access to discounts from a wide range of vendors and services? Check out the list below and learn more by typing “Employee Discount” into the search box on MyFlatiron.

Tech Discounts

Microsoft

Microsoft Home Use Program – get Microsoft Office PC applications to install and use at home

Apple

Apple – discounted pricing on computers and equipment

Dell

Dell – discounted pricing on computers and equipment

Wireless Discounts

AT&T

AT&T – up to 18% discount on services and up to an 18% discount on some hardware

Verizon

Verizon – up to 18% discount on services and up to 25% of accessories

Sprint

Sprint – up to 17% discount on services

Home & Auto Insurance

Liberty Mutual

Save on Auto insurance, or by bundling your insurance packages with Liberty Mutual. Type Liberty Mutual into the Sharepoint search box for a link, or call 800-524-9400 and mention client #118646.

Ford

Ford – U.S. employees can use the Ford X-Plan to save on a vehicle purchase. Visit www.fordpartner.com and use the code XC119.

Equipment Rentals

Sunbelt Rentals

Sunbelt Rentals – Flatiron employees are eligible for a discount when borrowing equipment from Sunbelt rentals. For details, go to Sharepoint, click on Purchasing, then on Sunbelt Rentals.

Office Supplies

Staples

Staples – Discounted office supplies offered to employees. Go to Sharepoint, and click on Purchasing then the appropriate Staples link (US or Canada).
Flatiron completes 9th B2P footbridge

El Dorado, Nicaragua

Team El Dorado celebrates the completion of the second footbridge of 2013 through a collaborative effort between Flatiron, E.E. Cruz, Turner Construction and Bridges to Prosperity. The partnership is building three footbridges in Nicaragua this year. Flatiron and Bridges to Prosperity will have partnered on more than 10 footbridges in Central America by the end of 2013.