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CONSTRUCTION & EQUIPMENT



May 5, 2017

ABC MANTRA: GET INTO POLITICS OR GET OUT OF BUSINESS

Government plays a significant role in whether a company can be profitable.

Politics dominates the news, and not in a good way. Many people are turned off and are tuning out. Should businesses do the same, or is now the time to “lean in” and get involved?



BY WENDY NOVAK
ABC OF WESTERN
WASHINGTON

Washington, D.C., may be becoming more business friendly, but Washington state isn't. Should businesses refuse to engage, thinking they can't do anything about it anyway, or try to have some influence in improving the business climate?

For a business to be successful it must have good working relationships with its bank, accountant, lawyer, vendors, subcontractors and clients. But government also plays a significant role in whether a company can be profitable.

Governments pass ordinances and legislation that impact taxes, the environment, labor and employment, and more —

touching nearly every facet of a company's operation. In addition, unelected bureaucrats add more, often burdensome, regulations. Too often, a business owner who values good working business relationships fails to develop relationships with the elected officials in his/her local city, county, Olympia and Washington, D.C.

Many business owners think it is impossible to influence government, so they don't even try. And, certainly in the current political climate it is tempting to believe that. But now is exactly the right time to get involved.

The business community has a key role to play in achieving good government by providing real-life examples of how the marketplace works and how proposed legislation would impact businesses that make the economy strong.

Often, legislators are trying to solve a real or perceived problem. They have good intentions, but many times don't understand how the economy really works, and the legislation can end up with harmful and unintended consequences.

Most elected officials have never been a business owner; they don't know what it means

to sign the front of a paycheck. If company owners would engage in the legislative process, providing vital information, better legislation should result. Business owners and legislators should be partners in forming public policy regarding the economy, regulatory environment, taxes and employment law. But that is only possible if company owners, managers and employees engage in the government process.

How to get involved

While becoming involved in government takes time — and often money — it is worth making it a regular part of a business's operations. It is helpful to realize there are two distinct elements of being involved in government: politics and legislative activity.

Politics is the selecting and electing of candidates a business owner thinks will more likely support policies helpful to creating a healthy business climate. Legislative activity is the introduction and passing or stopping of legislation.

Politics is a numbers game: dollars and votes. Business owners have several ways to get

involved. Study the candidates and make a choice of the preferred candidate. Then, make a contribution, attend or host a fundraiser, or offer to help with the campaign. Because money is a critical factor in running a successful campaign, being a donor or volunteer helps get the ear of the legislator after the election. That's a good start to a mutually beneficial relationship where a company owner can provide vital information on pending legislation.

Once a candidate becomes an elected official, the ways a business can participate in the process changes. Because of the volume of bills that are introduced, and the speed and complexity of the legislative process, many business owners depend on trade associations' government affairs programs to inform them. Some are general business groups like the Association of Washington Business or National Federation of Independent Business, while many others are industry or profession specific, like Associated Builders and Contractors, Associated General Contractors, American Council of Engineering Compa-

nies, NAIOP and others.

Associations generally track legislation of interest for their members and notify the members when to contact their legislators and use services such as VoterVOICE to make that contact as easy as a click or two.

Associations often employ lobbyists who provide information and work to persuade legislators to vote in a way that the members of the association see as beneficial. Associations also often host events where its members can meet elected officials and develop or maintain relationships.

While business groups are often made up of competitors, when it comes to their government affairs efforts, the members come together.

“If we do not hang together, we shall surely hang separately.” — Benjamin Franklin.

Contacting lawmakers

It is possible to develop relationships without joining a business group. A call to a legislator's office to set up a meeting, either in the home district (even

ABC MANTRA — PAGE 7

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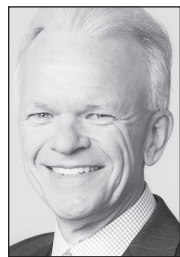


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10 THINGS DEVELOPERS MUST CONSIDER WHEN HIRING A GC

Developers would be wise to pay close attention to the ever-changing landscape in construction.

The Puget Sound region's commercial real estate market is booming right now, with new buildings seemingly going up on every block. We are incredibly fortunate to have so many experienced and talented general contractors in this market.



BY GREG KRAPE
SECO
DEVELOPMENT

However, developers would be wise to pay close attention to the ever-changing landscape in construction.

During my 40-year career, I've had an opportunity to work on more than \$5 billion worth of development projects totaling more than 15 million square feet. Based on my experience, below are 10 criteria I think developers should look at when hiring a GC.

1 Experience: While having the right experience may seem obvious, it's without question the most important thing to consider. You want to make sure your GC has the necessary skills for your project type. They need that previous experience to help assure they can properly estimate, manage and build your project. Don't hire a GC to build a hospital or biotech facility if they haven't before. Always, always, check references to be sure of this.

I'll also look for someone that has some self-performing skill-sets, such as concreting, steel or carpentry. If a GC self-performs portions of the project, then they typically end up with better results. Firms with a great track record and applicable experience provide a resume of more surety, credibility and confidence to lenders and investors — which are real assets to developers.

2 Organization: This one is a bit more subtle in the process of finding a GC since many people don't think about it right away. Office and job site organization can be good indicators on whether the firm will run an organized and effective project. Actions speak louder than words, and observations related to organization are often an omen of things to come.

3 Safety and bonding history: It takes experience, organization and focus to maintain a safe work environment, so it is important to review the GC's safety record. Additionally, those that have top tier bonding capacity are generally financially sound, which can be a very good indicator about the quality of their business.

4 Commitment: Successful GCs need to deliver a commitment to the job and to the people they build their team around. The commitment to keep on the people that you hired is

critical, and you need to have that trust in them. During major growth cycles like we're currently experiencing there's a lot of lost talent, particularly in project engineers, project managers and construction superintendents. We're now also losing experienced, high-quality baby boomers to retirement. As with many of these criteria, examine the firm's track record and check their references for good indicators of their commitment to a project.

5 Timing: The timing needs to be just right when hiring a GC. You don't want to hire too soon, or scramble at the end because it's important that the right team will be available. Waiting for a traditional design-bid-build approach in a busy building market can create timing issues. Another impact to timing is securing key subcontractors and procuring long lead equipment. In today's building boom, you need to secure tower cranes and elevator providers in advance along with key concrete, curtain wall and mechanical, electrical and plumbing subcontractors or you may fall short of your goals.

6 Communication: When you are hiring a GC, it's important to see if they have the right chemistry and relationship-building skills that work for both you and their team. The way they communicate is important as well — too many people rely solely on email instead of face to face these days. I'm a firm believer in the adage that 90 percent of communication is body language. In addition, the job will fall apart if people are at each other's throats, so they must be effective communicators and know how to handle and effectively resolve conflict.

7 Leadership: You can only be an effective communicator if you are also a strong leader. Try to get a feel for the GC's leadership abilities. Grab coffee with the team to see how they interact. Can they create an environment of teamwork and collaboration? Are they effective relationship builders? And, everyone makes mistakes. How they respond when there's a mistake is important. These are crucial attributes necessary to creating a win-win project.

8 Subcontractors are equally important: If the GC is detail and quality oriented, then they will also likely work with subcontractors that share the same mission. You're only as good as your team, so a good team of subcontractors means everything for the project. Additionally, many projects have incredibly complex infrastructure and it is critical that the GC and their subcontractors are highly proficient and adept with the latest building-information modeling software packages.

9 Have ties with the market: Most likely, you will be looking at candidates that are already a part of the market in which they are proposing to build. If not, however, make sure their company has built strong working relationships with established leaders in the local subcontracting market. For those GCs looking to enter a new market, they should consider making significant investments in the local organizations and communities they are joining.

HIRING A GC — PAGE 7

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ON THE COVER

Rafn Co. won an ABC Excellence in Construction award for improvements at Seattle University's Connolly Complex that included a new entry pavilion made with 140 metal cassettes set into a structural grid. To learn more, turn to page 9. PHOTO BY HEYWOOD CHAN

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TECH WIZARDRY: WHAT'S REALLY BEHIND THE CURTAIN?

How people understand, apply and leverage technology does more than make a jobsite efficient and safe. It enhances the way project teams communicate, producing better planning and problem-solving, and delivering higher quality.

The 1.5 million-square-foot Lincoln Square expansion is one of the largest private development projects in Bellevue's history. GLY has been around the block a few times, literally, but even for us the sheer size and scale of the project demanded we question all our previous



BY TED HERB
GLY CONSTRUCTION

assumptions and processes. With up to 1,100 people per day (equivalent to \$825,000 in payroll) working to erect 13 million pounds of structural steel, hang 550,000 square feet of curtain wall, and install 330,000 lineal feet of piping — all while the clock ticks down to leasable space generating income for our client — the consequences of inefficiency are potentially astronomical.

What are we trying to solve?

Everything we do is centered on one key question: How do

we reduce waste and create efficiency? This isn't just an economic consideration, although that's an important driver. It's about reducing the burden on our employees so that they can do their best work safely, effectively and without undue stress.

There are five key issues that can compromise efficiency on a project:

- 1. Motion:** excessive walking to accomplish a task. Throw in the need to cross a street with traffic lights on a 7-minute signal and you do the math!
- 2. Delivery and storage.** Poorly timed deliveries wreak havoc on a jobsite, creating a chain reaction of multiple moves to store materials.
- 3. Excess inventory** gets in the way of production and clutters the site, compromising safety.
- 4. Waiting for information,** materials, equipment, etc. to arrive.
- 5. Defects, mistakes and** rework.

We have incredible technology that helps us do our job

more efficiently, such as virtual and augmented reality and 3-D design models. They allow us to visualize space before it is built, test fit systems and structures in half-constructed rooms, and create interactive models to identify optimum solutions. But at the end of the day, it's not the technology itself that transforms the way we build, but how people understand, apply and leverage it.

Knowing what, forgetting how

The benefits of using augmented reality and virtual reality to visualize space are well documented, but the user must understand what they're looking at and know which actions to take next. On the Lincoln Square expansion project, we developed a comprehensive 3-D model in Revit with key subcontractors. This effort is self-performed by GLY project engineers, a process we've been refining for over 10 years now.

The main intent of the model is to find conflicts, resolve dimensions, and develop highly accurate shop drawings so we



In trained hands, technology can bridge the gap between physical and virtual distance, making it a powerful communication tool.

IMAGE BY GLY

know exactly what to build; but if you focus solely on determining what to build, you miss the opportunity to leverage thinking about how to build it. The process becomes inherently wasteful because you're just reacting to the environment.

Instead, we engage our superintendents in developing a comprehensive construction schedule informed by the model. All five of our superintendents on this project contributed their thoughts and plans, and then we incorporated this information into the model to create a 4-D time lapse representation of the construction process.

The model is only ever as good as the information that goes into it. With this level of detail we were able to tune up the sequence to streamline one comprehensive, coordinated construction effort.

Physical, virtual distance

Minimizing the physical distance people and materials have to travel is one challenge; the other is the virtual distance between getting information from the job office into the field. The speed of electronic distribution and the highly visual capability of digital communication is unquestionably efficient.

Smartphones and tablets allow us to send large data files to teams quickly, even though we have to overcome the lack of Wi-Fi and often very weak cell phone coverage. This efficiency of communication means fewer errors, because everyone can

access vital new information at the touch of a button.

Nonetheless it does have a bit of a downside: We don't want our crew glued to their screens while they're walking across the jobsite. We consider it equivalent to texting while driving. The impact of a distracted pedestrian on a downtown sidewalk is bad enough, but where there is heavy machinery, multiple obstacles, and an ever-changing hazardous environment, the consequences can be serious not only for the individual but for the safety of the entire team.

We have to train and reinforce safe behavior, and that includes adjusting to new technologies. These ongoing discussions at the jobsite level are really the only counter to the advantages.

Powerful tools in the right hands

We are reaping the benefits of new and emerging technologies on a daily basis and everyone from our field crews to our integrated design engineers are constantly evolving new applications and new ways to optimize available and emerging technologies. From spherical cameras that give us a 360-degree view of a room's status at any given moment, to a FARO laser that allows us to quickly scan and measure an existing space in 3-D (imagine an incredibly accurate as-built document), we have so many more opportunities to evolve our approach.

TECH WIZARDRY — PAGE 7

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TIME TO PUT THE BRAKES ON 700 WORK ZONE DEATHS

The majority of those killed or injured in roadway work zones are motorists, not the workers themselves.

National Work Zone Awareness Week (NWZAW) is an observance set aside every year, usually in April at the beginning of the busy roadway construction season. The event allows workers — and all road users — an opportunity to focus on the dangers that exist in roadway work zones.



BY JAMES BARON
ATSSA

The latest national statistics from 2015 reveal 700 deaths nationwide in work zones. That's a high number, but what's surprising to most is the majority of those killed or injured in work zones are motorists, not the workers themselves.

Our workers know the drill. Get the right training and certification to do your job. Wear the right protective gear and reflective apparel. Exercise caution and safety every waking moment. Expect the unexpected.

Too bad motorists don't take

work zones as seriously.

Seven hundred fatalities annually behind the orange cones should be enough information to slow anyone down, but motorists continue to text, speed, follow too closely, drive drunk, drive tired, and most worrisome — completely disregard orange signs and the workers within the work zone.

For the most part, the nation has taken notice of the dangers that exist in work zones. We have reduced the number of accidents and injuries in work zones over the years, but there is still a lot of progress to be made as we hope to someday bring those numbers of fatalities to zero — not only in work zones, but on our nation's roadways in general.

Even though NWZAW 2017 (April 3-7) has officially passed, many states mark the event at different times of the year. For example, in cold states the start of the construction season doesn't begin until May. Other states, like Virginia, have permanent memorials to honor fallen work zone workers that the motoring public can stop and reflect at all year long.

Virginia's stunning granite work-

er's memorial is located near scenic Afton Mountain on I-64 east-bound. The beautiful memorial was built with contributions from VDOT employees and citizens. According to VDOT's website: "The (memorial) site provides a place where family members, friends, and colleagues can reflect on their loss, and where the traveling public can become more aware of sacrifices made by state highway transportation workers."

Other states have year-long campaigns that feature media advertisements, billboards, celebrity spokesmen, and even mascots who visit schools to help educate young children on work zone issues, while making the topic fun and entertaining.

NWZAW began as a small event, but today is a major community relations outreach program that nearly every state in America takes part in.

The program was created in December 1999 when members of the American Traffic Safety Services Association (ATSSA), the Federal Highway Administration and the American Association of State Highway and Transportation Officials signed

an agreement proclaiming that such an event would be held every year. The three agencies have lived up to their nearly 20-year-old promise to do so.

The first event was held in Washington, D.C., in April 2000. At that event, over 1,026 orange cones were set on the grassy field next to the Washington Monument. Each cone represented a work zone fatality. Back then, the number of motorists killed in work zones surpassed the number of workers killed by 70 percent. That statistic remains constant even today.

Representatives from ATSSA spoke at the first event, and workers made up the audience. It was a small gathering, but it sparked the question from many passing tourists on the Mall that day who asked, "What do all those orange cones mean?"

It was a road worker's first interaction with a motorist on "neutral ground." The two talked safety and the motorist learned something about the dangers that exist in roadway work zones.

That's how community relations events are born.

As the event grew every year,

other states began conducting their own unique ways to spread the word. Many DOTs would bring damaged crash cushions and vehicles to the event to give the public — and the media — a visual of what roadway workers experience every day in work zones. Then came the workers who survived crashes, or had near brushes with death. They all told the media and the public their own unique, compelling story. How they're often yelled at by motorists, or how passengers in moving vehicles have thrown debris at them in moments of rage. Again, the public listened, and the event grew even larger across the country.

One year, then-Federal Highway Administrator Mary Peters sat at a desk in a work zone adjacent to I-95 in Springfield, Virginia, in the morning rush hour and proclaimed sternly on national television, "Slow down, this is my office."

That event made an impact on the nation, and it's an image that's still fresh on the minds of many of us in the roadway safety industry today.

WORK ZONE DEATHS — PAGE 7

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Safety resources are Associated Builders and Contractors of Western Washington's #1 service to its members. Workers and jobsites are safer. Contractors are more competitive and can get more work. ABC's Safety Training and Evaluation Process (STEP) program is a key component in our portfolio of safety services. STEP is an annual assessment of a contractor's safety program, helping reinforce successful practices and identify areas for improvement. Each year ABC of Western Washington is recognized for having more member participation in STEP than any of the other 70 chapters in ABC. These members were recognized in the top tiers of the STEP Program for 2017.

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EQUIPMENT FIRMS' NEW FOCUS: 'POWER-BY-THE-HOUR'

Some organizations may need to transform their after-sales service businesses to become more customer-centric and efficient.

This year is bringing both challenges and opportunities for those in the heavy equipment industry. With a proposed \$1 trillion makeover of the U.S. infrastructure — consisting of new or repaired roads, seaports, airports, sewer systems, schools, electric grids and more — both manufacturers and equipment rental companies must be equipped to meet these new demands.



BY GARY BROOKS
SYNCRON

In comes "power-by-the-hour," which is an agreement that allows a company to lease or rent equipment for a certain number of in-use hours, buying the functionality rather than the actual piece of equipment. Rolls-Royce originally made the concept famous in the aviation industry, but for manufacturers of long-lasting durable goods like heavy equipment or aircraft, this is a model they must start watching. It also means rental companies and manufacturers must maximize equipment uptime to maximize revenue.

According to Grand View Research, the global construction equipment rental market is expected to reach \$84.6 billion by 2022 due to increasing construction activities across the globe, as well as rising government investment in emerging economies.

Here are three common questions surrounding this changing market:

1 What does the future hold?

In the near-term, both manufacturers and rental companies must be equipped to meet the increased demands expected to come with the national infrastructure improvements. This means equipment that has been sitting idly will need repairs and maintenance to get up and running, and that there could possibly be an influx in new orders.

With emphasis placed on improving roads and bridges, military fleets and oil and gas production, many of the companies providing services to these areas may turn to equipment rental as an option instead of purchasing new goods, as a way to cut down on time and cost. Manufacturers and rental companies alike must be ready to service these goods — any downtime results in lost revenue, so ensuring the correct service parts are in the right place at the right time is critical to success.

Long-term, expect the power-by-the-hour model to become

more common. Maximizing uptime means after-sales service organizations must be equipped to deliver high service levels and service part availability. By optimizing parts inventories throughout the entire service supply chain — from central stock locations to dealers and trunk stock — manufacturers can reduce service parts inventories by as much as 60 percent and increase gross profits by 5 to 20 percent, while maximizing the uptime of rental equipment to deliver top line improvements.

2 What is driving the trend?

A combination of both a new way of thinking and a market force are driving the shift to the power-by-the-hour trend. There are several social, political and economic factors creating a perfect storm, including the volatility of orders for durable goods over the course of the past few years, millennials in the workplace, a changing political climate and emerging technologies becoming more commonplace.

Today's customer has higher expectations than ever thanks to brands that provide on-demand experiences like Amazon, Zappos and Uber. If a piece of equipment they're relying on to generate revenue is down, they will expect quick and efficient repairs. And if the repair isn't made quickly or correctly, the chances of that customer leaving for a competitive brand increases.

3 Who has the most to gain/lose?

There are both challenges and opportunities for manufacturers and rental companies, and some organizations may need to transform and optimize their after-sales service businesses to become more customer-centric and efficient. This can be a significant revenue driver, but companies must adopt the right technologies and business practices to be successful.

For the end-customer, it's a win-win situation. There is little risk associated with renting: replacement is less complicated, it can oftentimes be more cost effective, maintenance costs are lower and there are fewer transportation and servicing requirements. More customers are going to start shifting to this model in the near future.

Organizations that don't adopt rental models could get left in the dust, and those that do adopt rental models without improving the efficiency of their after-sales service functions will face challenges. Across all industries and verticals, the ways of doing business are shifting. Customer expectations are evolving: they

expect quick, reliable service, and brands that don't provide that experience will be left behind.

The biggest area of opportunity as the market shifts to a power-by-the-hour model is after-sales service. Because of the way the rental model is configured, the

manufacturer or rental center is only making money when the piece of equipment is up and running. This means that service parts must be available at the right place and time to ensure a quick repair, and ultimately minimize downtime.

The opportunity for both manu-

facturers and rental companies is huge — and power-by-the-hour done correctly will give them the chance maximize revenue while simultaneously increasing customer loyalty.

Gary Brooks is chief marketing officer at Syncron in Atlanta.



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WORK ZONE DEATHS

CONTINUED FROM PAGE 5

But perhaps the most important group of people to be brought to the attention of the American people are the families of those workers killed or seriously injured in roadway work zones. The unfortunate men, women and children who said goodbye to their loved one in the morning, and never saw them again. They are the ones who tell the most compelling and heartbreaking stories of all and many have stepped to the podium at NWZAW events across the country to tell their stories.

The American Traffic Safety Services Foundation's National Work Zone Memorial contains the names of men, women and children killed in roadway work zone accidents from all over the country. Every year, the 8-by-28-foot portable exhibit is featured as the centerpiece of the national kickoff event, and then travels around the country as part of work zone safety events all year long. At the end of the year, the memorial is refurbished, additional names are added — and the cycle begins again.

ATSSA, established in 1969, is an international roadway safety trade association. Its members provide safety products and services that make roadways safer — including signs, pavement markings, temporary traffic control devices, guardrail, rumble strips and crash cushions. The Fredericksburg, Virginia-based association also leads the nation in training roadway workers.

You can reserve the work zone memorial by emailing Foundation@atssa.com.

James Baron is director of communications for ATSSA.

HIRING A GC

CONTINUED FROM PAGE 3

10 Cost is key (but not everything): A GC that can deliver on time and on budget is worth their weight in gold. However, do not go for the lowest bid, go for high-quality and experience. Bring the firm in at the beginning and negotiate general conditions up front. During pre-construction they will watch your back. A good GC will help ensure what you are developing makes sense and stays on budget. Typically, the best contractors will meet all of the other criteria to be the type of company that meets this requirement.

Greg Krape is president of Seco Development, which has been recognized as one of the most successful mixed-use development companies in the Puget Sound region. Seco has been a landowner for over 35 years in Seattle, Bellevue, Kirkland and Renton.

TECH WIZARDRY

CONTINUED FROM PAGE 4

However, our philosophy remains unchanged. Technology is a tool, an increasingly powerful tool, but unless it is in trained hands and adds real value it is at best a toy. Technology cannot replace careful planning, the deep insight that comes from experience, and a friendly crew member looking out for the safety of their teammates and neighborhood residents.

The real magic happens when you combine the two. In the right hands these innovations do more than just reduce waste and create efficiency, they engender conversations that are more coordinated and meaningful. They empower people to be effective and in control of the myriad moving parts that need to come together for successful execution of complex projects. Technology does not replace careful planning, it enhances it, allowing us to see more, do more, and tackle problems in a new way.

Ted Herb is president at Bellevue-based GLY Construction, one of the region's largest locally owned contractors, currently celebrating 50 years in business.

ABC MANTRA

CONTINUED FROM PAGE 2

at the company's location) or in the legislator's office, may result in a bit of a scheduling challenge, but it's a good way to get to know each other.

Contacting legislators often results in talking to their aides. Don't hesitate to tell them what your concerns are or voice your opinion. Legislators are often in committee meetings or "on the floor" so they rely on their aides to be their eyes and ears. Aides are significant participants in the process so working with them is a valuable endeavor.

While business owners are often consumed with the demands of just running their companies, it is in their long-term interest to become actively involved in elections and the legislative process. Electing pro-business candidates makes the rest of the process easier, especially if there is a majority

of pro-business people in office.

Better legislation can result from business owners viewing themselves as partners in the process by providing critical information about how legislation will really work — or not — in the business community. Developing relationships with government officials is just as important as knowing the other "partners" who impact the success of a business. It just takes a bit of time and money. But it is worth both.

"Just because you do not take an interest in politics doesn't mean politics won't take an interest in you." — Pericles.

Wendy Novak is president/CEO of ABC of Western Washington. She has served many years on the ABC National Membership Professionals Council, chairing it for three years, and is a member of the American Society of Association Executives.



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ABC AWARDS

ABC'S 2017 EXCELLENCE IN CONSTRUCTION AWARDS

Increasing construction costs, a lack of subcontractor availability, a tight project footprint and a contaminated site were some of the challenges facing Rafn Co. during construction of the AMLI Wallingford apartments.

The success of this project earned Rafn the Eagle of Excellence at the 2017 ABC Excellence in Construction Awards.

Rafn has won the top award six times in a row from the Associated Builders and Contractors of Western Washington. Last year, the Bellevue contractor took top honors for another AMLI apartment project, in South Lake Union.

The ABC yesterday handed out 13 category awards to seven firms during a banquet at the Renton Pavilion Event Center. Donovan Brothers and Synergy Construction won three awards each; Rafn and SKIS Painting took home two apiece.

The judges this year were John Schaufelberger of the University of Washington, J. Carter Woollen of Woollen|Studio, Bobby Thomsen of CollinsWoerman, Daniel A. Swaab of Mithun and Benjamin Minnick of the Seattle Daily Journal of Commerce.

EAGLE OF EXCELLENCE • MIXED-USE CONSTRUCTION

AMLI Wallingford apartments Rafn Co.

Architect: GGLO

Engineer: Coughlin Porter Lundeen

Owner: AMLI Residential

ABC members: Davis Door Service; Evergreen Concrete Cutting; Pacific 1 Construction; Premier Builders; Propel Insurance; Rainbow Federal; RC Painting & Sons; Van-Well Masonry

Rafn began budgeting work for the 181,000-square-foot, 231-unit AMLI Wallingford apartments in 2014 when Seattle's building boom was at its height.

The initial budget, affected by both rising costs and the complex structure, was much higher than expected so Rafn came up with a value engineering and scope cut list. That resulted in more than 100 cost-reduction strategies totaling approximately \$1.2 million, making the project economically viable.

During permitting, AMLI voluntarily made major concessions to the design and configuration based on community input — adding a public plaza, moving the garage entrance, adding live-work units and minimizing the mass of buildings by creating a landscaped open area down the middle, and keeping the site of the Varsity Inn intact. AMLI also restored the quarter mile of streets and sidewalks surrounding the site, including those in front of the restaurant.

With all those changes, the design had to be completed on the fly, during construction. To make up for lost time due to labor shortages, Rafn phased the project delivery and pursued early occupancy, allowing the first phase to be occupied five months ahead of the last.

The north site had been an aircraft parts manufacturer and chemicals from the facility had leached into the soil. This required exporting 15,000 cubic yards of contaminated soil and installing treatment wells for an ongoing liquid injection system. Rafn also tied the parking garage foundation drainage system to the vapor extraction system to collect any vapors leaching from the soil.

The complex design accommodated open

Rafn came up with 100 cost-reduction strategies, saving about \$1.2 million for AMLI.



PHOTO BY MICHAEL WALMSLEY PHOTOGRAPHY

courtyards, exterior steel stairs, exterior bridges and connecting towers — all while maximizing building height and interior ceiling heights. The building also has multiple floor levels that closely follow the grade of the sloping site, with hallways on two or three different levels on any given floor. The complexity of the unit arrangement made materials handling difficult and the standard construction practice of stacking units impossible.

To manage these challenges, Rafn

employed 3-D modeling to understand the intricacies and visualize how it was meant to come together as well as discover, and correct, conflicts between structural beams and HVAC ductwork prior to construction.

Safety on this project took into account not only Rafn personnel and all of the subcontractors, but also pedestrians and vehicle traffic on the streets. In the 81,144 hours worked, there were three time-loss injuries and no incidents involving pedestrians or street traffic.

2017 ABC EXCELLENCE IN CONSTRUCTION AWARD WINNERS

Eagle of Excellence • Mixed-Use Construction

AMLI Wallingford apartments
Rafn Co.

Commercial Construction (over \$10 million)

Northgate Hampton Inn & Suites
Redhawk Group

Commercial Construction (\$1 million-\$5 million)

Poulsbo Retail
Donovan Brothers

Commercial Construction (under \$1 million)

Choux Choux Bakery tenant improvement
Synergy Construction

Community & Public Service

Sebastian Place Veterans Housing
Synergy Construction

Healthcare

Franciscan Medical Pavilion Auburn tenant improvement
Donovan Brothers

Tenant Improvement/Renovation

Seattle University Connolly Complex Title IX
Rafn Co.

Multifamily Construction

N23 micro apartments
Synergy Construction

Institutional Construction

Open air structure
Donovan Brothers

Historic Preservation/Restoration

Washington Hall
SKIS Painting

Electrical Construction

Living Computer Museum
SME Inc. of Seattle

Mechanical Construction

Tacoma Medical VAV RTU replacement
Air Systems Engineering

Specialty Contracting: Exterior

Department of Ecology headquarters repairs
SKIS Painting

ABC AWARDS

COMMERCIAL CONSTRUCTION OVER \$10 MILLION

Northgate Hampton Inn & Suites

Redhawk Group

Architect: Jensen/Fey Architecture & Planning

Engineers: Frank Co. Structural Engineering; Blueline Group; Abossein Engineering

Landscape architect: Thomas Rengstorff & Associates

Owner: Northgate Lodging LLP (Gramor Development Washington)

ABC members: Advanced Interiors; Electri-City; Premier Builders; Sound Glass; United Systems Mechanical

Gramor Development Washington hired Redhawk Group to build the six-story, 167-room Hampton Inn & Suites hotel in the Northgate area. Construction began in May 2015 at the height of Seattle building boom, putting a great deal of demand on subcontractors.

Redhawk worked with the design team, management, ownership and the subcontractors to develop a plan to overcome issues and schedule crunches in order to meet the project deadline.

Another major challenge was coordination with the massive Sound Transit tunneling project across the street. Through multiple meetings, Redhawk, Sound Transit and the

city of Seattle determined how they would approach construction to have the least impact on the neighborhood. Coordination of the traffic control and right of way revisions and restrictions were reviewed almost daily. Truck deliveries were managed to avoid a backup of construction vehicles on the arterial roadway or disruption of transit buses that use First Avenue Northeast.

Redhawk worked closely with the design team through the staged permitting to address questions of ongoing design and constructability to stay on top of the process.

The hotel has a mix of king, double queens, king studios and handicap-accessible rooms. The first floor includes the lobby, a market, banquet and dining areas, meeting rooms, a fitness center, and a pool and spa. The site has an urban garden.

As the project neared completion, Redhawk coordinated with the owners, the Hilton brand, the hotel operator and the furniture/fixture/equipment vendors to ensure their safe on-site presence while completing final building inspections, punch list work and final cleaning.

The project was completed on time for the scheduled opening on Nov. 30, 2016. There were two minor injuries in the 30,513 total hours worked.

Construction took place during the height of the building boom, putting high demand on subcontractors.



PHOTO BY DAVID PAUL BAYLES

COMMERCIAL CONSTRUCTION \$1 MILLION TO \$5 MILLION

Poulsbo Retail

Donovan Brothers

Architect: Helix Design Group

Engineer: Barghausen Consulting Engineers

Owner: Olhava Group 3H & 3I LLC

ABC members: AM Exteriors; Parker, Smith & Feek; Sound Glass; Star Rentals

The commercial real estate broker who sold the 3-acre property for Poulsbo Retail to the developer recommended Donovan Brothers to build the retail complex. A car wash and major tenants Starbucks and AT&T had already signed leases, necessitating the contractor to coordinate the requirements of each tenant's space needs.

The project's completion date was driven primarily by Starbucks' grand opening set for late March 2016. Unfortunately, construction wasn't started until September 2015, causing Donovan Brothers to miss the mild, dry summer months and build the project in one of the wet-

test winters in Washington's history. The wet weather presented great challenges to site work and construction. Both Starbucks and the car wash required vaults and utilities, and when installed, the vaults filled with water and required dewatering.

The framed retail building totals 8,481 square feet and consists of five spaces occupied by Starbucks and AT&T. The 3,000-square-foot car wash with five vacuum stations completed Donovan's work.

The finished wood-frame structure has CMU veneer and Hardie lap siding. Board and batten siding was installed in accent locations. Two towers with exposed glu-lam beams were built at the Starbucks and the car wash. Donovan Brothers self-performed the placement of the glu-lam beams for the towers.

With effective planning, communication and scheduling, the project was completed early and within budget. There were no time-loss or medical injuries during the 2,872 hours worked.



The car wash has exposed glu-lam beams.

PHOTO FROM DONOVAN BROTHERS

ABC AWARDS

COMMERCIAL CONSTRUCTION UNDER \$1 MILLION

Choux Choux Bakery tenant improvement Synergy Construction

Architect: 2812 Architecture

Owner: Scott Schreffler

ABC members: Ahlers & Cressman; Dexter + Chaney; Propel Insurance; Safety Matters

Choux Choux Bakery is the first retail space in the Market at Potlatch Place, an indoor farmers market at the Potlatch mixed-use project in Everett.

Synergy Construction worked with Path America Farmers Market LP, the architect and consultants to develop a cohesive plan for the design, layout and construction budget. Synergy's team worked with the owners on interior finishes and the construction schedule, and then installed the interior wall finishes, cabinet cladding, and old growth wood beams.

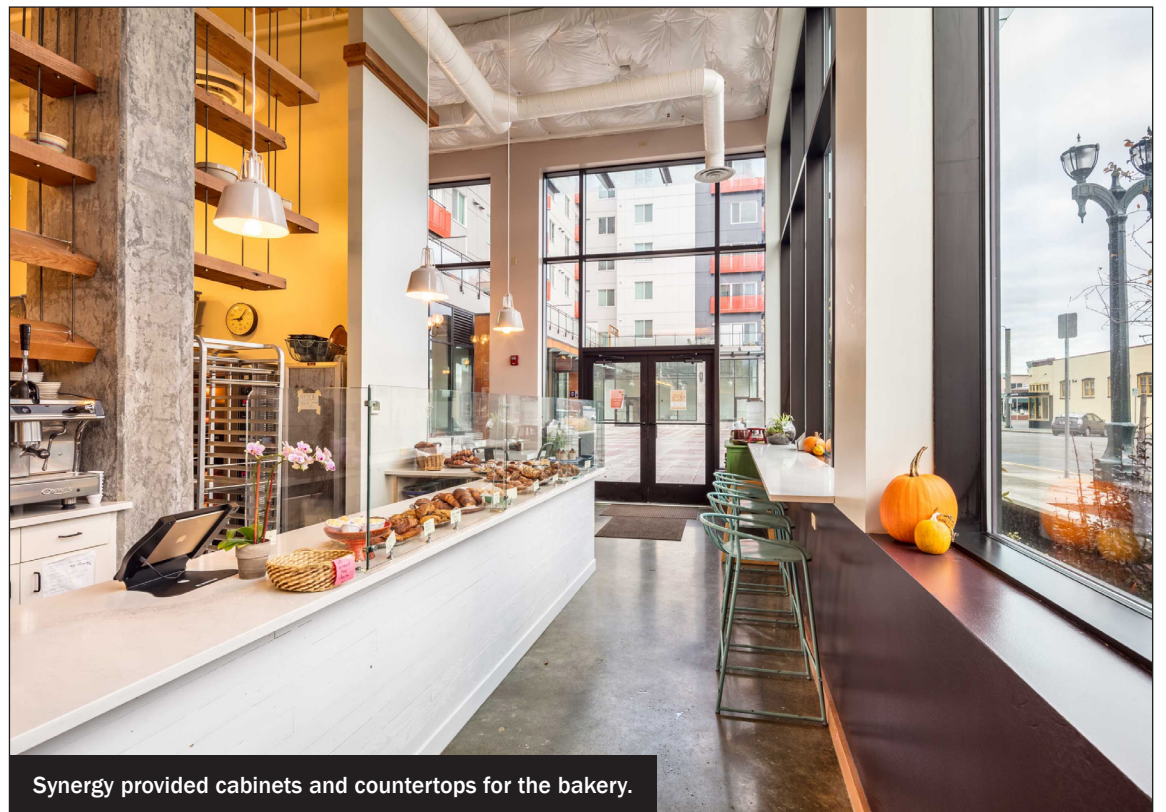
Because this was a new building, the scope of the project included polishing concrete floors, layout and core drill-

ing of the post-tension slab for the plumbing rough in, ensuring sound insulation at party walls, painting, and framing the non-bearing metal studs. Crews also installed drywall, MEP and HVAC systems, fire sprinklers, light fixtures, outlets and HVAC diffusers.

Synergy provided the cabinets and countertops and installed the owner-provided sinks and kitchen equipment.

The Synergy team dealt with a unique challenge when, prior to the bakery build out, the building went into receivership. Synergy built the mixed-use building and knew the development team well, but the receivership required that Synergy agree to payment terms before moving forward with the new work while old balances from prior to the receivership were still outstanding.

Synergy completed the 1,088-square-foot retail space on budget with minor delays caused by the receivership. There were 231 hours worked with no recordable or lost-time accidents.



Synergy provided cabinets and countertops for the bakery.

PHOTO BY FRANCIS ZERA PHOTOGRAPHY

COMMUNITY & PUBLIC SERVICE

Sebastian Place Veterans Housing Synergy Construction

Architect: Tonkin Architecture

Engineer: Nouwens Structural Consultants

Owner: Catholic Community Services of Western Washington

ABC members: Ahlers & Cressman; Dexter + Chaney; Electricity; Pacific 1 Construction; Propel Insurance; Safety Matters

Sebastian Place is a 20-unit apartment complex in the heart of Lynnwood for formerly homeless veterans. It provides a safe haven for the veterans and is the first of its kind in Snohomish County.

The project is a partnership between Catholic Community Services of Western Washington, Snohomish County and the Veterans Administration.

Three of the four one- and two-story buildings are slab-on-grade wood-framed buildings that house studio dwellings. The fourth houses the community laundry and kitchen, plus storage and office space for Catholic Community Services staff.

Synergy Construction worked with the owner, architect and consultants to exceed the project goals. It was built to the

Evergreen Sustainable Development Standard, a green building performance standard required for all projects receiving funds from the Washington State Housing Trust Fund. The standard is designed to safeguard health, increase durability, promote sustainable living, preserve the environment, and increase energy and water efficiency.

A stringent air barrier system required daily inspections and open communications with various subcontractors to ensure that problems were averted or solved immediately.

Challenges to the project included numerous buried and partially buried utilities, old mobile home foundation pads, and two previously unknown abandoned septic tanks that had to be removed during the course of construction. Synergy also hit an unknown 2-inch water line that had to be shut down and repaired by the Alderwood Water District. Although the line was shut down quickly, it still flooded a 3-by-75-foot ditch. Fortunately flooding was confined to just the project site and the incident caused no project delays.

Despite the challenges, the project was completed ahead of schedule with no time-loss or medical injuries during the 6,243 hours worked.

Sebastian Place provides 20 units of housing for formerly homeless veterans.



PHOTO BY FRANCIS ZERA PHOTOGRAPHY

ABC AWARDS

HEALTHCARE

Franciscan Medical Pavilion Auburn
tenant improvement
Donovan Brothers

Architect: CollinsWoerman
Owner: CHI Franciscan Health
ABC member: Parker, Smith & Feek

After learning that Donovan Brothers had developed the site, built the shell, and completed a number of other tenant improvements in the Franciscan Medical Pavilion in Auburn, Franciscan asked Donovan to bid on the contract to build out a 1,600-square-foot space.

The technologically advanced facility offers state-of-the-art 3-D mammography screening and DEXA bone imaging scans. The primary function of the clinic is to provide early detection of cancer while creating a more comfortable and efficient screening experience for patients.

Donovan began work in Decem-

ber 2015 and had to finish by May 10, 2016, when the first patients were scheduled for appointments.

The space includes a reception area, two restrooms, two dressing rooms, a break room, three storage and laundry rooms, an office and two exam rooms.

Luxury finishes and specialty equipment added to the complexity of the project. Level four gypsum wallboard was installed throughout and bathrooms were hand-tiled. A Douglas fir slat ceiling was installed above the reception desk, which has quartz countertops and facing. LVT plank flooring was installed and plastic laminate faux wood cabinetry was used throughout.

Donovan also installed all of the medical equipment, including the DEXA and 3-D mammography machines.

Donovan completed the project on time and on budget. There were no medical or time-loss injuries in the 1,427 hours worked.



A Douglas fir slat ceiling was installed above the reception desk.

PHOTO BY ROGER TURK NORTHLIGHT PHOTOGRAPHY

TENANT IMPROVEMENT/RENOVATION

Seattle University
Connolly Complex Title IX
Rafn Co.

Architect: Gensler
Engineer: Arup
Owner: Seattle University
ABC members: NorthStar CG; Propel Insurance

Rafn Co. completed the Seattle University Connolly Complex Title IX tenant improvement on a tight schedule while the busy facility was occupied.

The project enhances Seattle University's game day experience for women's basketball and volleyball programs to match those of the men's (NCAA Title IX).

There were three main areas of work. The first was a new ground-up steel pavilion with a concrete and steel ramp that guides athletes, fans and guests to a new second floor entrance to the renovated sports facility.

The second phase included demolition and reconfiguration of corridors, concessions and locker rooms, and the addition of public restrooms.

The third phase involved demolition, replacement and reorientation of the existing North Court including new bleachers, painting and a state-of-the-art audio/visual system with a new video board.

The new entry pavilion is not only a new access but is also an architectural work of art. The exterior consists of a custom "box"



The entry pavilion was built with 140 metal cassettes that fit precisely into a structural grid.

PHOTO BY HEYWOOD CHAN

containing 140 metal cassettes that fit precisely into a structural grid. Each cassette has a custom laser cut pattern that required exacting attention to detail and installation into the correct location. To manage time, reduce cost and ensure quality, Rafn powder-coated the entire steel frame and all the cassettes off-site before installation. This allowed for winter installation, thereby saving time and money.

The onyx-colored concrete was a structural design element that required six mock-ups and continuous testing to ensure that it

met structural requirements and provided the specified color finish.

The main court reorientation plan had to be modified when the original plan to restripe the existing floor did not meet the Title IX goals. Instead, Rafn demolished the existing wood floor and installed a new floor system while creatively maintaining ADA access by replacing the existing rubber ramp system at the entrances.

The common areas, amenities, locker rooms and athletics offices required coordination with multiple decision makers. For example, Rafn originally installed

the locker room shower heads at the standard height, but on a walk-through the athletics representative realized that they were too low for basketball players so the heights had to be changed.

The project was started on June 6, 2015, with the goal of being completed in time for the Dec. 19 women's basketball team's first game. To meet that date, Rafn split the project into two phases to allow the use of the basketball court before the pavilion portion was complete. To get the fire inspector's sign-off on that plan required that

Rafn and McKinstry, plus the plumbing, HVAC and fire sprinkler subcontractor, work over a weekend to install additional pipes. Also, the painting subcontractor, Fawcett, repainted everything to meet the schedule.

Rafn has done many projects at Seattle University over the years, but this was by far the largest. Throughout all three areas of construction Rafn kept the rest of the building functioning, even during intensive and invasive work.

Rafn had no medical or time-loss injuries in the 15,477 hours worked.

ABC AWARDS

MULTIFAMILY CONSTRUCTION

N23 micro apartments

Synergy Construction

Architect: Studio 19 Architects

Engineer: Michael Nouwens Structural Consultants

Owner: GLP Holdings LLC

ABC members: Ahlers & Cressman; Dexter + Chaney; Propel Insurance; Safety Matters

N23 micro apartments is a 23-unit building in Seattle's University District designed in a modified triangle shape to fit its 3,300-square-foot lot.

The four-story, wood-frame structure houses micro apartments, each with its own bathroom. Tenants share a kitchen, laundry and mail facilities on the first floor.

GLP Holdings, Synergy Construction and Studio 19 Architects collaborated during the 14-month project to complete a high-performance, LEED silver certified affordable housing property. The team worked through preconstruction and design in order to maximize the available resources. In addition, the team produced a flexible plan for deliveries, traffic control and site safety.

Exterior finishes are a combination of stucco and metal siding. The structure also has an exterior steel stairway as a second egress and contains a fire sprinkler system. A bio-retention system that includes a planter and pervious pavers for the hard-scape allows for natural water infiltration.

Even with its modern design, energy efficiency and architectural features that are on par with a much more expensive building, it is the most affordable new apartment building in the University District.

Synergy completed the project on time and had no medical or time-loss injuries during the 5,008 hours worked.

N23 was built on a tight 3,300-square-foot site in the University District.



PHOTO BY FRANCIS ZERA PHOTOGRAPHY

INSTITUTIONAL CONSTRUCTION

Open air structure

Donovan Brothers

Architect: BPH Architects

Engineer: DCI Engineers

Owner: New Community Church

ABC members: SKIS Painting; Parker, Smith & Feek

The New Community Church was founded in 1993 and has worked steadily on completing the master plan for the church grounds.

Located on the historic Olson Mansion property in Maple Valley, the grounds include the old mansion and a refurbished barn that is used for regular worship services. Donovan Brothers was hired in the fall of 2015 to build a convertible gathering place for the congregation that is adjacent to the manor and barn.

The open air structure was designed to be used year-round. It has custom fabricated aluminum bi-fold doors that were sourced in Wisconsin and installed along the exterior of the structure. The doors differ from commercial rolling doors because they collapse in the center and fold up to form canopies around the

Board-on-board siding was stained to match the rustic look of an adjacent barn.

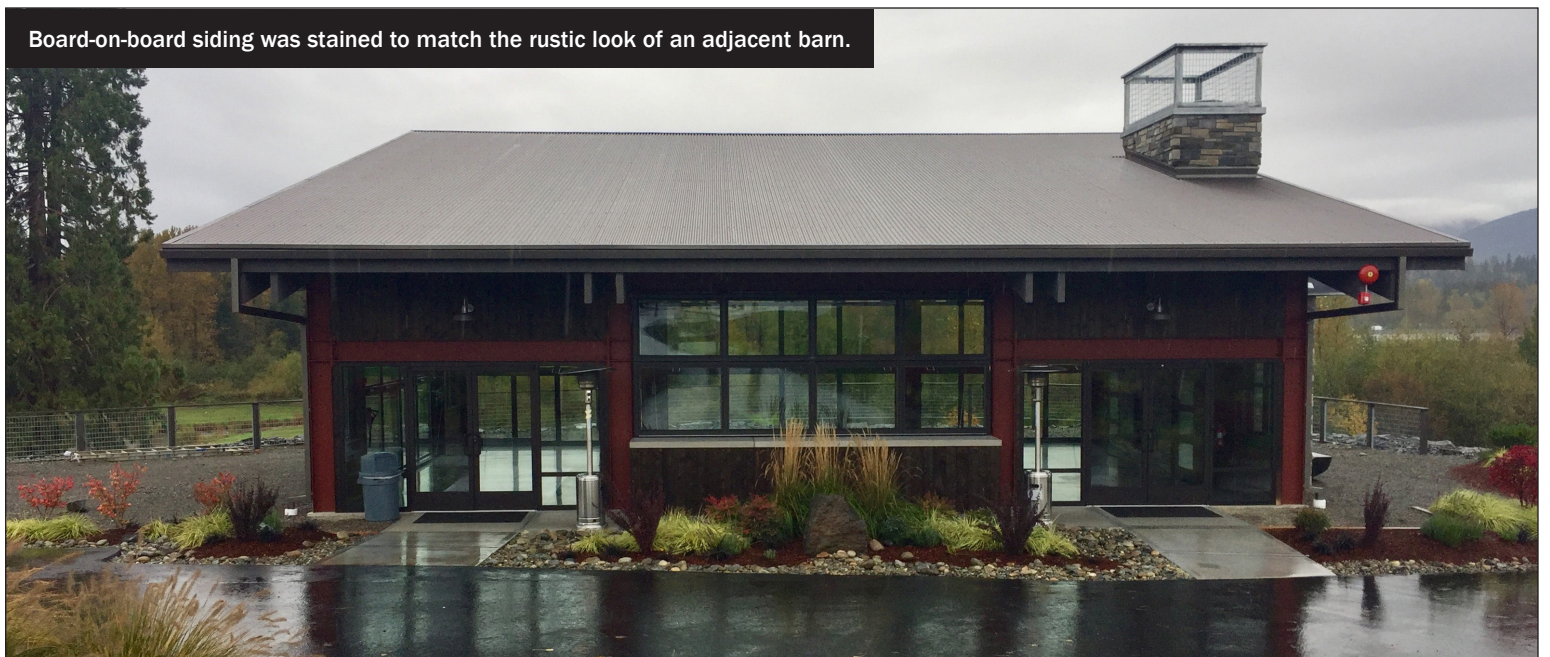


PHOTO FROM DONOVAN BROTHERS

building. The closed doors allow for a 360-degree view outside because they are styled with large glass windows.

Church representatives wanted the structure to complement the barn. That was done with board-on-board siding stained with a

homemade mixture of vinegar and steel wool to match the rustic look of the barn.

The building has a back-to-back interior/exterior fireplace made of CMU and stone. The exterior features a 7-foot-wide-by-5-foot-tall fire box and the

interior has a Heat & Glo natural gas fireplace.

The main challenge of the project was building it during an extraordinarily wet winter. To meet a strict schedule to complete the building in time for Easter service in 2016, the team

poured the slab on schedule and then worked through weekends and took advantage of every good weather opportunity to finish it on time and on budget. There were no medical or time-loss injuries during the 2,872 hours worked.

ABC AWARDS

HISTORIC PRESERVATION/RESTORATION

Washington Hall SKIS Painting

General contractor: Lydig Construction

Architect: Ron Wright and Associates

Owner: Historic Seattle

Washington Hall was built in the early 20th century as a fraternal lodge and dance hall. Located in Seattle's Central District, it was used over the years as a center for social and cultural activities for various ethnic groups, as well as a music venue for such artists as Billie Holiday, Duke Ellington and Jimi Hendrix. The hall fell into disrepair over the last two decades, and to save it from possible demolition, Historic Seattle, with the help of 4Culture, purchased the building in 2009 and set an ambitious course to renovate the building.

The \$9.9 million project has been supported by city, county and state agencies, local foundations, and corporations and individual donors, culminating in November 2015 with a \$968,000 grant from King

County and 4Culture's Building for Culture program. Restoration incorporated seismic upgrades that include a new roof and securing the south wall. The hall is now fully accessible with the addition of an elevator. Floors were refinished, the stage was enhanced and new lighting was installed.

SKIS Painting started work after the building was stabilized and the roof replaced. As is common with historic renovations, as the project evolved, the scope was ever-changing to meet new challenges that arrived almost daily.

Raw and unsealed surfaces were primed, and the existing trim was sanded to ensure proper adhesion and to remove the runs and fat edges from previous paint jobs. One unique challenge was to stain and apply a clear coat to some newly installed fir adjacent to some very old trim, requiring Skis to apply numerous light coats of amber shellac until the colors matched.

The paints used in this project were chosen for versatility, durability and ease of application. They also have great gloss



Part of the renovation involved painting the 30-foot-high auditorium ceiling.

PHOTO BY TIM RICE PHOTOGRAPHY

retention, are easy to clean, and have excellent mold and mildew resistance. To ensure compliance with both the client and PDCA standards for a properly painted surface, samples were made and submitted for approval. Due to the age of existing walls and trim, the SKIS team made multiple other samples on site to develop a benchmark.

One challenge was painting the 30-foot-high auditorium ceiling using rolling scaffolding. The lead painter painted from the scaffolding platform while a ground crew moved the scaffolding along and ensured that the floor was clear of obstacles. The hanging stage lighting, which was badly rusted, had to be cleaned, primed and painted as

part of the ceiling painting.

The entire project required precise planning and coordination with other trades to facilitate a smooth work flow. Despite the numerous challenges, SKIS completed the project on time and within budget. There were no recordable incidents or injuries in the 2,040 hours worked.

ELECTRICAL CONSTRUCTION

Living Computer Museum SME Inc. of Seattle

General contractor: Abbott Construction

Architect: Tiscareno Associates
Engineers: DCI Engineers; Case Engineering

Owner: Cedarstrand Properties LLC/Vulcan

ABC members: Preferred Electric; Safety Matters; Tradesmen International

SME Inc. of Seattle has worked with the Living Computer Museum on a number of projects, dating to early 2012. The final phase of this project was the buildout of the first-floor museum space that contains exhibits on robotics, video game creation, self-driving cars and virtual reality.

The project included the design-build installation of LED lighting, general lighting, display track lighting, a hand-blown custom chandelier in a featured stairwell, a special "Hello World" sign, lighting control system, power outlets located throughout for museum displays and labs, a unistrut grid to support track lighting and sign displays, power connections to mechanical equipment, voice and data

communications, fire alarm system upgrades, and relocation of several electrical branch circuit panels.

SME began the project by demolishing the existing electrical and then installing surface-mount branch conduits and boxes. Second was installing ceiling supports for data cabling and fire alarm, and supports for the unistrut grid system — both of which had to be completed before acoustical spray insulation could be applied on the ceiling.

As a design-build project with a fast start, the electrical drawings were still in design during the initial stages of the project and evolved as the museum exhibit spaces developed.

This was a first-of-its-kind museum so SME, the general contractor, design team, project owner and museum staff met continuously to flesh out the design requirements and ensure that the team was in-sync in the rapidly changing exhibit environment. As museum staff solidified their exhibit plans, SME commenced with routing pathways for power and lighting without a completed design, and developed the mission-critical lighting control plan that need to be flexible as exhibits would change.

The contractor removed a non-

working elevator and installed a stairway to connect the first and second floors. The centerpiece of the stairway is a custom blown glass light fixture, designed and built by Julie Conway from Illuminata. SME worked closely on site with Illuminata to create the artistic look that the museum sought. The challenges and design modifications delayed the installation, allowing SME only three days to erect scaffolding, install the fixture, and remove the scaffolding as the museum was already open.

Near the project's end, the museum asked SME to install the featured "Hello World" LED letters that are noticeable upon entering the space. Because the sign was unplanned, there was no control circuit for it and SME's field staff suggested using a wireless control device that receives a signal from the lighting control panel. This elegant solution provided what was needed to automatically operate the LED letters.

SME's experienced superintendent and open lines of communication between all of the design, construction and museum staff resulted in a successful on-time delivery despite numerous additions to the project scope. There were no medical or time-loss injuries during the 7,187 hours worked.



This LED sign was added during the final stages of the project. Since no control circuit was planned for it, SME staff suggested using a wireless controller.

PHOTO BY DARIO IMPINI PHOTOGRAPHY

ABC AWARDS

MECHANICAL CONSTRUCTION

Tacoma Medical VAV RTU replacement

Air Systems Engineering

General contractor: Air Systems Engineering
Owner: HR Acquisitions I Corp. (managed by Healthcare Realty Services)
ABC member: Star Rentals

Air Systems Engineering designed and installed the original HVAC system for Tacoma Medical in the early 1990s.

Since then the building was leased to new tenants and the spaces have undergone massive floor plan modifications. In addition, the ownership of the building had changed and the new tenants hired a general contractor that used a different mechanical and controls subcontractor to do the tenant improvement work.

Air Systems Engineering negotiated with the new owners to replace the primary HVAC systems and front-end controls system, which mandated a good deal of coordination

between the mechanical and controls contractors performing the tenant improvement work.

The project was a perfect application for the design-build process as it would minimize potential delays and Air Systems Engineering would have the flexibility to work in alignment with the TI contractor. As Air Systems Engineering has been the key service provider for the building, it ensured that all details were covered and allowed everything from critical lifts to the controls integration of the new tenants to be streamlined.

The field team's prefabrication of the larger roof-mounted duct systems helped speed the installation up so that none of the tenants experienced any downtime. The success of this project has led to many addendums to the preexisting maintenance agreements, as well as future construction opportunities.

There were no medical or time-loss injuries during the 1,021 hours worked on the project.

New HVAC equipment was lifted to the roof.



PHOTO FROM AIR SYSTEMS ENGINEERING

The building's exterior was cleaned and joints were resealed.



PHOTO FROM SKIS PAINTING

SPECIALTY CONTRACTING: EXTERIOR

Department of Ecology headquarters repairs

SKIS Painting

General contractor: SKIS Painting
Architect: KMB
Engineer: Weatherholt and Associates
Owner: Washington State Department of Ecology
ABC members: Moss Adams; Propel Insurance

The state Department of Ecology, acting through the state Department of Enterprise Services, contracted with SKIS Paint-

ing to clean, seal and repair the exterior of its headquarters in Lacey.

The project involved cleaning the building exterior, repairing spalled concrete on a concrete panel, prepping and injecting nearly 500 lineal feet of epoxy into cracks of the precast panels, removing old silicone sealant joints and preparing the joint surface for new sealant, and removing and replacing seismic joints in two locations.

Ecology's desire to use non-chemical cleaning methods made cleaning the biologic growth that was well-adhered to the building a challenge. SKIS

had to pressure wash the building uniformly as the water repellent/final coat was clear and pressure washing inconsistencies would be visible and sealed over.

SKIS hired Contech Services to inject epoxy into 390 lineal feet of cracks in the building's surface. Contech also removed existing crack repair materials that were failing, and in some cases, falling out. The approximately 750 lineal feet were then repaired with a sanded sealant joint to match the limestone color of the precast panels.

SKIS cut and removed all vertical and horizontal joints, as well

as all window perimeter joints, and prepped the raw concrete and window frames for an appropriate profile. All raw tilt seams were prepped and filled with new backer rod, and all joint sealants were replaced on the entire south and west elevations of the facility.

Sealant was applied per specifications to produce uniform, cross-sectional shape and depth, and to directly contact and fully wet all joint sides and backer material, completely filling recesses in joint configuration. Evonik Aqua-Trete SG was applied to all but the glass and aluminum surfaces.

In-progress monitoring was performed multiple times a week by Weatherholt and Associates, and SKIS passed all non-destructive and destructive field adhesion testing.

To complete the project, SKIS supervised Olympia Sheet Metal's installation of the sheet metal cap and the traffic coating application at the lower window in-covers.

The project was completed with an extended deadline due to weather delays and was under budget by more than \$150,000. There were no medical or time-loss injuries in the 2,986 hours worked.

SURVEYS

STONEWAY CONCRETE

Specialty: Ready-mix concrete
Management: Greg McKinnon, operations manager
Founded: 1928
Headquarters: Seattle
2016 revenues: N/A
Projected 2017 revenues: N/A
Projects: Southport Hyatt Regency Lake Washington hotel, Renton; Tilt49 office building, Seattle

Greg McKinnon, operations manager at Stoneway, answered questions about his company.

Q: What type of projects is Stoneway focusing on?

A: Commercial buildings (office, hotel) and multifamily (apartments).

Q: Has Stoneway shifted its focus to any new sectors in recent years?

A: No.

Q: Stoneway has been in business almost 90 years; what are the keys to your success?

A: Family values, developing long-term relationships, focusing on providing great customer service and the highest quality products; and hiring the best people.

Q: Name one interesting project Stoneway has worked on recently.

A: Elliott Bay Seawall.

Q: What sort of challenges did Stoneway run into on the seawall project?

A: We did not have any challenges on the seawall. It was a pretty straight forward project from our perspective.

Q: How has Stoneway responded to the increase in construction activity in recent years?

A: We have hired staff to return to 2008 levels.

Q: What is your staff level?

A: We are currently around 130 employees.

Stoneway supplied concrete for the Elliott Bay Seawall project in Seattle.

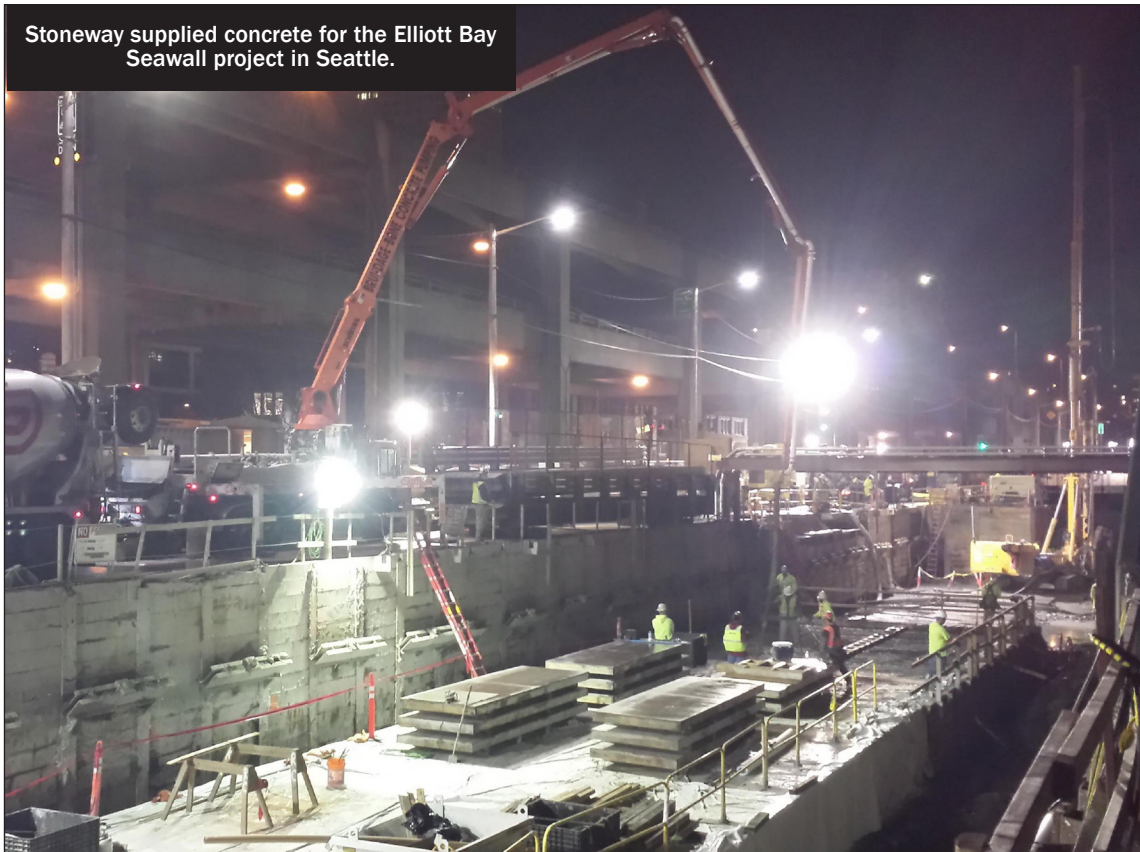


PHOTO FROM STONEWAY CONCRETE

COLVOS CONSTRUCTION

Specialty: Tenant improvement, multifamily, commercial office, hospitality, design/build
Management: Devin Page, president
Founded: 2017
Headquarters: Tacoma
2016 revenues: N/A
Projected 2017 revenues: \$10 million
Projects: Infoblox tenant improvement in downtown Tacoma; parking lot upgrades for El Centro de la Raza's Beacon Hill mixed-use development in Seattle; 40 small efficiency dwelling units for Kamiak Real Estate in the University District of Seattle

President Devin Page answered questions from the DJC about his new construction company, which was named after Colvos Passage in Puget Sound.

Q: You are a new firm. What is your background?

A: Anders Bjorn, Colvos Construction vice president, and I have been in commercial construction in the Puget Sound region since the early 2000s. We began our careers as project engineers for growing and large-scale companies, including Skanska, Turner and Andersen, which is where we first worked together. Anders was a project manager in the emergent special projects division that I was responsible for growing. In 2013, I left Andersen to lead the construction arm of

a South Sound developer and increased its revenue and staff size by 300 percent.

Participating in the strategic deployment at the executive level for established companies has given me the skills to develop and run a successful construction company. Our combined experience shapes the strategy that we live by at Colvos Construction: Bring on the most talented team members in the region and focus on adding value for our clients.

Q: What are the biggest issues in your industry?

A: There's fewer subcontractors available than in the last economic cycle, which we feel results from an exodus of skilled labor during the recession and a lack of positive outreach from the trades to millennials. Likewise, local universities produce a fraction of construction management graduates that were produced in previous decades, creating a hiring frenzy for competent superintendents and project engineers. The result is severe cost escalation, schedule delays and talent entitlement. We mitigate this challenge by working with subcontractors we know and trust and by hiring only reputable, vetted team members.

Q: In which sectors are you see-

Colvos Construction is doing tenant improvements for Infoblox to expand its office in downtown Tacoma.



PHOTO FROM COLVOS CONSTRUCTION

ing, or expect to see, growth or a slowdown?

A: Multifamily and mixed-use will continue to dominate the market, but we anticipate a change in popular development project types. Since many of the larger sites have been built in this cycle, we see infill projects and renovation of B and C product in the urban areas of Seattle and Tacoma becoming more attractive to developers. Senior housing and assisted living will also continue sharp growth rates, as more national operators enter the region.

Q: How has design-build changed how jobs get done; where are you using it?

A: Design-build effectively reduces the risk of last minute cost escalation to the owner. Not only are the design and engineering consultants involved from the onset of the project, but so are the subcontractors, allowing us to proactively identify and mitigate any future pain points in construction. Typically on our multifamily projects we design-build the shoring, plumbing, fire sprinkler, HVAC, electrical and fire alarms.

Q: How are rising land costs in Seattle affecting what gets built?

A: Land price escalation is certainly delaying or canceling some projects in Seattle, but savvy local owners who can manage versatile product types will continue to purchase land and move forward with development. Many are exploring submarkets like Bothell, Shoreline, Tukwila and Tacoma. Likewise, with the progressive increase in allowed heights for new development in many Seattle neighborhoods, we're finding that more SEDU (small efficiency dwelling unit) projects pencil and will be built.

SURVEYS

COMPASS GENERAL CONSTRUCTION

Specialty: Multifamily and senior housing

Management: Dan Selin, president; Peter Anderson, vice president; Bob Strum, vice president

Founded: 1998

Headquarters: Kirkland
2016 revenue: \$200 million
Projected 2017 revenue: \$250 million

Projects: Main Street Apartments, Kirkland; Elan Uptown Flats, Seattle; Aegis at Ravenna senior housing, Seattle

Compass Vice President Bob Strum chatted with the DJC about his new position at the company, the residential construction surge and other topics.

Q: You're going to become president of Compass in 2018. What opportunities do you want to pursue?

A: The initial priority for me is to continue building on our strong company culture with this amazing group of co-workers! Our teams do a fantastic job of consistently delivering quality projects for our owners.

Opportunities we are pursuing relate to strengthening our great owner and subcontractor relationships to ensure we are meeting their objectives, and helping them plan strategically for future projects.

Q: How have you been keeping

pace with the surge of residential construction?

A: We haven't attempted to keep pace with the surge! Compass is focusing its resources on delivering an exceptional owner experience, not chasing additional volume. Our workload is directly indexed by the capacity of our existing teams.

Q: What's the company's biggest cost-related concern?

A: Like everyone else, our biggest cost-related area of concentration is in the escalating cost of labor without a commensurate increase in quality/experience.

I am keenly focused on our subcontractors and working to ensure clear communication and expectations while remaining nimble enough to respond to their needs if a challenge presents itself.

Q: What's your outlook for multifamily construction 3 to 5 years from now?

A: I believe that the pace of development may slow somewhat, due to permitting challenges and incremental tightening from lenders. This would be a welcome opportunity for the local market to catch its breath, settle down a bit and get healthier.

The passage of ST3 has opened up substantial areas of (comparably) affordable land



Main Street Apartments is a 128-unit mixed-use project in Kirkland that Compass is building for Continental Properties.

PHOTO COURTESY OF COMPASS GENERAL CONSTRUCTION

that is well-suited to multifamily development. Due to the vibrant businesses that are continuing to grow in Seattle, I anticipate a healthy construction market for the next three to five years.

Q: What's an interesting trend, and what does it mean for your

firm?

A: I'm really fascinated by the new people that are coming into our industry.

I am regularly impressed, especially by our younger people who have fantastic drive combined with curiosity, and their ability to look at processes and tech-

niques from a completely different perspective. Their fresh ideas, enthusiasm, and a fearless approach to hard work contradicts the millennial stereotype we've all heard about.

I'd put our younger people up against anyone, they will figure out how to win every time!

RAFN CO.

Specialty: General contractor specializing in commercial and multifamily projects

Management: Shawn Rhode, CEO; Marc Victor, CFO; Heather Bunn, vice president

Founded: 1978

Headquarters: Bellevue
2016 revenue: \$52 million
Projected 2017 revenue: \$70 million

Projects: The Eddy at Green Lake Village, Seattle; Home-Street Bank headquarters tenant improvement at Two Union Square, Seattle; Broadacres office building seismic retrofit, Seattle

Heather Bunn, vice president of Rafn Co., shared her thoughts about the company's top challenges and trends she sees affecting the construction industry.

Q: What are Rafn's top challenges these days?

A: We worry most about the impact of overstretched subcontractor resources and labor

on jobsite safety. An increased emphasis on safety is the top priority of leadership.

Our second big concern is recruiting without poaching. We need to add a few good people but are trying hard not to rob our competitors of experienced resources.

The third concern is the degree to which construction costs are escalating. Increasing pressure on labor and the demands on resources are impacting costs beyond a sustainable level.

Q: How do you see local economic conditions shaping up over the next few years?

A: The "experts" seem to be telling us that there are enough new jobs in our region to fuel the growth we are seeing, but I have to believe there is a point where rising costs, a little inflation and tighter lending requirements will slow things down to a more manageable level.

Q: Which area of your business would you like to bring more focus on?

A: That's a tough question. We have a very balanced portfolio of projects right now — private

and public, new and renovation, large and small.

If there was one area, I guess it would be in sustainability — the deep green variety. Everything we do has some element of sustainability to it but we haven't done an IslandWood or Terry Thomas office-type project in several years.

Q: What's your staffing trend? Any changes coming?

A: We are in active recruitment mode, which is unusual for us. We are hiring at all levels including craft and labor.

We are known for our tenured staff and so recruiting for us is a serious and intensive process. We spend our time finding the right candidates, people we want to have on board for the long haul.

We are also seeing plenty of opportunity for internal promotions both as a result of the market and a result of seeing some folks retire.

Q: What's something about the construction industry that's gotten better (or worse) in recent years?

A: Reliably predicting project



Rafn finished AMLI Wallingford, a 236-unit apartment in Seattle.

PHOTO BY MICHAEL WALMSLEY

start dates has definitely gotten worse. It seems that every project has trouble closing, and banks are taking construction loans much more seriously.

That said, the professionalism that is built into construction management these days should be making the industry a more

desirable career path for young people.

We certainly also see a more diverse workforce emerging from the younger generations. We are also finally seeing technology finding its highest and best use on projects, and as a result some best practices are becoming the norm.

SURVEYS

GLY CONSTRUCTION

Specialty: High-tech corporate office projects, mixed-use developments; facilities that support health care, life sciences, education and senior living

Management: Jim Karambelas, CEO; Ted Herb, president; Mark Kane, COO; Steve Peterson, CFO

Founded: 1967

Headquarters: Bellevue

2016 revenues: \$533 million

Projected 2017 revenues: \$537 million

Projects: 74,300-square-foot middle school for Seattle Academy of Arts and Sciences; Two Lincoln Tower luxury apartments in Bellevue for Kemper Development Co.; shell and core of Vulcan's 1.1 million-square-foot mixed-use development along Mercer Street in Seattle

COO Mark Kane answered questions from the DJC about his firm and issues in the industry.

Q: What are the biggest issues in your industry?

A: How to grow responsibly, while continuing to deliver projects with the nimbleness, cost effectiveness and quality we are accustomed to. Strong technical and relational skills needed to excel are in short supply. We must take on only the work we can responsibly deliver.

Capacity constraints for sub-

contractors and suppliers, and the availability of experienced, skilled tradespeople are equally tempering our industry's ability to respond. At the same time, technology greatly leverages our ability to effectively manage complex projects on compressed schedules. To do this we need a highly educated, highly experienced workforce that takes time and great investment to grow. The supply chain to our industry was greatly impacted by the Great Recession and is only now rebounding.

Q: Which sectors are growing and which are slowing?

A: We continue to see strong demand in technology office, urban residential, small and mid-size health care, adaptive re-use, life sciences, lifestyle center related retail and hospitality, and education — in the public and private sectors. Senior living projects are starting to re-emerge locally.

We are starting to see a slowdown in high-rise apartment construction and speculative office development projects without significant pre-leasing. Many major health care projects are stalled by the uncertainty created around government support, and also the ongoing consolidation in their industry.

In the second quarter, GLY will start the shell and core of Vulcan's four-building development along Mercer Street in Seattle. There will be offices, apartments, dining and shopping.



IMAGE COURTESY GRAPHITE DESIGN GROUP

Q: You have done a number of senior housing projects. What is trending there?

A: The move to aging in place has created an industry in itself — properly supporting people who want to age in the comfort of their own homes. The industry is reorganizing itself around this fundamental change in demographics and desires from this community. We see projects that are deliberately lifestyle focused, with amenities that weren't widespread previously such as common areas for hobbies and entertainment, exercise and fitness facilities, beauty salons,

and more spaces and styles of dining designed to be much more interactive. There is a lot of work now from the companies that are investing in repositioning their facilities to respond to these changing needs.

Q: How are rising land costs in Seattle affecting what gets built?

A: When you look at who occupies new facilities, you see it is only the most successful and forward-thinking organizations that can afford the cost of new construction. The economics around housing projects are

more challenging; there aren't options for multiple income levels and that is a great concern for the growth and sustainability of our region.

Ensuring we can house all who want to live, work and play nearby is essential for sustainable responsible growth. Regional sustainable solutions are available to help combat these challenges, but political will and cooperation are necessary to get moving in the right direction. It was wonderful that ST3 passed and that we are continuing work on the beginnings of a high-quality regional transit system.

PCL CONSTRUCTION SERVICES

Specialty: Commercial construction company providing preconstruction, design-build, general contracting and construction management services to the hospitality, multifamily, higher education, adaptive-reuse, light-civil and aviation markets

Management: Aaron Wiehe, vice president and district manager

Founded: 1906; in Seattle since 1992

Headquarters: Edmonton, Alberta; U.S. head office in Denver

2016 revenues: \$130 million

Projected 2017 revenues: \$169 million

Projects: Tower12 Apartments, Seattle; Potala Tower, Seattle

Aaron Wiehe, vice president and district manager, answered questions about PCL and the local construction market.

Q: In the last year, has your office seen an uptick in workload?

A: Not so sure it's an uptick in workload as much as the market continues to keep going. We

expected a bit of a slowdown, but it hasn't stopped. There seems to be a depth to this cycle that is deeper than expected and what we have seen in the past.

Q: Has PCL ventured into any new sectors in the last year or so?

A: No, we have not ventured into any new sectors. We continue to be active on high-rise residential, office, aviation and transportation projects.

Q: Are you working on any new innovative delivery systems/techniques?

A: We have multiple (systems) that are proprietary to PCL. We are seeing great return on the use of virtual reality and augmented reality. Both will continue to grow in the construction marketplace. These tools allow our teams to communicate with our clients and partners efficiently, clearly representing what the end product will look like. The potential for their incorporation into the construction pro-

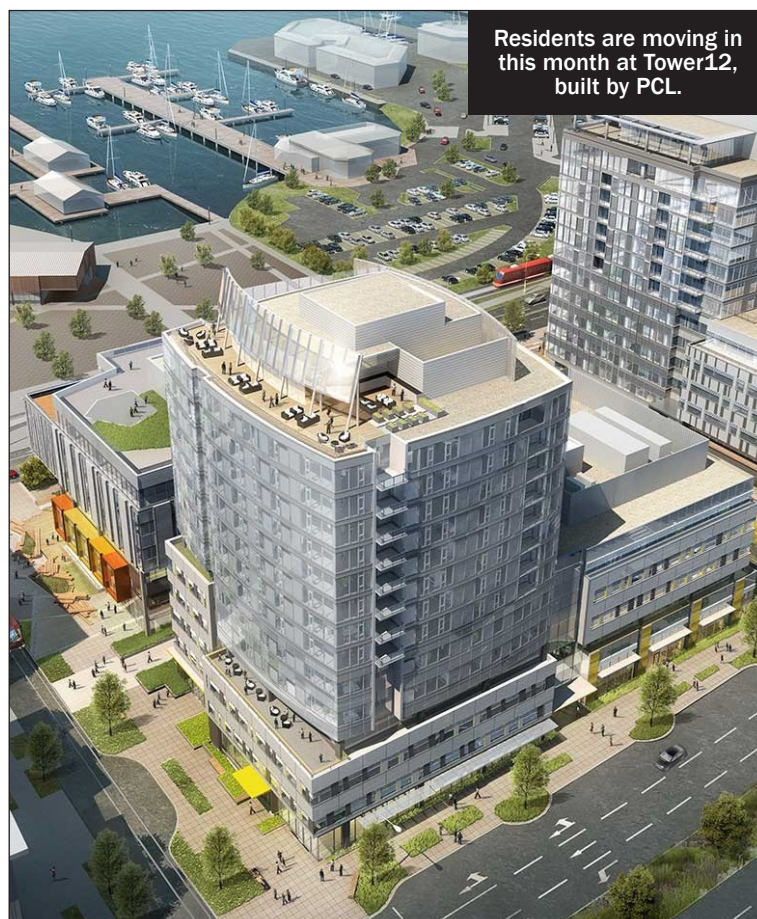
cess is endless and exciting to watch grow.

Q: What type of projects best symbolize those PCL does?

A: The high-rise residential projects represent the type of work PCL excels at — vertical construction with high-end finishes. We excel at delivering complex projects with tight schedules. Both the Tower12 Apartment building and the Potala Tower mixed-use building are good examples.

The new Delta Sky Club is another example. This project had an extremely tough site where the building structure had to be built above an existing baggage handling system that had to remain operational. In addition, the site had active airplane gates on each side that could not be interrupted or taken out of service at any time. The project also included high-end finishes. The schedule was compressed, and PCL was still able to deliver the project to our client ahead of schedule with extremely high quality.

The tougher and more complex a project, the better for PCL.



Residents are moving in this month at Tower12, built by PCL.

PHOTO FROM PCL CONSTRUCTION SERVICES

WHAT EVERY CONTRACTOR SHOULD KNOW ABOUT BONDS

As construction projects get more complicated, bonding issues follow suit.

No one can claim to be a stranger to this phrase: "My word is my bond."

If this phrase were true, and if the person saying it were Warren Buffett, the need for so many types of bonds for construction projects in Washington would evaporate.



BY SETH MILLSTEIN
PILLAR LAW PLLC

But there is only one Warren Buffett. And it's hard to take people at their word. This is especially true today when — in a city like Seattle — so much new construction means so many new relationships.

With newer relationships, there is less history. With less history, there is often less trust. We also live in an age of hyper-litigation. So even if you were contracting with Warren Buffett to build him a new home, and even if he hired you on a handshake only, that still might not be enough.

Hence the incredibly large and complex world of bonding issues in the construction world. Bonds range from massive (public works) to minor (private liens). This article is intended to provide a brief overview. It addresses a few common types of construction bonds.

PRIVATE PROJECTS

CRA bond

General contractors in Washington, those requiring use of more than one craft or trade on a given project, must actively carry a \$12,000 bond. Specialty contractors must post a \$6,000 bond.

• **Purpose.** The purpose of a CRA bond is to provide security to

members of the public when hiring a contractor in Washington. In other words, if a contractor does not perform properly, ends up owing money and fails to pay, the bond then must pay.

• **Details.** Those entitled to recover from a general contractor's bond include owners, subcontractors, material suppliers and state agencies. However, a general contractor is not permitted to make a claim "downstairs" against its subcontractor's CRA bond.

• **Recovery process.** In other states, a claim on a contractor's bond can simply be initiated by filing a notice with the appropriate agency. Here in Washington, the only way to make a "claim" against a contractor's CRA bond is to file a lawsuit. The CRA bond company must be named as a defendant to this action. Residential owners are entitled to recover the full amount of the CRA bond and also get first priority to its proceeds. The CRA bonding company must be served through the state Department of Labor & Industries, by mailing copies of the pleadings to L&I with a check for \$50 by certified mail. The CRA bond is obligated to pay when there is an unpaid judgment against the contractor.

• **Wrinkles.** CRA bonds are relatively small. Homes in King County now sell for an average of \$700,000, yet the CRA bond amount of \$12,000 or \$6,000 (for trades) has not changed in years. If there are multiple claims, each party in the same priority tier (such as owners) is then entitled to recover only a percentage share of the remaining CRA bond. In other words, after figuring in attorney fees and costs, net recovery can be very low considering a successful lawsuit is required to collect from a CRA bond.

Also worth noting: a CRA bond

is not insurance. A CRA bond is only available if the claimant gets a judgment against the contractor and the contractor does not pay. A CRA bond does not "defend" a contractor. A CRA bond is simply a backstop. It is intended to provide some measure of security if a claimant obtains a judgment against a contractor and the contractor fails to pay.

Lien release bond

• **Purpose.** If a contractor liens a property, and the owner wants to sell the property, a lien release bond is required. Often this is called "bonding around" a lien. A lien release bond frees up the property. Security is shifted from the property itself to a dedicated release bond. In general, the release bond must be twice the amount of the lien, if the lien is under \$10,000. If the lien exceeds \$10,000, the release bond must be 1.5 times the lien.

• **Details/recovery process.** For a contractor whose lien has been "bonded around," the perfection process is the same as foreclosing on a lien. The difference is that the bond company (also called a surety) is named as a defendant to the action. To perfect, the foreclosure suit must be filed within eight months of the date the lien is recorded. If and when the contractor prevails, and the claimant remains unpaid, then the surety issuing the release bond is liable.

• **Wrinkles.** Be careful if you have recorded a lien and the lien has been "bonded around." Make sure that the company issuing the bond is permitted to do so, and that the language on the face of a release bond aligns with the statute. And be aware that this area of the law carries a measure of confusion when naming proper defendants to the action. Here, as in other areas, an attorney familiar with such bonds should be consulted prior to expiration of the eight-month window.

P&P bond

• **Purpose.** A payment and performance (P&P) bond is common on commercial jobs, and may be considered on high-end residences too. If the owner requires the general contractor to post a P&P bond, the intent is to protect the owner in the event the general contractor defaults. The P&P bond would then allow the owner to tap funds to pay unpaid subcontractors and suppliers, and hire another contractor to complete the project.

Often general contractors require their subcontractors to post P&P bonds too. The idea is the same. If the subcontractor defaults, the general can pay its

suppliers or sub-tier subcontractors, and hire another subcontractor to complete a given scope of work.

• **Details/recovery process.** Private P&P bonds are not statutory in nature. Recovery requirements therefore vary from bond to bond. It is important to read the P&P bond carefully before proceeding, and to provide proper notice accordingly. Typically proof of default and debt is due to the surety. The surety is then afforded first opportunity to pick up the pieces for the defaulting party. If this fails, and a suit is filed to recover, the P&P surety would also be a named defendant.

• **Wrinkles.** P&P bond com-

panies often require significant documentation prior to paying, or stepping in to complete the project. The issue therefore is timing. If the documentation and approval process is lengthy, the project could stall, costing more money. P&P bonds, like all bonds, often limit the range of their liability, including various consequential damages.

PUBLIC PROJECTS

P&P bond

On state work projects, the general contractor is statutorily

BONDS — PAGE 20

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BONDS

CONTINUED FROM PAGE 19

required to post a P&P bond on projects exceeding \$25,000. The amount of the bond is also fixed by statute, which varies depending on the size of the project. State P&P bonds are for the benefit of all unpaid laborers, subcontractors and suppliers.

On federal projects, a Miller Bond must be posted, which also provides security for parties providing labor and/or materials on a job. However, only parties contracting with the prime contractor or a first tier subcontractor are protected by the Miller Bond. Below that, there is no protection by way of a bond claim. With state bonds, protection runs further downstream, including more parties involved.

• **Details.** Claims must be formally sent to the proper public agency within 30 days of formal acceptance of the entire project for bonds, and 45 days after completion of construction for retention, defined as an amount held back by the owner to provide additional security. Suit must then be filed within four months of serving the claim notice. Claims can be extended, if renewed prior to acceptance, and within the four-month duration of the claim period.

• **Wrinkles.**

State: Pre-claim notices are only required for parties not contracting directly with the general or prime contractor, also known as second-tier subcontractors and suppliers. In any event, suit should not be filed within 30 days of the date of your claim or properly amended claim. If a contractor files suit too soon, recovery of statutory attorney fees is prohibited.

Federal: Only those below first tier subcontractors must provide notice to the prime contractor. This must occur no later than 90 days after the claimant's last date it furnished labor or materials. Suit must be started within one year from the last date the claimant furnished labor or materials.

Retention release bond

The government agency must "holdback" or retain 5 percent of the contract amount from the prime contractor on state projects. Prime contractors often need this money before the project has been formally accepted. In such cases, a prime contractor can post a retention release bond. Such bonds permit the agency to promptly release retention to the prime prior to

acceptance. A subcontractor or supplier's security, flowing from a retention claim, is then shifted to a release bond. If a prime contractor posts a retention release bond, a subcontractor can post one as well, if the subcontractor chooses to get its funds earlier.

• **Details.** Check the bond for details. Technically the retention bond is named as a defendant instead of the government agency in the lawsuit, since the agency no longer holds the retention after disbursal. To be safe, both could be named as defendants. Then, upon proof from the agency that it is holding zero retention, a stipulation can be entered to relieve the agency.

• **Wrinkles.** There is always a cost to purchasing a bond. Like all bonds, posting a retention release bond can be expensive. Whereas the cost of other bonds is often rolled into the contract price, this is not true for retention release bonds, which are voluntary in nature. The contractor must therefore pay premiums and post collateral at its own expense.

In a nutshell, bonds can be complicated. Today, as construction projects get more complicated and increase in volume, bonds and bond issues promise

to increase too.

Seth Millstein has been practicing construction law for 13 years in

Washington, and formed Pillar Law seven years ago. His firm focuses on liens, bond claims and litigating construction contract disputes.

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