Over the years, I have built relationships with many people in the union construction industry. This includes apprentices, journeymen, field supervision, management, training coordinators, safety directors, company presidents, and everyone in between. Most of my closest friends; people that I grown-up with and have known for most of my life, work in union construction. I see first hand at the dangers they potentially face on the jobsite. I see how they travel the country to find work. I see how they get up before the sun rises and get home after the sun has set so they can put food on the table for their families. So I obviously want to see the union construction industry, especially the people within it, succeed.

Lately, I have been worried about the state of our industry. This summer, there seems to be a lot of union workers and friends on the unemployment line. There is a lack of steady work, especially in the industrial sector. I have recently witnessed two long established local union contractors close down their construction companies. As a result, Northwest Indiana has two fewer local contractors to hire local tradesmen. I personally know other contractors who have dipped into their personal saving to keep their business afloat during tough times. All of this makes me worry about our future. I worry that the union construction industry has been losing market share for decades and cannot seem to reverse the trend. It worries me that state legislators are passing laws nearly every year looking to undermine our industry. Above all, I worry about the survival of the union construction industry.

So helping to educate and the people in the industry with more tools for their toolbox is basically what led me to creating the Northwest Indiana Union Construction Magazine. It’s also the same reason we put on dozens of professional development and safety programs every year at the CAF. Just like CAF programs, the articles in this magazine cover a broad range of topics. I encourage you to help spread the word and share the articles with others. The more knowledgeable and educated our people are, the stronger our industry becomes.

Kevin Comerford

Moving Forward

Kevin Comerford
Director of Professional Development, Construction Advancement Foundation

“The more knowledgeable and educated our people are, the stronger our industry becomes”
Cover Photo: Bill Batchelor, Superintendent, and Brad Fox, Foreman, both with the Pangere Corporation look over a set of drawings at the new Portage Firestation located on Central Avenue in Portage, Indiana. Pangere Corporation is the General Contractor on the project.

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On March 25, 2016, the Occupational Safety and Health Administration (OSHA) published the final rule concerning respirable crystalline silica. The new rule covers workers performing work in the construction, general, and maritime industries. The new rule is in effect as of June 2016.

About Silica
Crystalline silica is a basic component of sand, granite, and other minerals. Quartz, cristobalite, and tridymite are all forms of crystalline silica, which may become respirable when workers grind, cut, or crush concrete, brick, and stone. Crystalline silica is classified as a human carcinogen and also causes silicosis. Silicosis occurs when respirable dust enters the lungs and causes formation of scar tissue, which reduces lung function. Epidemiologic evidence indicates that lung cancer and silicosis occur at exposure levels below 100 micrograms of respirable crystalline silica per cubic meter of air (ug/m^3). Silicosis is fatal but preventable.

A Decision That Will Save Lives
According to OSHA, approximately 2.3 million American workers are exposed to respirable crystalline silica annually. Exposures to workers in the construction industry can occur when workers conduct drilling, cutting, crushing, or grinding of concrete and stone. Workers in general industry may be exposed to silica when manufacturing brick or glass, sand blasting, and while working in foundries.

The intent of the final rule is to limit employee exposures to crystalline silica that causes diseases such as lung cancer, silicosis, kidney disease, and chronic obstructive pulmonary disease (COPD). The rule change was necessary given that the permissible exposure limit (PEL) for silica was based on a formula that was difficult to interpret. In addition, the standard has not been updated since 1971 when the current PELs were established. OSHA believes health benefits will be derived from the rule change. It is estimated that once the effects of the rule are fully established, more than 600 deaths per year will be prevented.

What the New Rule Requires
The new rule proposes that employers use engineering controls, such as wet methods and ventilation, and proper work practices to limit employee exposures to respirable crystalline silica. Respirators also may be necessary when employers are not able to reduce the employee exposures below the PEL using engineering and administrative controls. However, respirators may not be used in place of these controls.

General/Maritime Industry Requirements
- Limit access to high exposure areas
- Provide employee training
- Provide respiratory protection when exposures cannot be reduced through engineering, controls, and work practices
- Develop written exposure control plans
Conduct air monitoring to determine employee exposure levels

Construction Standard Requirements
- Develop and implement an exposure control plan
- Designate a competent person to implement the exposure control plan
- Minimize housekeeping practices that expose employees to silica
- Offer medical exams every three years to employees wearing respirators for 30 or more days per year
- Train employees on ways to limit silica exposures
- Keep records of medical exams and silica exposures

The second option is that an employer may measure workers’ exposure to silica by
- Measuring worker exposure to air at or above the action level of 25 ug/m³,
- Using dust controls when the employee exposures exceed the PEL of 50 ug/m³, or
- Providing respiratory protection when dust controls don’t reduce the exopse limits below the PEL.

To learn more about OSHA’s final rule on crystalline silica, please visit www.osha.gov/silica.

Knowledge Sharing

How Organizations can Leverage Best Practices in Safety

By Capital Construction Solutions

With baby boomers retiring and the millennial generation becoming the majority in construction in the year 2018, it is critical that the safety knowledge produced over the past few generations not be lost forever.

Construction accounts for over 150,000 accidents per year with 1 in 10 workers injured annually. In order to reduce the number of accidents, companies need to focus attention their on training, efficiency and aligning to best practices.

Sharing knowledge at job sites reduces risk in construction. Today we live at a time in history when leaders have access to innovative, data driven solution platforms that can keep workers better informed and more engaged in safety and productivity programs. The supporting technologies to collect and manage the data have matured significantly, becoming easier to use and far more affordable.

Unprecedented opportunities are emerging for all kinds of construction firms to address the challenges of making construction safer. Safety tools are ushering in a new
strategic era, enabling unprecedented tech-enabled collaboration among workers, trade unions, associations, GCs, subcontractors, CM / PM organizations, developers, owners, insurance companies, government agencies and consultants.

By focusing on benefits across all entities working on projects, from the edge to the center, including the government agencies, we’ll see benefits accrue not only to individual parties but also to the industry as a whole. Each firm will be free to contribute specific knowledge and expertise, without getting bogged down by complex, monolithic or proprietary project management systems that have characterized the centralized command and control systems typically used in the past.

Construction is a uniquely social and networked enterprise, operating in a large and fragmented industry. In the U.S., 80% of the ~700,000 construction companies have fewer than ten employees. As a result, a network approach usually will work better than a hierarchical approach. This is all the more true when we consider the skills and interests of young people entering the workforce, who have high expectations for mobile technologies and easy access to information.

Unfortunately, the U.S. remains far behind the leaders of the developed world in construction safety, with a death rate among the highest of ten countries studied. We believe that lack of knowledge sharing compounds risks inherent to such complex environments. By using modern tools to more effectively share checklists, lessons learned, situational awareness and other relevant data, safety leaders can build on decades (even centuries) of accumulated historical insights of safety professionals and experts who have come before us.

Today it is feasible to deploy mobile apps connected to well managed central databases you can access via securely shared websites. This is far more useful and cost effective than trying to manage the same set of information via paper, fax, email or attached spreadsheets.

Since job sites may be remote or lack Internet connections, each mobile app must work both online and offline. The app also must be available to and affordable for all individuals on a project responsible for safety and productivity, i.e. almost every worker.

A well designed mobile platform for construction allows more than one organization to securely access the data, with appropriate controls to grant permissions for data sharing among organizations. Other ingredients vital for the success of a platform include simple administration of the mobile apps for a changing workforce (e.g. updated in background through an app store) support for multiple devices (the most popular or standard off the shelf smartphones or tablets, so that forms can give workers an option to bring their own devices) high reliability, fast device response time, and high quality customer service from the software vendor, when difficulties or questions arise. Perhaps most important is ease of use, an intuitive interface built for the real world ergonomic and environmental constraints of construction sites (e.g. dirt & dust, gloves, ambient noise, vibration, etc.) needing little or no formal training to be useful and productive.

As mobile devices and access to corresponding databases via websites provide workers with better access to better data, it becomes critical to pay attention to the accuracy and timeliness of your data through performance metrics and key performance indicators (KPIs). In construction, this means looking holistically beyond your own company’s KPIs to project level KPIs (sharing data among multiple companies).

In summary, of all the modern tech tools at our disposal today, the most significant for construction are cloud based SaaS platforms integrated with modular mobile apps that enable social sharing of knowledge and best practices through standardized data, informatics and analysis; safety checklists; 360° surveys; and the collection and application of lessons learned.

By exploiting construction informatics and by employing platforms built using these technologies, leading construction companies are transforming themselves into learning organizations. They are learning to leverage what they have learned from their own experience, together with shared industry knowledge. As they become more data driven, performance based companies, they incent and encourage safety and efficiency for their own companies and for the industry as a whole.

Capital Construction Solutions (www.CCS.network) has developed a knowledge sharing platform to mitigate risks in construction. CCS has created a safety mobile application (CCS Safety) that reviews a list of 7,000+ best practice safety questions depending on the category of work (180+ categories) being performed. In addition, the command center website allows companies to tie together all Apple and Android devices into a single safety enterprise reporting tool. Our goal is to ensure a safe workplace and provide a quantitative and intuitive tool for all employees. In addition, CCS will be developing 17 more applications to eliminate friction points in the construction industry by the end of 2018.
One aspect of my career educating the union construction workforce is that I am able to attend a variety of informative seminars that cover topics specific to our industry. One topic that has been getting a lot of press over the past few years, and rightfully so, is the state of the multiemployer pension system. All of the defined benefit plans that the men and women of the union construction industry are relying on to fund their retirements are included in the multiemployer system. While the majority of these pension plans are financially healthy, as many as 15% of them are projected to become insolvent in the coming years. If a multiemployer pension fund becomes insolvent, a government insurance fund called the Pension Benefit Guaranty Corporation (PBGC) kicks in so that retirees would receive some kind of benefit. While this may sound somewhat reassuring if a plan fails, the PBGC itself is underfunded and projected to become insolvent within a decade. If the PBGC should become insolvent, then all bets are off on a secure pension for participants in multiemployer plans.

Interestingly, the United States Congress passed legislation in 2014, known as the Multiemployer Pension Reform Act (MPRA), to allow severely underfunded plans that were in “critical or declining status”, such as Central States, an opportunity to restructure. MPRA gave the trustees the ability to slash benefits to retirees in order to ensure that the fund is able to continue to pay future benefits. While cuts in pension benefits to retirees are never a good thing, a reduction in benefits today is still a more favorable outcome than the dramatic benefit losses the retiree will see when the fund goes insolvent. In fact, the most the PBGC would pay a multiemployer participant with 30 years of service is less than $13,000 per year.
Unfortunately, The U.S. Treasury, who has the final say in approving the restructuring application under MPRA, rejected Central States restructuring proposal because they deemed the projected investment returns in the restructuring plan as too optimistic. The proposal also failed to show that benefit cuts would keep the plan solvent in the future. This leaves the Central States Pension Fund trustees out of options to keep the plan solvent and it’s only a matter of time before the fund goes bankrupt. Once that happens, the sheer volume of participants in the Central State’s Fund would quickly drain whatever money remains in the already underfunded PBGC. With the impending collapse of the PBGC’s multiemployer arm, there will no longer be any government protections in place for participants in any multiemployer plan, thus putting the retirement security for millions of participants, including union construction workers, at stake.

The only solution that would be available once the PBGC goes insolvent would be a taxpayer bailout. A PBGC bailout would be the only way millions of retirees in multiemployer plans would be able to collect any retirement benefits. Many industry insiders have been told by lawmakers that a taxpayer bailout is bleak. Moreover, the political atmosphere in not conducive to a bailout solution since the country is already strapped with massive amounts of debt. However, when millions of retirees lose their pensions, the outrage will be so widespread that congress may have to settle for some type of bailout. If that happens, we could very well see legislation that puts and end to multiemployer defined benefit plans for good. It is also likely that any kind of bailout would result in retirees receiving just pennies on the dollar of what they were originally promised from their defined benefit pension.

What is likely to happen in the meantime is that lawmakers are going to start hearing a lot about the brewing pension system crisis and raise PBGC premiums and enact other legislation to help shore up the systems. The thing is that the PBGC’s liabilities are more than $50 billion, while their assets are currently only around $2 billion. This hole is so deep that raising PBGC premiums would likely only delay a systemic collapse. Moreover, any significant increases in annual premiums could have negative implications by encouraging employers to exit plans which would further strain the system.

The multiemployer pension system is already plagued by exiting employers and there are extremely few new employers coming in to take their place. This is evident in the union construction industry. There are many more union contactors that have closed their doors within the last decade than new contractor start-ups. The reason it is so difficult to attract and keep contractors in the construction industry is due to exposure to unfunded liabilities associated with the multiemployer pension system. An unfunded liability is when a pension plan’s future obligations exceed the present value of funds available. Most multiemployer plans in existence have some sort of funding shortfall even though they are considered “healthy” by definition. So if a new contractor wants to enter into the industry, they are automatically on the hook for a portion of that unfunded liability the moment that they become signatory to a trade and hire an employee. Furthermore, contractors looking to retire and sell their businesses often cannot find a buyer to purchase their contracting company due to the unfunded pension liabilities on their books. So the contractor just closes its doors and goes out of business. That company’s portion of the unfunded liabilities then gets distributed among the remaining employers still in the plan and strains the system further.

The structure of the current multi-employer pension system is loaded with risk for both employers and participants. Moreover, the defined benefit system deters new contractors from entering the construction industry due to the unfunded liabilities. The construction industry is currently stuck with this system which is contributing to our decline in market share. However, there are possible systemic changes underway that would provide the industry with some tools that could help bring more stability to participants and employers within the current multiemployer pension system. There is a currently coalition of General Presidents from the Building Trades and various industry organizations lobbying congress to get legislation passed that will allow the industry the ability to implement new plan designs or composite plans. The proposed legislation on new plan design closely resembles retirement plans successfully being used in other areas of the world such as Canada and Germany. The new plans, which are defined contribution, would provide a secure lifetime retirement income for participants. They would essentially look like variable annuities and would permit adjustment of accrued benefits but would have more stringent funding discipline than the current defined benefit plans. The individual risk is spread because the assets are pooled as they are in the current defined benefit plans. Additionally, employers would not have any financial
responsibility beyond their contractually required contributions thereby stemming attrition by existing employers and facilitating new entrants into the construction industry. In other words, new plan design could potentially help grow and strengthen the contractor base because contractors wouldn’t be burdened with PBGC premiums, withdrawal liabilities, and unfunded liabilities.

New and innovative plan designs would undeniably limit the financial risk for the employers while providing effective benefit protections for plan participants. However, there would still be some obstacles to overcome. The adoption of the new composite plans would be voluntary and subject to the collective bargaining process. Some parties in the collective bargaining process could be hesitant to transition to the new composite plans, especially if those current defined benefit plans are fully funded. In addition, when the collective bargaining process produces a decision to convert from a traditional defined benefit plan to a new plan design, the new plan design provisions would apply prospectively only and legacy plans would not be affected. Therefore, employers would still need to continue to fund the legacy plans according to the current funding rules while transitioning over to the new plan design. This could potentially be expensive for employers, especially if the legacy plans they are trying transition away from are severely underfunded.

The bottom line is that the PBGC arm of the multi-employer system is severely broken and is projected to implode in roughly a decade. The brewing crisis is going to affect a lot of construction workers and retirees who probably have no idea the system is even in trouble. An aging workforce, changing economic realities, and reduced credit opportunities resulting from unfunded liabilities are placing additional obstacles in the path of existing contributing employers to continue their participation and further reducing the ability of funds to attract new employers. Facing these growing risks, employers are exiting the system which ultimately harms retirees receiving benefits, saddles other participating employers with a larger financial burden, and weakens the multi-employer defined benefit pension system overall. New and innovative plan designs can help to limit the financial risks for employers while providing secure retirement benefits for participants. However, the industry is going to have to wait to see if Congress will act this year on additional multiemployer pension reforms, including allowing for innovative plan designs, in order to help modernize the multiemployer system.
One common theory that everyone is taught in business schools around the world is the concept of life cycle. The theory holds that industries, firms within an industry, and even products and services are experience a life cycle. There are basically four stages in a life cycle: introduction, growth, maturity, and decline. Just as we humans are born (introduced), grow, mature, and ultimately decline until we die, industries experience very similar stages. While the stages are the same for every industry and firms within an industry, the length of time spent within a particular stage will vary between industries. Some industries may spend decades in a particular stage of the life cycle while other industries may only spend months in that same stage. The strategies or lack of strategic planning employed within the industry can have a profound impact on determining the length of time within a stage of the life cycle.

As you can see in the diagram, the life cycle flows from left to right over time. The first stage, introduction, is largely defined by high risk. Investment is typically high during this stage as the industry or participants within the industry bring an innovative product to the market. Profits are lucrative during this stage because prices are high and competition is low. As a result, the industry begins to evolve into the growth stage as more participants enter into the industry.

The most prosperous stage is the growth stage which is the second stage in the life cycle. This is where the curve is the steepest and is the ideal stage for an industry and its participants. When there is lots of growth within an industry, there are many firms vying for a piece of the market share because there are profits available. Whenever there is an abundance of competition, firms become increasingly standardized in their operations and this leads to efficiencies and reduced cost. However, prices are also reduced which typically leads to a flattening of the life cycle curve as the industry approaches maturity.

During the maturity stage, the industry is established and the goal is now to maintain the market share that has been built up. This is probably the most competitive time for an industry. Costs are reduced even further when industries mature because they become more efficient in their production techniques. The industry becomes increasingly saturated and there are fewer new customers when it matures. As a result, market share starts declining. The industry participants in this stage typically develop niches in product offerings or services and work to develop some sort of competitive advantage in order to effectively compete in the market.
The last of the life cycle stages is the decline stage, which as you might expect is often the beginning of the end for an industry. Typically, sales and profits fall during this time which leads to firms leaving the industry. It is during the decline stage that cheaper and more innovative products or services start replacing old and outdated methods of production. It is impossible for an industry in the decline stage to go backwards along the curve line and get back into maturity or growth. This is because there is already something new and innovative that is being demanded within the market that is gaining traction and therefore replacing the old model. Therefore, the only way for the industry to get back to growth is through a rebirth. Once in decline, the industry, or firms within the industry, must introduce a new and innovative approach to business that will once again lead to growth. In essence, the industry would need to reinvent itself in a changing world if it is to survive.

The union construction industry and all of the participants within the industry are not exempt from the industry life cycle. Our industry and all of the participants, which include contractors and the building construction trades, fall within one of the stages on the life cycle curve. It is a well known fact that the union construction industry has been losing market share for the last several decades. The most likely culprit has to do with costs. It is no secret union labor is more expensive than non-union labor. These costs can be anywhere from 20%-30% more per man-hour. That means that union contractors must consistently be at least 20%-30% more productive than non-union contractors. If they can't, the contractors are likely to close its doors.

• In 1947, approximately 87 percent of the U.S. private construction workforce was unionized.
• In 2012, only 13.9 percent of the U.S. private construction workforce was unionized.

Source: http://www.bls.gov/news.release/union2.nr0.htm

To survive, the union construction industry needs to embrace change. The status quo approaches to doing business that have been used in the past have only led to the loss of market share. No longer can we put our head in the sand and ignore that fact that our environment is becoming increasingly more competitive. The industry needs bold leaders and even bolder ideas if we are going to turn this around. The time for change is now!
Are you in charge of anyone? Do you have any responsibility for management objectives, outcomes or profits? Does anyone working for or with you supervise, guide, mentor or lead others? If the answer to any of these questions is yes, then I have a very simple question that should be easy for you to answer.

What are the top three performance motivators for people in the workplace?

Can you answer this quickly and accurately? If not, why not?

It is only the most important question one can ask, teach and utilize. But hey, I’m sure you have the answers correct. For all the other people not quite as on-the-ball as you, let’s take a quick look.

According to national studies of workplace satisfaction, motivation and performance, the three key prime motivators are;

1. Recognition and Praise
2. Participation in Decision Making
3. Money

So lets do a little check-in on our industry for these three factors. And why not a little reflection on your organization? And heck, while we’re at it, how about your personal leadership motivation style?

Recognition and Praise

The construction industry is not touchy feely. Leadership “soft skills” in our industry would best be described as deficient or non-existent. I know because I was there too. Our industry is run on authority, ego, pride, attitude, swagger, aggressiveness and competition. And you can build a lot of jobs and make money doing it that way. Conversely, this approach seems to overlook the NUMBER ONE PRIME MOTIVATOR entirely. Recognition and praise are given grudgingly if at all.

I have a glass encased hand saw on the wall in my office. It was my grandfather’s saw and he was (as was my great grandfather) a hard nosed Italian contractor. Inscribed next to the saw is his message of motivation summed up in one quote he used frequently on the jobsite. “Don’t drink more water than you can sweat.” In other words don’t even think about stopping even to pee. This summarizes our industry in a nutshell. Field leaders pride themselves on being tough instead of perceptive or interactive. Thus the vast majority of our industry culture does not maximize the productivity, commitment and profit returns of recognizing individual and team performance. What to do?
1. Coach field leaders, key lead-men and even apprentices on the necessity of providing positive feedback to subordinates and peers. Reward and recognize this behavior when you see it.

2. Note that recognition and praise are only effective when they are tied to a specific event or tangible effort or outcome. General non-specific praise or recognition has no impact on satisfaction or motivation.

3. Be sincere. People can tell when you are doing it with an agenda.

4. Build a culture where this is not only centralized around one area (safety / production) but all areas that contribute to the organization’s broad mission.

5. Do it yourself. Every day.

### Participation in Decision Making

Why even bother with this one when you and I know everything anyway? What a pain in the ass. Well the real lesson is; people want to feel a part of determining their own fate. Call it “buy-in”. Call it alignment. Call it brainstorming. Call it a flat management structure. The label matters less than the practice. Hey, our business is generally not a democracy but it should not be a dictatorship. The net result of people being directed is that they do what they are directed to do. The net result of people doing what they are part of developing is seeing pride and a bigger macro picture of how their small part fits in terms of purpose and meaning. What to do?

1. Solicit others opinions even when you think you know the answer.

2. Solicit others views even when you are impatient and listening to them feels frustrating. The respect you are granting is part of what motivates them.

3. Tell people why decisions are made. Give them an idea of how a decision contributes to the organizational mission; whether they like it or not. Weak leaders only give people this when news is good or where they can avoid the discomfort of discussing how it effects those down the chain of command.

4. Openly review mistakes. Others and your own. Not in a judgmental manner but in a way that encourages everyone to own their decisions and learn from each other. When this is not present some people will default to blaming, CYA or not providing information out of fear or a don’t care view.

5. Participation in decision making is a key to increasing accountability.

### Money

When I ask most leaders what motivates people the first answer I get is money. But money is the default when the first two are not present. In the field in union construction money is a zero. In fact it can be a demotivator. In the system we have (that as a good capitalist makes no damn sense to me) the best and worst workers get about the same compensation. Maybe a guy gets over scale, but it does not make him or her work harder, it just retains them. They live in a culture where “fair” compensation does not always correlate to personal effort given. For apprentices this can be a very poisonous environment; they work for years for less money than others that don’t provide value at the high level required by union construction. What net motivational impact do you think that has by the time they become journeymen? What to do?

1. Recognize that union wages though they may on the surface seem to be key motivators, are likely not. If everyone gets the same, you need to find other ways of motivating.

2. Give foremen, superintendents, trainers, instructors, office managers and everyone else positioned to influence others the resources and flexibility to reward people in non-monetary ways.

3. Remember that money is only number three and that if you work at Number One and Number Two hard enough, Number Three won’t be such a challenge.

Lastly, think about your personal style related to these simple but powerful motivational elements. I used to be a unpleasant person to work for. Results before people. Just give me the bottom line. Fifteen years ago a departing employee told me that in her three years of employment, it was never enjoyable working for me. I was surprised and a little blindsided. The organization was thriving and growing, increasing resources and by every measure of success doing very well. But I had used a hard edged construction kick butt and take names old school model that drove people and not motivated them. It had also about lived out its’ usefulness as it wears people out quickly.

It took me a while to figure out, but right there, under my nose, was the real key to motivational success. From that point forward, I began a motivational culture change and I knew it had to start with me. The long term results? Transformational growth and success for the organization, and hopefully greater fulfillment for the people who shared in the achievement. And it was so damn simple...
Getting ‘er Done!

Improving Productivity in Construction

By Jim Bain, Falcon Performance Institute

The importance of productivity is no secret in the construction business. Yes, we must balance our drive to get the work done with being safe. Yes, we just do our very best to do a quality job—work that we would be willing to sign our name to. While it can be argued that over time, no contractor can be successful without continually focusing on all three legs of that stool; safety, quality, and productivity, the focus of this discussion will be entirely on getting it done – productivity.

If you were reading a text book on the subject, productivity would be defined as units of work (output) per unit of time (person hours of effort). For example, we might discuss square feet of forms installed per hour or per day. Other examples would include linear feet of pipe installed, cubic yards of concrete poured, etc. You get the idea. Unfortunately for the construction business, those are terms that are pretty much unique to estimators and engineers. Our craftspeople don’t tend to talk or think in those terms. They talk and think in terms of tasks. Examples might include “we need to get that wall built today.” Or, “we hope to get enough pipe in the ground today so that we can set that structure tomorrow.” The bottom line, both literally and figuratively, requires that we get more done with fewer resources. Because we must balance this push to get things done with both safety and quality, we cannot simply work faster. We must learn to work smarter.

To make matters even worse, if you were to ask a crew member where they hoped to be by the end of the day, responses would typically be; “in my truck,” “home,” or “at the bar.” Our craftspeople rarely think in terms of needing to pull X number of feet of wire, install X number of yards of concrete, or paint X number of square feet of wall. If we want our people to be productive, we have to help them think in terms of daily goals and numbers. We need to communicate, on a daily basis, exactly what the goal is for today.
Construction experts agree that, on the average, construction crews only spend about 2/3 of their day actually getting anything productive done. What that means of course, is that 1/3 of the average construction worker’s day is “lost time.” What exactly is lost time? Yes, it includes goofing off, smoking a cigarette, or going to the port-a-john, but the bulk of lost time is a result of waiting for something. Our people need seven things to accomplish any construction task. Those seven things are:

- Tools
- Information
- Manpower
- Materials
- Equipment
- Space
- Safety

If you see someone standing around on a construction site, ask yourself, “what are they waiting for?” Chances are very good that they are waiting on someone else to do something, more information, the right tool, more concrete, etc. And, if they are waiting on something, we should then ask, “who is responsible to make certain they have what they need?” The answer may surprise you but it’s supervision. More often than not, poor performance is the result of poor supervision. Poor supervision is very often the result of poor planning and/or poor communication.

“Construction experts will also agree that a 5% improvement in productivity will more than double your bottom line profit”.

The fact is that our people want to do a good job. They don’t get up in the morning, look in the mirror and ask themselves, “how can I screw up today?” They want to do well. They want to be productive. They want to be proud of their work – in terms of both quantity and quality. They want to be proud of themselves. And the better they are, the better the morale becomes and the better they want to be. From the CEO, to the P/M, to the superintendent, to the foreman, we must tap into that desire to do well, provide our people with everything they need, and do everything we can to encourage success.

Construction experts will also agree that a 5% improvement in productivity will more than double your bottom line profit. Let me say that again. A 5% improvement in productivity will more than double your bottom line profit. If your crews spend almost 33% of their time waiting for things, isn’t it reasonable to believe that we could relatively easily improve our productive time by 5%?

In short, we have the need to improve, the opportunity to improve, and the desire to improve on the part of the people actually putting in the work. So, how do we get ‘er done? The process starts with education which must be followed with training. If you need to know the difference, just ask a father if he would rather his teenage daughter get sex education or sex training!

Our supervisors at every level (P/Ms, superintendents, and foremen) must be educated. At the very least, subject matter should include:

- Productivity Improvement
- Project Pre-planning
- Time Management
- Leadership Skills
- Building Better Teams
- Negotiating to Win

In addition to the class room time, they need to be coached – in the field. This training function must include field observation, using the tools learned in the education process, and turning mistakes and non-productive behaviors into teaching opportunities. Whether you have someone in your firm do the coaching or you hire outside help, it simply must be done. We want to believe that our people “know what they’re doing.” Or at least they should. We want to believe that because it’s the easiest and least expensive route to take. Unfortunately, that is short term thinking. If we want to be successful in the long term, we simply have to invest the time to educate and train our people.
There isn’t a professional athlete out there that doesn’t have a coach. The coach is constantly observing, offering suggestions for improvement, and encouraging the very best performance possible. We need to do the same. Our survival in construction, one of the most competitive businesses in the world depends upon it. If, and only if, we commit to educating and training our supervision in the tools of productivity, we will continue to succeed. We will reap the benefits in the form of improved performance, improved morale, improved profitability, and improved competitiveness. At the end of the day, we will be where we want to be – getting ‘er done!

James S. Bain, MBA, is an author, speaker, consultant, and coach. He is the founder of the Falcon Performance Institute, a consulting and corporate training firm focused on productive performance. He has been a featured speaker at numerous regional and national conventions.

To hire Jim or find out more about the Falcon Performance Institute, please visit www.fptime.com and/or www.jimbainspeaks.com or call 352-854-4015.

Do I Need to Worry About What My Contract Doesn’t Say?

By Patrick Drewry

In reviewing contracts with our clients, or presenting at seminars, we frequently advise on the various key risk management clauses in a construction contract. Terms governing payment, delays, claim notices, change orders, indemnity and insurance often dominate the discussion. We then have to advise that there are a number of implied obligations that, by law, are read into every contract. This can be a frustrating realization. Your lawyer is advising you of all the key terms to be aware of, but yet you have to worry about what your contract doesn’t say?

Generally speaking, other than the express terms of the contract, there are other sources of the law forming the contractual relationship on a given job. First, there are the controlling statutes and laws that will be read into a contract, and control over any conflicting contractual term. Second, there are the implied terms that a court or arbitrator will read into a contract. Third, there is the course of dealing between the parties during the life of the project. How did the parties treat the contract terms and conditions?

It is important to note that a court or arbitrator will not imply contract terms that contradict express terms of a contract, but a court or arbitrator will imply such terms if necessary to give meaning to the intentions of the parties.

Custom and Usage

Standards of “custom and usage,” are frequently applied
by courts or arbitrators to resolve contract interpretation disputes. A court or arbitrator will consider standard practices in the industry in an effort to determine whether a party’s particular course of conduct was accepted or anticipated by the parties to the agreement. The law in Indiana holds that when considering the standard of “custom and usage,” a party who is carrying on a known usage in a trade or geographic area is deemed to have contracted with reference to the usage, unless the contrary clearly appears. For example, what are the typical standards and practices for a specific trade such as a masonry contractor or an electrician? The impact of geography can be equally important. Although there are state and national standards common to all construction, what is standard practice or “custom” in northwest Indiana, may be different than Chicago, Fort Wayne or Indianapolis. In a dispute involving defective work, a contractor may introduce evidence of what his standard practice for his or her trade, or in the region where the work was performed. More typically, “custom and usage” may be used to aid in the interpretation of contract documents and specifications to show that a particular word or phrase has a customary technical meaning in the trade. However, there are caveats to this standard. The custom and usage must be well established, certain, uniform and reasonable. Such standards may not carry the same persuasive weight as other forms of evidence, such as course of dealing.

**Standard of Reasonableness**

Although it may seem like logic and reason do not often carry the day in litigation or arbitration, courts and arbitrators frequently use standards of reasonableness when resolving disputes. Courts will seek to find what is fair, just, and sensible. Implied terms must, by definition, be reasonable. For example, where parties have failed to agree on a price for the performance of work, a judge or arbitrator will likely find an implied agreement to pay the reasonable value of the work. Likewise, where contracting parties have failed to specify a time for performance, the court will likely find that performance was due within a reasonable time.

**Prevailing Laws and Codes**

Laws and codes which exist at the time and place of the making of the contract are considered to be implied terms of the contract documents. The parties are presumed to have understood the law at the time of entering into a contract. Generally, all laws in force on the date of the agreement form a part of the agreement without any express statement to that effect. A problem may arise when a law or code is enacted after the execution of a contract. What happens if there is a change in the electrical code mid-job? Absent language demonstrating the parties clearly allocated for such a risk, the change in code will generally not be deemed to be included as a term of the contract. Obviously, this result under the law is not a free license to ignore changes in the law or technical codes. Another consideration is to provide for a change order and price increase if compliance with a change in the law or code increases the cost of performance.

What if there is a conflict between the terms of a contract document and the requirements of a statute? The requirements of the statute will always prevail. For example, an attempt to create a no lien contract on a commercial job would conflict with the mechanic’s lien statute and would not control. Another example lies in the payment or performance bond that contains terms that conflict with the public works statute, such as an attempt to shorten the time period for asserting a bond claim. Contracting parties must always comply with statutes.

**Implied Duty Not to Hinder Performance**

While the above implied terms tend to impact the interpretation of a contract, there are two very important implied duties that can serve as the basis of a claim against another party: (1) the implied duty not to hinder performance; and (2) the implied duty of skill and fitness.

Under Indiana law, it is an implied condition of every contract that neither party will hinder the other in his discharge of the obligations imposed upon him nor increase his or her cost of performance. Where one party hinders or precludes completion of contractual duties, he or she is liable for breach of the contract. This implied duty has particular application to issues of schedule delay. Indiana recognizes that delay damages can be awarded for breach of an implied or an express contractual promise.

What are specific examples of where this duty may be triggered? An owner may be held in breach of its general duty not to hinder or interfere with the contractor’s progress when:

- It failed to prepare the construction site in time for the contractor to perform;
- It did not provide adequate access to the construction area;
- It provided defective plans which resulted in delays;
- It neglected to make payments to the contractor on time;
- It failed to coordinate or correct the work of parallel primes properly and this resulted in delays to the contractor;
- It failed to give written orders for additional work;
- It did not approve drawings necessary for the job within a reasonable time;
- It ordered a hold or suspension of the work; and
- It changed the plans and specifications and ordered substituted performance

This implied warranty can be a valuable remedy in pursuing claims for increased costs in addition to a contract action.

**Implied Contractor Warranty of Skill and Fitness**

An equally powerful remedy is the contractor warranty of skill and fitness. Although not expressly stated in the contract documents, a contractor impliedly warrants that he or she will perform their work in a workmanlike manner, and that the resulting improvement will be reasonably fit for its intended purpose. This implied warranty is frequently utilized in asserting a claim for defective work, wherein a party argues that a contractor or subcontractor did not perform the work “skillfully” or in a “workman-like” manner, or otherwise failed to adhere to typical standards for construction of that type of work. However, be mindful of how this warranty will defer to the standards of workmanship established in the contract.

**Always remember to read and understand your contract, but also be aware what is not in your contract!**

Patrick A. Drewry is a Partner with DSV, and concentrates his practice in the areas of construction law, construction litigation, public contract law and surety law. Patrick has extensive experience representing general and prime contractors, subcontractors and suppliers, owners and sureties on a variety of legal matters on both public and private construction projects. He assists his clients from project commencement on bidding and contract drafting and negotiations, through project management and field performance issues such as change orders, differing site conditions, construction defects, delays and payment claims, and ultimately through project conclusion and claim resolution in mediation, arbitration and litigation. Through his years of representation of clients in the construction industry, Patrick has gained a unique and practical perspective on protecting his clients through front-end and proactive job risk management while guiding them through complex construction disputes.

**A Construction Worker’s guide to Financing a New Home**

By Jeffrey Svantner

During my lifelong career as a Mortgage Loan Officer in Northwest Indiana, I have helped hundreds of local union construction trade professionals to not only obtain financing for their housing needs, but to make sure that the mortgage process is smooth from start to finish. Construction is very unique in that work can be feast or famine. Timing and preparation is extremely critical when looking to purchase a home or refinance an existing mortgage. Knowing how much you can afford can often be challenging since income can vary considerably from year to year. While every tradesman situation may be different, there are many commonalities that all construction workers face when trying to secure financing.
Here I will cover tips that can help all union trade workers make smart decisions and smoothly achieve the financing that they need.

Before beginning a construction project, planning is paramount. The more effort that is put into making sure that the plans, specs, and drawings are accurate, or ensuring that the proper tools and equipment are on the job-site, the smoother the job will run. As you know, change orders due to poor planning can cause delays and added expense. Well the same analogy can be applied when financing a new or existing home. Planning is everything when applying for a loan. Failure to plan can impact interest rates and delay the process and possibly add to costs.

One of the first things every construction professional should examine before obtaining any kind of financing is their credit report. Your credit history determines what loans you will qualify for and the interest rate you will pay. Your creditworthiness is defined by your three-digit credit score and is the key to your financial life. Your credit score is what lenders use to determine what risk you pose to them. Higher scores translate into lower interest rates which can save a borrower thousands of dollars a year in lower interest payments. The three major credit bureaus (Equifax, Experian and TransUnion) are legally required to provide you with a free copy of your credit report once every year. I would recommend that everyone, whether they are seeking a mortgage or not, review their credit history annually. You can obtain free copies of your annual reports by going to www.annualcreditreport.com. Many times your credit reports contain errors that can adversely affect your score so you will want to make sure to correct any errors and clean up any negative marks that you may have on your credit history. While the credit bureaus are not legally required to provide you with your credit score for free, you can always purchase your scores directly from the credit bureaus or a reputable monitoring service so you know where you stand.

The best advice I can give anyone, especially construction trade workers, is to seek the advice of a professional mortgage lender before beginning your home search. A professional lender can sit down with you and help you determine an affordable price range for your home so that you can comfortably make your mortgage payments each month. They will also help you understand the entire mortgage process, documentation requirements, and associated costs that go along with purchasing a home. A lender will most likely need to verify income, assets, and view your credit profile in order to determine your capacity to qualify for a mortgage loan. Most importantly, you should always try and obtain a legitimate “pre-approval” letter before shopping for a home. A pre-approval letter verifies that your information has been checked and indicates the amount you can afford which makes the process of purchasing a home go much smoother. A pre-approval letter also carries a lot of weight with the seller when making an offer to purchase a property.

Getting started with the loan process is easy. It all starts with a simple phone call or a short office visit. A quality lender will discuss your homeownership goals and help you come up with an affordable dollar amount to ensure that you stay within your monthly budget. Your lender will usually have you fill out a loan application, run your credit report, and discuss any potential issues with your credit that can be fixed to help you maximize your score and secure the best interest rate and mortgage product. Lastly, your lender will provide you with a checklist of items needed to get you pre-approved. These items can vary from person to person by typically include things like bank statements to verify assets and the past two years tax returns to verify steady income.

Some additional recommendations I would make to help you avoid some of the common pitfalls and get the most favorable mortgage product and interest rate includes:

Know you budget and work within it.
- Everyone always wants to know what they can qualify for, a better question is: “What are you comfortable with as far as your monthly budget and typical annual income?”

Avoid money-pits.
- It is common to see construction workers take on challenging properties that require extensive costs to fix-up and don’t pay off in the short-term. On these types of major renovation projects, it always pays to talk to an inspector before purchasing.
- If you are working 60 plus hours or more a week, when are you going to do major renovation projects and still spend time with your family?
- Like construction on a maintenance project, there is always more work and more costs than you anticipated. For that reason, a contingency reserve fund is recommended and required for certain types of loan products.

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Arcelor Mittal USA Selects Vidimos, Inc to Fabricate New Downcomer

You may have never heard of Vidimos Inc., but the local Northwest Indiana company has left its fingerprint on dozens of industrial manufacturing facilities in Northwest Indiana and throughout the world. Vidimos, located in East Chicago, Indiana, is a 4th generation union sheet metal fabrication shop specializes in heavy metal fabrication for various applications. The company is currently fabricating a replacement downcomer for Arcelor Mittal USA, Indiana Harbor West plant. The downcomer is a massive carbon steel duct that runs diagonally from the top of the drop out chamber and descends down into a manifold. The downcomer that is being replaced has been in use for about 50 years.

Once completed, the entire downcomer will measure at 253’ – 8 ½” long and have a diameter of 16’ – 6”. The downcomer will be fabricated in seven separate sections, often referred to as “cans”, at Vidimos’s state-of-the-art facility. The cans are fabricated out of 5/16 Grade 70 carbon steel plate by Local 20 union Sheet Metal Workers. Each can section will be transported to Arcelor Mittal via truck in a journey that takes only roughly 2 hours. “One of advantages that we had at winning this project bid was our customer is just down the street which is a nice competitive advantage when it comes to shipping costs” said Adam Vidimos, who is the lead Project Manager on the project. “We are able to fabricate and ship much larger sections than any competitor could due to our location which helps the customer save on the cost on the number of field splices that are required”. Adam also mentioned that some of the other companies competing for the work would have had to barge the units in through the St. Lawrence Seaway or up the Mississippi River which would and additional expenses.

Once all the cans are fabricated and shipped, Morrison Construction, out of Hammond, Indiana, will field splice some of the cans together onsite, resulting in two separate pieces, one measuring at 145”-8¼” and the other at 95’-2”. Morrison Construction will then field erect the two colossal pieces into place and make the final connections. The downcomer will then be primed and fitted with a custom insulated jacket. The project is expected to be fully completed by the end of September.

Several local engineering firms where instrumental in helping to bring the project together. SNC Lavalin Capital Engineering out of Merrillville, Indiana did all of the detailed engineering for the project. Superior Engineering out of Hammond, Indiana did the preliminary engineering for the project and is responsible for reviewing and approving the drawings. DLZ, Indiana was instrumental in doing a field scan to verify the total length of the downcomer to ensure the engineering design fell within the specified tolerances.
Beware that some “fix-it-upper” properties may not qualify for a loan if the appraiser deems the property unsafe or uninhabitable.

Sometimes foreclosed properties means “deal” and sometimes it means “headache”.

The real estate market in the mid-west is pretty dialed in right now, most homes are priced appropriately. Being pre-approved, knowing your budget, and seeing multiple homes can help you better recognize values and jump on a respectable deal when it’s available.

In the Long-term, homeownership is generally a great investment. Real estate is the center piece to any wealth building plan and owning a home is usually more affordable and often more sensible than renting. Just remember that a little preplanning can make the loan process smooth and even save you thousands of dollars over the life of the loan.

Jeff Svantner is the Branch Manager at Union Home Mortgage. He has over 20 years of experience in mortgage lending in the Northwest Indiana market. Jeff has experience with conventional, FHA, VA, construction loans, along with an array of other mortgage products. Jeff works with a wide range of borrowers, but especially enjoys working with first time homebuyers because he strives to make sure first time homebuyers are comfortable with their new home purchase and fully understand the mortgage transaction. Jeff can be reached at (219) 405-0893 or Jas@unmco.com. You can make an appointment by here: Free Consultation.