

Building a Better Box by Thinking Outside of It

Implications of the COVID-19 Pandemic on the Engineering and Construction Industry

Gould & Ratner presents the second installment of our Construction Interview Series on adapting to the COVID-19 pandemic and beyond. We will periodically sit down with representatives of some of the most influential companies in the construction industry to discuss their insights on relevant and pressing topics of interest.



Patrick Johnson

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Patrick Johnson, member of the firm's Construction Practice, recently discussed current issues facing the engineering and construction industry with Christopher Hewitt, Senior Project Manager at Simpson Gumpertz & Heger (SGH). SGH provides a variety of services globally related to structural design, investigation and rehabilitation of constructed works.

Pat: Chris, thanks for agreeing to sit down over Zoom to discuss the current state of engineering, construction and forensic work given these unique times. What is your overall assessment of where the COVID-19 pandemic ranks in terms of disruption to the engineering, construction and forensics industries when compared to previous disasters? How is this different?



Christopher Hewitt

Senior Project Manager

Simpson Gumpertz & Heger

Chris: We're all living through this, so I suspect we all know that the disruption to construction and general movement of people is unprecedented and is changing the way that we work together. Most of us have gotten over the initial shock, which was very abrupt, but there will be lasting effects of this change that are likely to be with us for years, or permanently. Clients and construction companies have implemented coping strategies and many firms, including our own, are developing office reopening plans for June. Most construction sites have adopted social distancing policies and are limiting the number of people on site, but most sites are still working. We've seen broad construction impacts in some states where construction was completely shut down for a time, such as Michigan and Pennsylvania, and very few restrictions in others, but many projects that were halted mid-construction are coming back online and we will see how they manage through the recovery. New design projects have slowed, as many project owners are rethinking investments, and I think that we'll see an uneven recovery between different markets. But, thankfully, more work is moving forward now than we expected in the earliest days of the stay at home orders.

CURRENT STATE OF ENGINEERING, CONSTRUCTION AND FORENSICS

Pat: I would like to start with some questions regarding the current state of engineering, construction and forensics. From the legal side, we are currently assisting our clients in navigating the ever-changing and inconsistent state, county, and city construction orders, as well as CDC, OSHA and other health guidelines. Let me ask you about some of the concerns our clients are facing and ask about what changes SGH has made. What problems have you run into over the past few months related to the pandemic?

Chris: Our existing employees, who were already familiar with the job expectations and our culture, adapted quickly. Onboarding new employees in a pandemic has been a challenge. We had a new hire start work on the first day of the stay-at-home order in Illinois, which wasn't ideal, and June is traditionally when new graduates start work. We're remaining effective on projects, but it takes more conscious effort to keep teams communicating effectively.

Pat: Aside, from working from home, are you aware of any employee absences?

Chris: Some of our coworkers have complicated childcare situations at the moment and need to adopt modified work hours, but we haven't had an issue with absenteeism. The firm's culture has always allowed for a fair amount of autonomy and the staff consistently responds with a high degree of professionalism. Everyone understands the urgency of this situation, and our whole staff is pitching in, communicating concerns, and looking out for each other.

Pat: What about from other project professionals? Any unique problems or absences?

Chris: Early on we heard that some construction sites had difficulty staffing field work, but I am not aware of that being a persistent problem. Those of us who have kids are trying to sort out how to handle childcare if we return to work before the kids can return to school or daycare. I suspect that this will be the one of the bigger drags on getting people back to work.

Pat: Do you have any concerns with smaller engineering, construction, forensic companies surviving this pandemic? Why?

Chris: It depends how long this lasts and the kind of work that firms are invested in. Firms are working through their design backlog, and there was no early warning of this change like we have in a more conventional recession, so we might not have seen the full impact on design and construction yet. Our retail clients have been hit especially hard, and with the number of retailers that will be put out of business by this event there is an unclear future for shopping malls. Offices have been proven to be unnecessary for a lot of businesses, so it seems unlikely that we will be designing many new office buildings in the Chicago loop this year. Some clients are predicting new demand for suburban office spaces and I expect that there will be additional demand for interior fit-out of vacated spaces as owners look to repurpose their properties. Our industrial clients are still holding the line and some are seeing stronger demand for new industrial facilities. Certain facilities that rarely close, like schools and transit systems, are highly accessible at the moment. There's never been a better time to implement a transit project.

The Paycheck Protection Program seems to be helping smaller firms buffer the impact, and if the market recovers quickly or government assistance is extended I don't think we'll see as many small firms defaulting as we did in 2008. This event might most starkly affect mid-sized firms with 500-1000 people, as the government support of those entities has been less generous and they were already under pressure to compete in a market that has become crowded with larger firms.

Pat: What percentage of your work involves on-site time versus office time? Do you have any concerns about on-site work going forward?

Chris: Our office as a whole spends about 30% of our time in the field doing testing, inspections, and site observations, with some project types requiring 100% field work. Field work is certainly where we saw the sharpest initial impact from the pandemic, but clients are implementing appropriate COVID-related health and safety protocols for site access and I am hopeful that the worst of the impact on-site is behind us.

Pat: Have you been impacted by social distancing requirements either here in Chicago or have you heard of others being impacted on the jobsite? How? Any specific areas of the country more so than others? What steps have been taken to reduce impacts of social distancing?

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“THE CDC HAS ISSUED BETTER GUIDANCE ON TRANSMISSIBILITY, AND I THINK THAT WE’RE STARTING TO SEE CONSENSUS ON REASONABLE STANDARDS FOR SOCIAL DISTANCING IN WORK ENVIRONMENTS. THERE ARE SOME CONSTRUCTION ACTIVITIES THAT ARE IMPOSSIBLE TO COMPLETE WHILE MAINTAINING SOCIAL DISTANCING, AND I THINK THAT EMPLOYERS NEED TO LOOK AT THOSE CASES CAREFULLY.”

Chris: With the exception of a few of our laboratory personnel, each of our 10 offices are closed with everyone working 100% from home. We are rolling out a return to work plan that will bring us gradually back to the office, starting in June. Our plans call for spreading out workspaces, allowing people to work from home when appropriate, and limiting use of public spaces like kitchens and conference rooms.

Pat: Did you foresee any other industry issues in the engineering and forensic world before the pandemic? Are you concerned COVID-19 Chris cause any exacerbation of these concerns?

Chris: Our firm was preparing for a possible recession before the pandemic and it seems to be here. Changes to markets, like online shopping and working from home, were trends before the pandemic, and the pace of those changes has been quickened by this event, so I expect that we'll see the infrastructure around those markets change.

Pat: How has COVID-19 impacted your use of technology? How do you expect these changes to evolve in the future?

Chris: We're thankful to have strong technical infrastructure in place so that our staff can stay connected and, frankly, aside from the occasional interruption from a dog or visit from our kids, we haven't seen a significant change in our office-based work. The efficiency surprised many of us and I think that these tools will be with us for a long time. There's also something unifying and very human about this – everyone is in the same situation and we're all dealing with similar problems, so everyone has been very understanding. I think that these tools might quicken a move away from centralized workplaces. I've already heard that tech companies are planning to allow workers in high rent markets to live and work remotely from their headquarters. I expect that a similar culture shift will occur with other businesses, including ones that were much more traditionally rooted before the pandemic.

Pat: How have COVID-19 related safety guidelines impacted your day-to-day activities as it relates to engineering, construction or forensic work?

Chris: We live on Zoom! While this has all been a change, the online platforms - Zoom, Skype, MS Teams - have been working better than I think many of use imagined they would. We're still going to construction sites when we need to, though everyone is taking precautions to minimize unnecessary risks of exposing employees to potential hazards. Some jobsites are closed to non-essential workers, and we have been encouraged to delay site visits when possible. When on-site, we require additional PPE, such as masks or face shields, to be used and we are asking all contractors to provide written assurance that that no COVID-19 cases have been reported on the jobsite.

Pat: Do you see any concerns with personnel returning to project sites? What have you heard?

Chris: I think we all need to take common sense approaches to look out for each other, but we are getting more comfortable with the idea of managing this. The CDC has issued better guidance on transmissibility, and I think that we're starting to see consensus on reasonable standards for social distancing in work environments. There are some construction activities that are impossible to complete while maintaining social distancing, and I think that employers need to look at those cases carefully.

Pat: Do you think engineering, construction or forensic work Chris be impacted by issues related to returning to project sites more so than another? How so?

Chris: Forensic work can't always be planned as far in advance as construction work, but there are sometimes fewer people at a project site for a forensic project than there are for a construction project, so social distancing is often more manageable.

Pat: On behalf of owners, we are requiring that contractors submit detailed site safety and security plans. What are your thoughts as to this requirement? Have you had to deal with any such plans yet? Have there been any impacts to your work?



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Chris: Yes, most work sites that we visit have these plans in place, and when they don't an adequate policy we provide our own. It's a prudent move from a risk management perspective and supplements safety protocols that sites should already have in place. I think that we will have to be vigilant to ensure that these policies are applied consistently as we transition back to normal. Social distancing requirements can affect how efficiently you move around a jobsite and may restrict the ability of contractors to staff up jobs to catch up on delayed schedules. Some contractors early on were concerned that OSHA would make contracting COVID-19 on a job site a reportable event, so I believe that many put plans in place in anticipation of that possibility.

Pat: Have owners, or other clients of yours, talked with you about health guidelines causing delays on projects? Are you aware of any claims being submitted? What types?

Chris: As a designer, I haven't heard of claims related to COVID-19 specifically, and I believe it is still too early to see many claims from this. I expect that we will see delay claims regarding the impact of shutdowns and restarts in the years to come.

Pat: Since many construction materials are produced in China, there were fears of supply chain interruptions. Although I have not seen much impact yet, what has your experience been?

Chris: I have heard from contractors having problems procuring specific products – in one case a peer had a flooring order from China delayed – but I have not heard of this being a widespread impact.

Pat: Have any of your current projects been cancelled? What about future projects? Were the cancellations due to fears surrounding COVID-19?

Chris: Many projects that were still in the planning phase have taken a breath to regroup, and some projects aren't progressing past their current design phase for the time being. Many clients are waiting to see what the next few months have in store before making major decisions. Certainly, private capital and rental revenue have been affected dramatically and if this persists it will have broader impacts on construction.

Pat: What other economic issues are the engineering, construction or forensic industries facing now and what do you see for the future?

Chris: This is really hard to predict. The banks aren't in as bad of shape as they were in 2008, so access to capital should allow us to recover, but the main street impact of this is deep. It seems likely that we're going to see a recession in design engineering and construction this year for most markets, and it may persist for certain markets for a long time. Forensic work tends to be driven by a different set of variables, and there are repair and rehabilitation opportunities that come along with buildings being repurposed that may blunt some of the impact to design.

FUTURE IMPACTS

Pat: We believe that the impact this pandemic will have on future projects will be widespread. Project teams will begin to re-think how spaces are designed. What are your thoughts? Do you think this presents an opportunity?

Chris: Well, there are a few optimistic scenarios – we find a vaccine later this year and everyone gets back to work with the flush economy we had 6 months ago and without too many businesses falling victim to the pandemic! I think this is what we're all hoping for. Or, maybe we decide that we need to build a world with a new normal where every restaurant has a drive-thru and retail buildings are repurposed with rack systems where you scan your phone and have your order brought directly to the trunk of your car. Maybe our government will decide that with everyone sitting at home and with the road clear, this is a good time to invest in infrastructure projects. Or, modular construction has been gaining speed recently, so maybe this is the impetus to help us make better use of the controlled manufacturing processes and more limited site demands that modular construction offers. People are eager to move forward and I think that once we have clarity on how to deal with health conditions and people get some picture of what the business landscape is really going to look like at the end of this, we'll see big moves in construction. And I think that we are very likely to see innovation around office and retail spaces, driven by unplanned occupancies and lower traditional demand.



Pat: We have heard of possible design changes on future projects as means of dealing with potential COVID-19 issues in response to tenant requests. Some of these changes include, ventilation systems upgrades, touchless systems, less porous fabrics and re-configurations that allow for better social distancing. What types of changes do you foresee and how you believe they will help.

Chris: The new CDC guidance suggests that touch is not one of the primary ways that the virus spreads, which is very good news for getting us all back to work. While I do think that most reasonable employers are evaluating how to manage the health and safety aspects of returning to work, I think that we have a long way back to normal. If this persists for a very long period of time or if people decide to plan their workspaces to better weather for future pandemics, airflow will be a critical issue for design, and we may see open-office plans fall out of favor. But I think that, more likely, this will be a temporary event that doesn't change the fundamental architecture of spaces, but may cause some employers to forego office spaces entirely, as many companies have discovered that they can switch over to an entirely remote workforce effectively and can invest the money that they were spending on leasing office space toward infrastructure to improve their core business.

CONSTRUCTION CLAIMS

Pat: On the claim side, what Coronavirus related claims have you seen recently? What future claims do you anticipate?

Chris: We're normally engaged as technical experts in claims and to date haven't seen claims that are directly related to Coronavirus. I do believe that we will see claims in a few years related to the cost and schedule impact of shutdowns and restarts and possibly claims related to reasonable protection of workers.

Pat: Chris, thanks again for sharing your thoughts and experience on COVID-19 related issues in the engineering, construction and forensic arena. Stay safe!

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