

Safety Measures and Business Considerations-What A/E/C Firms Need to Know

Presented By:

Phillip Ross, CPA, CGMA – Anchin
Richard Cavallaro, EVP – Gilbane Building Company
Grant Gagnier, VP – Gilbane Building Company
Brian Sanvidge, CIG, CFE – Anchin
Doug Mass, PE, LEED AP – Cosentini Associates
Elsie Tai, VP of Risk Management – NFP Corp. DBA GCG Risk Management

Thursday, May 14, 2020 | 1:00 PM - 2:30 PM EDT



Agenda

- An update on the various industry leading safety measures
- What will the A/E/C industries safety protocols look like after the "Pause" has ended?
- Insights on insurance matters and risk management
- An overview on business planning issues and recommendations





Commitment

- Safety is Our #1 Priority
- Project Specific Safety Plans
- Dust, vibration and noise control
- Fall protection standards above OSHA
- Communications
- Cleanliness
- > PPE Improvements
- Technology











Reopening New York's Economy



Phase 1



Construction

Manufacturing

Wholesale Trade

Select Retail for Curbside Pickup Only

Agriculture, Forestry, and Fishing

Phase 2



Professional Services

Finance and Insurance

Retail

Administrative Support

Real Estate, Rental, and Leasing

Phase 3



Restaurants and Food Services

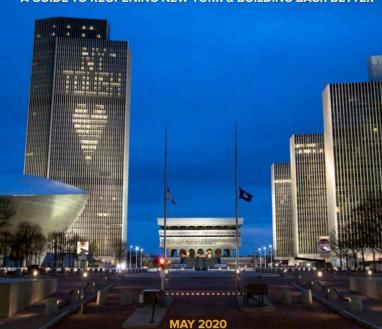
Phase 4



Arts, Entertainment, and Recreation Education

FORWARD

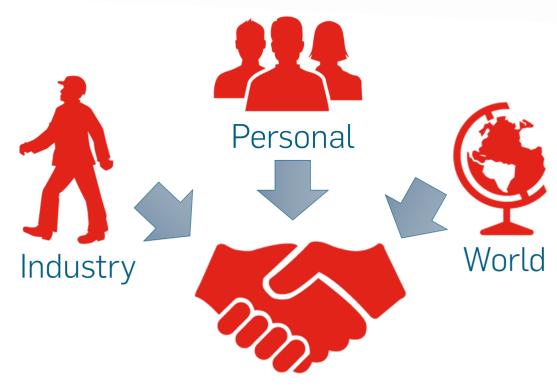
A GUIDE TO REOPENING NEW YORK & BUILDING BACK BETTER



Construction industry included in Phase 1



Overcoming Key Challenges



Inspiring Trust & Confidence



COVID-19 Safety: Gilbane Corporate Initiatives

A Proactive Approach

- Dedicated Executive Task Force
- Confidential Employee Hotline
- Social Distancing Measures
- Reduced Workplace Density
- Cleanliness & Sanitation
- GRS/Emergency Response
- Communication







Restarting Operations: Core Safety

Components





Developing Site Specific Safety Plans

Preparing to Reopen

- Policy
- Logistics
- Communications
- > Expectation-setting

Jobsite Conditions

- Hygiene
- Reduced density
- Social distancing
- > Temperature-taking
- Reorientation

SAFETY FIRST TEMPERATURE SCREENING CRIBADO DE TEMPERATURA SEGURIDAD PRIMERO







Developing Site Specific Safety Plans

Social Distancing & Reduced Density

- Staggered starts, lunch breaks
- Limit meetings or go virtual
- Limit number of people on hoists/in elevators
- > One way traffic on stairs and in corridors
- Follow six-foot social distancing/utilize face covers

Sanitization & Hygiene Plan

- > Regular cleaning
- Accessible handwashing stations
- No sharing of food or tools





Communication with Partners

Introducing New Protocols

- Clients
- Subcontractors
- Architects/Engineers
- Third Parties
- Buy-In, Input, Commitment
- Non-Negotiables
- Open Discussion
- Best Practices
- JHAs and Charters
- Execution







Education of Workforce

- > Self-check questionnaire
- Informative site signage
- Tool-box talks
- Communicate frequently
- Post charters

GILBANE CARES YOUR HEALTH & SAFETY IS OUR #1 PRIORITY Before you enter the jobsite, please read these questions: If you answer YES to any of them, please do NOT come to work and contact your supervisor. Are you currently feeling sick? Did you take your temperature before arriving at work this morning and is your temperature 100.4° F [37.8° C] or more? if you do not have the means to take your temperature, discuss any current symptoms of fever with your supervisor. Are you having any breathing issues? Have you traveled outside of your local government's current travel restrictions for any reason? Have you been in close contact with anyone that is being tested for COVID-19 because they have symptoms consistent with COVID-19? Have you tested positive or been in close contact (within 6 ft. for 10 minutes) with anyone that has tested positive for COVID-19? If you answer NO to all of the above, please come to work. We will be maintaining social distancing and following CDC and OSHA guidelines while we manage our way through the COVID-19 outbreak. Any concerns regarding the above questions need to be brought to your supervisor's attention immediately. Thank You



Prevention/Wellness

- > Self Screening by Workforce
- > Temperature Screening
- Enhanced PPE
- Face Coverings
- Handwashing/Sanitizing Stations









Technology

- Triax partnership Proximity Trace
- Reinforce social distancing
- Contact Tracing
 - > Workers issued a tag for hardhat or lanyard
 - > Tags emit real-time alerts when workers are close
 - Interactions/duration are recorded to cloud





Your Expert Partner



Risk Management

- Subcontractors and Vendors
 - Many businesses hold <30 days of cash in reserve
 - Stay in close contact
 - Enact enhanced pre-qualification protocols
- Schedule delays
 - Anticipate impacts
- Supply chain disruptions
- Loss of productivity claims, other COVID-related Costs
- Maintain open communications with Clients and other stakeholders
- Seek fair and equitable solutions wherever and whenever possible

Supply Chain COVID-19 Impacts

As of May 8, 2020 Subject to State & Local Shutdowns

Commodity	Status	Lead Time	Price	Comments
Commodity	Status	Lead Time	Price	
Cast Iron		Consistent	Consistent	No disruption - both major foundries operational
Ceiling/Acoustic		Consistent	Consistent	No disruption - major plants operational
Flooring - Domestic		Consistent	Consistent	No disruption - major plants operational
Flooring - Imported		Delayed	Consistent	Watch out – Italy tile
Furniture - Domestic		Delayed	Consistent	Watch out – Gunlocke, Herman Miller & Haworth reduced capacities
Furniture - Imported		Delayed	Consistent	Watch out – China parts (casters, handles, knobs, etc.)
Glass - Domestic		Consistent	Consistent	No disruption – 6 to 8 weeks lead time
Glass - Imported		Delayed	Consistent	Watch out - sporadic temporary plant closures
HVAC/MEP - Domestic		Consistent	Decreasing	No disruption – some evidence of slight price decrease
HVAC/MEP - Imported		Delayed	Consistent	Watch out – Mexicali shutdown, Germany, Croatia, China delays
Lighting - Imported		Impact Unclear	Consistent	Watch out – China, Mexico
Process Equipment - Imported		Delayed	Consistent	Watch out – Germany
PPE/C19-Related Equipment		Delayed	Decreasing	Watch out - slight decrease in spiked prices, availability improving
Pipe, Valves & Fittings		Consistent	Consistent	No disruption – slight decrease in distributor inventory levels
Stainless Pipe & Fittings		Consistent	Consistent	No disruption
Steel - Domestic		Consistent	Consistent	No disruption - manufacturers & mills operational
Steel - Imported		Impact Unclear	Impact Unclear	Watch out – weakening demand, reduced plant capacities



Business Planning Issues and Recommendations

No Crystal Ball...More Opaque

- Evaluate overheads and expenses
- Look out for new opportunities
- Be nimble and ready to pivot
- Consider strategic investments







Gilbane New York

Gilbane has delivered compelling and creative building solutions across New York since 1949.

Albany
Buffalo
New York City
Rochester
Syracuse



Richard CavallaroExecutive Vice President



Grant GagnierVice President



Current News Headlines

- Any site that "cannot maintain distance and safety best practices must close," the Buildings Department order noted. The state and Buildings Department will enforce this mandate, and violators will be subject to finds of up to \$10,000.
- Construction Covid-19 safety complaints falling; Two sites cited as 'repeat violators'.
- Enforcement of the COVID-19 Safety Guidelines and Procedures for Construction Sites.
- Construction workers caught on camera breaking COVID-19 safety rules, threatening public health.



Current News Headlines

- Builders' COVID-19 Dilemma: Construction Continuity Versus The Health Risks On Job Sites.
- NYC Announces Fines of up to \$10K if Work Continues on Non-Essential Projects.
- How can I report a violation of an Executive Order?
- Fines Increased for Violating Covid-19 Orders in Philadelphia.
- COVID-19 violations: \$35,000 in fines issued by Fresno, CA.



Current News Headlines

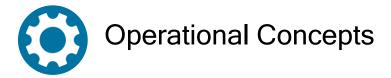
- Save lives on your construction sites now, and prevent workers from bringing sickness home, by taking these essential steps thoroughly and immediately.
 - 1. Social Distancing
 - 2. Symptom Checking
 - 3. Hygiene
 - 4. Decontamination procedures
 - 5. Training



COVID-19 RESPONSE















PHYSICAL ENVIRONMENT DESIGN CONCEPTS



Recommendations for healthier buildings

HVAC



Improve air quality: Increase air exchange rates & Higherfliciency filtration/air treatment

Ensure pressurization between spaces

Humidification

Decentralized Systems

Architectural



Touchless technology
Space planning for
distancing
Frictionless entryways
Lighting Controls &
Automated Shading

Distance Indicator on Floors Larger workstations/hoteling?

Material



Anti-microbial materials
Entryway mats
Antimicrobial surface
protectors

Technology



High-tech connectivity

App-based touch-free systems

Smart Concierge

Thermal Scanning

Hoteling desk management
system for disinfection





ENHANCED HVAC SYSTEMS



Air Quality (Dilutes Contaminants)

Air Treatment (Removes/Disables Contaminants)

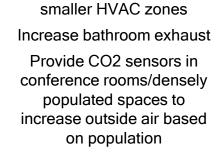
Air Exchange

Humidification











Control humidification





BUILDING LOBBY







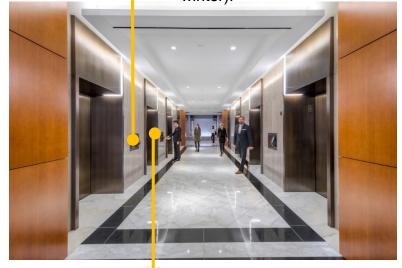
Plexi barrier for security/ reception desks



Increase outside air, enhanced filtration, and air treatment systems

Touchless destination dispatch system via card or mobile app. Keep elevator doors open in main lobby (note stack effect concern in winter).





Entryway mats



Sanitization station at entry



Facial recognition/mask scanning, thermal scanning, and touch-free security



Minimize elevator occupancy and use floor stickers.
Consider UV in elevator cabs.





OPEN OFFICE



Increase outside air, enhanced filtration, and air treatment systems

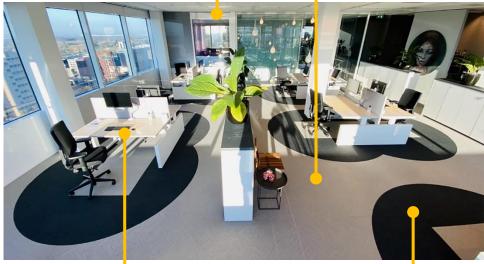




For conference rooms space out seating, add CO2 sensors, consider portable air filtration. Reduce open collab/touchdown spaces.



Desk dividers for existing desks







Larger or separated workstations, stagger work hours and occupancy (occupy every other desk) for social distancing



Floor markings for circulation and 6' separations





PANTRIES





Handwashing education posters



App-based coffee machine and automatic water bottle filler



Countertop cut-outs for touchless waste and recycling system





Motion-activated faucet with 20 second timer



Touchless cabinets





BATHROOMS







Automatic Flushometers



After-hours UV disinfection

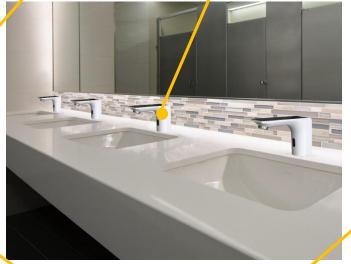


Motion-sensor 20 second faucet and automatic soap dispenser



Automatic bathroom doors







Full-height water closet partitions (\$7,500/unit)





Toilet seat UV disinfection



Prime floor drains & add automatic trap primers if not already installed



Automatic paper towel dispensers and open trash can located by door





OPERATIONAL CONCEPTS



Proactive things building owners can do

Cleaning



New cleaning protocols

More regular deep cleaning

Frequent cleaning of common touchpoints

Increase supply of sanitizing products

Ductwork and unit cleaning

Air Quality



Changing filters

Monitoring air quality

Extending ventilation
hours and after-hour
purge with outside air

Screening Protocols



Thermal Camera
Scanning/Elevated Body
Temperature (EBT) checks
Staggered Arrivals and
Departures
Packages Sanitization

Commissioning



Commissioning of systems with periodic validation

Creating operations and maintenance manuals for staff

Create a best practices manual for tenants







AEC EMPLOYERS – KEYS TO RETURNING TO WORK SAFELY



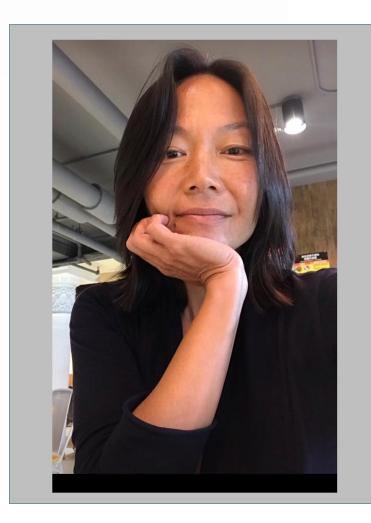
- Fear of Economic Future &
- Fear of Disease Transmission
- Site Safety for Pandemics





AEC EMPLOYERS – KEYS TO RETURN TO WORK SAFELY

- 1. Fact Based Clear Communication
- 2. OSHA & CDC Based *Infection Control Plans & Measures for AEC
- 3. Related Health & Safety Topics *PPE, *Chemical Safety, *Recordkeeping
- 4. AEC Employee Health & Safety Training





Infection Control Plans & Measures for AEC

- Based on
- OSHA Regulations, Guidelines & Exemptions, and CDC Recommendations





Medical Management: Check-In

- Do NOT come to work if sick or unwell.
- Temperature (101° ≥F) scan (touch-free)
- Symptoms checks conducted daily before start of work
- There are SOP's for sick or unwell employees, & visitors to be isolated and removed from others ASAP and sent home with their belongings.
- A thorough disinfection regime will be applied to all items, surfaces and areas that sick employees may have come into contact with through back tracking their steps. (Maintain logistics log that can record this info effectively.)
- All employees who may have had potential exposure or contact with sick employee will be informed. They should self-monitor for symptoms as well.



Sick Employee Policy



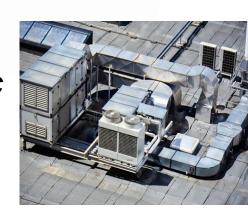
- Employees who report in sick, or are sent home sick, should remain at home until:
- A. Respiratory symptoms have resolved, AND,
- B. They have been fever-free for at least 3 days without the use of fever-reducing medication, AND,
- C. At least 7 days have passed since the symptoms first appeared.
- **OR**, of course, they have been cleared by FDA approved COVID19 tests (which requires 2 negative tests over a 2-day period).





Engineering Controls 101 – Ventilation

- To remove active microbe and minimize its spread, and to dilute the aggressive use of disinfecting chemicals in AEC Permanent & Temporary Structures
- Maximize Fresh Air Intake & Air Exchange Rates
- Ensure bathrooms are under negative pressure
- Try to have the general ventilation flow in one direction through a facility, minimize turbulence. Do not let pedestal or hard mounted fans blow air from one person directly onto another.
- Increase filtration efficiency (i.e. HEPA, High Efficiency Particulate Air filters)
- Clean/disinfect all HVAC intakes and returns daily.
- Install adequately sized, cleanable sneeze guards or partitions in between people who cannot be distanced at least 6 feet apart, *if they must face each other
- Move operations OUTDOORS whenever possible.





Reopening in A&E Offices

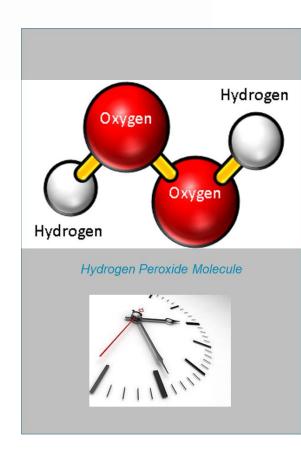
- Conduct detailed review of configuration to eliminate crowding, reception seating area, establish workstations & seating properly distanced, facing away from each other, establish partitions,
- Redesign/Deter/Forbid use of communal amenities
- Vary, rotate, stagger, condense shifts, close off public areas
- Use virtual and remote meeting tools whenever possible
- If in-person is essential, limit to 10 or less, keep distance, limit time
- Wipe down all touchpoints after meetings in conference room
- Disinfect shared high touch points, handles, switches, buttons, keypads, keyboards, handles, doorknobs, pens, markers, wands, mouse, touch screens, shared hand tools/implements, etc.
- Reduce tasks with large #'s of people in one area. Reduce/eliminate trade stacking
- Ban lingering, socializing before/after meeting, at breaks, start/end of work, minimize talking/yelling
- Identify high-traffic choke points, i.e. elevators, stairways, hallways, and implement distancing measures, only allow a designated # of people in an elevator at once, demarcate waiting spots at proper distancing intervals for lines that could form anywhere
- Multi-stall restrooms should be spaced, be able to open/close without touch handle
- Provide paper towels in place of automatic hand dryers along with hands-free trash





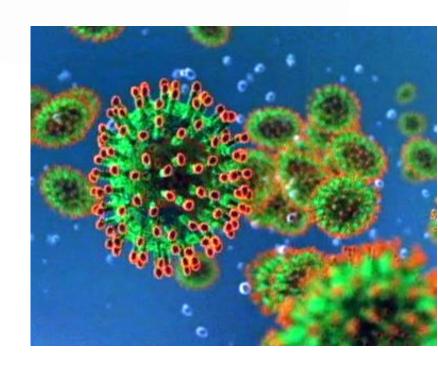
Disinfection with Hydrogen Peroxide Base Cleaner

- Use a hydrogen peroxide based cleaner
- One of the safest disinfectants, both for human health and the environment
- Has a benign environmental footprint
- The breakdown components are water & oxygen.
- Is effective against bacteria, yeasts, fungi, viruses & spores
- Most disinfectants need to remain on surfaces for 2-3 minutes to be effective. Check instructions.



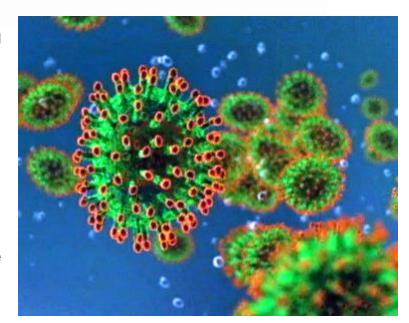


- Work in occupied areas should be limited only those strictly necessary
- Conduct immediate workflow audits to remove instances of workers being within 6' of each other
- Limit physical contact with others, direct workers to maintain proper distances
- Whenever possible, don't stack trades
- Develop and communicate scheduled stagger use of "skip, elevator, stairwell" volumes control for entry and exit procedures
- Develop and communicate "Emergency Action Plan" with rally points for 10 people or less outside & inside including severe weather shelters
- Take breaks & lunches in shifts to reduce size of group in lunch area at any one time <10 people
- Reconfigure break spaces to allow for proper distancing, clean & disinfect at end of break
- Do not gather at lunch/break, entry/exit, amenities, locker trailer, other congregation areas
- · Discourage carpooling unless riders live together



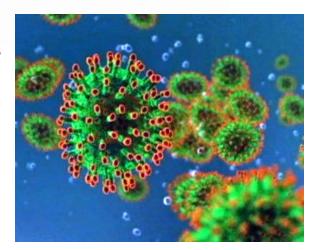


- Subcontractor foremen and project managers should communicate with their general contractors about prohibiting large gatherings (now < 10 people) on the job site, such as the all-hands meeting and all-hands lunches
- Discourage hand-shaking and other contact greetings
- Do not hold, or participate on site-wide meetings, standdowns, celebrations or lunches whenever possible
- Morning Stretch and Flex and Toolbox Talk safety meetings to continue at a crew level while maintaining physical distancing of 6 feet or more
- When in-person meetings are required, maintain appropriate physical distance
- Eliminate community provided food (lunch buffets, donuts, candy dishes)
- Eliminate community coffee pots, water dispensers, hot boxes and microwaves from break areas (replace with water bottles, individually wrapped snacks, etc.
- Increase # of portable toilets
- Make plumbed handwashing stations available with soap & paper towels if possible
- Increase cleaning routine especially of touch points



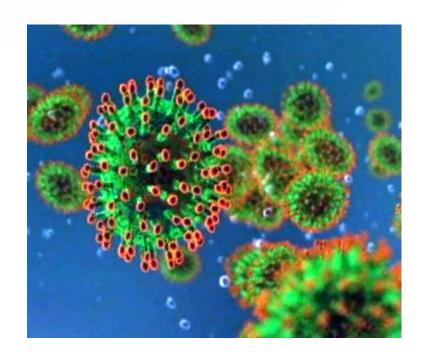


- Instruct employees to clean their hands often with an alcohol-based hand sanitizer that contains at least 60-95% alcohol or wash their hands with soap and water for at least 20 seconds
- Soap and water should be used preferentially if hands are visibly dirty
- Provide soap and water and alcohol-based hand rubs in the workplace
- Ensure adequate supplies are maintained, place hand rubs in multiple locations to encourage hand hygiene
- Do not share tools or any multi-user devices and accessories such as iPads, laptops, hand-held radios, computer stations, hand and power tools, etc.
- Limit the exchange/sharing of paper documents, encourage the use of electronic communication whenever possible
- Do not share personal protection equipment (PPE)
- Sanitize reusable PPE per manufacturer's recommendation prior to each use
- Ensure used PPE is disposed of properly
- Utilize disposable gloves where appropriate; instruct workers to wash hands after removing gloves & be careful with doffing and disposal, ensure protocols training to prevent recontamination
- Disinfect reusable supplies and equipment





- Provide routine environmental cleaning and more frequently (doorknobs, keyboards, switches, handles, levers, clasps, locks, buttons keypads, counters, and other high touch surfaces)
- Use shoe sanitation tubs (non-bleach sanitizer solution) prior to entering/leaving jobsite)
- Instruct workers to change work clothes prior to arriving home; and to wash clothes
- Use disposable hand towels and no-touch trash receptacles
- Avoid cleaning techniques, like pressurized air or water sprays that may result in the generation of bioaerosols
- Clean surfaces of heavy equipment enclosed cabs including service/fleet vehicles, steering wheel, gear shift, instrument panels, etc. use aerosol sanitizers inside closed cabs
- Replace cabin air filters if you suspect they have been exposed or compromised by sick employee
- Instruct workers leaving the jobsite due to illness to collect all their personal belongings before exiting the worksite





AEC Infection Control

- Provide resources and a work environment that promotes personal hygiene. (i.e. tissues, no-touch trash cans, hand soap, alcohol-based hand sanitizer containing at least 60% alcohol, disinfectant products and disposable towels for employees to clean their work surfaces at their discretion
- Encourage regular and frequent handwashing with available supplies and post signage encouraging proper cough/sneeze etiquette and handwashing techniques
- Encourage employees to support fellow co-workers in following the designated procedures, protocols and practices.
- Encourage employees to contact their supervisor if they have questions or concerns or suggestions
- Hold daily reviews of personal & company hygiene protocols, symptoms to monitor





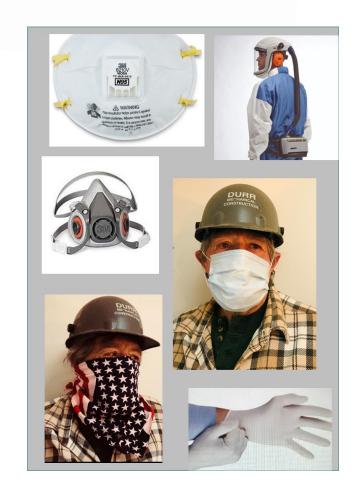
- 1. Personal Protective Equipment *PPE
- 2.*Chemical Safety/Worker Right-to-Know
- 3.*300 Log Recordkeeping & Reporting
- 4. Employee Health & Safety Training





Personal Protective Equipment, PPE

- 1. What is, (N95, N99, half face respirators with proper canisters/filters, or PAPR)
 *All require Respiratory
 Protection Program
- 1. What isn't, surgical masks, and homemade face masks or face coverings which is/can be required if 6 feet distance cannot be maintained



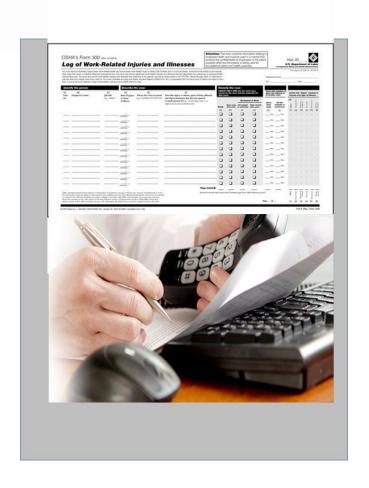


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Addressing Employee Concerns & Site Safety Management

- Anxiety & Depression leads to Agitation, Irritability, Preoccupation, Distraction, Poor Listening & Retention, Increased Stress, Anger, Hostility
- Which leads to Poor Communications,
 Mistakes, Accidents & Outbursts
- Communicate Clearly, Firmly, Repeatedly,
- Reassuringly, Center-Self, Expect These, but Don't Tolerate the Intolerable, while being more accommodating and tolerant given the circumstances.





Risk Management – Insurance

- Commercial Property (Business Interruption)
- General Liability
- Workers' Compensation
- **•D&O**
- Management Liability
- Pollution
- Stock Throughput Policies (STP)





Business Issues and Planning

Companies must plan

- Those that do will be more successful
- More able to adapt to changes and modify plansalternate scenarios
- Anticipate issues and deal with them timely.
- Find opportunities and take advantage.
- Short term and long term plans



Return to work – Construction is one of the first industries to come back to work

What does this really mean?

- Will not be a 100% resumption of normal.
- Which projects/types will re-start first?

Job Sites

- What will it be like at job sites??
- Size of crews and limits?
- Multiple shifts?
- Overtime?



- Potential changes: safety measures, technology improvements and related costs to operate after the pandemic are uncertain with future guidelines.
- Will construction codes require an independent COVID-19 safety director on all job sites?
- Costs and risks associated with a contract site that gets "tainted" with the virus and job site infections.
- Will any of these additional mandated costs be recoverable from the client?
- What will it be like at offices?
 - Commuting issues
 - Safety and wellness at work
 - Remote working will continue
 - Monitoring work-technology



New work - proposals

- What will the timeframe be? Public versus Private
- Will these jobs take longer than normal for the bid, award and start process?
- Include "new normal" in bids and cost estimates- regulations, new designs for health parameters, additional safety/health costs for projects, efficiency issues, et al.
- Competitiveness- how much work is there to bid on, potential low bids from companies with reduced backlog.

Need to develop projections and analysis based on different scenarios

- Need in order to monitor operations.
- Tool to help decide which jobs to bid on and bid strategyconservative/aggressive.



Cash flow versus profitability monitoring – Don't confuse the two

- Projections need to be continually updated and compared to original ones.
- Develop/monitor alternate scenarios.
- Positive results in one does not guarantee the other results.
 - Good cash flow from collecting on A/R does not mean the work is there for future billings and future cash flow.
 - Work and billings now and in the future may take longer to collect.
 - Re-evaluate the funding sources for each job.



- Financing, lines of credit, capital sources, equipment needs
- Monitor reporting to determine accurate
- Job costs don't include non-working time to hide employees non-working time.
- Track "new/additional" safety costs
- Capture "unproductive" and "loan necessary" expenses/costs separately in records.
- Better internal management analysis and reporting tool.
 - Will also be useful in demonstrating need/reason for various loan programs.
 - Evaluate whether to maintain these additional costs as compared to issues when work will start up/increase, need for employees, loan programs and potential forgiveness eligibility.

Thank you for joining us



Phillip Ross, CPA, CGMA
Partner, Leader of Anchin's Architecture and
Engineering and Construction Industry Groups
Anchin
Phillip.Ross@Anchin.com



Brian Sanvidge, CIG, CFE
Principal, Leader of Regulatory Compliance and
Investigations of Anchin's Litigation, Forensic
and Valuation Services Group
Anchin
Brian.Sanvidge@Anchin.com



Richard Cavallaro
Executive Vice President
Gilbane Building Company
RCavallaro1@GilbaneCo.com



Doug Mass, PE, LEED AP
President
Cosentini Associates
DMass@cosentini.com



Grant Gagnier
VP of Risk Management
Gilbane Building Company
GGagnier@GilbaneCo.com



Elsie Tai

VP of Risk Management

NFP Corp. DBA GCG Risk Management
elsie.tai@gcgriskmanagement.com

