



2016 CONSTRUCTION SAFETY
EXCELLENCE AWARDS SAFETY
MANAGEMENT SHOWCASE



Introduction

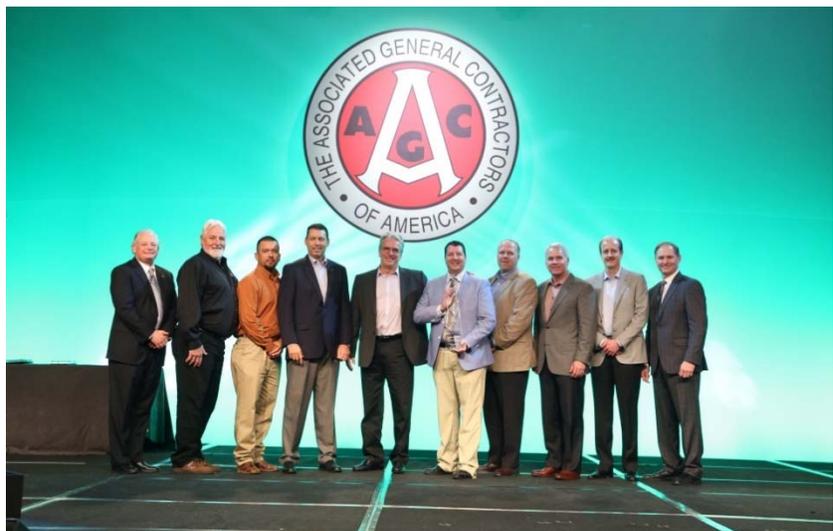
On March 10, 2016, the AGC-Willis Towers Watson Construction Safety Excellence Awards (CSEA) breakfast was held at the AGC National Convention in San Antonio, Texas. Almost 1,000 contractors attended.

Paul Becker, Chairman of Willis Construction, introduced the awards and noted, “Willis Towers Watson is proud of our 30-year partnership with AGC to shine a spotlight on safety. Each year we see great examples of companies who live their values by providing safe environments for their people to be productive, empowered and collaborative in sharing the best ideas on how to make the industry a better place to work. The CSEA program has involved over a thousand submittals in its history which has generated great ideas, and that is the core purpose of the competition. This document is a representation of what the judges saw as the best of the best ideas which they strongly felt needed to be widely shared throughout the industry. Willis Towers Watson and the AGC encourage everyone to use it to generate discussion about what’s next for safety in every construction company. We look forward to seeing the results in the future as we all build for the day when zero accidents is a reality.”

The AGC’s Construction Safety Excellence Awards (CSEA) program is the industry’s elite safety excellence awards program for companies of all sizes and occupational divisions. It is unique because finalist contractors make five-minute presentations to five judges. The judges then ask each finalist a series of unknown questions for 10 minutes. CSEA recognizes companies that have developed and delivered premier safety and risk control strategies. CSEA showcases companies that have achieved continuous improvements and maintenance of their safety and health management systems. In 2016 there were 57 total finalists among six divisions and 20 categories.

AGC-Willis Towers Watson presented the Grand Award for Construction Safety Excellence to Sundt Construction. The first-place winner of each category was included in the evaluation that determined the “Best of the Best” of the 2016 Construction Safety Excellence Awards finalists.

During the post-competition exit interviews, many contractors shared the value that the CSEA process has brought to their organization:



“Excellent program, well organized, provides a great service to the industry”

“Provided an opportunity for our team to spend time really focusing on what makes this company great”

“Plan to use the award in proposals and to recognize employees by letting them know it is theirs”

“We like the idea of sharing and hearing from others on their best practices”

“It’s great and really opens your eyes to areas that we need to work on to improve our own company”

“It was challenging for us – in a good way. It was also educational”

Willis Towers Watson

The 2016 AGC-Willis Towers Watson finalist judges were:
Bob Fitzgerald, Bill Parsons, Mike Sterrett, Mike Fredebeil, and Tony Militello.

On January 17-19, 2016, in Phoenix, Arizona, prior to the AGC National Safety Committee meeting, preliminary judging for the CSEA final competition took place. A total of 32 preliminary judges from the construction industry, AGC Chapters, construction brokers, and construction insurance evaluated and scored the initial 102 CSEA applications from across the country.



The following combine the many noteworthy Safety Management program elements highlighted by presenters and noted by the judges during the final competition:

Senior Management Ownership and Participation

- Executive management team participates in safety pre-planning meetings, attends in-house training, and conducts a monthly tail-gate safety tool box talk
- Monthly management one-on-one conversations with employees based on a planned schedule and specific topic (leading).
- Executive management developed a Monthly Safety Scorecard that goes beyond injury rates.
- Monthly Foreman safety dinner “Open Forum” discuss Safety Scorecard, Lessons Learned, Incident Review, and needed safety training improvements.
- President sends out monthly direct e-mails to all employees with a specific safety emphasis and asks for direct feedback from individual employees.
- President conducts unannounced project safety inspections without safety manager and reviews results with Superintendent and all workers.
- Orientation video by the President which communicates total commitment for the “Stop Work” program.
- Bi-annual Safety Stand Down lunches facilitated by the president.
- We participate in CSEA to afford ourselves the opportunity to grow and expand our understanding of ourselves and our culture.
- Internal monthly 30 minute “all call” with CEO to discuss safety focus and trends; 2,000+ employees are invited to call in. Includes Q&A with CEO.
- “HiPo” program that uses tools to identify and develop top performing employees at all levels for future leadership roles and to fuel organizational growth.
- Senior leadership participation in each incident review and personally talks to affected employee(s) with specific questioning as to what leadership can do to prevent a similar incident.
- Project Managers required to do documented project safety walks and must answer the question.... What have you done this week to improve the safety culture on your project”? Answer sent to President.
- Owners and senior managers cook BBQ for field crews to recognize their safety performance.
- Built a Peer system of cross contractor safety audits done by invited similar contractors. Help each other improve their safety processes.
- Monthly companywide safety topic and “Safety Share” starts every meeting.
- Executive safety committee makes monthly project visits and interviews workers regarding their perceptions of the safety climate on their project. These interviews are shared with the project team and summarized at the monthly executive meeting.
- Foreman training curriculum enhanced with leadership skills such as computer, time management, problem resolution, listening, writing, and negotiation.
- All recordable injuries to GC employees and subcontractors are reported directly to COO and CEO.
- Executive team completes “Safety Only” project reviews.
- Safety Culture Committee works beyond the safety committee by focusing on more of the “people” aspects of the projects vs. the compliance focus of the safety committee.

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- Promote General Labor Foremen to safety manager positions; currently about 50% of the safety management population. Their building experience combined with their relationships has been a huge improvement in the quality and effectiveness of our safety professionals.
- Serious Near-Misses are completely investigated and the project team has to do a formal in-person presentation to the COO and CEO about why and the lessons learned.
- 3rd party Professional Coach is used for helping employees manage stress, deal with conflict, and work with all types of personalities.
- President utilizes “pop quizzes,” either in person or by sending a text, to the superintendent with a limited time frame for their response. They are totally random safety issues and situations. Example: “OSHA just showed up, what are the first 3 things you should do as a Superintendent?”
- Management established “book of the month” club to share leadership books and information.
- Company leveraged web conference/FaceTime technology to connect every company jobsite for morning huddles.
- Management used climate survey of all employees to assess company and jobsite safety culture.
- Establishment of an employee advocacy program to serve as intermediary between jobsite craft workers and senior management. Non-supervisory or authority position, but has cooperative relationship with employees and management.
- Every employee given a red drawstring bag for their cellular device - “Safety in a bag” is intended to be safe place for cellular device while operating motor vehicles and equipment on/off project sites.
- Company president often sits in on site meetings (to support, not guide).
- Small companies have company president leading safety meetings.
- Safety Pays - we self-perform 90+% of our work - Workers Compensation Incurred Costs are less than \$0.01 per work hour.

Risk Identification and Analysis

- Estimating Team “Hand Off” safety meeting comprised of VP Field Ops, PM, Superintendent, Foreman, Engineer, Purchasing Manager, and Safety Manager.
- Use Integrated Process Design techniques in the bid process to bring safety and risk considerations into the picture much earlier.
- Use of Smart Bid for project selection with additional questions for Owner and GC related to safety to make sure clients and customers have aligned safety cultures: <http://smartbidnet.com/>.
- Formal Post-project “lessons learned” meeting with all levels of project management including employees. Safety is one-third of the discussion. Lessons are inventoried and used on next project.
- Project management team has special focus on “unusual or non-routine work” during the project planning stage to identify potential risks and develop planning around those potential risks that are outside of the normal routine.
- Pre-hire Isokinetic physical evaluations to match the physical capabilities of the applicant to the demands of the task.
- Hazard identification team building game where employees take photos of project hazards and submit to Superintendent. Superintendent votes on the best hazard catch and the employee receives a prize.



- Use company physicians to accompany site inspection team to review health hazards and to become familiar with the demands of the tasks for more efficient and effective return-to-work placements.
- New project planning includes an occupational health assessment by a qualified healthcare professional.
- IndustrySafe software is used to validate training and for making safe behavior observations: <https://www.industrysafe.com/>.
- Use iAuditor to perform and track in-house safety performance: <http://www.safetyculture.io/iauditor/>.
- Use of 3-D Lift Planning Software has helped ratchet up the safety planning for critical lifts: <http://www.3dliftplan.com>.
- Highway contractor includes their attorney on their work zone crisis management team. Mobilizes to the crash scene with company officials.
- Monthly “Project Safety Executive Summary” is completed outlining positive trends in behavior and conditions along with specific issues that need executive focus and attention.
- Use Hazard Scout safety management software to help ID issues and at risk behaviors: <https://www.hazardscout.com/>.
- Use of LEAN to map and pinpoint where safety concerns are more frequent so the right managers are involved and more detailed planning completed.
- Require all employees who may be on sites with a known or unknown Asbestos potential to maintain an annual two hour Asbestos Awareness training certification card.
- Safety Means and Methods strategy meetings are held as each new scope begins. Strategy is also peer reviewed.
- “At Risk” physical tagging procedure. When issues are found a tag is placed on the item, photographed, and sent to the Superintendent for correction.
- Use “Workplace Aware” software for identification of hazards and communicating remediation and lessons learned: <http://www.workplaceaware.com/>.
- All JSA’s are electronically uploaded to corporate website within one hour of completion so anyone in the company can review, comment and coach.
- Company safety professionals log their time and what activities they are doing at the project level. A leading indicator of performance for the safety professionals is that they spend at least 80% of their time outdoors on the project managing safety by walking around and observing the people element of the project along with identifying hazards and assisting in solutions. Prior to this leading measurement our safety team spent 80% of their time in the trailer doing paper work.
- “Crane Safety Verification Process” where every crane, even those delivered by rental companies, is fully evaluated before use on project. This process also applies to all subcontractor cranes. Since putting process in place a year ago, 12+ cranes delivered by rental companies have been disqualified and returned for safe equipment.
- “Fatigue Management Plan” has helped take a closer look at how fatigue negatively affects our employees and their decision making process. We have learned that managing fatigue has helped us improve productivity, safety, and rework.
- All heavy equipment operators must pass a TPE (Task Proficiency Evaluation) by a dedicated heavy equipment evaluator and trainer before being allowed to operate equipment on the project. This includes subcontractors.
- “RED Book” process for helping field workers ID and Control Risks. RED stands for Recognize, Eliminate, and Discuss. Each RED Book is carried by



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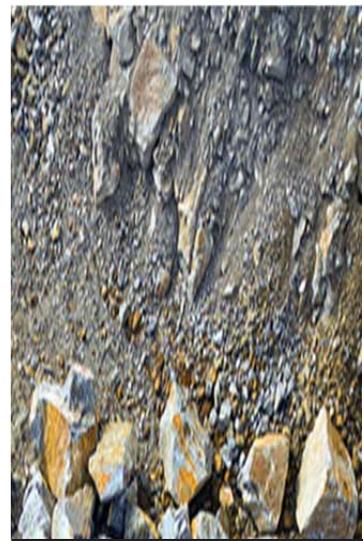


each craft worker and the master RED Book is kept by the crew leader for daily signoff for the Pre-Task meeting.

- Developed a monthly “Safety Dashboard” that contains leading and lagging indicators and issues identified on projects for the month. The dashboard also contains prevention measure and next month’s activities to address and control the identified issues.
- Workers required to take a 20 second pause every 20 minutes to conduct a risk analysis and hazard mitigation validation.
- Outfitted company vehicles with GPS devices to track employee location, which reduced the amount of non-work related vehicle use.
- Use of unmanned aerial vehicle (UAV) to conduct jobsite overview and hazard assessment to avoid congestion and impact zones, etc.
- Installation of “deer horn” on company vehicles reduced wildlife traffic mishaps 100%.
- Daily AHA, PTP, JSA to include assignment of a Risk Assessment Code.
- Critical lift crane software.
- Use of modern HR hiring analytic tools to understand personality traits of applicants.
- Pre-hire Cost Reduction Technology (CRT) tool which measures dynamic strength and the physical ability to do a job.

Task Design – Engineering Controls & Design for Safety

- Post OSHA violation - designed pre-fab temporary electrical panels which eliminated the need for removing front covers to access the installation and removal of conductors from the circuit breakers.
- Developed a formal agreement with national fall protection vendor to immediately notify company of any technological advancement in fall protection systems so workers will have the latest and best safety equipment.
- 100% retractable lanyard policy.
- Workers are issued padded knee pads so they can get closer to low level work for better body mechanics and risk reduction for muscle strains.
- Utilization of “Twist Lock” cord connections for temporary lighting which reduced electrical risks.
- Pre-work infrared images of electrical panels to help warn workers of high temperature potential electrical issues prior to work.
- Project engineers design anchorage points and review location and specs with all workers and subs who will be using the anchorage.
- Designed noise reduction enclosure panels to keep high noise level operations contained. Use sound level meters and dosimeters around to outside of enclosure to validate results.
- “Nothing Hits the Floor” program to reduce falls on working surfaces. Debris containers are planned and placed in strategic locations with large casters and lifting eyes so full containers don’t become an overexertion problem.
- Construction materials are delivered on pre-loaded and stackable carts to reduce the risks of multiple unnecessary handing of material, which reduces overexertion exposure.
- Designed material carts and debris containers to fully integrate into ergonomic Chop Saw stations. The stations are convenient and mobile. The Chop Saw stations are pre-built at a standard height as to receive material directly into debris containers to eliminate multiple handling. Built upon a narrow cart design, they easily pass through doorways without the need to be broken-down or modified. They have a self-contained HEPA filtration/dust & debris



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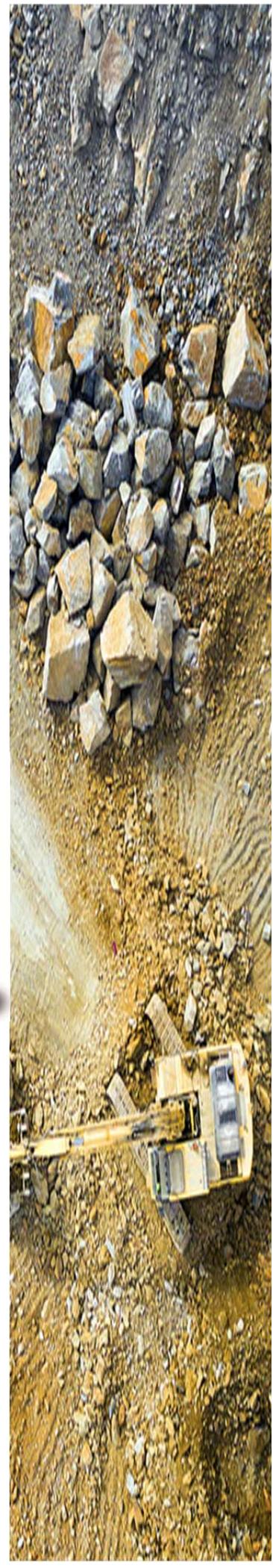
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collection system, as well as an integrated backstop, task lighting, fire extinguisher, GFCI and emergency shutoff switch. The system blends safety, environmental health, productivity and lean principles.

- “Ladders as a Last Resort” program has eliminated ladder use completely. All work done from powered personnel lift equipment. Project engineer and Superintendent plan work sequence to facilitate the program.
- Use of BIM and Trimble technologies to reduce congestion and noise issues on project.
- Use of BIM to pre-place pipe rack hangers above the floor which is an ergonomically lower risk. Eliminated drilling from below on scaffolding, lifts, and ladders. Also reduced exposure to Silica dust from drilling overhead.
- Developed a scaffolding system with overhead A-frame fall protection anchorage points on trolleys for retractable lanyards. Used to access the beds of haul trailers safely when lining with plastic sheeting for contaminated soils.
- Transferred the risk of a 220' in-the-air demolition project fall risk to workers to a Brokk demolition Robot equipped with a Go-Pro moves the worker from a 220' crane basket to inside a trailer doing the work remotely.
- Air operated Genie lift with specialized cradle to hold ceiling ductwork in place while worker in lift connects the duct.
- Deadman Block redesign based on employee suggestion resulted in elimination of repeated drilled holes that could weaken the top of the block. Now use permanent metal attachment rails and fork pockets so the blocks could be moved with a manual or mechanical lift truck. Results: safer attachment point for blocks and improved production by freeing up the tower crane for block movement.
- Use “Giken” silent pile driving machines to reduce noise levels to below 85dBA: <http://www.giken.co.uk/product-range/giken-eco-1400s-slient-piler/>. You Tube Videos: <https://www.youtube.com/watch?v=dEkcuJT15qk>; https://www.youtube.com/watch?v=M5FqzeV_bC0.
- Designed a vertical jack hammer mount which alleviated workers from manually holding the hammers. Resulted in lower risk for muscle strains and vibration.
- Use of remote control compactors and GPS survey robots to reduce people congestion which reduced crushing and struck-by hazards.
- Designed shoring slide rail system to protect workers in boring pits.
- Devised a fall protection system for working on existing narrow concrete beams with embedded stirrups.
- Tie back anchorage points are poured into each column for roof and interior leading edge anchorage points.
- “Left of Zero” program Innovation: A paved and internally heated primary building workers access walkway that will keep the access ice free preventing falls on the same level.
- Risk reduction device was created in-house that eliminated pile drivers from climbing the leads to align the pile.
- “Left of Zero” program Innovation: Placing porta-johns on the heated access way preventing falls on the same level.

Giken U Silent Piler



- “Left of Zero” program Innovation: Pre-planned and designed material handling pads to facilitate material storage.
- “Left of Zero” program Innovation: Pre-planned layout for extension cord “mains” located above the floor and door headers.
- “Left of Zero” program Innovation: For buildings with parapets, spec the design to be high enough to serve as a permanent perimeter guardrail.
- Innovation: reusable concrete anchorage points required a certain size drill bit. Drill bit and anchor are now issued together in a protective tube.
- A guardrail boot is mandatory on projects to standardize the passive fall protection system and make sure guardrails are durable and meet standards: (<http://www.safetyboot.com/>).
- Engineered guardrail systems are mandatory for all projects. Smart Edge is used for leading edge elements: <http://iwwinc.ca/products/smart-edge-protection-system>.
- Provide employees with company logo wicking type-3 shirts to dissipate heat during hot weather work.
- Use engineered platforms over excavated or uneven surfaces to complete project construction above unsafe areas. Reduces falls on the same level, and uneven surfaces for personnel lifts.
- Put non-slip surfaces on all equipment decks and stepping surfaces companywide to prevent falls from equipment.
- “PE Day in the Field”: Project Engineers must spend a full day in the field one-on-one with Safety Managers on an annual basis to share experiences both ways.
- Guardrails are placed next to open trenches rather than a Personal Fall Protection System. This is a consistent company policy for all open excavations 6’ or greater in depth.
- Designed buckets for removing ballast from between cribs between rail ties to eliminate work by hand. Reduces the risk of overexertion injuries to workers.
- Developed an underwater steel pipe piling inspection method which eliminated the risk to divers who previously performed the inspection. The system uses high definition GoPro cameras mounted on a ring which is lowered down to stream video to the inspection engineers. The innovation eliminated worker risks, and resulted in a higher quality inspection process vs. the diver looking through his diving mask to inspect. Safety, Productivity and Quality all significantly increased.
- Created a policy requiring all equipment and rented equipment, especially equipment used to lift personnel, to have the most current state of the art redundant safety features available. Prior to the policy we found we were getting older non-updated rental equipment which exposed our employees to hazards that technology has engineered out.
- Purchased “Safe Approach Flange Clamps” to enhance the safety of fall protection system anchorage points: <http://www.safeapproach.com/index.html>.
- Evaluation of packing process and quantity of packaging materials reduced worksite clutter and amount of trash removal and also contributed to a sustainable production goal by reducing wasted materials.



“OUR PROJECT ENGINEERS MUST SPEND A FULL DAY IN THE FIELD ONE-ON-ONE WITH SAFETY MANAGERS ON AN ANNUAL BASIS TO SHARE EXPERIENCES BOTH WAYS”



- Equipment, product and material rule that required initial delivery to be within 30 feet or 30 seconds of the location where equipment/material to be used in effort to reduce waste and injury potential associated with manual material handling.
- Materials/assemblies/forms pre-fabricated off-site and delivered “just-in-time” for assembly/use.
- Alternative conventional methods for fall protection (providing guard rail system at excavation edges).
- Manufactured pre-assemblies designed by BIM have made work much more efficient and reduced material handling exposures.
- Highway and Road projects use of intrusion alarms on traffic cones. Use of the “Zello Walkie Talkie” app for instant communication with cell phones that act like a walkie-talkie.
- Use of the CCI program to design out material handling hazards such as a jack hammer stand. They recently designed a “claw” to work from the ground instead of a ladder or otherwise elevated.
- On school and higher education jobsites they use social media to communicate safe footpaths to students.
- Purchased new rack trucks with hydraulic gate loaders to reduce muscle strains.

Safe Work Methods (Planning and Validation of)

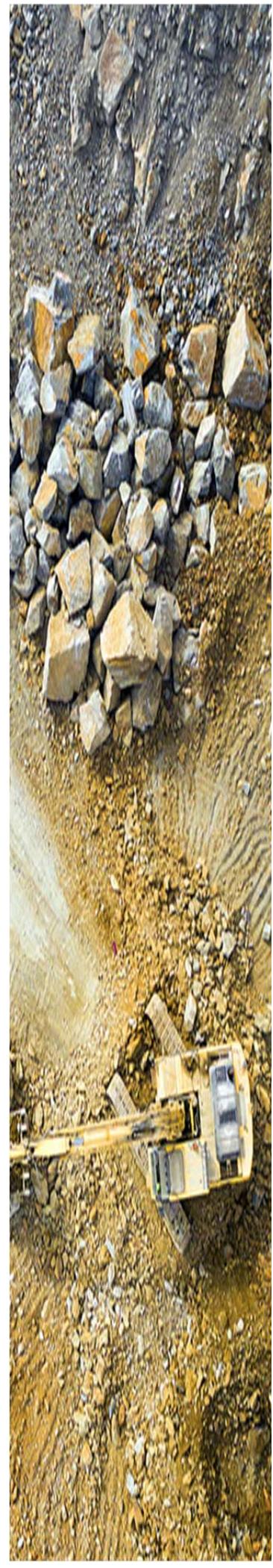
- Safety Committee includes the Fleet manager to review fleet safety issues and results.
- Safety process improvement committee comprised of Executive management, Project Managers, Foremen, employees, and safety coordinators.
- Quarterly required safety training on fall protection, electrical safety and PPE. Safe behavior based on repeated proper method reinforcement.
- Safety Sequence Plan that is reviewed with the Client and then finalized as the plan to reduce disruptions and surprises and showcases the safety planning process to Client.
- “Safe Plan of Action”: A daily work area safety inspection completed by foreman. All corrective action items are assigned a Risk Rating and fixed using a priority system.
- Quarterly documented formal tool inspection program completed by a competent person insures safety of company tools. Extra set of eyes. Lessons learned completed and communicated after each quarterly inspection.
- Pandemic plan that has procedures to recover from anything that would disable the firm’s ability to do work.
- Safety Manager “Us vs. Them” anti “Safety Cop” collaboration program. All Safety managers are required to make some deliveries, help erect scaffolding, help with trash runs, and help with material stocking.
- Foreman documented assessments of worker attitude, demonstration, and engagement in safe work methods. Feedback given to evaluated employee.
- Mentorship meetings held monthly to discuss common “at risk” safety observations for the month and to have a team oriented focused approach and message for helping newer employees.
- Company vehicle policy: driver must do a 30 second walk around vehicle to look for risks related to the vehicle and the ever-changing construction site surrounding the vehicle.
- Project Chart for all to see which shows who are the competent persons and what their qualifications are and cell phone number.



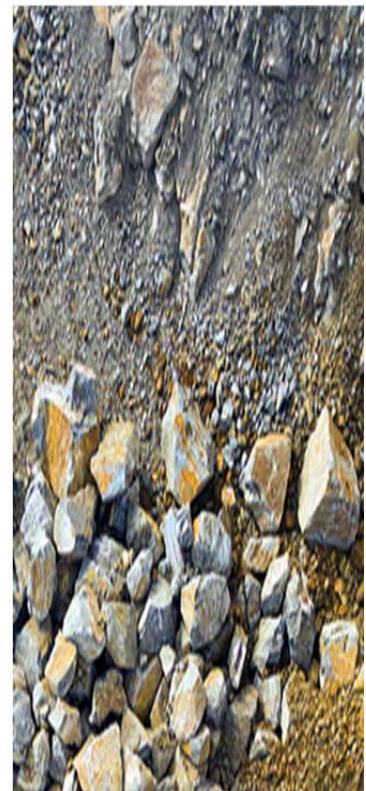
- “Forward First” vehicle and equipment policy to prevent vehicle backing accidents and runover/backover injuries to workers.
- JSA’s are completed but also “Work Plans,” which outline safety, quality, and production goals, along with the tools and materials needed and the specific means and methods that will be used to accomplish the task.
- Safety Task Force inspects jobs using weighted point system. The more risky observations like falls from Heights and Excavations have a higher rating. Total point scores are added up and there is a Housekeeping bonus at the end which can add or take away points from the overall score.
- Fall Protection program is measured by “Lives Saved” after someone falls with fall protection; 18 lives saved in the past 5 years including subcontractors.
- Cooling stations are placed throughout structure for heat related illness.
- Every worker every day acknowledges, via their signature, their right to stop work on a specific section of the daily pre-task plan.
- Safe-D program consists of 3 interrelated segments: 1) Mind set; 2) Tool set and 3) Skill set.
- When PFPS’s are inspected in the field, a color coded zip tie is attached to the harness. The colors are based on a time period and quickly tell others if the harness has been inspected and what time frame it was.
- All Craft workers are required to carry their own Job Hazard Analysis Workbook which includes a checklist and a step-by-step plan for completing an effective analysis.
- Bright Orange Safety Buckets are placed in all areas where workers are present. They contain First Aid kits, spare PPE, incident reporting/recording forms, and other safety items.
- Use smart phone technology to photograph and document precise location of underground utilities as they are installed in case they have to work near them in the future.
- As part of their pre-plan parking plan, they park such that they can pull forward when leaving.
- Safety 360 process for equipment/vehicle safety that requires a person walk around and inspect each piece of equipment/vehicle prior to use.
- Developed a short list of Life Critical Rules that require complete buy-in.
- Workspace Management that focuses on keeping workers on the ground safe by planning work to minimize heavy equipment backing with a focus on overlapping work zones.
- All project vehicle operators must to wear seat belts and operate with lights on while on site.

Worker Engagement, Involvement, and Participation

- “Foreman of the Month” is selected by the safety committee and lists their specific proactive approach to safety.
- Sequence and Scope of Work Tool Box talks that are Craft designed.
- Workers complete their own individual pre-task plan with 35 task questions for each different scope of work on a weekly basis. Quality validated by Foreman and Safety Manager.



- C.A.R.E. In-House wellness program administrator who guides company and employees toward optimal health and healthy lifestyles. Creates personalized health plans for employees, health promotional programs, and organizing health related events.
- “Personnel Improvement Plan” (PIP) process employees identified to have a lack of safety commitment is reviewed by a panel of peers and a team-based improvement strategy is developed.
- The corporate “Safety Tripod” consists of Safety, Quality and Production. All three support company goals and if any leg comes up short the tripod will topple.
- The “Family Board” or “Board of Life” on every project reminds company workers and subcontractors who is expecting us to come home every day.
- “What’s Wrong With This Picture”? Employee hazard awareness program where a large poster-size photo is posted on project and employees get a prize for identifying the hazard(s) and extra for knowing the controls.
- Employees are assigned to do a safety talk each day and must Google the subject and present in a creative way on their own. Researching a safety subject leads to learning.
- Lunch and learn training sessions to cover new Federal safety standards and risk issues that need to be addressed based on incidents and observations.
- Use of Audience Response Systems to enhance training, culture surveys, and anonymous group answers: www.turningtechnologies.com.
- \$1,000 reward system for employees who submit innovative ideas for eliminating a risk or a better, safer way of performing construction tasks.
- Electronic counter on company website that counts day’s real time since last incident. Reminder to all who sign in daily to the internet access point.
- Employee Only Group Facebook closed to the public page used to communicate, discuss, and celebrate safety successes.
- Provide family members with First Aid, CPR and AED training. Discount AED’s are also provided for home use.
- Family oriented Tailgate parties at major local sporting events to celebrate safety and family.
- Sponsor family oriented charity events to support and help the homeless.
- A large field whiteboard is used to complete daily pre-task plans. The board is completed by the craft group and encourages more participation in the process. The whiteboard remains in the work area so if things change the team can update the whiteboard.
- Inside of hardhat stickers with the cell phone of the regional safety manager should an “at-risk” situation need attention. Also, company 3rd party anonymous Hotline. Part of our stop work program.
- Every 60 days all new hires (those were hired in the last 60 days) attend a group new hire meeting where their initial impressions about the safety culture on the project are communicated in a no-fear environment. Suggestions from these group meetings have been valuable and their suggestions have been incorporated into our Safety SOP’s.
- Company Investment partner provides ongoing one-on-one financial advice for employees on managing money, retirement planning, college savings, and debt control.



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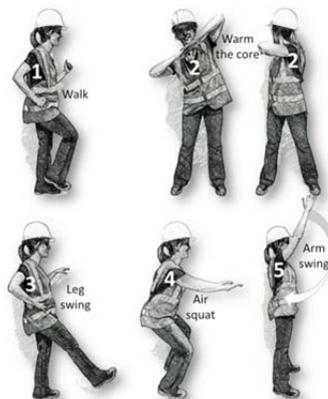
- “Paid Safe Holiday Benefit”: Employees who demonstrate safe work behavior and have not exhibited “at risk” behavior since the last holiday get paid for the upcoming holiday.
- Developed a company “Safety Only” email address ex. (Safety@callAGC) so people can send issues or accomplishments to a central website. Increased employee participation in the safety management process.
- Use a voluntary Monthly Project Safety Exam to help identify future potential production leaders. We figure if someone volunteers for the exam it shows leadership qualities and that they are engaged in not only Production and Quality, but also in Safety. Participants who score high are asked to develop an exam question for next month’s exam. We have expanded the exam process to include a separate exam for Quality control.
- Every company employee is required to take 16 hours of intense communication “People Skills” training each year.
- Wellness program developed for company employees and extends wellness program benefits and participation to family members.
- Worker seniority (apprentice, journeyman, master/mentor) identified by varying hardhat colors.
- Use of Mobile Tablets and Face Time technology to speed up communication and sharing.
- Mindset of “No Name - No Blame - No Shame” to encourage reporting and sharing of incidents and events.
- Bought into a true “safety culture” where all employees participate (everyone is a safety person).
- Invited OSHA site visits.
- In-the-field days for all staff for safety.
- Monthly “call-in” safety meetings for all employees.
- Newsletter put in employees paychecks.
- Use a near miss email address and are in the end stages of developing a near miss phone app.
- Invite the surrounding community onsite to conduct safety surveys with a close eye on Public Liability exposures.
- Developed a Short Service Worker Safety Program...to manage safety for employees new to the company...30 day mentor program. After 30 days and an acceptable evaluation by the mentor, there is a graduation ceremony at the jobsite.
- 20% savings in health insurance premium for non-smokers.
- Designed a free form “Survey Monkey” questionnaire asking employees to describe the company culture. Took all the words from the survey and made a Word Cloud banner for the project sites.

Safety Training and Validation of Training

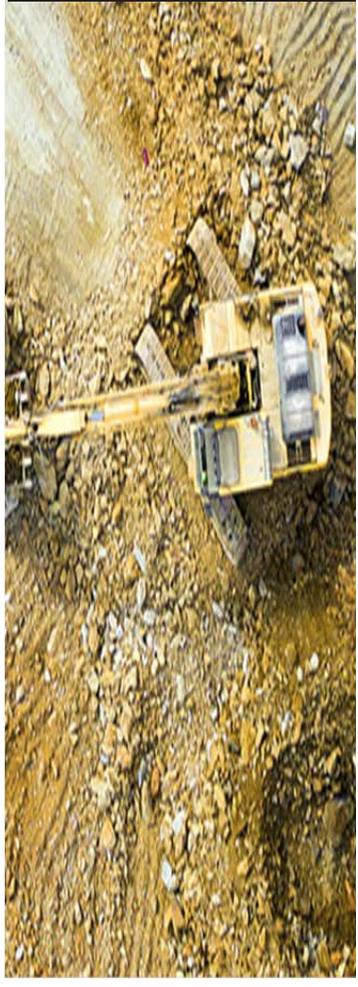
- Provided NFPA 70E training to Clients to help them understand their work and the GC’s instructions to bidders. Promoted safety after turnover to Clients employees.
- Electrical hazard training facility which includes multiple streaming interactive touch screen monitors, mock-up switch gear room, newest power distribution equipment including dry type transformers, disconnects, panel boards, and actual working clearances and distances.
- Safety Training matrix which visually shows (in colors) all employees who have completed and those who need safety training.



- Annual training incentive program requiring 16 hours of training per year. Each employee who completes their training receives a \$150 gift card and a chance for five drawings of \$1,000 each.
- "Safety Onboarding Day": 8-hours of training where new employees go through extensive safety training and hands-on use and practical application of their company-issued fall protection system.
- Learning and Development Department who work in conjunction with Safety department and focus on the specific learning challenges and solutions faced by all age groups of employees.
- Employees of less than six months have a gold hardhat sticker and an assigned safety mentor for a full six months.
- Orientation has a PowerPoint presentation which takes new workers on an actual journey through a construction project pointing out the significant hazards they need to watch out for.
- Monday morning "Breakfast and Learn" safety training sessions for all employees using a PowerPoint and six-question quiz.
- Number of total safety training hours, excluding site orientation safety training hours, are tracked as a leading indicator.
- Drivers of company vehicles are required to have a 30 day waiting period and pass a practical and on-line driving exam before being assigned a vehicle.
- Partnered with Rosetta Stone to provide language training to field personnel.
- OSHA 10 and OSHA 30 classes are required every 2 years instead of 3; keeps issues fresh and on the minds of management and employees.
- All company safety managers/coordinators are OSHA 500 authorized trainers. This significantly improved the quality of training done in the field. These guys provide a lot of training, and certification has improved the quality, effectiveness, and validation of all they do.
- During orientation all workers are issued a personalized business card that contains specific information about the worker, their qualifications/certifications, and contains other project specific information. It is laminated and must be produced while on site if requested by management.
- All field employees must have and maintain an STP "Safety Training Passport." STP is equivalent to the OSHA 10 + 6 additional hours. Ohio based training program: <http://www.local18training.com/classes-offered/safety-training-passport>.
- "Green Band" new employee hardhat identification and pair with a mentor until they can demonstrate knowledge and execution of working safely.
- Safety managers must be OSHA 500 certified and must be certified to teach safety courses through the National Center for Construction Education and Research (NCCER): www.NCCER.org.
- Fleet safety program has been updated with an extensive section on cargo securement. The accompanying training requires hands-on demonstration of securement procedure and a written test to validate an understanding of the training and on-road procedures.



“ WE CREATED A YOUTUBE CHANNEL FOR WIDESPREAD COMMUNICATION OF SAFETY INFORMATION AND TRAINING ”



- Contacted the Masonry Institute of Michigan to conduct masonry bracing and scaffold awareness training to help workers who had not worked around masonry “Fall Zones” to understand the risks and be proactive in the way they work around the zones.
- Creation of a YouTube Channel for widespread communication of information and training.
- Mentorship/New Hire 90 day programs.
- Internal full-time training team.
- Minimum requirements for safety professionals (ASP, CSP, CHST, etc.).
- Extensive orientation program (2 to 3 days).
- Rainy day training, safety “workshops.”
- Mid-term exams to test knowledge retention of safety program.
- Developed a solo warm-up routine, “stretch ‘n flex,” that a worker can use by him/herself after sitting for a few hours.
- Use of a rearview mirror sticker to heighten awareness of backing accidents.

Subcontractor Management

- Use construction safety outreach services of the University of South Florida to help subcontractors evaluate and upgrade their safety program: <http://www.usfsafetyflorida.com/Resources/Small-Business-Safety/Construction>.
- Developed an “Over OSHA” policy based on loss trends of GC and Subs and amended subcontracts to reflect standards above OSHA.
- Developed three targeted safety videos. Each aimed at subcontractors, employees and visitors. All visitors must go through a structured orientation.
- Crisis management plan has a severity rating system of 1, 2, or 3 with different response and management criteria.
- Subcontractor “Unlearning Bad Practices” identification, remediation, and rewards program.
- Subcontractor “3 Strike” disciplinary program. On 3rd strike, owner of subcontractor must meet face to face with owners of GC.
- Subcontractors complete a six-page Pre-Construction safety document and are assigned a Superintendent mentor for the first 90 days after they begin work. Each subcontractor also receives a weekly safety audit by the GC.
- Use anonymous Subcontractor perception surveys to measure the safety process effectiveness of the GC project leadership team.
- Specific safety requirements above and beyond OSHA are listed on all subcontractors Bid Forms. The additional requirements are also reviewed at the pre-award conference with every responsive bidder.
- Asked a major subcontractor to take a deep dive into their current safety program by entering the national CSEA competition, which they did. The sub said they learned a lot about themselves and received 1st place in their division.
- Invested in employing a full-time dedicated Subcontractor Safety Manager who focuses solely on subcontractor work, and building a database of subcontractor issues that can be used for future contracts and future work by the same subcontractors. Works very hard with the identified “Competent” persons identified by the subs and validates their ability to be in that role.
- Review all subcontractor safety programs.
- Conducting safety surveys to include subcontractor comments (safety committees).

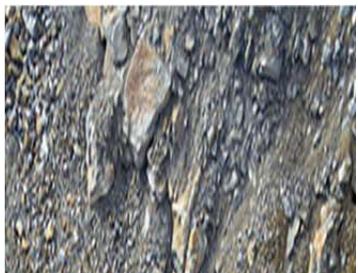


- Focused temporary worker program and collaborated with temp agencies to provide a minimum level of training of this workgroup.
- Subcontractor “Video Exchange” program where they periodically video work under progress with active employees working. They review the video with project management and have a conversation about risks and controls.

911 - Emergency and Crisis Management

- “Stop and Call” crisis management program where each employee has a red stop sign hardhat sticker on the inside with simple steps and phone numbers to call.
- Crisis management program also includes potential Occupational Health Issues.
- Every worker has an “ICE” sticker on the inside of their hardhat which contains all their pertinent medical information.
- Used TV investigative reporter to help with simulated project crisis management drills and role plays.
- All projects have automated external defibrillators.
- “Left of Zero” program Innovation: Pre-planned access way and signage for emergency vehicles.
- “Left of Zero” program Innovation: Lighted and painted designated fire extinguisher locations and exits.
- Laminated poster size pictograms of key things to do in a crisis situation. Covers fire, utility, bomb threat, tornado, and active shooter. Also identify project safe zones for assembly based on certain crisis situations.
- All managers attend a third party crisis management training program to make sure we stay on top of an ever changing crisis world.
- Crisis management plan also includes procedures and drills for Tower Crane operator rescue.
- Crisis Management Plan is in the form of a Grab and Go which facilitates easy, structured, step-by-step, readily printable information for project teams to use.
- All site superintendents have a crisis/emergency satellite phone.

The Top 50 words in the 2016 CSEA Showcase Document



“ AS A GC OUR ANONYMOUS SUBCONTRACTOR PERCEPTION SURVEYS HELP US MEASURE THE EFFECTIVENESS OF OUR SAFETY PROCESS AND OUR PROJECT LEADERSHIP TEAM. ”



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