Session Overview
PNCWA Summit Series 5

Keynote: "*Evolving Needs of our Construction Workforce*"
Wednesday, January 20, 2021
8:40am – 9:20am
Presenting Author: Kabri Lehrman-Schmid

Abstract

Psychological safety is a necessary attribute of doing great work in the volatile, uncertain, complex and ambiguous (VUCA) world of construction. We are each active contributors to constantly shifting teams and goals, and can inspire superior team performance by taking action to challenge detrimental stigmas. This session will discuss the industry's inherent risk factors that can degrade mental health, and the unhealthy stereotypes that compromise our peoples' ability to become/remain highly engaged. Immediately accessible tools are available to help us use our positions to drive forward a culture that supports our greatest resource - our people.

Brief Biography and/or Qualifications

Kabri Lehrman-Schmid is a Project Superintendent endorsed by a 14-year career portfolio of high-risk projects in operational building and campus environments. Her reputation as a resourceful director of building strategy and attentive coordinator of construction teams extends beyond the jobsite with contributions to Seattle-area organizations that support womxn and minorities. Kabri is a conscious role model for the next generation of female superintendents and is a champion for careers in construction management and the skilled trades. She boldly reinforces field management's role in the essential application of psychological safety through initiatives that examine bias and challenge the stigma of suicide in construction. An engineering graduate of Columbia University, Kabri was recognized as one of Construction Business Owner's 2019 Outstanding Women in Construction and Washington Women in Trades Workplace Leader 2019.

Session 2: "*Improving the Preconstruction Process with Collaboration and Teamwork*"
Wednesday, January 20, 2021
9:20am – 9:55am
Presenting Author: Josh Baker, Tyler Resnick, Jeff Hodson

Abstract

The City of Boise recently embarked on a water renewal project to replace the Lander Street Water Renewal Facility's Headworks and UV Disinfection facilities utilizing the CM at Risk (CM/GC) delivery mechanism. The project is located at the oldest plant in the City's system, constructed in the 1940's, and is the largest public works undertaking in City's history. To add to the complexity, the site is very small with extremely limited access and numerous operational constraints. The team is comprised of four entities including the City of Boise, McAlvain

Construction, and Jacobs teamed with Brown and Caldwell. From the onset of the project, the team embraced the following core values:

- Risk belongs to everyone
- There is nothing we can't do better
- Own each and every outcome
- Continually learn by reflecting and debriefing
- Succeed as a team or fail as a team

With these core values at the forefront, the team broke numerous stereotypical molds on executing the design and constructing the project. The team debriefed at all major milestones and had candid conversations about successes and failures. By continually refining the preconstruction process, outcomes became more predictable and teamwork flourished. This presentation will cover how the team broke down barriers, extracted each team member's strengths, and optimized the performance of the preconstruction process through continual growth and development. Furthermore, best practices and lessons learned will be presented with practical examples.

Brief Biography and/or Qualifications

Josh Baker P.E.
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Josh is a project manager for the City of Boise's Water Renewal Engineering Department. He is currently the project manager for the Lander Street Phase 1 improvements project. He has been in the water/wastewater industry for the past 8 years working on projects across Idaho focusing mostly on wastewater design and construction. He graduated from Boise State University in 2012 with a B.S. in Civil Engineering. Josh prefers a hands-on approach to engineering spending time in the field.

Tyler Resnick
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As a Construction Manager and General Contractor, Tyler Resnick has had the opportunity to work on numerous water and infrastructure projects. He has experience as an early preconstruction collaborator and construction manager on interesting water, urban and infrastructure projects in the Treasure Valley such as the Dixie Drain Phosphorus Removal Facility, Grove Plaza Renovation, and the Lander Street Water Renewal Facility Improvements Program. Throughout his career, he has had an emphasis on planning, handling and treating of water and wastewater infrastructure that drives his passion for responsible development.

Jeff Hodson P.E., S.E.
jeff.hodson@jacobs.com
Jeff is a project manager in Jacobs' Boise office with more than 19 years in the engineering profession. His experience includes managing a variety of projects in the water, wastewater, and

facilities markets, with emphasis on multi-discipline delivery of complex projects. He is a graduate of Utah State University (go Aggies!) with BS and MS degrees in Civil Engineering. When not in the office or at a construction site, he loves getting into Idaho's backcountry with his friends and family.

Session 3: "*Impacts of COVID-19 on the Construction Industry and Construction Workforce*"
Wednesday, January 20, 2021
9:55am – 10:30am
Presenters: Todd Pike, Jeremy Holland, Joe Kernkamp, Matt Gregg

Abstract

COVID-19 has profoundly impacted the way we live and work in 2020. This panel will explore the ways in which COVID-19 has changed the construction industry and construction workforce. We'll discuss the impact it has had on the workforce, challenges it has posed for construction projects, and how it is effecting companies of all types in the water and wastewater space.

Brief Biography and/or Qualifications

Todd Pike
Todd Pike specializes in large-scale complex industrial facilities and water and wastewater treatment plants and conveyance systems. Todd's project portfolio includes many accounts of successful integration of new or upgraded facilities into existing industrial environments. Todd's thorough understanding of all scopes of work associated with these projects allows him to perform quality preconstruction services that create value for clients and stakeholders. He is a certified Design-Build professional, recognized by the Design-Build Institute of America. He has led IMCO's largest alternative delivery projects. He has worked with the most innovative and cutting edge technology in the water/wastewater sector and he has a powerful ability to partner with clients, vendors, and government officials. Todd is one of IMCO's Lead Estimators, highly competent in managing budgets and subcontractor management.

Jeremy Holland
Jeremy is a Market Executive in the Water Infrastructure Market in Seattle's Operating Group. With 23 years of engineering experience, Jeremy has served as project principal, technical advisor, project manager, and design engineer. His industry knowledge spans a wide variety of projects, clients, disciplines, and engineering problems.

Over his career Jeremy has completed a number of construction projects as a contractor, as a designer, and as an owner's representative. This includes overseeing design and construction phases of projects, developing procurement documents, guiding owners in the contractor selection process, and providing advisory support services.

Jeremy is a board member of the Oregon Association of Clean Water Agencies and is the Co-Chair of the Water Quality Committee. He is also a member of the Thermal Oxidation Task Force for Water Environment Federation's Bioenergy Committee.

Jeremy is a licensed Professional Engineer in Oregon, Washington, and Puerto Rico. He received a Bachelor of Science in Chemical Engineering and a Bachelor of Arts in English from the University of Notre Dame, and a Masters degree in Business Administration from Portland State University.

Joe Kernkamp
Joe Kernkamp currently serves as the President of APSCO. Joe is an executive who leads individuals and small teams to solve mechanical, contractual and water treatment challenges. He accomplishes this by bringing people and technology together. Joe is passionate about the environment and believes that every problem is truly a veiled opportunity in which only people coming together can solve. Joe has spent two decades working in manufacturing, and sales of engineered equipment. It is from this experience working in engineering, service, sales and leading as an executive that he has been able to bring a wide perspective and true appreciation for creating the value of a high performing team. Sharing his experience, vision and values have allowed himself and colleague's great success. By not focusing on the current marketing flavor of the month, but rather following core values based on high integrity, constant communication, engineering expertise, and being people-centered he has created new opportunities and driven real results.

Joe knows that successful people and businesses are reflections of themselves. Joe is an active member in Vistage where he continually works to improve as an individual and leader. He is additionally a member of professional organizations such as the Water Environment Federation. Joe is currently a contributing member of the annual conference committee for the Pacific Northwest Clean Water Association. As a key channel partner to nearly 25 industry suppliers, Joe is a member of many distributor councils which provide industry direction to global manufacturers. Joe has created an intern development program in which he brings young engineering professionals into the environmental sector sharing a core value that it is not what we achieve, but rather who we become.

Joe holds a B.S. in Mechanical Engineering from Montana State University and a Six Sigma Black Belt for Service from Villanova University.

Matt Gregg
Matthew Gregg is Brown and Caldwell's Northwest Area Wastewater Market Sector Lead. He has experience as a program manager, client service manager, project manager, and wastewater engineer. Matt's primary focus is assisting clients with long-term utility management decisions and large program execution. Matt has a master's degree in civil engineering with a focus in wastewater engineering and a bachelor's degree in civil engineering, both from the University of Idaho.

Session 4: "*Partnering to Improve Project Delivery*"
Wednesday, January 20, 2021
10:40am – 11:15am
Presenter: Michael Humm, David Romilly, Clayton Thompson

Abstract
Reduced design periods, tight construction windows, and bringing projects online more quickly are becoming the norm as this industry tries to stay ahead of aging infrastructure demands. Proactive decision making, fostering relationships across the industry, and the inclusion of mandatory partnering were strategies used to mitigate these typical project challenges. This strategy fostered trust and collaboration and resulted in a design that moved from concept to bid documents in four months with construction completed within 3 months.

Affectionately known as the Ramen Box, a stagnant collection box within the fence line of the Hillsboro WWTP traps floatables, debris, FOG, and yes, Ramen packaging. This accumulation limits hydraulic capacity, generates odors, and requires routine vactor cleaning. With limited disposal options, a long-term solution was needed prior to the wet season when overtopping and limited hydraulic capacity would risk permit compliance.

With time short, a partnering approach was adopted to streamline design and construction. Work-in-progress design workshops resulted in design efficiencies such as real time equipment feedback, pre-purchasing long lead equipment, and discipline coordination. Meanwhile, informal project walkthroughs with potential bidders was occurring. This allowed contractors to be prepared for the upcoming work as well as incorporating constructability ideas into the in-progress design. Following contracting and NTP, reoccurring construction partnering meetings allowed the Owner, Engineer, and Contractor to better understand the needs and objectives of each team member, identify upcoming critical coordination needs, and provide an opportunity to course correct any issues. With an emphasis on making decisions as close to the work as possible, expediting construction communications, and collectively taking ownership for the success of the project, the team was able to complete construction prior to the wet season.

This presentation will showcase how a partnering approach through design and construction results in streamlined delivery and value added through final completion.

Brief Biography and/or Qualifications

Michael Humm
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Michael Humm has a bachelor's degree in Civil Engineering from the Oregon State University. His experience includes leading teams in the planning, design, and construction of water and wastewater infrastructure projects.

David Romilly
romillyd@cleanwaterservices.org
Mr. Romilly is a Principal Engineer at Clean Water Services and is responsible for delivering capital improvement projects for the Forest Grove and Hillsboro Water Resource and Recovery Facilities. He is excited to oversee the many upcoming projects at both facilities to maintain the District's title as a "Utility of the Future". Clean Water Services operates as a special sewer District in Washington Country, Oregon, where they own and operate four resource and

recovery facilities. The Forest Grove and Hillsboro facilities are the two smaller facilities, but as Mr. Romilly likes to describe them - two of the most important ones.

Clayton Thompson
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Clayton is one of Slayden Constructor's Sr. Project Managers and has specialized in treatment plant work almost exclusively throughout his career building municipal, federal and private projects in California, Arizona, New Mexico, Washington and Oregon, totaling in excess of $400m.

Session 5: "Panel: *Getting the Equipment You Want*"
Wednesday, January 20, 2021
11:15am – 11:50am
Presenter: Dan Garbely, Brett Reistad, Rob Bechtloff, Jeff Stallard, Chris McCalib

Abstract

A panel that includes two owners, a consulting engineer and a contractor with years of experience specifying, buying and operating equipment. The panel will discuss equipment procurement options and weigh the pluses and minuses of each different option from their different perspectives. Owners are trying to balance costs, O&M staff preferences, and limiting stocks of parts. Engineers have to pick a vendor and model to base the design around while maintaining a competitive specification for bid. Finally, a contractor has to find the equipment at the right price to win the job, while still meeting the design specifications. These conflicting demands can make for a challenging environment where often no one is perfectly happy with the end result. This panel will explore different options for equipment procurement such as owner procure, owner procure and assign, open bid, and bid alternates and discuss the pros and cons of each option from the varying points of view, and discuss ideas on how to improve collaboration to get the right equipment, at the right price, to meet the design objectives.

Brief Biography and/or Qualifications

Dan Garbely
garbelyd@cleanwaterservices.org
Dan Garbely is a wastewater engineer and project manager with experience on a variety of wastewater, drinking water, and energy projects in Oregon and as well as in developing countries around the world. After 13 years as a consulting engineer, he joined Clean Water Services in 2015 and is the Principal Engineer at the Durham Advanced Wastewater Treatment Facility. He has bachelors and masters degree from Cal Poly - San Luis Obispo. In his spare time, he and his wife like to spend their time making beer & wine, while laboring in their ever expanding garden with their two children.

Brett Reistad
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Mr. Reistad is a senior engineer with Jacobs and has been involved in the design, construction,

and operation of wastewater projects for over 20 years, with an emphasis in residuals handling and treatment systems. Focus areas are anaerobic digestion; biogas utilization including cogeneration and thermal processing systems; and solids dewatering, storage, and loadout. Mr. Reistad's experience in these areas include technology lead, facility design lead, and project design manager.

Rob Bechtloff
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Rob Bechtloff is a SR Project Manager at Slayden. He is currently working on the Geren Island Water Treatment Plant Improvements for the City of Salem. Over the last 16 years he has done projects, mostly water and wastewater projects, all over Washington and Oregon. When Rob is not working he spends his spare time hiking, working around the house, tasting local beers, volunteering at his 1st graders elementary school, and taking his 2 boys to soccer and swim practice.

Jeff Stallard
JStallard@clackamas.us
Jeff Stallard is a project manager with 19 years of experience in the water and wastewater industry. Jeff spent the first 16 years of his career as a consulting engineer then joined Water Environment Services in 2018 as the Civil Engineering Supervisor. Jeff got his bachelors of science degree from the university of Cincinnati where he spent lots of nights attending Cincinnati Reds games. He moved to the pacific northwest 12 years ago where he now spends his spare time exploring the wilderness with his wife and two kids.

Chris McCalib
Chris is a owner at Treatment Equipment Company supplying water/wastewater solutions in the PNW. Prior he was from Lakehaven Utility District, where he was the Wastewater Operations Manager for 9 years. In this role, he was responsible for 2 WWTPs, as well as numerous functional groups within the district. Prior to Lakehaven, Chris worked in all facets (Senior Operator/District electrician) of operations at Southwest Suburban Sewer District (Salmon and Miller Creek WWTP's) for 7 years. Chris is actively involved in the Northwest Biosolids Management Association Board of Directors, serving as president, and is a past Vice President for the PNCWA Puget Sound Section. Founding board member and still active PNCWA biosolids committee. Chris is a US Navy veteran (Desert Storm), where he was in the engineering division for over 5 years. In his spare time he enjoys fishing, hunting, teaching Brazilian Jiu Jitsu, and a HS golf coach.

Session 6: "*Rethinking how to manage and mitigate project risks*"
Wednesday, January 20, 2021
11:50am – 12:30am
Presenter: Michelle Green

Abstract

As the use of Collaborative Delivery models (e.g. CM/GC, GC/CM, Progressive Design Build) expand, Owners and Engineers are becoming exposed to the risks that Contractors regularly manage and price. These models inherently require characterization and negotiation of risk allocation, with the goal of shifting risks to the party best able to manage them. This analysis of likelihood and consequence of failure, along with an understanding of the practical cost implications associated with simply shifting risk to the Contractor, results in better informed decision-making. A similar approach can be implemented in traditional Design-Bid-Build delivery models to support better project outcomes.

This presentation will first provide an overview of the risk management process utilized in collaborative models. Then, examples of how to apply these techniques in a traditional delivery model to manage project costs and reduce potential for claims will be discussed. Specific areas of focus include:

- Actively managing scope growth during design
- Use of a Risk Register during design development
- Minimizing unknowns through additional pre-construction investigations
- Good and bad examples of allocating risk to the contractor
- Definition of constraints related to existing systems
- Effective utilization of Allowances, Contingencies, incentives, etc.
- Risks that Owners should retain

Brief Biography and/or Qualifications

Michelle Green
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Ms. Green leads the Design-Build business for Jacobs Water Market in the Western US, building on a career of leading successful water and wastewater projects. With over 26 years of experience, Michelle regularly provides project delivery analyses, has delivered major capital projects in all delivery formats and provided Owner's Agent services for both CMAR and Progressive Design-Build projects.