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2020 Award Recipients

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2020 - 2021

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Congratulations to...

ASPE's 2020 Award Recipients

**Fellow Certified Professional Estimator**
Robert Nidzgorski, FCPE
Tampa Bay 48

**Chapter Champion**
Asradee Strevens
Landrun - Oklahoma City 80

**ASPE National President Award**
Frank Kutilek, FCPE
St. Louis Metro 19

**Industry Award - Most Innovative**
Joseph Flemming, FCPE
Roadrunner 47

**Honorary Member**
Allan Hauck, Ph.D., CPC
Los Angeles 1

**Chapter Achievement Award**
Landrun - Oklahoma City - 80
Gold

**Chapter Achievement Award**
St. Louis Metro - 19
Silver

**Scholarship Recipient**
Annie Jansen

**Chapter President of the Year**
Phyllis Battle
Landrun - Oklahoma City 80

**ASPE National President Award**
A. Keith Parker
Central Indiana 59

**Industry Award - Best Estimate**
Dan Ergle, CPE
Atlanta 14

**Honorary Member**
Ann Ludwig, MMP
Golden Gate 2

**Chapter Achievement Award**
Roadrunner - 47
Platinum

**Chapter Achievement Award**
Denver - 5
Silver

**Chapter Achievement Award**
Southwest Ohio - 38
Bronze
am sure that everyone understands how different the world has become. No face to face, the fellowship that we hold dear, giving friends a hug and what makes ASPE the way it was and with God’s grace that way again. We have all been struggling with what some say is the new normal. I don’t believe that. I think that this is something that will pass and we can begin living the way we wish.

ASPE recognizes all the difficult requirements Covid-19 has placed on our businesses and the Society as well. We must comply with the directions and requirements that are placed before us by the governing bodies in our cities and states. Several ASPE Chapters have been putting on excellent on line programs. These programs are open to all members and the notices are posted on the website and sent to members. I encourage everyone to attend/view the programs that are of interest to you.

I would like to Introduce Matt Burress as our new Central Plains Governor. Matt has been a long-standing member of ASPE and an active Chapter member of the Central Indiana Chapter. I asked for a volunteer, and I was excited that Matt threw his hat in the ring. He will be a great new member of the Board and will represent Central Plains as well. Everyone reach out to Matt as you need help and he will do the same. I would also like to thank Keith Parker for his great service to ASPE.

At the ASPE award presentation we introduced our NEW ASPE LEARNING MANAGEMENT SYSTEM – FREESTONE. This system works in conjunction with our web-based system and is integrated with that program. In the opinion of the board this is a game changer. With the integration of Freestone – great things are on the horizon for ASPE. Everyone has received notices about the LMS go on the website and check it out. This is just the beginning.

I would like to thank all who attended the Awards Presentation on August 21. We had a great time and congratulations to all the award winners. I would like to thank Tina, Cinder, Marcene and Gustav for all their hard work on putting together the presentation.

We as individuals, companies and as a Society will get through this crisis. Communication is vital; and should you have questions or need information, please don’t hesitate to contact a Board Member.
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ASPE Members $35 / Non-Members $45
Each Seminar = 1 Professional Development Unit (PDU)
Welcome to Our New Members (June + July)

Membership Classification Count (as of 08/25/2020)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Count</th>
</tr>
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<tbody>
<tr>
<td>Affiliate</td>
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<tr>
<td>AEP</td>
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<tr>
<td>CPE</td>
<td>479</td>
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<tr>
<td>Member Emeritus</td>
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</tr>
<tr>
<td>Student</td>
<td>47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,486</strong></td>
</tr>
</tbody>
</table>

NAME | COMPANY | CHAPTER  
--- | --- | ---  
Pete Eyre | Empire Construction | Los Angeles  
Bob Fanelli | Empire Construction | Los Angeles  
Eduardo Reynaga | Golden Gate |  
Yogendra Shrestha | Orange County |  
Wyatt Barrett | ALLGIRE General Contractors | San Diego  
Fuzail Mohammed | Bancroft Architects + Engineers | Chicago  
Banessa Ramirez | New York |  
Patrick Brittle | CSU Chico | Sacramento  
Saad Jasim | Madsen Kneppe & Associates, Inc. | Baltimore  
Michael Farnham | Selective Site Consultants | Greater D.C.  
Scott Lucca | Murray Company | Boston  
Jean Guerrier | Murray Company | Boston  
Roy Huemer | Huermer Consulting LLC | Garden State  
Lynn Roberts | Selective Site Consultants | Heartland  
Daniel Schulte | Lambert, Inc | Heartland  
Cody Collins | Lambert, Inc | Middle Tennessee  
Alec Hamburg | WSB & Associates | Viking  
Tim Culp | LS Black Constructors | Viking  
Alex Blake | The University of Texas at Arlington | Dallas/Ft.Worth  
Sagar Khaire | Olaric’’ Construction Services LLC | Dallas/Ft.Worth  
Chiao Victor Akarichi | CYPM Corporation, Inc. | Dallas/Ft.Worth  
Yolanda Phillips | Astral Construction | Gold Coast  
Emmanuel Gonzalez | BBanes Consulting Inc. | Gold Coast  
Brian Banes | City of Miami | Orlando  
Emmanuel Oyedepo | Paramount Quality Construction | Orlando  
Luis Marrero | Old Pueblo |  
Nathan Hughes | JE Dunn Construction | Columbia - Pacific  
Bryan Cook | JE Dunn Construction | Columbia - Pacific  
Travis Marshall | JE Dunn Construction | Central Indiana  
Christian Smith | JE Dunn Construction | Central Indiana  
Annie Jansen | Purdue University | Central Indiana  
Glenn Wilson | DLC | Nutmeg  
John Guzak | Crawford Consulting Services | Philadelphia  
Brian Forrest | Crawford Consulting Services | Philadelphia  
Rich Trotter | Crawford Consulting Services | Philadelphia  
James Buccilli | Crawford Consulting Services | Las Vegas  
Susie Calvin | Calvin Consulting Services, LLC | Las Vegas  
Dominic Papa | GFP Mobile Mix Supply LLC | Delaware  
Dennis Gossert | GFP Mobile Mix Supply LLC | Delaware  
Lilian Ray | Oldcastle Precast, Inc. | Richmond  
Gary Casper | Energy northwest | Northwest MAL  
Kevin Wagoner | Progressive Concrete LLC | Southeast MAL  

Congratulations to New CPEs + AEPs (June + July)

NAME | COMPANY | CHAPTER  
--- | --- | ---  
Tom D. Veitch, CPE | TBD Consultants | San Diego  
Cheryl Steiner, AEP | Sturgeon Electric | Denver  
Jordan Guerrero, AEP | SiteWorks | New York  
George Tellefsen, CPE | T. Moriarty & Son, Inc. | New York  
Ryan Israel, CPE | Roebbelen Contracting, Inc. | Sacramento  
Henry Ossi, CPE | DMR Architects | Garden State  
Vasudeva Nandyala, AEP | Construction Cost Management, Inc. | Dallas/Ft. Worth  
Ambaresh Tijare, AEP | Construction Cost Management, Inc. | Dallas/Ft. Worth  
Runcong Liu, AEP | Oldcastle Precast, Inc. | Three Rivers  
Spencer Gravelle, AEP | Blach Construction | Silicon Valley  
Matthew Washkovski, CPE | Camsoy Construction | Brew City  
John Subbiondo, AEP | Camsoy Construction | Brew City  
Alex Koltsov, AEP | Grant Thornton |  
Ali A Ibrahim, CPE | The Consulting Bureau Inc |  
Robert Bunting, AEP | Bunting Construction Company, Inc. |  
Josh Hedges, AEP |  |  
Charles Dabney, AEP |  |  
Andres Ballate, CPE | JRM Construction Management |  

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Project Report

New York Psychotherapy and Counseling Center

Brooklyn, NY, USA

Wall Systems | Skyroof™ + Skylight Systems | Canopies + Walkways | Hurricane-Rated E-Series™ Windows
IN THE HEART OF BROOKLYN’S BUSHWICK NEIGHBORHOOD, A BEACON OF HOPE SHINES BRIGHTLY.

This two-story, 19,000-square-foot expansion transformed a former single-story warehouse into the home of one of the New York Psychotherapy and Counseling Center’s (NYPCC) Child and Family Mental Health Centers.

The Bushwick Center has become a figurative and literal symbol of promise for the under-served thanks to the two new floors clad in Kalwall translucent sandwich panels. The panels serve as a symbolic, signature feature, glowing softly at night and creating an illuminated neighborhood landmark.

The NYPCC has been providing outpatient services to children, adolescents and adults since 1974 with the mission of improving the quality of life for individuals with behavioral and emotional challenges. The use of Kalwall reflects this mission by bringing proven health benefits to building occupants.

Diffuse natural light bathes the interior of the Center’s upper spaces to create a calming atmosphere that has a profound effect on physical and mental states. Kalwall’s full-spectrum daylight was chosen to improve mood, mental awareness and visual clarity, leading to a decrease in eyestrain, headaches and insomnia.

Taking advantage of daylight modeling technology, the translucent building envelope helps reduce shadows, hotspots and glare throughout the building while meeting target light levels. It provides broad line-of-sight protection to patients within, while still providing a view to the outdoors through unitized windows. Finally, the Kalwall system boosts energy savings by reducing reliance on artificial lighting and providing superior thermal properties to control HVAC loads.

The project was designed by Bromley Caldari Architects of New York City, which has incorporated Kalwall in past work. Mark Lipman was the Kalwall representative who worked on the project.

“We worked with a subcontractor who had never installed Kalwall,” Lipman says. “Our installation services team was able to work with them and provide the guidance for a flawless install.” The renovation project was completed without interrupting the Center’s regular working hours.

As a lightweight, modular system, Kalwall allows for rapid and cost-efficient installation, requiring minimal manpower, substructure and time on site. Interiors are pre-finished with Kalwall, eliminating the need for drywalling, painting or other work. Its surface is easily cleaned with soap and water.

Kalwall systems have a decades-long lifespan with technology that does not fail like insulated glass and exceeds stringent energy codes for future-proofed construction. The NYPCC will be a beacon of community hope for generations to come.
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**FACES OF ASPE: Paul Croke**

- **Best advice I ever received**
  - Live simply and be generous with others.

- **Best advice I share with young (and not so young) estimators**
  - Building and fostering relationships with people will create tremendous personal and professional opportunities. Be intentional about setting aside time to build relationships and your network will become a great resource for you.

- **ASPE goal for 2020 - 2021**
  - As a new member to the society and board, I’m looking forward to meeting members, identifying how ASPE best serves them, and support the growth of the organization by meeting their needs.

- **If I wasn’t doing this, I would be**
  - Sitting on a lake waiting for calm water to finish my last waterski run of the day or hiking a quiet trail in one of our national parks with my family.

**Chapter 39 – Viking – National Treasurer**

Hinrichs Estimating

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Calling All CPEs!

• Imagine you are a young estimator who is assigned to work on an estimate for a new hospital radiology floor?
• Suppose you have been a healthcare estimator for 10 years, change jobs and are asked to estimate a new casino?
• What are your next steps if you encounter a project type that you have never estimated before, and are not even sure what you don’t know?

The Standards Committee is working to address this challenge by introducing a new SEP publication that will support estimators, at all levels of experience, to expand their skillset and detail unique information about specific project types. But your help is needed!

ASPE is calling upon all CPEs to share your knowledge by writing Technical Papers on various project types in which you consider yourself an expert. So whether you are an expert in estimating for banking institutions, hospitals, casinos, manufacturing plants, sewer treatment plants, grocery stores, restaurants, office buildings, housing or hotels, we hope you will participate. To reward this effort, the Certification Committee will award the author of successful Technical Papers with 12 PDUs. In addition, if the Technical Paper is selected for publishing, an additional 4 PDUs will be awarded!

(Successful Technical Paper = Earning a Passing Score of 20+)

ASPE is seeking very specific topics. To ensure that a variety of Technical Papers are received, please contact Cinder McDonald, Certification Committee Coordinator (Certification@ASPEnational.org) prior to proceeding, for a list of possible topics. After a topic is approved, you will be provided with the established parameters / the standardized format for the Technical Paper.

If you have any questions regarding Standards, please contact Karla Wursthorn, Standards Committee Chair at kwursthorn@tnward.com.

Thank you for considering this opportunity to be part of this first of its kind estimating reference book!
HTETCO Replacing Existing 150 Year Old Utilities with New 3.5 Miles of Long Street Car Construction

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Section 2: Types and Methods of Measurements
Section 3: Specific Factors to Consider
Section 4: Overview of Costs
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Section 6: Ratios and Analysis
Section 7: Miscellaneous Pertinent Information
Section 8: Sample Plans and Take-off
Section 9: Sample Budget Estimate
SECTION 1: INTRODUCTION

This Technical Paper is intended to educate the reader (civil estimator) about procedures, knowledges, tools and steps required and suggested for creating a conceptual cost estimate for replacement over 100 years old existing brick sewer, evaluate available options with conjunction to new City of Seattle building a modern streetcar system. The City of Seattle is building a modern streetcar system that will provide new mobility options, support economic growth, and strengthen connection in the urban core. Larger part of this project is replace 150 years old brick sewer and steam pipe that will provide a multiple challenge to put together comprehensive Budget Estimate with 3 basic estimate options. This overall project will fully replace or partially replace and reline over 100 years old existing brick sewer and manhole with new RCP concrete pipe and pre-cast manhole. The work may be conducted as a single project or multiple projects dependent on factors including cost, schedule sequencing, failures or external priorities. This project will maintain existing combined sewer capacity (throughout the C3 alignment, reducing the risk of mainline and service failures, while reducing the increased O&M costs that result from the streetcar.

Existing over 100 years old Sewer Rehab project-The combined sewer between Madison Street and Jackson Street consists of a bricked lined sewer of variable size. The current condition of this section of sewer is not expected to last the desired 50 year life of the street car project. This line must be repaired or replaced. The 970 foot section between Madison Street and Cherry Street is an egg shaped section measuring 22” wide by 33” high. Another 270 foot section of brick sewer between Cherry Street and Yesler Street is an egg shaped section measuring 28” wide and 42” high. The 600 foot sewer section between Yesler Street and South Main Street is an egg shaped brick sewer measuring 32” wide by 48” high. And 340 foot sewer section between South Main Street and Jackson Street is a 48” diameter round brick sewer. In addition to the above indicated item, project will consist of existing MH’s replacement that located North of Madison Street and along the main proposed project location Madison to Jackson Street. FOM identified necessary repairs, rehabilitations and replacements along the C3 alignment through CCTV analysis. With the Base Case and all other options, the project team has determined that all requested work alongside C3 construction must be performed. Final decision been made to replace existing sewer with new.

Existing Brick Sewer Cross section. Sewer project been completed in December 1893.
SECTION 2: TYPES AND METHODS OF MEASUREMENTS

Quantity development will be based on a CCTV Inspection and existing as-build drawings (Dated Dec. 1893), takeoff made from preliminary developed plans, profiles and sewer crossing details crossing details. Main Sewer pipe line utilities are measured by length, (L.F=linear foot), fitting associated with any pipe line are measured by the piece (E.A=each). Precast Concrete Maintenance Hole (also known as catch basin) is measured by each structure (EA=each), and Cast in Place Maintenance Hole is measured by vertical linear feet of pouring concrete (V.LF=vertical linear feet). Support and Safety System in trench excavation are measured in square area (S.F=square feet). Bedding for Sewer pipe is measured by length, (L.F=linear foot). In addition we are having supporting activities to the main sewer line such as Safety and Health Program is measured by Month of construction (MO=month), Maintenance and Protection of Traffic Control is measured by Day (DAY=day), and Traffic Control Peace officers are measured by hour (HR=hour). Most of the demolition items rea measured the same way as the new installed items. Consumables can be calculated from manufacturer’s chart or, based upon historical job cost data. Labor is MHRs/Ft of pipe or in Manhole Structure. Fittings and specialties such as cleanout are measured in MHRs/pc. Equipment, Consumables and Labor are included in the unit prices line item base on existing database with composite crew, materials, equipment and sub-contractor cost. Quantities for miscellaneous items, such as the trenching, sand bed and backfilling estimated and measured according to past historical completed projects and existing estimating database for the unit prices.

SECTION 3: PROJECT SPECIFIC FACTORS TO CONSIDER

Engineering Quality

Quality of the engineering drawings is extremely important in preparation of quantity development for this particular scope of work. O&M staff have performed closed circuit television inspection of the mainline existing brick sewers and lateral connections along the alignment, and have completed work orders recommending replacements along the C3 alignment. This project was estimated using two different methods, a construction estimation approach and an

Engineering approach. The construction estimation approach evaluated equipment, materials, labor, and level of effort (work duration) to develop this cost estimate based on recent SDOT project work. The engineering approach involved direct estimating using project 60 percent design quantities and recent

SPU unit price Bid tabs.

Effect of Geographical location

When putting budgetary estimate together, it is crucial to consider geographical location of the project. Due to the location of this project in very busy downtown Seattle area we need to consider the following important factors that will definitely affect the cost:

- Higher costs for repairs if will be selected
- Higher costs for operations and maintenance and higher cost to perform repairs or replacement, as well as limited access near streetcar tracks
- Potential loss of public confidence due to infrastructure failure

In addition to the above quality labor force often depends on location and current Market condition. First, it is important to find out if skilled labor is available for the hire through the union hall. Second, it is important for estimator to familiarize themselves with the delivery workers to the job-site and how to schedule the working hrs. that will not disturb the public. The specific attention need to be taken when locating the staging and materials storage areas. Excavation and fill conditions vary widely, so their cost impact must be closely considered.

Construction Quantity Allowances

Usually for this type of project quantity allowance of 10% has been applied to this estimate to protect against anticipated increases during design and through construction. The increased % can be for variations in routing and filed run changes along with delivery damages, load damages etc. The project team did evaluate feasibility of performing meaningful Value Engineering on this project considering when our first design deliverable will be available and how this fits in the overall project schedule.

Seasonal Effect on Work

When working outdoors, it is crucial that you as estimator consider the working environment. You should be familiar with project schedule constrains, and labor cost factor along with at least past 10 years weather temperature in region.

SECTION 4: OVERVIEW OF COSTS

Labor: Labor costs are calculated on a composite crew day basis and typically in this case determined by the project schedule restraints. This particular type of work most efficiently accomplished by a crew of six or more by the local Heavy and Highways/Civil Laborers Union. Labor rates do not cover contractor field indirect costs such as Mobilization and temporary facilities. All these items are included with the construction indirect cost. Estimate prepared and assumed that G.C will self-perform the work and labor burden been added into union labor rates (Fig 1).
The pipe journeyman will be instrumental in the pipe installation process, as they are usually very well versed in underground utility task. In addition as always all labor forces will need appropriate small tools & supply to perform assigned work activities.

**Equipment:** Equipment necessary to provide a complete task will be mid-size in comparison to other types of combine underground sewer project and will be based on general contractor responsibilities for site excavation, installation of shoring system, pipe installation, structures installation, back-fill and compaction. Proper selection of Equipment and tools for this project very important factor for safety, efficiency and eventually for total construction overhead and profit. The main piece of equipment required to complete pipe installation will be the following: Mid-Excavator for removal existing brick sewer, digging trench, and new pipe installation; Loader for carry disposal of offsite soil, dumping back granular fill and hauling excavated spoils; Roller for compaction and dump tracks with drivers will required as well. A generator and pump should also be included in the estimate, because there are extensive amount of dewatering in different project locations. Equipment will also include mid-size crane with operator for shoring system installation and crew mid-size track. Total List of Construction Equipment with rental rates provided below (Fig 2).

<table>
<thead>
<tr>
<th>Groups</th>
<th>Basic Wage</th>
<th>Fringes</th>
<th>Credit Union/Dues</th>
<th>Small Tools/Consumb.- (2.5%-5%Basic)</th>
<th>Total/HR</th>
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<tbody>
<tr>
<td>Foreman</td>
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<td>$10.72</td>
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<td>Operator Equipment-I</td>
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<td>$10.72</td>
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<tr>
<td>Lead Pipe layer</td>
<td>$34.76</td>
<td>$10.56</td>
<td>$2.35</td>
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<tr>
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<td>$10.56</td>
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<tr>
<td>Laborer-Apprentice-1st</td>
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<td>$2.35</td>
<td>$1.50</td>
<td>$44.46</td>
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</table>

Notes: Fringes are as follow: H&M; Pension; Training; WALECET; WCISAP Credit Union/Dues are as follow: Credit Union; Working Dues; WFC

**Fig 1**

The pipe journeyman will be instrumental in the pipe installation process, as they are usually very well versed in underground utility task. In addition as always all labor forces will need appropriate small tools & supply to perform assigned work activities.

**Fig 2**

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>Make/Models</th>
<th>Rates/Day</th>
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</thead>
<tbody>
<tr>
<td>Crawler Loader/7501</td>
<td>Bobcat T250</td>
<td>$225.00</td>
</tr>
<tr>
<td>Backhoe/65-74HP</td>
<td>CASE 590SL</td>
<td>$285.00</td>
</tr>
<tr>
<td>Crane/Carry Deck-8T</td>
<td>Broderson IC80-3G</td>
<td>$375.00</td>
</tr>
<tr>
<td>Generator/2.9KW/Gas</td>
<td>MIKASA GA2.5H</td>
<td>$35.00</td>
</tr>
<tr>
<td>Pump/Submersible/4&quot; HYD</td>
<td>Pioneer 4HS-O</td>
<td>$85.00</td>
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<tr>
<td>Track/Box Dump/3-4YD</td>
<td>FORD F550</td>
<td>$240.00</td>
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<tr>
<td>Track/Pickup/F150CL</td>
<td>FORD F150</td>
<td>$125.00</td>
</tr>
</tbody>
</table>

**Materials:** Sources of materials pricing and methods of adjusting them are essential to the estimator in creating professionally reliable cost estimate. Materials prices has been obtained from the local SPU unit Cost database, that is updated twice per Calendar year base on supplier prices catalog. Material for this task will consist of a few different commodities. The items that impact cost are as follow (See Fig 3). After evaluating current market condition and taking into consideration the fact that that project will starts in 2018, it is not unreasonable to put a 10-20% contingency on market unit cost if the work is more than 1 year out from the current estimate. Sales Tax are included as 9.5% base on the current Settle Market for 2016 unit cost report in the summary sheet, but shipping and handling are included in the item unit cost. A quantity allowance of 10% for materials waste has been applied to this estimate to protect against any unanticipated increases during design development.
In 2018, it is not unreasonable to put a 10-20% contingency on market unit cost if the current market condition and taking into consideration the fact that project will start. The items that impact cost are as follows (See Fig 3). After evaluating obtained from the local SPU unit cost database, that is updated twice per calendar year, the estimator in creating professionally reliable cost estimate. Materials prices have been adjusted.

### Table

<table>
<thead>
<tr>
<th>Activity</th>
<th>Materials/Type</th>
<th>Unit</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIPE REPAIR</td>
<td>High-strength grout</td>
<td>CY</td>
<td>$142.50</td>
</tr>
<tr>
<td>MAINTENANCE HOLE, TYPE 211B</td>
<td>Pre-Cast MH type 211B</td>
<td>EA</td>
<td>$16,500.00</td>
</tr>
<tr>
<td>Bedding, CL B, 12 IN Pipe</td>
<td>1/2&quot; Clean Rock</td>
<td>TN</td>
<td>$30.50</td>
</tr>
<tr>
<td>Pipe PSD, Conc Reinf C76 CL IV, 12IN</td>
<td>PSD CONC REINF Pipe C76 CL IV-12&quot; DIA</td>
<td>LF</td>
<td>$35.63</td>
</tr>
<tr>
<td>Bedding, CL B, 18 IN Pipe</td>
<td>3/4&quot; Clean Rock</td>
<td>TN</td>
<td>$44.53</td>
</tr>
<tr>
<td>Pipe PSD, Conc Reinf C76 CL IV, 18IN</td>
<td>PSD CONC REINF Pipe C76 CL IV-18&quot; DIA</td>
<td>LF</td>
<td>$45.25</td>
</tr>
<tr>
<td>Bedding, CL B, 24 IN Pipe</td>
<td>1&quot; Clean Rock</td>
<td>TN</td>
<td>$48.00</td>
</tr>
<tr>
<td>Pipe PSD, Conc Reinf C76 CL IV, 24IN</td>
<td>PSD CONC REINF Pipe C76 CL IV-24&quot; DIA</td>
<td>LF</td>
<td>$54.37</td>
</tr>
<tr>
<td>TEE, 12 IN, Cut-In-Existing Concr Pipe</td>
<td>12&quot; PSD Concr Reinf Tee</td>
<td>EA</td>
<td>$403.33</td>
</tr>
<tr>
<td>TEE, 18 IN, Cut-In-Existing Concr Pipe</td>
<td>18&quot; PSD Concr Reinf Tee</td>
<td>EA</td>
<td>$802.08</td>
</tr>
<tr>
<td>TEE, 24 IN, Cut-In-Existing Concr Pipe</td>
<td>24&quot; PSD Concr Reinf Tee</td>
<td>EA</td>
<td>$947.92</td>
</tr>
<tr>
<td>Pipe PSD, Conc Reinf C76 CL IV, 30IN</td>
<td>PSD CONC REINF Pipe C76 CL IV-30&quot; DIA</td>
<td>LF</td>
<td>$155.00</td>
</tr>
<tr>
<td>TEE, 30 IN, Cut-In-Existing Concr Pipe</td>
<td>30&quot; PSD Concr Reinf Tee</td>
<td>EA</td>
<td>$1,020.83</td>
</tr>
<tr>
<td>TEMPORARY SEWER BYPASS</td>
<td>PIPE, PS or PSS, PVC, D3034 SDR 35.15 IN</td>
<td>LF</td>
<td>$43.33</td>
</tr>
<tr>
<td>TEMPORARY SEWER BYPASS</td>
<td>TEE, VCP, 10 IN</td>
<td>EA</td>
<td>$212.50</td>
</tr>
</tbody>
</table>

### Fig 3

After tabulation and explanation of the direct cost for this project, you as an Estimator will have to begin the consideration of indirect cost, that consist of many variables such as supporting activities and overhead and profit.

**Indirect Cost:** Indirect cost is usually considered to be costs that are necessary to complete any construction project and is consist of 2 (two) additional supporting cost to the direct or hard project cost in our business. This cost include the supporting activities that area needed to main scope of work, but are not directly attributable to productive labor. This cost in our Estimate include the following supporting activities: Mobilization; Survey; Safety and Health Program; Traffic Control Peace Officers; Construction Storm Water & Erosion Control Plan and Tree Vegetation & Soil Protection Plan and Soft Cost which include Engineering Design, Permitting, Coordination with Residents, Property acquisition cost, Legal Fee, Economical Analyst of Life Cycle. All overhead and profit cost are allocated in the each line item unit cost base on existing historical Database. For this Estimate we are included 10% of overhead and 5% of profit.

**Approach:** Approach is basically the plan of action. Each Budget Estimate for Underground Utility work need to maintain special approach. You as an estimator will need to be confident that you do understand the scope of work as well as schedule constrains. After fully agree with the Designers and understand the project scope, you might begin QTY take off process base on proposed profile layout and 100 years old as-build drawings. The take-off is basically a quantity survey where you literally count all items that impact the cost of the project.

**Project Reserve:** This include the combination of Contingency Reserve and Management Reserve. Contingency is an amount added to the Direct Estimating Cost to cover identified risk events that occur on the project, excluding changes in project scope; Management Reserve is an amount added to the Base Cost to cover unidentified risk events that occur on the project, including minor changes in project scope. Examples of Contingency Reserve and Management Reserve for this Estimating task are provided below:
Contingency Reserve is estimated at 15% of the Direct Cost Total.
Management Reserve is estimated 10% per the Direct Cost Total.
Total reserves are estimated at 25% of the direct cost or about 50% of the construction line items.

SECTION 5: SPECIAL RISK CONSIDERATION

Construction Schedule
It is very important to start scheduling construction activities in the early stage of design. The planning of all critical path construction activities should be prepare well in advance in Design phase with proper coordination of main player for the project the Department of Transportation whose starting activities for the related segment will fully depends on completing activities for Underground Sewer work. Total project schedule for this project consisting for 29 activities and commenced to complete by August 21, 2019. Schedule Calendar been build base on 40 Hour Week/8hr/day work load. Project Schedule is showing below.

Construction Facilities
Sewer replacement which is considers the underground utilities in general always present a contractor with great deal of risk consideration. Estimator is better to judge all type of risk factors and include all assumptions in the unit cost along with the indirect cost into the Estimate.

- Estimating project cost without Construction Drawings and only using 60% Design Development along with completed base map and 100 years old as-build technical Drawings.
- Work in downtown very busy street along with having into consideration the noise barrier, extended working hours, multiple coordination with residents and business owners created the higher than usual risk.
- Risk potential of unforeseen existing utilities such as gas, Steam pipe, and electrical duct bank along with communication cable.
- Rock excavation and dewatering along with the Environmental procedures will be creating another risk factors. Groundwater in the selected construction field can be very tricky and surprise when preparing the estimate and need special and careful evaluation.
SECTION 6: RATIOS AND ANALYSIS

After the take-off has been completed, information regarding Labor, Materials and Equipment pricing has been verified in historical Database and included along with the identifying special risk consideration and indirect cost. The cost estimate is fully completed. The final estimate should and will be reviewed by prepared estimator for any errors, omissions and forwarded to the appropriate management parties for the final review. Ratio and analysis are calculated from historical data, and should be in the estimator library of resources. In our particular example we are using 2(two) existing database-APWA and CSI. Although brick sewer replacement project is very unique and cost can vary depends on location, size of pipe and schedule restraints, estimator should develop and maintain database base on historical process from past similar projects. For example, in our estimate we will price Installation of PSD Concrete Reinforcement 12” Diameter pipe for $98 per LF. This price comes from a combination of historical data as well as analysis of past and existing projects.

Historical Database presented partially as an example of unit prices for this Estimate.

<table>
<thead>
<tr>
<th>Bid Item</th>
<th>Item/Description</th>
<th>Take-Off QTY</th>
<th>Unit</th>
<th>Labor Amount</th>
<th>% of Total</th>
<th>Materials Amount</th>
<th>% of Total</th>
<th>Equipment Amount</th>
<th>% of Total</th>
<th>Sub Amount</th>
<th>% of Total</th>
<th>Sub Total Unit</th>
<th>O&amp;G Profit %</th>
<th>Total Cost Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>107005</td>
<td>Safety and Health Program</td>
<td>MO</td>
<td>$180</td>
<td>12.0%</td>
<td>$1.278</td>
<td>85.0%</td>
<td>$45</td>
<td>3.0%</td>
<td>-</td>
<td>-</td>
<td>12.0%</td>
<td>$1,504</td>
<td>12.0%</td>
<td>$2,000</td>
</tr>
<tr>
<td>109007</td>
<td>Mobilization Small to Mids Project</td>
<td>LS</td>
<td>$0</td>
<td>71.0%</td>
<td>$0</td>
<td>2.0%</td>
<td>$0</td>
<td>15.0%</td>
<td>$0</td>
<td>12.0%</td>
<td>10.0%</td>
<td>$0</td>
<td>10.0%</td>
<td>$0</td>
</tr>
<tr>
<td>110020</td>
<td>TRAFFIC CONTROL</td>
<td>HR</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>$9</td>
<td>11.0%</td>
<td>$77</td>
<td>89.0%</td>
<td>10.0%</td>
<td>$86.36</td>
<td>10.0%</td>
<td>$95.00</td>
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<tr>
<td>110005</td>
<td>MAINTENANCE &amp; PROTECTION OF TRAFFIC CONTROL INCLUDING FLAGGING-CSI(REF)</td>
<td>DAY</td>
<td>$611.38</td>
<td>75.0%</td>
<td>$41</td>
<td>5.0%</td>
<td>$163.03</td>
<td>20.0%</td>
<td>-</td>
<td>-</td>
<td>$815.17</td>
<td>12.0%</td>
<td>$913</td>
<td></td>
</tr>
<tr>
<td>201303</td>
<td>CLEANING EXISTING PIPE</td>
<td>LF</td>
<td>$5</td>
<td>35.0%</td>
<td>-</td>
<td>-</td>
<td>$9</td>
<td>60.0%</td>
<td>$0.83</td>
<td>5.0%</td>
<td>10.0%</td>
<td>$15</td>
<td>10.0%</td>
<td>$17</td>
</tr>
<tr>
<td>202190</td>
<td>REMOVE PIPE In TRENCH-Depth 10-15 FEET</td>
<td>LF</td>
<td>$11.13</td>
<td>55.0%</td>
<td>-</td>
<td>-</td>
<td>$9.10</td>
<td>45.0%</td>
<td>-</td>
<td>-</td>
<td>$20.23</td>
<td>30.0%</td>
<td>$26.30</td>
<td></td>
</tr>
<tr>
<td>202190A</td>
<td>REMOVE PIPE FITTING Depth 10-15 FEET</td>
<td>EA</td>
<td>$8.88</td>
<td>55.0%</td>
<td>-</td>
<td>-</td>
<td>$7.27</td>
<td>45.0%</td>
<td>-</td>
<td>-</td>
<td>$16.15</td>
<td>30.0%</td>
<td>$21.00</td>
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</tr>
<tr>
<td>202270</td>
<td>REMOVE BRICK MH STRUCTURES</td>
<td>EA</td>
<td>$962.50</td>
<td>55.0%</td>
<td>$350.00</td>
<td>20.0%</td>
<td>$437.50</td>
<td>25.0%</td>
<td>-</td>
<td>-</td>
<td>$1,750</td>
<td>20.0%</td>
<td>$2,100.0</td>
<td></td>
</tr>
<tr>
<td>207010</td>
<td>SAFETY SYSTEM IN TRENCH EXCAVATION(7-10 Feet Deep)</td>
<td>SF</td>
<td>$0.56</td>
<td>45.0%</td>
<td>$0.31</td>
<td>25.0%</td>
<td>$0.38</td>
<td>30.0%</td>
<td>-</td>
<td>-</td>
<td>$1.25</td>
<td>20.0%</td>
<td>$1.50</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 7: MISCELLANEOUS

At this time we will use only 30% design Development Drawing which will be considered as schematic. This is totally on Estimator to develop and survey the comprehensive QTY. Having the issue with the varying of Design Development phases and incomplete Drawing, the estimator must be well knowledgeable and verses in the CSI division he is working. Many construction projects today have constrained budgets, thereby making the value engineering process an important part of most projects. In the parametric Estimate task every civil Estimator need to evaluate and exercise a few options and alternatives to effectively construct the estimate proposal. The following sample of Estimate file made up of a series rows and columns. These rows and columns contain data including quantity, activity descriptions, break-down components of activity unit cost, cost escalation factor and total Activity cost.

Summary of proposed Estimate included the following: Allowance for Indeterminates, Allowance for Market Conditions and Sales tax.

SECTION 8: SAMPLE PLAN AND TAKEOFF

Major Take-off QTY presented below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Size</th>
<th>Materials</th>
<th>Unit</th>
<th>QTY</th>
<th>Notes/Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOBILIZATION</td>
<td>Project</td>
<td></td>
<td>LS</td>
<td>1</td>
<td>Assumed % of Subtotal of all Activities (without Mob).</td>
</tr>
<tr>
<td>SURVEY</td>
<td>Project</td>
<td>Wood - Stake/Rebar-Rod</td>
<td>DAY</td>
<td>80</td>
<td>Survey Crew(2 Man’s) along with Survey Track &amp; Instruments</td>
</tr>
<tr>
<td>SUPPORT AND SAFETY SYSTEM</td>
<td>7’x10’</td>
<td>Timber Wood/Steel Frame</td>
<td>SF</td>
<td>18,900</td>
<td>Qty take from Option Summary, Unit price new Database-Section between Cherry St &amp; Madison St.</td>
</tr>
<tr>
<td>SUPPORT AND SAFETY SYSTEM</td>
<td>8’x10’</td>
<td>Timber Wood/Steel Frame</td>
<td>SF</td>
<td>6,790</td>
<td>Section between Cherry St &amp; Jackson St.</td>
</tr>
<tr>
<td>MAINTENANCE HOLE-211B</td>
<td>Dia-11’xH-20’</td>
<td>Pre-Cast Concrete</td>
<td>EA</td>
<td>9</td>
<td>Qty take from Option Summary, Unit price new Database-Section between Cherry St &amp; Madison St.</td>
</tr>
<tr>
<td>MAINTENANCE HOLE-211B</td>
<td>Dia11’xH-12’</td>
<td>Pre-Cast Concrete</td>
<td>EA</td>
<td>5</td>
<td>Section between Cherry St &amp; Madison St.</td>
</tr>
<tr>
<td>CATCH BASIN, TYPE 240A</td>
<td>Dia-4’xH-8’</td>
<td>Pre-Cast Concrete</td>
<td>EA</td>
<td>2</td>
<td>Qty take from Option Summary-Section North of Madison.</td>
</tr>
<tr>
<td>Bedding, CL B, 12 IN Pipe</td>
<td>1/2” Clean</td>
<td>Washed Gravel</td>
<td>LF</td>
<td>92</td>
<td>Section between Cherry and Jackson Street.</td>
</tr>
<tr>
<td>Bedding, CL B, 18 IN Pipe</td>
<td>1/2” Clean</td>
<td>Washed Gravel</td>
<td>LF</td>
<td>192</td>
<td>Section between Madison St &amp; Jackson St.</td>
</tr>
<tr>
<td>Bedding, CL B, 24 IN Pipe</td>
<td>3/4” Clean</td>
<td>Washed Gravel</td>
<td>LF</td>
<td>30</td>
<td>Section between Madison St &amp; Jackson St.</td>
</tr>
<tr>
<td>Bedding, CL B, 30 IN Pipe</td>
<td>1” Clean</td>
<td>Washed Gravel</td>
<td>LF</td>
<td>2,180</td>
<td>Qty take from Option Summary-Section North of Madison St.</td>
</tr>
<tr>
<td>Pipe TEE, 12 IN</td>
<td>12” Dia</td>
<td>Pre-Cast Concrete</td>
<td>EA</td>
<td>5</td>
<td>Section between Cherry and Jackson Street.</td>
</tr>
<tr>
<td>Pipe TEE, 18 IN</td>
<td>18” Dia</td>
<td>Pre-Cast Concrete</td>
<td>EA</td>
<td>10</td>
<td>Section between Madison St &amp; Jackson St.</td>
</tr>
<tr>
<td>Pipe TEE, 24 IN</td>
<td>24” Dia</td>
<td>Pre-Cast Concrete</td>
<td>EA</td>
<td>30</td>
<td>Section between Cherry and Madison St.</td>
</tr>
<tr>
<td>Pipe TEE, 30 IN</td>
<td>30” Dia</td>
<td>Pre-Cast Concrete</td>
<td>EA</td>
<td>30</td>
<td>Qty take from Option Summary-Section North of Madison St. (with 7.5% waste)</td>
</tr>
<tr>
<td>Pipe PSD, C76, Class IV</td>
<td>12” Dia</td>
<td>RCP ASTM C76</td>
<td>LF</td>
<td>99</td>
<td>Section between Cherry and Jackson Street.</td>
</tr>
<tr>
<td>Pipe PSD, C76, Class IV</td>
<td>18” Dia</td>
<td>RCP ASTM C76</td>
<td>LF</td>
<td>207</td>
<td>Section between Madison St &amp; Jackson St. (with 7.5% waste)</td>
</tr>
<tr>
<td>Pipe PSD, C76, Class IV</td>
<td>24” Dia</td>
<td>RCP ASTM C76</td>
<td>LF</td>
<td>896</td>
<td>Section between Madison St &amp; Jackson St. -7.5% waste</td>
</tr>
<tr>
<td>Pipe PSD, C76, Class IV</td>
<td>30” Dia</td>
<td>RCP ASTM C76</td>
<td>LF</td>
<td>1043</td>
<td>Section between Cherry St. and Madison St.-7.5% waste</td>
</tr>
</tbody>
</table>
HTETCO Replacing Existing 150 Year Old Utilities with New 3.5 Miles... continued

<table>
<thead>
<tr>
<th>Item</th>
<th>Size</th>
<th>Materials</th>
<th>Unit</th>
<th>QTY</th>
<th>Notes/Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOBILIZATION</td>
<td>Project</td>
<td>LS</td>
<td>1</td>
<td>Assumed % of Subtotal of all Activities (without Mob)</td>
<td></td>
</tr>
<tr>
<td>SURVEY</td>
<td>Project</td>
<td>Wood – Stake/Rebar-Rod</td>
<td>DAY 80</td>
<td></td>
<td>Survey Crew(2 Man’s) along with Survey Track &amp; Instruments</td>
</tr>
<tr>
<td>SUPPORT AND SAFETY SYSTEM</td>
<td>7'x10'</td>
<td>Timber Wood/Steel Frame</td>
<td>SF 18,900</td>
<td>Qty take from Option Summary, Unit price new Database-Section between Cherry St &amp; Madison St.</td>
<td></td>
</tr>
<tr>
<td>SUPPORT AND SAFETY SYSTEM</td>
<td>8'x10'</td>
<td>Timber Wood/Steel Frame</td>
<td>SF 6,790</td>
<td>Section between Cherry St &amp; Jackson St.</td>
<td></td>
</tr>
<tr>
<td>MAINTENANCE HOLE-211B</td>
<td>Dia-11'xH-20'</td>
<td>Pre-Cast Concrete EA</td>
<td>9</td>
<td>Qty take from Option Summary, Unit price new Database-Section between Cherry St &amp; Madison St.</td>
<td></td>
</tr>
<tr>
<td>MAINTENANCE HOLE-211B</td>
<td>Dia-11'xH-12'</td>
<td>Pre-Cast Concrete EA</td>
<td>5</td>
<td>Qty take from Option Summary, Unit price new Database-Section between Cherry St &amp; Jackson St.</td>
<td></td>
</tr>
<tr>
<td>CATCH BASIN, TYPE 240A</td>
<td>Dia-4'xH-8'</td>
<td>Pre-Cast Concrete EA</td>
<td>2</td>
<td>Section between Cherry St &amp; Madison St.</td>
<td></td>
</tr>
<tr>
<td>Bedding, CL B, 12 IN Pipe</td>
<td>1/2'' Clean Washed Gravel LF</td>
<td>92</td>
<td>Qty take from Option Summary-Section-North of Madison.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bedding, CL B, 18 IN Pipe</td>
<td>1/2'' Clean Washed Gravel LF</td>
<td>192</td>
<td>Section between Cherry and Jackson Street.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bedding, CL B, 24 IN Pipe</td>
<td>3/4'' Clean Washed Gravel LF</td>
<td>30</td>
<td>Section between Madison St &amp; Jackson St.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bedding, CL B, 30 IN Pipe</td>
<td>1'' Clean Washed Gravel LF</td>
<td>2,180</td>
<td>Section between Cherry St and Madison St.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipe TEE, 12 IN</td>
<td>12'' Dia Pre-Cast Concrete EA</td>
<td>5</td>
<td>Qty take from Option Summary-Section North of Madison St.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipe TEE, 18 IN</td>
<td>18'' Dia Pre-Cast Concrete EA</td>
<td>10</td>
<td>Section between Cherry and Jackson Street.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipe TEE, 24 IN</td>
<td>24'' Dia Pre-Cast Concrete EA</td>
<td>30</td>
<td>Section between Madison St &amp; Jackson St.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipe TEE, 30 IN</td>
<td>30'' Dia Pre-Cast Concrete EA</td>
<td>30</td>
<td>Section between Cherry St and Madison St.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipe PSD, C76, Class IV</td>
<td>12'' Dia RCP ASTM C76 LF</td>
<td>99</td>
<td>Qty take from Option Summary-Section North of Madison St.(with 7.5% waste)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipe PSD, C76, Class IV</td>
<td>18'' Dia RCP ASTM C76 LF</td>
<td>207</td>
<td>Section between Cherry and Jackson Street.(with 7.5% waste)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipe PSD, C76, Class IV</td>
<td>24'' Dia RCP ASTM C76 LF</td>
<td>896</td>
<td>Section between Madison St &amp; Jackson St.-7.5% waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipe PSD, C76, Class IV</td>
<td>30'' Dia RCP ASTM C76 LF</td>
<td>1043</td>
<td>Section between Cherry St. and Madison St.-7.5% waste</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HTETCO Replacing Existing 150 Year Old Utilities with New 3.5 Miles... continued
## SECTION 9: SAMPLE TAKE-OFF

### Project Name: Sample Estimating 100 Old Brick Sewer Replacement Project

<table>
<thead>
<tr>
<th>Item</th>
<th>APWA Bid Item</th>
<th>Bid Item Description</th>
<th>Unit</th>
<th>2016 Unit Price</th>
<th>Quantity</th>
<th>Unit Price Extension</th>
</tr>
</thead>
<tbody>
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<td>109005</td>
<td>MOBILIZATION</td>
<td>%</td>
<td>$188,817</td>
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<td>$188,817</td>
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<tr>
<td>2</td>
<td>105000</td>
<td>SURVEY</td>
<td>DAY</td>
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<td>$581.3</td>
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<td>3</td>
<td>107005</td>
<td>SAFETY AND HEALTH PROGRAM</td>
<td>MO</td>
<td>$1,300.0</td>
<td>1</td>
<td>$1,300.0</td>
</tr>
<tr>
<td>4</td>
<td>110005</td>
<td>MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL INCLUDING FLAGGING</td>
<td>DAY</td>
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### Itemized Construction Line Item Pricing

- **Construction Line Item Pricing**: $3,093,688
- **Allowance for Indeterminates**: $3,867,110
- **Adjustment for Market Conditions**: $4,060,465
- **Construction Bid Amount**: $4,060,465
- **Sales Tax %**: $4,446,209
- **Construction Contract Amount**: $4,446,209
CLAIMS MANAGEMENT

The NEW NORM seems to exemplify the old saying: Pain Share - Gain Share. Today it is mostly pain, but some have the luxury of gain, although probably not sharing. The number, types, and purposes of claims already occurring are overwhelming and extraordinarily complex. These claims are creating a panacea of questions that are redefining the concepts: unprecedented, force majeure, legitimacy of state vs federal edicts, and the contractor, supplier, and owner responsibilities.

Change orders and claims cover more than the normal gamut of the earth’s stratosphere. We are already seeing the invention of a whole new set of “norms” from all levels of businesses engaged in construction projects. The list of claimants is long, starting with suppliers, equipment suppliers, subcontractors, self-performing general contractors, construction management, and the workers.

The best workaround to resolve claims is to first seek the advice of a prominent construction claims attorney. Work with the claimants, settling all claims as early as is possible. One simple resolution was to extend the deadline but not more money. Giving the contractors more time seems to be the most attractive to everyone.

Re-baselining projects has been suggested by some, but the entire COVID-19 predicament is not defined well enough to develop a credible sustainable new baseline. The best approach for a contractor to manage claims is to “Think like an owner. The owner has the right to know what they bought, how much they paid for it, and that cost was reasonable”. All claims must be real, based on actual costs via open book transparency including credits for stimulus and insurance recovery, etc.

a. Owners

A smart facility or plant owner / investor may decide to manage some of the costs incurred to accommodate the new safe place work practices. On some sites, the owner has taken the initiative to provide site resources (staff and supplies) for monitoring activities and sanitizing. It is not clear if they were forced into supporting this effort or if they were simply trying to practice due diligence.

Regardless, using separate resources independent of the construction companies is seen as the most effective, efficient, and feasible process assuming the owner has those resources and can manage them, as most commercial developers probably already have in place.

It is critical that the owner’s resources are communicating well with the construction crews and minimizing the interferences. One optimal solution would be to use the same crew that performs sanitization activities to also perform area cleanup for the contractor when a crew leaves the area. This enables the owner to control the costs but is an amicable solution that the contractor would find acceptable to pay half of.

b. Tangible Claims

Claims that are relatively easy to define, are measurable, and can be spot checked easily by the owner are tangible and easier to remedy. It is especially important to establish as early as is possible a mechanism to measure and pay for tangible costs.

A smart contractor will not provide a lump sum cost in their bid for the COVID-19 impact to their costs. A process proven most successful is to identify the known elements of change that are tangible and negotiate an appropriate cost for compensation above their contract “base” value. Those tangible elements should be measurable and easily verifiable by the owner. As an example, some additional staff are required for various functions and the cost per day including all ancillary costs (to be spelled out) at a rate of $XXX per day. Any tangible costs that can be should be identified and a price agreed before the work starts or as soon as is possible if the added work is in progress already.

Many of the above identified activities are translated into tangible claims for resolution early in the project. PPE, site access and entry protocols, and additional staff should all be
c. **Intangible Claims**

Intangible claims are those costs that are not easily quantifiable by the contractors and/or are not easily verifiable by the owner. Most often the issue relates to field output performance impacting activities.

» **Down Time**

The above activities that most likely are intangible performance issues are delays caused by work area access restrictions. These are actions that prevent the hands-on-tools crafts from accessing their work areas. Delays getting through the site entry gate is an excellent example of down time. Although down time impacts the ultimate worker productivity, the cause for reduction is easier to explain, document, and justify. “Down-time” is industry jargon defined as the period which an equipment or machine is not functional or cannot work. Site entry restrictions creates downtime that the construction site workers are not functional and cannot work.

» **Production Output**

Crew sizing, staggered scheduling, work spacing, crew stacking, and supply-chain delays are all intangible. They are not easy to quantify, measure, or confirm/validate. The measure of productivity is the output per one unit of a total. It is commonly measured in field labor hours or man-hours.

Two distinct challenges complicate the intangible productivity claims.

The first challenge is the inability to measure the actual difference between worker qualifications and capability verses the true impact resulting from the COVID-19 one of these (and many other) COVID-19 safety implemented practices. What was the productivity expectation in terms of output for non-COVID practices vs the new COVID practices?

That answer is often sought in Bid Estimate details. What did the Estimator use to develop the base estimate before adjustments, and what was used to adjust the estimated productivity in the bid. If there was no adjustment, then the difference between what actually occurred could be attributed to the impact of COVID, but that assumes there were no other extenuating circumstances (such as incompetent behavior, late deliveries, etc.) that could have been the actual cause of the delay. The other assumption, a bad assumption, is that the Estimator would normally have identified the delta for the change.

The second challenge is how to quantify the cost for claims? Perhaps the best solution is to forecast the impact and build it into the estimate, taking great care to document the change in the estimate.

Assuming there were no extenuating circumstances (living in a dream world – not reality), the estimate is often used as the delta being the basis for a claim. However, that type of a claim would also require a field time and material study to validate the claim. A field time and material study is a high cost itself that doesn’t add value to the owner, the contractor, or the safety of the workers.

The best solution for an intangible claim is to increase the profit margins in the estimate to offset any probable expense, or simply to negotiate a settlement and live with that loss.

» **Owners and Contractors** should be aware that almost all intangible claims should include at least two pieces of information.

The first is the credit for the delta between the cost the contractor had assumed would be incurred to perform the work without the implementation of the COVID-19 protocols. As an example, the contractor submits a claim for additional hours to place concrete. The claim should only be for the difference between what they estimated it would take, less an extenuating circumstance occurring under the control of the contractor. All claims must identify the root cause, not just an excuse.

The second integral piece of the claim is a full explanation of the root cause of the claim. We should expect to see intangible claims, but a noticeably clear picture must be painted explaining the of the root cause in simple understandable terms that make sense. As an example, perhaps the concrete delivery was not delayed at the gate, perhaps the contractor was not ready to receive the concrete. Perhaps the root cause was that COVID related absenteeism played a role in the delay.

**Contractor Costs:**

**New Overhead costs Never Before Realized**

Contractors are realizing unforeseen costs are hitting their overhead that have never been recognized before. Business owners must immediately seek legal advice to protect their business and themselves.

As with any business, construction contractors are investing in a business with expectations of receiving a return on their investment. If they conduct their business in a prudent and reasonable manner, they absolutely are entitled to a return on their investment. Construction businesses usually require a substantial investment to be successful. If no construction firm were entitled to a return on their investment, there would not be any LS bidders. The COVID-19 pandemic is seen as a real threat to their business and livelihood, much the same as any other business in this world today.

Contractors typically carry their risk in their profit. Consequently, profit margins are taking a direct hit. All of these concerns in this advisory have been vocalized in a larger group setting involving those that are seeing these first: the construction company staff cost professionals.

These are all “behind-the-scenes” costs that few facility or plant owners recognize, or aware of, yet. They know they are already being charged higher prices, but they simply do not understand why.

1. **Insurance** is the one most “owner” misunderstood cost that impacts all construction companies. Various types of coverages are being impacted. Overall, the COVID-19 destabilization of the global economy is considered the biggest
business risk in our entire lifetime.

Below is a brief identification and the initial impact.

» Liability: This coverage is intended to protect construction contractors (the policy owner) from amounts they become obligated to pay due to damages or medical payments because of bodily injury, property damage or personal/advertising injury to third parties caused by or relating to the contractor’s work. This is a low-cost coverage until a claim is paid. Then, just like car insurance, the premiums will go up or possibly be cancelled. Liability insurance is paid out only to claimants, it is not intended to pay any benefit direct to the policy owner.

Concerns have been voiced that when a worker employed by a contractor directly or indirectly causes a worker from another company to be contaminated by the COVID-19 virus, the contractor is liable for lost compensation and other penalties depending on the severity of the infection.

The concern is that the premiums for liability policies will go up whether claims are filed or not. The consensus also agrees that the premiums will skyrocket, not if, but when. The liability premiums typically are < 0.5% of the cost to do business but are likely to go up several percentage points. The insurance underwriters consider COVID-19 to be a very real risk.

Many liability policies are reportedly have a “pandemic” exclusion and will not cover the contractor’s exposure. This is an expected and unpleasant surprise, with potentially huge implications to the survival of a construction company.

» Workers Comp insurance is expensive, ranging anywhere from 4% to 14% of all payroll costs. The purpose of worker’s compensation law is to provide compensation for all on-the-job injuries, whether caused by the employer or third parties. The contractor is responsible for all unpaid compensation. If medical care is rendered, someone is responsible for that cost also.

One of the employers on that jobsite is theoretically liable for all unpaid compensation. If medical care is rendered, someone is responsible for that cost also.

If it was a COVID-19 exposure by workers employed by another contractor, proof is difficult, and litigation is often the only answer to recover costs incurred. If the exposure was incurred due to exposure by another employee of the same firm, the workers compensation insurance is usually responsible for paying claims.

Many workers comp policies also reportedly have a “pandemic” exclusion and will not cover the contractor’s exposure.

» Payment and Performance Bonds are other forms of insurance.

Payment bonds are meant to guarantee to the subcontractors, suppliers, and laborers who the contractor hires that they will receive payment for services and materials. Performance bonds are meant to protect the facility or plant owner from the contractor defaulting on their obligations.

These bonds are also expensive, usually cost between 0.75% to 2% of the total contract value. They are also hard to get and considered to be advantageous over the many contractors who cannot buy this insurance. Much like a loan, as a part of the bonding process, the contractor must obligate a portion of their capital and assets as collateral in the even they default.

The anticipation is that the global economic upheaval of all development owners, construction contractors, and suppliers will destabilize the bonding service, forcing soaring costs and much larger capital and asset collateral commitment limits above their capability.

Another aspect a contractor must consider when bonding a project is the facility or plant owner’s ability to pay for the construction costs. If an owner’s financials are risky, there is high risk that the contractor will not be paid and will default on their bonds.

Typically, when a contractor defaults on their bonds, they are not financially capable of retaining their business and are forced to go broke. To make matters worse, when a bond holder defaults, usually there is a cascade affect and many additional business entities go broke.

» Construction contractors are exposed to unexpected Owner decisions to slow down the work (conserve cash flow), losing projects due to delayed funding commitments that were in the development stages and the construction company was supporting.

2. The construction contractor has the same risks across multiple project sites.

The ability to focus on risk mitigation processes and procedures on one site is quite challenging and takes a lot of the contractor valuable resources. The impacts in the workplace caused by COVID-19 are nearly untenable when managing one site.

Multiply that effort that is now required across multiple sites. A whole new level of sophisticated construction management skill set is now required to survive.

As a minimum, all contractors will not be able to manage the workload they had in the past. To survive, the consensus seems to believe they are likely to have to downsize their workload.

3. New bidding tactics are being used by contractors in two ways:

» Qualify the bid to exclude costs incurred because of
COVID-19. Some contractors do not know what the implications are or will be.

The safest way to protect themselves is simply to exclude that cost. Some are writing it in, some are incorporating it into the fine print in their proposals or contracts.

The result is always a devastating impact in terms of added cost and schedule delays. It is not all that difficult to blame mismanagement and delays on the COVID-19 pandemic. It is also relatively easy in all the confusion to trump-up the costs to the owner.

Some owners can successfully negotiate the cost down to half. Smart contractors know if the owner can afford the extra cost and will collect much more than half or will have trumped-up the costs to ensure they recover financially.

The second tactic is to negotiate a cost allowance with the owner that will protect the contractor’s investment. The allowance, if not a fixed price, will result in a similar scenario to the above exclusion clause.

Legal, Regulatory, and Political Turbulence:
Is This the New Future?

If you are a business owner, you must immediately seek legal advice to avoid litigation and to protect your business and yourself.

The one single most impacted function in society today is the inability of the Justice system to come to grips with a “NEW NORM” for trial litigation. Social distancing and travel restrictions have all but stopped court actions involving jury trials. The concept of presenting testimony by digital meeting (i.e. WebEx) is not allowed by law. Court trials are being suspended in most states. The judicial system must now think “outside-the-Jury-Box” in many more ways than are obvious.

The process of claim settlement is most often resolved through arbitration. However, the legal community is concerned that mediation by arbitration will become overwhelmed and the integrity of that process will eventually spawn a new legal claims mitigation process. But in the interim, arbitration cases will be prolonged incurring added costs and perhaps take too long to settle for most.

Several owners and construction firms participating in the discussions over the past few weeks have indicated they are already seeing legal ramifications and exposure. Most specifically is the lack of insurance coverage leaving facility and plant owners exposed. Most significant are the wrongful death lawsuits already prevailing.

Without specific language from OSHA requiring specific safety training and actions on the jobsite, owners and contractors are compelled to figure out on their own what they need to do to protect themselves and their employees.

Ever since OSHA became a federal agency backed by law, OSHA has been the industry measuring stick used to determine when someone is acting in a safe manner and when they are not. OSHA’s silence, combined with the lack of federal and state intervention, has now left the courts and the Philadelphia lawyers to sort it all out.

Throw in the political elections looming this fall. As we are already seeing, there is no expectation that the politicians will not jump into the fray, taking advantage of the COVID-19 pandemic, escalating to a much more tenuous situation.

Health:
When will this end? A Perfect Storm is Brewing…

Current expectations are that ~60% of the world must be vaccinated before the COVID-19 pandemic will be overcome. A minimum of 300 million vaccinations must be fabricated, distributed, and administered in the USA alone. Many of the allies and poorer countries will be dependent on the USA to provide and administer vaccinations.

The probability of forecasting the vaccine development is likely to be much better than forecasting the actual administration of the vaccine, unless the vaccine can be provided in an easy to swallow pill. It has taken two months to develop and administer 10 million COVID-19 tests. Perhaps vaccinating 100 million or more persons in the USA may be achievable, but complications (Murphy’s Law) will persist turning the vaccination process into a multi-year effort in just the USA.

Global production of the vaccine is projected to average one billion doses per year, but a minimum of 5.7 billion doses is needed. Clearly the impact from COVID-19 will continue for more than a year in the USA under the absolute best-case conditions.

USA is a major hub of global travel leaving the USA exposed by foreign travelers much longer than it takes to administer the vaccine to all Americans.

The ultimate perfect storm brewing and headed to culminate in some bad days late this fall 2020. It will go down in the history books as possibly the worst ever. Adding to the already expected political fracas, the “other” flu viruses will be at their height of exposure resulting in the “usual illness and death rates”.

Stop and consider the consequences of the past month or two in quarantine that will show itself late this fall. I call it the “GenC baby boom” which will occur eight or so months from now. COVID-19 is anticipated to make a whole lot of pregnancies a whole lot more complicated.

The Light at the End of the Tunnel:
Construction cost professionals are usually the first to pull the alarms and throw out the red flags as they should.

The consensus of late is that it will take a few years to tell the whole story, but the fact is that we’ve seen upsets happen in the past. Although it takes time, eventually project worksite process and protocols will change to adapt.

Many new and improved technologies are in the works and will be realized sooner rather than later to make construction worksites more effective and efficient, and continuing providing a safe place to work.
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1-866-627-6246
2020 ASPE Critical Calendar: September - December

September

9  Certification Committee Meeting via Conference Call
16  Education Committee Meeting via Conference Call
21  Chapter Reports due to Regional Governor for October Board of Directors Reports
22  Standards Committee Meeting via Conference Call
25  Committee and Technical Committee Chairs progress reports due to their respective Vice President and Society Business Office
25  Last day for Board of Director Reports to Society Business Office for October Board Books

October

3  Board of Directors Meeting - Virtual
5  Society Business Office issues invoices for 2021 Membership Dues Renewals
14  Certification Committee Meeting via Conference Call
21  Certification Renewal (CPE + AEP) Process to begin - watch for email communication.

November

11  Certification Committee Meeting via Conference Call
18  Certification Renewal (CPE + AEP) - watch for email communication.
19  Standards Committee Meeting via Conference Call

December

2  Deadline: 2021 January/February Estimating Today articles to Society Business Office
9  Certification Committee Meeting via Conference Call
16  Certification Renewal Process DUE NLT 12/31/2020
17  Standards Committee Meeting via Conference Call
31  Deadline: Member Profile Updates for inclusion in 2021 Membership Directory + Buyers’ Guide
31  Members suspended from Membership if not renewed
## ASPE Chapter Meetings

### Arizona

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Where</th>
<th>Date</th>
<th>Time</th>
<th>Meeting Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona #6</td>
<td>Aunt Chilada’s 7330 North Dreamy Draw Drive Phoenix - 85020</td>
<td>2nd Tuesday;</td>
<td>4:00 PM</td>
<td>Gene Plum <a href="mailto:gplum@mccarthy.com">gplum@mccarthy.com</a></td>
</tr>
</tbody>
</table>

Old Pueblo #53  
Where: Varies  
Tucson  
Date: Varies; Time: Varies  
Meeting Contact: Larry Lucero, CPE llucero@redlineinsulation.com

Arkansas #33  
Where: Varies  
Little Rock - 72201  
Date: Varies; Time: Varies  
Meeting Contact: Carri Morones, CPE aspe.carri@gmail.com

NW Arkansas #79  
Where: Varies  
Bentonville  
Date: TBD; Time: TBD  
Meeting Contact: Carri Morones, CPE aspe.carri@gmail.com

### California (Continued)

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Where</th>
<th>Date</th>
<th>Time</th>
<th>Meeting Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden Gate #2</td>
<td>Join 95 Minna Street San Francisco - 94105</td>
<td>3rd Wednesday;</td>
<td>6:00 PM</td>
<td>Gustav Choto <a href="mailto:gustav@join.build">gustav@join.build</a></td>
</tr>
</tbody>
</table>

Orange County #3  
Where: Ayres Hotel  
325 Bristol Avenue  
Costa Mesa - 92626  
Date: 2nd Wednesday; Time: 5:30 PM  
Meeting Contact: Dan Schottlander, CPE dpschottlander@cox.net

San Diego #4  
Where: Varies  
To Be Determined  
San Diego  
Date: 3rd Tuesday; Time: 5:30 PM  
Meeting Contact: Lisa Thibodeaux Lisa@constructionclasses.com

Sacramento #11  
Where: Rancho Cordova City Hall  
2729 Prospect Park Drive  
Rancho Cordova - 95670  
Date: 2nd Friday; Time: 12:00 PM  
Meeting Contact: Bryan Hall bryan.hall@vanir.com

Silicon Valley #55  
Where: Varies  
To Be Determined  
To Be Determined  
Date: Varies; Time: Varies  
Meeting Contact: Alan Jacobs, CPE alan.jacobs@blach.com

### Colorado

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Where</th>
<th>Date</th>
<th>Time</th>
<th>Meeting Contact</th>
</tr>
</thead>
</table>
| Denver #5      | To Be Determined  
To Be Determined  
Denver  
Date: 2nd Tuesday; Time: 5:00 PM  
Meeting Contact: Paul Jonez pjonez@gtc1.net |

### Connecticut

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Where</th>
<th>Date</th>
<th>Time</th>
<th>Meeting Contact</th>
</tr>
</thead>
</table>
| Nutmeg #60     | Back Nine Tavern  
245 Hartford Road  
New Britain - 06053  
Date: Varies; Time: 6:00 PM  
Meeting Contact: Harrison Levy klevy@petraconstruction.com |

Yankee #15  
Where: To Be Determined  
Stratford, CT  
Date: TBD; Time: TBD  
Meeting Contact: Gregory Williamson, CPE gwilliamson@bondbrothers.com

### Delaware

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Where</th>
<th>Date</th>
<th>Time</th>
<th>Meeting Contact</th>
</tr>
</thead>
</table>
| Delaware #75   | Varies  
To Be Determined  
Wilmington  
Date: 2nd Wednesday; Time: 5:30 PM  
Meeting Contact: Estel Taylor etaylor@albireoenergy.com |

### District of Columbia

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Where</th>
<th>Date</th>
<th>Time</th>
<th>Meeting Contact</th>
</tr>
</thead>
</table>
| Greater D.C. #23 | Jacobs  
1100 North Glebe Road, Suite #12  
Arlington - 22201  
Date: 3rd Thursday; Time: Varies  
Meeting Contact: Maurice Touzard, CPE mtouzard@gmail.com |
FLORIDA
Tampa Bay #48
Where: Mitchell’s Fish Market
204 West Shore Plaza
Tampa - 33609
Date: 3rd Tuesday; Time: 5:30 PM
Meeting Contact: Jim Cummings
jim.cummings@jedunn.com

Gold Coast #49
Where: To Be Determined
West Palm Beach
Date: TBD; Time: TBD
Meeting Contact: Carri Morones, CPE
aspe.carri@gmail.com

Orlando #50
Where: Black & Veatch Offices
201 S Orange Avenue, Suite 500
Orlando - 32801
Date: 3rd Tuesday; Time: 6:00 PM
Meeting Contact: Danny Chadwick, CPE
dckchadwick@bellsouth.net

GEORGIA
Atlanta #14
Where: Sage Woodfire Tavern
4505 Ashford Dunwoody Road
Atlanta - 30346
Date: 2nd Monday; Time: 11:45 AM
Meeting Contact: Clinton Aldridge
clintonaldridge@gmail.com

INDIANA
Central Indiana #59
Where: To Be Determined
Indianapolis
Date: 3rd Thursday; Time: 5:30 PM
Meeting Contact: Chris Neal
cneal@summitconst.com

Old Fort #65
Where: To Be Determined
Fort Wayne
Date: Last Thursday; Time: Varies
Meeting Contact: Thad Berkes
tberkes@designcollaborative.com

IOWA
Quad Cities #71
Where: To Be Determined
Davenport
Date: Varies; Time: Varies
Meeting Contact: Matt Burress, CPE
mburress@performanceservices.com

Greater Des Moines #73
Where: To Be Determined
Des Moines
Date: 1st Thursday; Time: Varies
Meeting Contact: Ray Conway
aspe.ia.73@gmail.com

LOUISIANA
New Orleans #9
Where: To Be Determined
New Orleans
Date: TBD; Time: TBD
Meeting Contact: Jim Johnson
warrego2jm@gmail.com

MAINE
Maine #37
Where: To Be Determined
Portland
Date: 1st Wednesday; Time: Varies
Meeting Contact: John Brockington, CPE
jbrockington@woodwardcurran.com

MARYLAND
Baltimore #21
Where: To Be Determined
Baltimore
Date: Varies; Time: Varies
Meeting Contact: Clint Townshend
ctownshend@phoenix-eng.com

MASSACHUSETTS
Boston #25
Where: To Be Determined
Boston - 02116
Date: Varies; Time: Varies
Meeting Contact: Eric Rennell
eric@rennellcapitalgroup.com

MICHIGAN
Detroit #17
Where: Auch Construction
65 University
Detroit- 48342
Date: 3rd Tuesday; Time: 5:15 PM
Meeting Contact: Gerald McClelland
gmcclelland@auchconstruction.com

Western Michigan #70
Where: To Be Determined
Grand Rapids
Date: Varies; Time: Varies
Meeting Contact: Mike Alsgaard, CPE
maalsgaard@fishbeck.com
## ASPE Chapter Meetings (Continued)

### Minnesota

**Viking #39**
- **Where:** Varies
- **To Be Determined**
- **St. Paul**
- **Date:** Varies; **Time:** Varies
- **Meeting Contact:** Matt Burress, CPE
 (mburrss@performanceservices.com)

### Missouri

**St. Louis Metro #19**
- **Where:** AGC St. Louis Training School
  6301 Knox Industrial Drive
  St. Louis - 63139
- **Date:** 3rd Friday; **Time:** 7:30 AM
- **Meeting Contact:** Matt Burress, CPE
  mburrss@performanceservices.com

**Heartland #32**
- **Where:** Uncle Buck's Grill or Bass Pro Shops
  See Meeting Contact
- **Date:** 3rd Thursday; **Time:** 5:30 PM
- **Meeting Contact:** Lonny Mills
  lonny.mills@flynncompanies.com

### Nebraska

**Great Plains #35**
- **Where:** To Be Determined
  To Be Determined
- **Omaha**
- **Date:** Varies; **Time:** Varies
- **Meeting Contact:** Keith Parker, CPE
  gmwfam5@gmail.com

### Nevada (Continued)

**Las Vegas #72**
- **Where:** Varies
  To Be Determined
  Las Vegas
- **Date:** 2nd Thursday; **Time:** Varies
- **Meeting Contact:** Chuck James, CPE
  wcjames2@cox.net

### New Jersey

**Garden State #26**
- **Where:** The Appian Way Restaurant
  619 Langdon Street
  Orange - 07050
- **Date:** 4th Tuesday; **Time:** Varies
- **Meeting Contact:** Jeffery Senholzi
  costnav@ptd.net

### New Mexico

**Roadrunner #47**
- **Where:** Fiestas Restaurant
  4400 Carlise Boulevard NE
  Albuquerque - 87107
- **Date:** 1st Wednesday; **Time:** 5:30 PM
- **Meeting Contact:** Jimmy Sample, CPE
  jimmy.sample@bixbyelectric.com

### New York (Continued)

**Western NY #77**
- **Where:** To Be Determined
  To Be Determined
- **Rochester**
- **Date:** TBD; **Time:** TBD
- **Meeting Contact:** TBD

### Ohio

**Buckeye #27**
- **Where:** Varies
  To Be Determined
  Columbus
- **Date:** Varies; **Time:** Varies
- **Meeting Contact:** Matt Burress, CPE
  mburrss@performanceservices.com

**Southwestern Ohio #38**
- **Where:** Varies
  To Be Determined
  Blu Ash - 45242
- **Date:** 3rd Thursday; **Time:** TBD
- **Meeting Contact:** Chris McCarthy
  chris.mccarthy@danis.com

### Oklahoma

**Landrun-OK City #80**
- **Where:** Ingrid's Kitchen
  3701 North Young Boulevard
  Oklahoma City - 73112
- **Date:** 1st Wednesday; **Time:** 11:30 AM
- **Meeting Contact:** Phyllis Battle
  pbattle@preconstructionservices.com

### Oregon

**Columbia-Pacific #54**
- **Where:** Varians
  To Be Determined
  Portland - 97201
- **Date:** 3rd Tuesday; **Time:** Varies
- **Meeting Contact:** Leanne Legare
  leanne-legare@hoffmancorp.com

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American Society of Professional Estimators • ASPEnational.org
Pennsylvania
Greater Lehigh Valley #41
Where: D’Huy Engineering Office
1 E. Broad Street
Bethlehem
Date: Varies; Time: Varies
Meeting Contact:
William Watkins
www@dthuy.com

Three Rivers #44
Where: Webinar
To Be Determined
Pittsburgh
Date: TBD; Time: TBD
Meeting Contact:
Siena Shilale
siena.shilale@aecom.com

Philadelphia #61
Where: Varies
To Be Determined
Philadelphia
Date: Varies; Time: Varies
Meeting Contact:
Richard Baus
rickb@bencardino.com

Central Pennsylvania #76
Where: Loxley’s Restaurant
500 Centerville Road
Lancaster - 17601
Date: 2nd Wed; Time: 6:00 PM
Meeting Contact:
Dan Dennis, CPE
dd@EGSConstruction.com

Texas
Houston #18
Where: Spaghetti Westerns
1608 North Shepherd
Houston - 77007
Date: 2nd Monday; Time: 6:00 pm
Meeting Contact:
Dennis Pyland
dennis.pyland@gmail.com

Rio Grande #40
Where: Amigos Restaurant
2000 Montana Avenue
El Paso - 79903
Date: 1st Thursday; Time: 6:00 PM
Meeting Contact:
Rodolfo Barba, CPE
rodolfobarba1@gmail.com

Dallas/Ft. Worth #43
Where: See Chapter Website
To Be Determined
Varieties: N. Dallas/Mid-Cities/Grapevine
Date: Varies; Time: Varies
Meeting Contact:
Rick Wyly, CPE
rick@buildcostcontrol.com

Utah
Great Salt Lake #51
Where: Varies
To Be Determined
Salt Lake City
Date: 3rd Thursday; Time: Varies
Meeting Contact:
Phil Capell, CPE
president@aspe51.org

Virginia
Richmond #82
Where: Baskervill
101 South 15th Street, Suite #200
Richmond - 23219
Date: 4th Wednesday; Time: 5:00 PM
Meeting Contact:
TK Farleigh
tfarleigh@baskervill.com

Please Note: Information is subject to change. Report changes in your Chapter’s information with an email to Tina@ASPeNational.org
**EDUCATION:**
ASPE educates and mentors professional estimators for the sustainability of the construction industry.

**PROFESSIONALISM:**
ASPE promotes the lifelong pursuit of excellence and credibility in professional estimating.

**FELLOWSHIP:**
ASPE develops a fellowship of professional estimators that connects and leads the construction industry.