By first appearances, I am not the best person to advocate for education – at least “formal” education. Although I lived in the same house from birth to leaving for college, I have never attended a school for longer than two years in a row. My illustrious academic career ended with my being expelled from college. The thought of being in a classroom even now makes me feel ill. Despite this history, I am passionate about taking advantages of opportunities to learn.

ASPE’s first core value is Education. It states, “we care passionately about educating and mentoring the next generation of professional estimators.” This is especially important in our industry. Since there are no higher education programs that offer a degree of study in construction estimating, the role of ASPE is critical. ASPE currently offers online classes as part of a certificate program in construction estimating. The estimating classes include an Introduction to Construction Estimating and Essential Construction Math as well as Construction Blueprint Reading, Estimating and Bidding, and Construction Materials and Processes. These classes provide a great foundation for estimators.

ASPE’s educational offerings continue with the Summit. This year’s classes focusing on the Art & Science of Estimating are valuable and relevant to our estimating careers. I encourage you to review the lineup of speakers for this year’s Summit in Denver and register for the conference at www.aspenational.org/2017summit. There is still time to take advantage of the early registration rate.

The Chapters of ASPE also offer educational opportunities at their regular Chapter meetings. Each Chapter caters to their individual markets and needs of members with educational programs. Get involved with your local Chapter and support the programs they are developing. As we move forward with ASPE’s strategic plan, you will continue to see a focus on educational programs. The National Education Committee is developing programs for Chapters to use at the local level, a text book for higher education use, and establishing the educational theme for upcoming year’s Summits. Future goals include creating a formal mentorship program for members to take advantage of in their own companies and local Chapters.

Continuing education is critical to our industry. We must stay current with the latest developments, technology, software, and trends in the construction industry. ASPE serves an important role in providing educational opportunities. If you have ideas for programs we would love to hear about them.

Marcene N. Taylor, CPE
ASPE National President
mtaylor@mticost.com
Hanover County-New Courts Building
Contractor: Gulf Seaboard
General Contractors, Inc.
Owner: Hanover County
Architect: Moseley Architects

Size: 3-Story including Basement/115,000sf
Disturbed Acreage: 13 acres
Construction Cost: $28,581,000
Construction Time: March 2015 – October 2016
Delivery Method: Design-Bid-Build
Project Description: After already building Hanover County’s New Administration Building in 2000, Gulf Seaboard, with a team comprised of two generations of family members and field personnel, had the responsibility of managing over 40 subcontractors towards project completion of the 115,000sf New Courts Building. The New Courts Building is built on the historical government complex near the original courthouse built in 1735. This project impressively embodies all elements of complexity in design and construction which include rammed aggregate piers for foundation reinforcement, concrete footings & bearing basement retention walls, etch-engraved architectural precast panels, brick veneer, massive interconnecting steel framed/ joist/deck structure, casework, wood panelling, waterproofing & air barrier systems including commissioning & quality assurance services, metal wall panels, metal roof panels, TPO membrane roofing, roof mansard to reflect architectural elements of the existing campus, applied/intumescent fireproofing, overhead doors, storefronts & curtain walls, pneumatic locks & sliding locking door devices, high level security detention equipment & systems, exceptional ceiling & floor finishes including terrazzo, pedestrian gate & access systems, upholstered jury seating & bench seating, pneumatic tube systems for document transfers, six elevators, sophisticated MEP systems, LP gas tanks, electrical systems with lightning protection & generator, and complex security/fire alarm/communication systems. The New Courts Building both creates a secure environment and also provides considerable programming for the Owner’s usage such as public/private parking, exterior & interior card access controls, sally ports, detention & holding cells, circuit court rooms, lockers, conference rooms, judges offices, etc. We at Gulf Seaboard are proud of our construction success and also excited to be part of Hanover’s great history.
...Scope It Out...Masonry

By Chris Ray, CPE
Arkansas Chapter 33
Education Committee Member

As a general contractor bids any given project, there may be several hundred subcontractor scope bid proposals that need to be reviewed and analyzed in order to incorporate the correct or at least the "most" correct subcontractor bid proposal into the overall price.

Identifying "scope issues" before the subcontractor proposals are received would be beneficial not only to the general contractor, but would help the individual subcontractors with identifying specifically what the general contractor wants. This article will assist in the identification of just a single scope of work—Masonry.

One would think that this is a relatively simple scope of work, but there may be pitfalls if not "scoped" properly.

1. Hollow metal frames installed within a masonry wall. In some jurisdictions, the masonry subcontractor may install the frames supplied by others. One risk of having the mason perform this work is the placement of a specific location and ensuring that the frames are plumb and level. This item of work may be more appropriate for a carpentry trade skilled in the placement of hollow metal frames.

2. Grouting of hollow metal frames in a fire rated masonry wall. Most masons will already have a grout pump on site to perform grouting specified within their masonry assemblies. However, hollow metal frames that are in non-masonry walls and assemblies may still need to be grouted. This additional scope of work is usually welcomed by the mason provided they are told in advance that they will be performing this work. Additionally, once the grout pump is removed from the site, the mason may be reluctant to re-mobilize the grout pump, so the general contractor will need to address the schedule coordination in the bid instructions.

3. Caulking. Most masons will exclude caulking within the field of masonry and at the perimeter of their assembly. However, some masons are well adept at performing this work if instructed initially in the bid instruction. Absent the mason performing caulking, either the caulking subcontractor or adjacent trade may perform this work. In either case, clear bidding instructions will help in coordinating this effort.

4. Waterproofing. Depending on the wall back-up assembly, most waterproofing systems will be applied by other trades. However, in some jurisdictions the masonry subcontractor may install the through-wall flashing provided by the flashing subcontractor.

5. Reinforcing steel. Trade custom is for the reinforcing steel supplier to provide the reinforcing steel material installed by the masonry subcontractor. Typically, the mason will provide a cut-list of required sizes and lengths to the reinforcing steel supplier. Supplying of shop drawings, if needed, would be provided by the reinforcing steel supplier. Any ladder reinforcing would be furnished and installed by the masonry subcontractor.

6. Anchor slots in a CIP structure. If the superstructure is made of structural concrete, the masonry subcontractor will need to provide the proper dovetail anchors to be incorporated into the concrete structure. The anchor slots need to be furnished to the jobsite in addition to a detailed setting location plan. The instruction for providing the anchor slots and setting plan need to be addressed in the bidding instructions.

7. Glass block. One would think that glass block would be furnished and installed by the glazing contractor; however, this scope is the jurisdiction of the masonry subcontractor because it is a field stacked and grouted assembly. Clarification in the bidding instruction eliminates scope gap or duplication.

8. Schedule issues.
   a. Mock Up. Because of the nature of the curtain wall assembly, a mock-up will typically be required. The mock-up will require the coordination of several vendors on the project in a very short time. If masonry is involved, the mason will be required to typically provide a variety of similar colors and textures of masonry—all of which will take time to procure for incorporation into the mock-up.
   b. Interior Masonry. If there is significant masonry in the interior of the project, the masonry subcontractor may need to include multiple mobilizations for the project. Additionally, clean up and protection of adjacent work may need to be included by the mason. Clarification in the bidding instructions needs to be provided allowing the mason to include the appropriate costs for this additional work.

9. Scaffolding. Most masons use their own unique scaffolding, typically 4 feet wide and set back from the building to facilitate outriggers from the scaffolding to the face of the building. Other trades cannot work efficiently from this scaffolding because of the nature of the scaffold setup and the timing element. Once the mason has completed their scope of work, the mason will dismantle and setup for other sides of the building or other projects. Many masons are now using platform lifts—either motor driven or hand-crank driven, which increase productivity significantly. In either case, it is still not efficient for other trades to utilize this scaffold. However, if the nature of the project warrants scaffold for the duration of the project, the general contractor may wish to procure and maintain the scaffold for all trades use during the project. Clarification in the bidding instruction eliminates potential duplication of scaffolding requirements.

10. Winter Protection and Tenting. Masonry operations performed during the winter months in northern climates will typically necessitate tenting of the operation and introduction of heat into the tented portion for a long enough period of time to make sure that the mortar has cured to a point where freeze—thaw does not effect the assembly. Most masons will exclude this requirement, because the risk of not knowing how long or how much protection or tenting is required is not reasonable.

In any condition, the general contractor, through an allowance, should provide for this requirement. Again, clarification in the bidding instructions is needed.

11. Clean up. Masonry is a notoriously messy process. At the base of any masonry wall assembly during construction, unused and waste mortar and broken and discarded brick are thrown. In many instances, the masonry subcontractor may exclude the cleanup and removal of this material. Again, clarification in the bidding instruction on the disposition of this material will help in identifying scope gap and duplication.

The preceding are just some of the many scope issues related to masonry that may be needed on any given project. The key to proper and effective scope identification is the analysis of gap and duplication issues—where two or more subcontractors have excluded a requirement that is needed or both have included a requirement that is needed by only one trade. ☞
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Section 6: Ratios And Analysis – Tools To Test Final Bid
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Section 8: Sample Sketches
Section 9: Take-Off Pricing Sheets
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Section 12: References
This Technical Paper is intended to help the reader understand a best practices approach for estimating the cost of a Precast Concrete Parking Structure including a checklist of items to consider when evaluating different design types. Related costs for site work; cast-in-place concrete foundations; miscellaneous metals; security access control; signage; sprinkler; mechanical and electrical systems will not be covered in this paper.

Main CSI Division
Division 3 Concrete

Subdivisions
Section 03210 Reinforcing Steel
Section 03405 Precast Concrete Design
Section 03410 Plant-Precast Structural Concrete
Section 03420 Plant-Precast Post-Tensioned Structural Concrete
Section 03450 Plant-Precast Architectural Concrete
Section 03480 Precast Concrete Specialties

Brief Description
Precast concrete structures are viable alternatives to structural steel framed buildings and, as such, require concise procedures to estimate the cost of fabrication, delivery and erection. Understanding the components and definitions of a Precast Concrete Parking Structure will provide the reader with the framework needed to estimate these types of structures efficiently and accurately.

In addition to learning how to estimate the cost of a precast concrete parking garage, it is helpful to understand and communicate to the customer its benefits, such as long-term durability, low maintenance, sustainable building elements and fast-track construction. It is important to be aware of the different precast parking garage design options available when dealing with the customer during the preconstruction phase. For this paper, we are estimating the building structure cost of a 184’ x 268’ four-level precast concrete parking garage with a total capacity for six hundred eighty-four (684) cars.

Types And Methods Of Measurement
First, begin by reviewing all of the plans and specifications for the project, including the General and Supplementary Conditions, carefully and thoroughly. Take notes and write down questions during this initial review phase for future research and reference when time allows.

During the initial review of the plans, look for precast components that are repetitive in size for quicker quantity take-off. Taking a bird’s eye view toward the approach to estimate the very beginning will ultimately save time for the estimator(s) during the take-off and pricing stages.

Methods of measurement for the various elements of a precast concrete parking garage structure will be taken off by area, length, weight and piece count as outlined further in this technical report. In addition, specific information obtained during the take-off stage will be used to quantify and estimate costs for material, labor and equipment for plant fabrication, weights and piece counts for trucking and erection; surface areas for specialty finishes such as exposed aggregate or brick veneer on precast concrete spandrel panels; and outsourced items such as miscellaneous metals, hot-dipped galvanizing and reinforcing steel. Whether the take off is done manually or using an on-screen program, it is critical to organize the measured components in a logical manner before entering values into the cost sheets or cost estimating spread sheet program.

Next, check the scale of the plans against a known line of measurement to ensure accuracy. This is especially important for “On-Screen” or “Digitizing” programs where quantity take-off is done very quickly. When using “Building Information Modeling” programs to derive quantities from the design model, be sure to verify the accuracy of the major elements, such as the counts for DT’s, beams, etc.

Specific Factors That May Affect Take-Off And Pricing
Economy of scale is an important consideration when estimating a precast parking garage. Larger scale projects will cost less per square foot than smaller scale projects due to set up time, mobilization, production rates and repetition of components during fabrication and erection.

Be sure to develop a checklist or template specifically designed to identify job-related cost factors. Some examples of checklist or template items include engineered calculations; detailed shop drawings; sales taxes; permit fees; transportation fees; union, non-union or prevailing wage labor; projected fabrication and delivery schedules relative to plant capacity; insurance and bonding requirements; potential impacts due to weather; delivery access and staging areas; and specialty items such as corrosion inhibitor additive, stainless steel connection hardware, precast concrete stairs, etc. Also develop a list of items that are specifically excluded from the cost estimate to clearly communicate what work is required by others such as safety cables; installation of embedded plate or anchor bolts in the cast-in-place concrete foundations; waterproofing; fire stopping; etc.

Provide cost options or value engineering suggestions not identified in the plans and specifications that will enhance the overall precast concrete parking structure and value without compromising the competitiveness of the bid proposal as outlined in the Bid Package and Contract Documents.

This report does not include the estimate for these suggestions, but some examples of cost options are:

1. Additional cost to design, fabricate and install precast concrete stair and elevator shaft walls in lieu of concrete masonry unit (CMU) shafts for potential cost and time savings.
2. Additional cost to design, furnish and install precast concrete stairs and landings in lieu of concrete-filled metal pan stairs to facilitate faster access to upper garage levels during construction and potential cost savings.
3. Additional cost to furnish and install optional threaded inserts in precast concrete columns to attach safety cable hardware provided by others.
4. Additional cost to provide structural component corrosion inhibitor additive (if not specified) in site locations where the building structure is more susceptible to corrosive environments such as northern climates or near bodies of salt water.

Overview Of Labor, Material, Equipment, Indirect Costs And Mark-Up Approach
Budget your time carefully and check the progress of other staff working on the estimate (if applicable) to ensure the progression of quantity take-off, pricing and finalizing the estimate is done in an efficient manner. Double-check your work and the work of others to verify correct quantities. Material take-off accuracy is extremely important since this information is used to price related components such as labor, equipment, trucking and erection costs.
Labor

Labor costs are calculated on a per-hour basis, including direct burden for insurance and taxes.

Material

Precast/Pre-topped Double Tees will be taken off by the top surface area in square feet and piece count. Precast Columns will be taken off by length in linear feet and piece count. Precast IT-Beams, L-Beams and R-Beams will be taken off by length in linear feet and piece count. Shear Walls will be taken off by single-side surface area in square feet and piece count. Reinforcing steel is taken off by length in linear feet, converted to weight by bar size in pounds and then total weight in tons. Connecting steel and hardware is taken off by piece count. Material take-off for this estimate was done using the On Screen Take-Off (OST) program.

Equipment

In this estimate, equipment costs are calculated on a per hour basis including the equipment operator, fuel, oil and lubrication expenses. Crane size will be determined by the weight of the heaviest component and maximum reach.

Indirect Costs

Indirect costs for engineering and shop drawings are typically calculated as a percentage of the total cost but should be checked for the total number of labor hours required for design depending on complexity of the project. Insurance is calculated on a unit rate per thousand dollars of the total cost. Bond premium is calculated on a scale depending on the total project cost at unit rate per thousand. Trucking costs are calculated per load based on an average cost per mile converted to weight by bar size in pounds and then total weight in tons. Connecting steel and hardware is taken off by piece count. Material take-off for this estimate was done using the On Screen Take-Off (OST) program.

Special Risk Considerations

Supply and Demand

Plant capacity associated with the anticipated schedule for award, shop drawings and fabrication may affect the cost estimate if additional manpower or overtime work is needed to meet the construction schedule. This estimate is based on adequate plant capacity without the extra cost of second shifts or overtime.

Site Conditions

Whenever possible, a pre-bid or site meeting is important to understand any special or unusual site conditions that may affect the cost estimate such as traffic control, overhead obstructions, crane access and staging areas. This estimate includes the cost for traffic control to enter the site from a main highway during delivery of precast concrete structural components.

Labor Factors

If the project is union, non-union or prevailing wage, how will it affect labor costs? In most cases, subcontractor bids for the erection will be solicited but for this estimate we are assuming the erection will be done internally based on non-union labor rates.

New Construction, Addition or Renovation

Is the project a new stand-alone parking garage, addition to an existing building or parking garage, or renovation to an existing parking garage. All three scenarios will have unique factors that affect efficiency and overall costs. This estimate is based on a new stand-alone structure.

Erection Factors

If site access is restricted, how will this affect the overall duration of the precast concrete parking garage erection? Can trucks be staged at an off-site location to minimize downtime between picks? This estimate assumes site access is not restricted, staging of trucks is not required and traffic control is only required during delivery.

Building Height

Can the parking garage be erected in a sequence to stage the crane from inside the footprint of the building or will a larger crane be needed to provide the reach and lifting capacity from outside of the building footprint? This estimate is based on staging the crane within the footprint of the building and erecting in two sections (See Figure 7-1).

Penetrations or Bond-Outs

Check the civil, mechanical and electrical drawings for all penetration and bond-out locations required for piping, ductwork, or conduits. Typically precast double tees will require bond-outs for electrical conduit to light fixtures in the parking garage.

Ratios and Analysis — Tools To Test Final Bid

One way to check to test the final bid is to compare the cost per parking stall with a range of other estimates of similar size and design. Parking garage structures for six hundred (600) cars should be in the range of $7,000 to $8,000 per parking stall for this type of design, building location and market conditions (July 2009).

Another check is the overall cost per gross square foot of parking area based on historical data from similar projects adjusted for current market conditions. Typical parking garage structure for six hundred (600) cars should be in the range of $30 to $35 per gross square foot of parking area (July 2009).

Erection can be checked by production rates if the erection is multiplied by the crew labor and crane equipment cost should be in the range of $1,200 to $1,300 per pick which is confirmed ($565,800 divided by 472 picks = $1,198 per pick).

Setup

Reinforcing steel can be checked on the weight per square foot of surface area in the typical range of 1-2 pounds per square foot. Reinforcing steel for precast shear/lite walls will be higher in the amount of 3-6 pounds per square foot. Connection steel can be checked as a percentage of the total material cost and is usually less than 0.5%.

Erection can be checked by production rates if the crew expects to set an average of ten (10) picks per day divided by four hundred seventy (472) total pieces for duration of forty eight (48) working days. This is multiplied by the crew labor and crane equipment cost of $11,787.50 per day (including mobilization/de-mobilization) for a total of $565,800. Typically, erection cost should be in the range of $1,200 to $1,300 per pick which is confirmed ($565,800 divided by 472 picks = $1,198 per pick).

Final Bid Ratios and Analysis – Tools To Test Final Bid

One way to check to test the final bid is to compare the cost per parking stall with a range of other estimates of similar size and design. Parking garage structures for six hundred (600) cars should be in the range of $7,000 to $8,000 per parking stall for this type of design, building location and market conditions (July 2009).

Another check is the overall cost per gross square foot of parking area based on historical data from similar projects adjusted for current market conditions. Typical parking garage structure for six hundred (600) cars should be in the range of $30 to $35 per gross square foot of parking area (July 2009).

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Connection Details

Do the engineer's connection details conform to industry standards per Precast/Prestressed Concrete Institute (PCI) standards? If not, can pre-bid clarification be obtained through an addendum to the Construction Documents? Often times the connection details are written in the performance specification to be designed by the precast concrete company. This estimate assumes the connections are designed by the fabricator's engineer within the performance requirements specified. Details of design and engineering are not included.

Design Factors

Are the design loads provided by the Engineer-of-Record in order to complete the comprehensive engineering analysis and details for the structural precast framing system and connections? Live-load deflection, seismic requirements, fire-resistance ratings, and movement due to expansion and contraction (within acceptable tolerances) must be considered. This estimate assumes normal design loads and ratings for a commercial precast concrete parking structure.
MISCELLANEOUS PERTINENT INFORMATION

Related sections in the Project Manual describe information that could affect the cost estimate of the precast structural concrete work. Specifically, Division 4 – “Unit Masonry”, will list inserts or anchorages needed for connection of precast double-tees to CMU walls. Division 5 – “Metal Fabrications”, will list inserts or anchorages needed for attachment of miscellaneous metal guard rails or screens. Division 7 – “Joint Sealants”, will specify product materials and installation requirements for horizontal and vertical joint sealants. Division 5 or 7 – “Expansion Control”, will list acceptable products and installation requirements for expansion joint covers.

Make sure the Professional Engineer responsible for the delegated design and structural performance calculations is licensed in the state where the project is located. This precast parking structure is located in Durability Zone III (see Figure 3-1) and is designed to withstand freeze/thaw conditions, corrosive protection from deicing salts and positive deck drainage.

QUALITY TESTING, CERTIFICATIONS and certifications are usually required for the Statement of Special Inspections prepared by the Structural Engineer and should be included as an indirect cost. Also, product data and mix design submittals associated with LEED Credits MR 4.1, MR 4.2 and ID 1.1 may be required if the project is looking to obtain LEED Certification.

SAMPLE SKETCHES

The following details were provided by the Precast/Prestressed Concrete Institute (PCI) to illustrate some of the basic components and details found in a precast concrete parking structure.

Typical Stemmed Floor Members

TAKE-OFF PRICING SHEETS

See Page 14-15 for the take off and pricing sheets

TERMS/GLOSSARY

PCI – Precast/Prestressed Concrete Institute.

Precast – Fabrication process performed in a controlled environment.

Prestressed – Reinforcing strands installed in tension during concrete placement in the mold or form to increase load capacity of structural beam or deck slab.

Pre-topped – Factory topped double tee section with entire deck thickness integrally cast.

LEED – Leadership in Energy and Environmental Design.

CMU – Concrete masonry units.

REFERENCES

Precast/Prestressed Concrete Institute (PCI) Parking Structures: Recommended Practice for Design and Construction Manual MNL-129-98

Concrete Specification Institute (CSI) www.csinet.org


Natasha Crumbliss, Education Committee Coordinator

We are excited to announce effective April 1, we welcomed Natasha Crumbliss to the ASPE family as the Education Committee Coordinator. Several of you may have already met Natasha, as she has been working closely with ASPE since the 2016 Annual Summit.

Natasha comes to ASPE with years of experience in the non-profit sector. With experience ranging in program development and management, large-scale event planning, emergency crisis response, and charitable campaigns, it doesn’t take long for her to settle in with diverse projects. In addition to providing support to the Education Committee and its goals, her other responsibilities will include planning and coordinating the Annual Summit and the planned development of Chapter Meeting themes and education programs. Don’t hesitate to email Natasha with a warm welcome and a friendly hello!

Tina Cooke, Standards Committee Coordinator

Tina has proven to be such a contributing force to ASPE over her tenure with the Society Office. Effective April 1, Tina extended her responsibilities and joined our efforts as the Standards Committee Coordinator. Many of you will already have met Tina, as she has been a member of the ASPE family for almost 10 years.

Tina has been an integral member of the team with responsibilities that include bookkeeping, website support, Estimating Today coordination, vendor account management, and countless behind the scene activities in support of the Business Office and Membership. You will find Tina is extremely knowledgeable and highly qualified and is passionate about the future of ASPE. As her role grows with the Standards Committee, some of her responsibilities will be adjusted to allow a change in focus. Please join us in congratulating Tina, on a job well done and her continued success with ASPE, with a quick email of encouragement!
Certification Committee Needs You!!

The Certification Committee is in need of Exam Reviewers and Beta Testers for the Electrical DST and Drywall Systems DST. If you are interested in assisting, please contact the Certification Coordinator at 615-316-9200. YOU MUST BE A CPE to be an Exam Reviewer or Beta Tester. CPEs that help will be given PDUs in exchange for their time.

1 hour = 1 PDU

Thank You!
-ASPE Certification Committee

Executive Director Corner

Things from the administrative side of ASPE are on track. Here are a few key things we are focusing on in the upcoming months:

- The search for our new Executive Director is ongoing. We are reviewing resumes and scheduling interviews. We are on track to get the new ED on board in June.
- The SocialLink mobile app is available for your use. You can find the app in the Apple App Store and the Google Play Store. Download the app and login with the same credentials you use for the national website. The app allows you to easily stay informed of ASPE happenings. The SocialLink app will become even more valuable as ASPE offers more content through blogs. The app allows you to get more out of your membership.
- Registration is open for the 2017 A Mile High Summit in Denver – The Art and Science of Estimating. Early bird registration rates are available through May 12th. Go to www.aspenational.org/2017summit for a complete agenda of the Summit and speaker bios. Make your plans and register as soon as you can. Space is limited, and you do not want to miss the Summit this year.
- Look for your membership renewal in the upcoming month. We are focused on improving the value of your membership. Renewal notices will be sent via email. In the next few weeks login to your account on the website to make sure your contact information is up to date. If you know of fellow members who are not receiving notices, encourage them to go to the website or call the office to make sure their email address is correct.

Thanks for your continued support of ASPE. We appreciate your membership!

ASPE Member Benefit!
Free Subscription to Design Cost Data™

Sign up today for your Free subscription to DCD magazine, the leading industry resource for actual construction costs. Delivered electronically each issue of DCD provides you:

- Actual buildings and their cost to build
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- Material Cost Trends
- National Building Cost Reports
- “Legally Speaking” by Matthew J. DeVries on Green Building and more

Go to www.dcd.com/aspe to sign up. Please call us at 800-533-5680 if we can help.
Meet the speakers...
This year's list of speakers is sure to keep you on the edge of your seats.

Andy is noted for his precision in the planning and design phases of projects. He uses his technical experience to assist project managers during the preconstruction phase of a project, focusing on design, budgeting and value engineering. Andy specializes in evaluating the aesthetic and functional, as well as the schedule and cost implications of all design options a customer may be considering. He knows listening to the customer and establishing clear goals and expectations early in the process will allow him to make the most impact on the overall success of a project.

Read more about our speakers at: www.aspenational.org/2017summit

CAREER AVENUES
Point Positive

Are you ready? We are excited to announce this year's annual conference: A Mile High Summit in Denver, Colorado (July 12 thru July 15, 2017). The theme is an engaging one: The Art and Science of Estimating. Estimators face new and diverse challenges every day. Technical obstacles range from BIM and other software trends to a lack of standards facing the estimating industry. Other challenges are what we refer to as “soft-skills” challenges ranging from professional team work, practical business presentation skills, and maximizing productivity and efficiency in an ever-chaotic world.

The goal of ASPE is to help equip estimators with the skills, knowledge, and tools to face and master these very challenges. Having found many of the best experts in these fields and more to offer insight and practical implementation to support and enhance an estimator’s skill set, we invite you to join us in Denver for an exciting and engaging conference!

The importance of CPE
Change orders. Budget overruns. Scheduling delays. If these words sound like “business as usual” in the construction industry, the words Certified Professional Estimator (CPE) will change your point of view. The CPE designation is one of the most respected credentials in the estimating profession. Hiring an estimator who has earned the CPE designation is a reliable indicator that the budget estimate you receive will result in a completed project that meets your expectations for quality, cost, and on-time completion.

Don’t miss the opportunity to connect!

The future awaits
"You won’t want to miss out on everything we have planned for this year’s conference!"

Product Demos

Networking with ASPE Members

DENVER 2017: A MILE HIGH SUMMIT
The Art & Science of Estimating

Register Today!
www.aspenational.org/2017summit

Get involved at www.aspenational.org
Summit Agenda 2017

Catch a brief glimpse at everything there is to look forward to at this year’s annual summit.

**Wednesday July 12, 2017**
- 03:00 – 08:00  Registration
- 06:00 – 08:00  Welcome Reception

**Thursday July 13, 2017**
- 08:30 – 10:00  Two Concrete Things That Accelerate Transformation
- 10:15 – 11:45  The Leadership Advantage - How to Connect, Communicate & Influence Different Personalities
- 12:30 – 12:30  Demonstration
- 12:30 – 02:00  Keynote Lunch
- 02:00 – 02:30  Workshop
- 02:30 – 04:00  Leveraging Historical Costs to Maximize Cost Intelligence
- 04:15 – 05:45  Microsoft Excel Skills For Estimators

**Friday July 14, 2017**
- 08:30 – 10:00  BIM Case Study
- 10:15 – 11:45  BIM Expert Panel Discussion
- 12:00 – 12:30  Demonstration
- 12:30 – 02:00  Lunch
- 02:00 – 02:30  Workshop
- 02:30 – 04:00  It’s Not Actually Worse Than Death: Surviving (and THRIVING)
- 04:15 – 05:45  Creating Time Efficiency & Managing Multiple Priorities
- 07:00 – 10:00  Awards Initiative

**Saturday July 15, 2017**
- 08:00 – 09:30  State of the Society Address and Q&A
- 09:45 – 10:45  Higher Education Panel Discussion
- 11:00 – 12:00  Estimating Textbook Discussion (Invitation Only)
- 12:30 – 01:30  Regional Breakouts
- 02:00 – 04:30  Rock Bottom Brewery Experience
- 06:00 – 10:00  President’s Dinner at the Denver Art Museum

Special discounted pricing for undergrad and graduate level students

Fun Filled events sure to keep you busy during the entire weekend!

This year’s conference isn’t just educational because we’re turning up the fun! With social events ranging from a downtown Denver brewery visit, to a private function at the Denver Art Museum, and a diverse exhibit fair to meet expert companies delivering solutions and applications for estimators, every moment will be packed with fun, fellowship, and educational advantages.

Can’t wait to see you in July!

Meet some of our Speakers

**Josh Bone, BIM Services Manager, JBKNOWLEDGE**

For more than a decade Josh Bone has been implementing, training and presenting construction technology solutions to AECO (Architecture, Engineering, Construction, Owners) professionals. Having worked with some of the top technology leaders in the industry, Josh specializes in identifying best practices and methodologies for integrating BIM and mobile applications into everyday workflows. Josh started his career working with design teams, then transitioned into helping construction professionals leverage technology in both the preconstruction and construction phases.

**Nora Burns, Speaker & Hiring Consultant**

Since stepping into the world of human resources more than two decades ago, Nora A Burns, SPHR has interviewed and onboarded thousands of candidates and new hires for positions ranging from file clerk to executive vice president. Along the way, she decided to study and evaluate the hiring process from a different perspective, by participating in job interviews across the country. She did this not in her usual role of interviewer or hiring consultant, but as a candidate for administrative, supervisory and managerial roles. As The Undercover Candidate™, Nora has participated in over a hundred interviews to gain insight into the hiring process from the candidate’s perspective.

**Kenyon Salo, The James Bond of Speaking and Engagements**

Kenyon Salo is one of the top trainers, facilitators and keynote speakers in his field of adventure, leadership, team building, sales, inspiration and motivation. One of only six members on the Denver Broncos Thunderstorm Skydive Team he is seen each week flying into Sports Authority Field at 60+ mph, ending with a soft tip-toe landing on the ten yard line. He brings to the stage over 20+ years of successful audience engagement through humor, awe-inspiring moments, prolific storytelling and edge-of-the-seat content. His goal is to deliver high caliber, powerful and heart touching content to each person in the room.

**Don Henrich, President and CEO, Assemble**

Don Henrich is an accomplished technology veteran in both the MCAD and the AEC industries. As President and CEO of Assemble he brings an distinguished track record of innovation, winning strategies, team building, and the ability to quickly grow revenue and market share. Don and his wife Noel have three children, reside in Marblehead, MA and spend as much time as possible sailing on Massachusetts Bay.

Register Today!

www.aspenational.org/2017summit
ASPE’s Annual Summit will focus on continued education in the world of Estimating

Having found many of the best experts in these fields and more to offer insight and practical implementation to support and enhance an estimator’s skillset, we invite you to join us in Denver for an exciting and engaging conference!

Some of the things you’ll learn in Denver:

- Two unique leadership models that focus on building innovative and competitive systems and processes to bolster organizational success, and culture building within an organization from a leadership perspective.
- As a leader and team member, learn how to understand your strengths and weaknesses in a workplace situation in order to build better working relationships and team workplace dynamics.
- Ever feel like your to-do list constantly grows but time continues to run out? Hear from a leading expert on time efficiency and workplace productivity while learning practical tools you can use in your daily work to increase productivity and decrease stress.
- Everyone wants to know more about BIM and that’s exactly what we’re bringing to the table this year. We’ll hear from an expert panel on the use of BIM in construction and estimating that is specifically geared to address what estimators want to know more about.
- Learn from a leading construction company that searched, found, and implemented the answer to leveraging historical costs for current and future projects.
- Do you use Microsoft Excel in your daily work? Join us for an engaging high-level Excel training and presentation built specifically to address how estimators can maximize their understanding and use of Excel in estimating.
- Learn from one of the best to communicate and present work projects and presentations in an engaging and informative manner that will impress your peers, leaders, and future clients, and ultimately add value to your career.

Book your room today! Before it’s too late!

Book your stay under the ASPE room block at the Embassy Suites Downtown Denver by June 22, 2017. Book online at ASPE’s Group webpage.

Wednesday, July 12, 2017 @ 6pm - Saturday, July 15, 2017 @ 10pm

Book by phone by calling 1 (800) 774-1500 for the Embassy Suites Denver Downtown Convention Center, or DENES, and mention the group code “ASP” to receive the ASPE room block rate.

Welcome new member S!

Member Company Chapter
Thierry Hall J.R. Abbott Construction Inc. Orange County 3
Elaine Cersosimo Skyline Glass Orange County 3
James Miley Madsen Kneppers & Associates, Inc. Denver 5
Chris Luts Frank Rewold and Son Inc. New Orleans 9
Kurt Ryder United Excel Corporation Heartland 32
Katie Clements Carter Waters Heartland 32
Blake King Jordan Foster Construction, LLC Rio Grande 40
Angela Erickson Delta Construction Partners, Inc. Tampa Bay 48
Bob Magnan Ramesh Ramlakhan Tampa Bay 48
Niklesh Ramlakhan Frederick Thompson Gold Coast 49
Blake King Pablo Raul Blanco EC Consulting Gold Coast 49
John Becker Blake King Frederick Thompson Orlando 50
Nicholas Anzer Parametrix, Inc. Great Salt Lake
Jim Holzgen Flickr Thompson, Carr & Huber, Inc. (FTCH) Western Michigan 70
Anthony Valdez Town of Milo, New York Western New York 77

Announcing ASPE’s Latest CPE’s

Member Company Chapter
Michael Nelson Skanska Orange County 3
Erick Hernandez O’Connor Const. Mangement, Inc. Orange County 3
Gary Aldred AFG Group, Inc. Baltimore 21
Ann Lyon MTA Bridges & Tunnels Garden State 26
Jesse Smith MTA Bridges & Tunnels Quad Cities 71
Nicholas Anzer KMI International Orange County 3
Jim Holzgen Dishbeck, Thompson, Carr & Huber, Inc. (FTCH) Orange County 3
Anthony Valdivia United Excel Corporation Orange County 3

www.aspenational.org/2017summit
Office Tel: 615.316.9200  (Mon-fri 9am – 6pm)
ASPE is re-inventing itself under the leadership of National President Marcene Taylor and the Board of Trustees. The National Education Committee continues to faithfully serve the educational needs of the ASPE membership, while also growing and re-inventing, too. Looking ahead through the remainder of 2017 and into 2018 the National Education Committee has many important projects to fulfill:

- Continue developing an “Estimating 101” textbook for use in higher education programs with insight from professional educators in Construction Management and Construction Engineering fields.
- Gather content for ASPE social media campaigns.
- Support the efforts of the 2017 Mile High Summit in Denver, Colorado.
- Further develop the 2018 educational summit and review potential speakers.
- Develop a multi-part series of resources for local ASPE chapter meetings that will provide educational support and build upon the 2018 educational conference theme.

The National Education Committee believes that social media such as Facebook and YouTube, the Society website, and other internet platforms that ASPE can deliver practical, useful information to Society members while attracting a wider audience among construction professionals, higher education institutions, and corporate “university” programs in need of educational content in both print and electronic formats. By sharing our combined knowledge through social media and outreach to higher education ASPE will provide meaningful benefit to current members, attract new members, and grow our Society.

The theme for 2018 will be announced this July at the Mile High Summit in Denver. In preparation for the exciting 2018 Summit theme, ASPE will begin to address the following areas in the months ahead.

- Technology
  - BIM (and related technology)
  - Software, Drones, Scanners, GPS
- Soft Skills
  - Confidence Building
  - Team Building
  - Managing Priorities
  - Efficient Estimating
  - Written Communication, Public Speaking, and Presentations
  - Leadership, management, recognizing generational issues
  - Training your replacement. Mentoring. Techniques
  - How Do I Move Up the Chain? How Do I Identify and Prepare for My Next Position?
  - How to deal with stress and live a healthy, balanced life

Education on Demand Resources, or, “Where Do I Send My Guys to Get Up to Speed?”

Using Social Media in Estimating.
This is directly related to the topic above. The truth is that everyone immediately “googles” a topic to start learning. We are collecting examples of social media (Facebook, You Tube, blogs, vlogs, websites, etc.) that estimators are using now.

Here’s a few Facebook pages that members have shared. Member contributions are most welcome!

https://www.facebook.com/quantityestimating
https://www.facebook.com/TechnicalConstructor
https://www.facebook.com/TheConstructor

You can be involved at your local level by providing feedback to the National Education Committee about how you use, interact, observe, and utilize professional social media resources and digital educational resources. We want to hear from you! Please submit feedback and suggestions to your local National Education Committee regional representative or the Education Committee Coordinator.

- SW Region: Tom Mayer – tj-mayer@msn.com
- NE Region: Peter Hamilton – peter.m.hamilton@gmail.com
- NW Region: Heather Boulander – heather@rollingplains.com
- CP Region: Deanne Goodlaxson – dgoodlaxson@cdsmith.com
- SE Region: Chris Ray – csray12@gmail.com
- Coordinator: Natasha Crumbliss – natasha@aspenational.org

**Scholarship Program**

$5,000.00

**Click Here for More Information**
# Chapter Meetings

## Arizona

### Phoenix
- **Where:** Double Tree Hotel 320 N 44th Street Phoenix - 85008
- **Date:** 2nd Tuesday
- **Time:** 5:30 Social Hour
- **Meeting Contact:** Tom Norton, CPE
tom.norton@aspenational.org

### Tucson
- **Where:** El Chorro Country Club 1000 West Capital Ave Tucson - 85712
- **Date:** 3rd Tuesday
- **Time:** 5:30 Social Hour
- **Meeting Contact:** John Jarman, CPE
jjarman@jedunn.com

## Colorado

### Denver
- **Where:** Urban Roadhouse 991 18th Street Denver - 80202
- **Date:** 2nd Tuesday
- **Time:** 5:30 Social Hour
- **Meeting Contact:** Matthew Rasmussen
mrasmussen@thesiliconhelps.com

### Golden
- **Where:** The Barbery Restaurant 1400 Huntington Drive South Pasadena - 91030
- **Date:** 4th Wednesday
- **Time:** 6:00 pm Social Hour
- **Meeting Contact:** Joe Miller, CPE
joe@siliconhelps.com

## Connecticut

### Cheshire
- **Where:** Barbaica Taqueria & Tequila 1341 Butterfield Rd Downers Grove - 60515
- **Date:** 3rd Thursday
- **Time:** 6:00 pm Social Hour
- **Meeting Contact:** Bob Sveboda, CPE
bosveboda@hotmail.com

## Delaware

### Dover
- **Where:** Urban Roadhouse 991 18th Street Denver - 80202
- **Date:** 2nd Wednesday
- **Time:** 5:30pm Social Hour
- **Meeting Contact:** Jason Gordon
jason.gordon@penningtoncpa.com

## District of Columbia

### Washington, D.C.
- **Where:** Jacobs Galleria 3612 N. Dale Mabry Tampa - 33609
- **Date:** 3rd Thursday
- **Time:**
- **Meeting Contact:** Bob Nitschgo, CPE
bob.nitschgo@aspenational.org

## Florida

### Tampa Galleria 3
- **Where:** Griffin Tree 5270 Utica Ridge Rd Davenport, FL 33896
- **Date:** 4th Tuesday
- **Time:**
- **Meeting Contact:** Ryan Andreason
randreason@aspencontracting.com

## Georgia

### Atlanta
- **Where:** Sage Woodfire Tavern 4049 Ashford Dunwoody Rd Atlanta - 30346
- **Date:** 2nd Monday
- **Time:** 5:30 Social Hour
- **Meeting Contact:** Clinton Aldridge
caldrig@knightsmiller.com

## Illinois

### Chicago
- **Where:** Barbaica Taqueria & Tequila 1341 Butterfield Rd Downers Grove - 60515
- **Date:** 3rd Thursday
- **Time:** 6:00 pm Social Hour
- **Meeting Contact:** Bob Sveboda, CPE
bosveboda@hotmail.com

## Indiana

### Bloomington
- **Where:** Courtyard by Marriott Boston-Cambridge Hotel 777 Memorial Drive Cambridge - 02139
- **Date:** 3rd Wednesday
- **Time:**
- **Meeting Contact:** Ryan Dogil
rdogil@applinggroup.com

## Iowa

### Des Moines
- **Where:** Information not submitted
- **Meeting Contact:** Chuck Hesselbein, CPE
chuckh@projectconstruction.com

## Louisiana

### New Orleans
- **Where:** Information not submitted
- **Meeting Contact:** Southeast Governor Chuck Hesselbein, CPE
chuck@projectconstruction.com

## Massachusetts

### Boston
- **Where:** Information not submitted
- **Meeting Contact:** Central Plains Governor Dave Westfall, CPE
davewestfall@applinggroup.com

## Michigan

### Detroit
- **Where:** Information not submitted
- **Meeting Contact:** Jeffery Setholz
costnv@aspencontracting.com

## Minnesota

### Minneapolis
- **Where:** Information not submitted
- **Meeting Contact:** Central Plains Governor Dave Westfall, CPE
davewestfall@applinggroup.com

## Missouri

### St. Louis Metro
- **Where:** Varies
- **Time:** 6:00pm Social Hour Meeting Contact:
Jenny Dorhauer, Sr.
dorhauers@bissellatk.com

## New Mexico

### Albuquerque
- **Where:** Lauck's Grill or Bass Pro Shops - See meeting contact date
- **Time:**
- **Meeting Contact:** Kelly Jarman, CPE
kjarman@aspencontracting.com

## New York

### Buffalo
- **Where:** Varies
- **Time:**
- **Meeting Contact:** Information not submitted

## Ohio

### Columbus
- **Where:** Information not submitted
- **Meeting Contact:** Northeast Governor James Hanna, CPE
gh@h-y-z.com

## Oklahoma

### Oklahoma City
- **Where:** Information not submitted
- **Meeting Contact:** Ben Nodine, CPE
ben@applinggroup.com

## Oregon

### Columbia Pacific
- **Where:** University Place
400 Carlisle NE Albuquerque - 87107
- **Time:**
- **Meeting Contact:** Chana Frederick
frederick.chana@gmail.com

## Pennsylvania

### Greater Lehigh Valley
- **Where:** Information not submitted
- **Meeting Contact:** Northeast Governor James Hanna, CPE
gh@h-y-z.com

## Tennessee

### Nashville
- **Where:** Information not submitted
- **Meeting Contact:** Ben Nodine, CPE
ben@applinggroup.com

## Texas

### Houston
- **Where:** Information not submitted
- **Meeting Contact:** Information not submitted

## Utah

### Salt Lake City
- **Where:** Information not submitted
- **Meeting Contact:** Information not submitted

## Virginia

### Richmond
- **Where:** Information not submitted
- **Meeting Contact:** Information not submitted

## Washington

### Puget Sound
- **Where:** Hales Ales
- **Time:**
- **Meeting Contact:** Information not submitted

## Wisconsin

### Milwaukee
- **Where:** Brew City
- **Time:**
- **Meeting Contact:** Information not submitted

## West Virginia

### Charleston
- **Where:** Information not submitted
- **Meeting Contact:** Information not submitted

## Wyoming

### Cheyenne
- **Where:** Information not submitted
- **Meeting Contact:** Information not submitted

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**Note:** Information about chapter meetings is subject to change. Any changes to your chapter meetings information can be submitted to the ASPE national office.
A MILE HIGH SUMMIT

DENVER
COLORADO

2017 ANNUAL MEETING AND ESTIMATORS SUMMIT

JULY 12-15, 2017