



ORANGE SPEEL

ASPE Chapter 3 Newsletter

APRIL 2019

Letter from the President

04/01/2019

March is finished and 2019 is already 25% complete or as some would say “in the books”. As I reported at the March meeting I attended the Northwest South-west Spring Regional meeting in Denver. For more information about it, see this month’s newsletter article. I will be attending and representing our chapter at the 2019 Estimators Summit in Kansas City, June 19th to 22nd. If you have the chance it is a wonderful opportunity to see the latest software, attend excellent presentations and meet other estimators from around the country.

At our upcoming April 10th dinner meeting Mike Romanowski SE, who is the Regional Director of WoodWorks Wood Products Council will be presenting on Mass Timber Construction: Products, Performance and Design. He will discuss the products used, its appeal, design topics and the future of it. This will be very informative since the upcoming building code changes will allow high rise timber construction. Oregon currently allows Tall Timber construction up to 12 stories in height.

Our Upcoming chapter elections will be held at our April 10th meeting. As this is a volunteer organization, if you are interested in serving please contact any of the board members to get additional information. On March 27th from 9:30 to 10:30 Tom Smithson and Chris Spencer, CPE went back to school at University High School. It was not to attend classes, but to speak at their Career Fair about a career in construction and specifically estimating. We want to thank them both for taking time from work to discuss our profession with the next generation.

Thanks again to Mike Frasco of Bio Clean who at our March dinner meeting gave a very informative presentation on BMP’s.

As I mention in every Presidents Message I want to thank everyone who has presented ideas for upcoming programs. We are currently evaluating them and will be trying to arrange for speakers in the upcoming meetings. For anyone new to our meetings you will find 3” x 5” cards and we encourage you to write down your ideas and contact information, if listing a specific speaker for our dinner programs. Our objective is to make our meetings relevant for what will help all of us be better and more informed estimators .



Kevin Murphy, CPE. ASPE Chapter 3 President

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“Professional Estimators and those in training shall conduct themselves in a manner that will promote co-operation and good relations among members of our profession and those directly related to our profession”

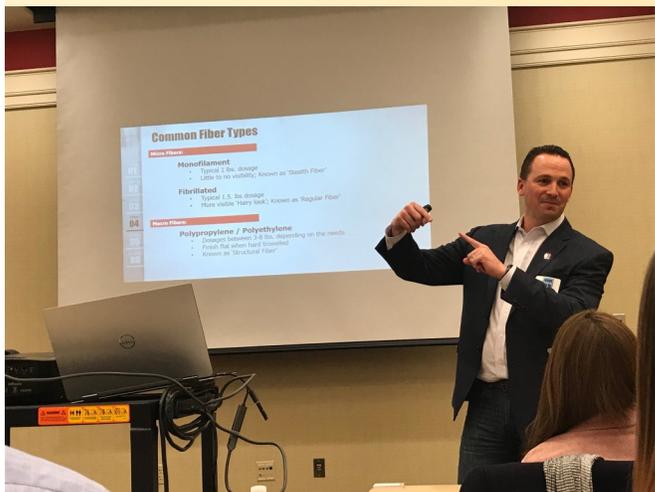
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NW SW Joint Regional Denver Spring Meeting Report

By Kevin Murphy, CPE

I represented our chapter at the Northwest Southwest Regional Meeting in Denver. It was a 2 day event with the meeting starting with a welcome from Paul Joanez the President of Denver Chapter 5. The first presentation by Dana Rotkovich of Bestway Concrete & Aggregate on Concrete Innovations. Concrete can be architectural, translucent, self-healing and for high rise construction have strengths ranging up to 16,000 to 20,000 psi.

One issue we have all had with today's finish flooring is curing of the slab or decks to the proper moisture content. The problem begins with today's adhesives which are water based. Concrete requires 32 gallons per CY of water. 16 gallons are required for the chemical process and the remaining 16 gallons are required for pumping, placing and finishing. An option for this is rapid drying self-desiccating concrete. This is a complicated mix design which takes into consideration the use of admixtures, chemicals and the proper use of aggregates, as their absorption is very important. The premium for this fast drying concrete is +\$130 per CY. The concrete is guaranteed not to fail the moisture test, if it does they will furnish and place Ardex. An example for its use was a building where the upper floors were going to be built out first. They used the rapid drying concrete only on the upper 3 floors so that the floor finish schedule could be achieved.



He also discussed the use of fibers in concrete. Typically reinforcement is placed in the bottom 1/3 of the slab for structural requirements and placed in the top 1/3 for shrinkage and crack control. With the use of 3 – 8 LBS per CY of polypropylene / polyethylene fibers, also known as Macro Fibers the top reinforcement can be eliminated for crack control. They can also provide stamped engineered drawings showing the structural replacement of the reinforcing. The slabs will actually crack more, but will be mechanically stopped by the fibers. He gave the example of a recently completed Amazon Fulfillment Center where the fiber requirement was 7.5 LBS per CY. By using the fibers they placed up to 30,000 SF of 5" deck without control joints while achieving an average FF 55 – 58 FL 30 – 33.

The second presentation was on integrated building controls by Ken Nekvasil of ATS Rocky Mountain. Division 23 Building Automation Systems typically bids to mechanical contractors while under Division 26 Electrical typically includes fire life safety; security; access; lighting control; IT systems; power monitoring and people movers. Some systems

will even track your phones Outlook calendar and control your office environment by your schedule. Owners are now wanting all of this to be integrated. With this much system complexity the estimator can no longer use a square foot cost. But why is it so difficult to scope controls? The answer is poor drawings and specifications; equipment and control bundling; lack of controls knowledge; scopes are vague at best and whose scope is it 23 or 26? For design build projects it is recommended to get a controls partner / subcontractor on board early so as to get the right scope and pricing.

Then lunch and in the afternoon we participated in an 11th hour Bid Day Simulation. In attendance were estimators who are consultants, general contractors and subcontractors. We formed 5 groups with a mixture of estimators in each group. Everyone experienced what general contractors do on bid day receiving and reviewing proposals, contacting subs to confirm scope, inclusions and exclusions. All of this while still having to get the bid form completed and submitted on time. The final goal was not to be low but to be the closest to the correct number. Both subcontractors and consultants were surprised based on the lack of clarity, the amount of detail which is required and the pressure of meeting the time deadline for bid submission.

In the evening it was a group dinner at a nearby restaurant where we were able to talk about the day's events and current issues of our industry.

Saturday, day 2 consisted of ASPE business. Our first session we worked on a chapter growth module which will be on the national website and available for all chapters to use. Then we reviewed both regional and national items consisting of the new Associate Estimating Professional, upcoming elections, By-Law changes. On the national level our Summit will be June 19 – 22 in Kansas City. The 3 days will consist of technical, professional development and State of ASPE. The 2020 Summit will be held in San Antonio. Lunch was served and the meeting closed with attendees either being shuttled to the airport or for the Chapter 5 members driving home.

Upcoming Programs in 2019:

April 10: "Mass Timber Construction and the new building codes" by Mike Romanowski of WoodWorks Wood Products Council.

May 8: "Modular retaining wall systems" by Erik Hanson of Geo Grid Retaining Wall Systems .

June 12: "Advanced engineered structural steel connections" by Kyle Wilson of SidePlate

June 19-22: Estimators Summit in Kansas City.

ASPE Chapter 3 Dinner Meeting

March 13, 2019

Stormwater BMP Design & Estimating Considerations by Michael Frasco of Bio Clean

Mike Frasco, the regional sales manager for Bio Clean, brought his 18 years of sustainable career experience and shared much of it with us at our March 13th dinner meeting. His objective was to give an overview of regulations; types of BMP's (Best Management Practices); value engineering and installation.

His discussion began with the 2 types of stormwater permits: Industrial General Permit and MS4 Commercial Residential. The MS4 permit has MCM's (minimum control measures) which are required to be incorporated into it. LID or Low Impact Development as it is commonly referred to, is a leading stormwater management strategy that mitigates the impacts of runoff and stormwater pollution as close to its source as possible. The 3 elements to achieve this are through infiltration, reuse and treatment. Infiltration is the top priority. Reuse of stormwater is used for irrigation and can be achieved by the use of rain barrels or underground cisterns. Water treatment is achieved through either mechanical or natural separators before it is discharged into the storm water system. Compliance challenges consist of local regulations; purchase costs and installation costs.

Mike Frasco discusses BMP's.



Full capture systems are based on providing a full screening mechanism designed to collect trash, the size of a cigarette butt. Systems have to be designed to treat the 1 year / 1 hour storm event and be properly maintained to qualify. Infiltration and detention designs consist of basins, drywells, pervious surfaces and storage pipes. A detention area or dry pond above ground is preferred over a retention area or wet pond. There are also urban ponds which are an underground modular system and can be up to 15' deep and expand to be the size of a football field. These can also be rated for loading up to aircraft, so that valuable land is able to be utilized. Reinforced concrete pipe (RCP) is more dependable than plastic piping as they can be crushed due to loading. Conveyance of the stormwater is achieved through either piped systems or swales.

Value engineering is not easy as the MS4 requirements are very strict and most systems are proprietary. When attempting to review alternate products the estimator must review the specifications closely for each product, and confirm that the alternate system(s) are equivalent.

We want to thank Mike again for giving us a simplified overview of BMP's, which is a very complicated subject, and one in which affects all construction projects.

Article by Kevin Murphy, CPE

ASPE Member Meeting

Please RSVP by the Tuesday before each meeting so we are sure to have enough food and place settings.

Registration is available at www.aspe-oc3.org. Click away and make sure you select your dinner choice. On-line payment is now available!

Cost is \$45 if RSVP and pay before the deadline and \$50 if you don't.

The Chapter has to cover the cost of the meals that we

Board of Directors [2018/2019]:

President: Kevin Murphy CPE

Vice President: Dan Schottlander CPE

Past President: Ron Svarc LCPE

Secretary: Bryon Barker

Treasurer: Asoka Sellahewa CPE

Committees: Tom Smithson (Meetings/speakers)

Wil Beukman (Newsletter)