

The Mid-Allegheny Minutes



September 23, 2021 Dinner Meeting

The first meeting of the ASHE Mid-Allegheny Section 2021-2022 program was held at the Rustic Lodge (in person) with a steak dinner and a welcome to all by new Section President William Ferko, P.E.

Following dinner, District 10-0 Assistant District Executive - Design **Alice Hammond, P.E.** presented on the current funding situation in PennDOT District 10. After a brief overview of the District's current staff organization, Alice touched on the declining funding situation in District 10-0. She presented the highlights of the federal Infrastructure Investment & Jobs Act (IIJA), what the resulting funding from that Act could mean for Pennsylvania, and how a state-funded match would be necessary to obtain the federal funding needed to help meet the transportation needs across Pennsylvania. Alice presented the findings of Pennsylvania's Transportation Revenue Options Commission (TROC) report, which proposes various strategic funding proposals for generating revenue that will help to provide the required match for the needed federal funding while offsetting the declining gas tax revenue that Pennsylvania heavily relies on as a funding source. It was emphasized that the TROC funding proposal will not solely fix the funding problem, but will take continued partnership and support at the federal, state, and local levels to eventually introduce the TROC proposals as legislation.



Alice Hammond, P.E. - District 10-0 Assistant District Executive - Design

The Mid-Allegheny Section sincerely thanks Alice for taking the time to share with our Section about what's currently happening in District 10-0.

Following the presentation, the Mid-Allegheny Section Officers for 2021-2022 were sworn in with the support of the members who were present at the dinner meeting. After the Officers were sworn in, the 2019 and 2020 ASHE

Mid-Allegheny Outstanding Highway Engineering Award winners were presented with plaques. See pages 2 and 3 for photos of the award winners.

November 3, 2021 Dinner Meeting

The second meeting of the ASHE Mid-Allegheny Section 2021-2022 program was held at the Rustic Lodge. Following dinner **Ryan Rowles, M.A., RPA**, with The Markosky Engineering Group, Inc. presented on the archaeology of a historic blacksmith shop site located within the SR 0119 Section 463, Home Bridge Replacement Project in Indiana County. Through a descriptive narrative and numerous historical pictures, Ryan first explained the general significance of what a blacksmith shop meant to a local community, including the importance of the work performed and the social interaction generated. The latter part of the presentation focused on the findings of a former blacksmith shop site that was investigated as part of the above mentioned project. Archeological findings, which helped to recreate the layout and various components of the blacksmith shop and amplify site's historical significance, were presented and discussed.



Ryan Howles, M.A., RPA

The Mid-Allegheny Section thanks Ryan for his willingness to enlighten our Section on this unique topic.

Mid-Allegheny News

2021 ASHE Mid-Allegheny Outstanding Highway Engineering Awards

At the dinner meeting on September 23, 2021, the ASHE Mid-Allegheny Outstanding Highway Engineering awards

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were presented for projects for both the 2019 and 2020 construction seasons. The following projects were selected for awards:

2019 (\$2.5M or Less) – Brady's Bend Bridge #16

Owner: PennDOT District 10-0

Prime Designer: ms Consultants, Inc.

Contractor: Mekis Construction Company



Left to Right: Jason Layman, Kevin Hartnett, Steve Moser, and Bill Ferko

PennDOT District 10-0 was in search of a solution to replace the existing structure while maintaining one lane of alternating traffic throughout construction and minimize impacts to several nearby popular summer destinations including a private campground, a public boat launch, and several businesses. As a result, it was determined that construction would take place during the winter months between Labor Day and Memorial Day eliminating the need for a temporary pedestrian bridge and additional temporary construction easements which would be needed to accommodate pedestrians during construction. Moving construction to the winter months also minimized impacts to the adjacent campground since the traditional camping season end Labor Day weekend. Meeting the needs of the adjacent property owners was key to the success of the project.

2019 (>\$2.5M) - US 119 Three Bridges Project

Owner: PennDOT District 10-0

Prime Designers: Erdman Anthony & Michael Baker International, Inc.

Contractor: Swank Construction Company, LLC



Left to Right: Sean Hart, Alice Hammond, Chris Robinson, and Bill Ferko

The US 119 Three Bridges Project required improving a section of roadway approximately a mile long that had significant safety concerns. Three bridges in poor condition fell within the limits of this project, one carrying US 119 over Yellow Creek, one over Tide Road (T- 840), and one over an abandoned rail line. Rather than simply proceeding with the replacement or rehabilitation of the structures, it was determined that removing the bridges over Tide Road and the abandoned railroad would save the near-term cost of replacement or rehabilitation and the long-term maintenance and improvement costs and the bridge over Yellow Creek would be replaced. The project also included roadway widening, a roadway relocation to facilitate removal of one of the bridges, drainage improvements and a stream relocation. On the east side of 119, elimination of the Tide Road bridge required relocating Tide Road to tie into US 119 at the location of an existing driveway. On the west side of 119, Tide Road was terminated in a cul-de- sac. A geogrid system was used at the bridge removal sites to minimize future settlement.

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2020 (\$2.5M or Less) - S.R. 0028 Thompson Run and S.R. 0028 Simpson Run Bridge Replacement Project:

Owner: PennDOT District 10-0

Prime Designer: Michael Baker International, Inc.

Contractor: Clearwater Construction



Left to Right: Sean Hart, Jason Layman, and Bill Ferko

This project replaced two existing bridges that were listed in poor condition: S.R. 0028 over Thompson Run and S.R. 0028 over Simpson Run in Jefferson County, approximately five miles southwest of Brookville, Pennsylvania. The new structures were single cell precast reinforced box culverts with precast end sections. A concrete distribution slab was not used on top of the culvert due to expedited construction. Embankment, subbase and an asphalt pavement were used on top of the culverts. Each culvert was constructed in seven days because of high traffic volumes on S.R. 0028 and limited detour routes in the area. Minimal cleanup work was required after the detour, and short-term lane closures were allowed to complete cleanup work. This was the first time PennDOT District 10 used such a short term detour to construct a culvert. The use of accelerated construction also avoided displacing a house and disrupting a hillside within the Simpson Run site and avoided impacts to a historic property on the Thompson Run project.

2020 (>\$2.5M) - S.R. 0068: I-80 To Dolby Street (Section 375):

Client: PennDOT District 10-0

Prime Consultant: Gannett Fleming, Inc.

Contractor: Plum Contracting, Inc.



Left to Right: Greg Cerminara, Alice Hammond (for Eric Buchan), and Bill Ferko

SR 0068 is vital gateway to the borough of Clarion and provides key access to the Clarion Hospital, Clarion University, Clarion Mall, local shops and restaurants. The existing corridor was congested, narrow, and did not provide adequate traffic capacity. It also had a substandard horizontal and vertical sight distance just north of Mall Drive. Corridor improvements included adding a through lane in the northbound and southbound directions, decreasing the vertical curvature of the road, adding a continuous two-way left turn lane and sidewalk along the western side of the roadway from the Clarion Mall to Dolby Street. The project also included curb gutter shoulders, installing a new storm sewer system and installing stormwater basins and infiltration swales. The design team evaluated vehicle turning movements at every driveway and intersection within the project limits for both permanent and temporary conditions. The final pavement design consisted of full-depth widening with an

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overlay of the existing pavement. Heavy-duty pavement membranes were used to minimize reflective cracking at the pavement joint. The existing horizontal and vertical curve just north of Mall Drive was lowered by as much as 10' and shifted up 20' to increase both horizontal and vertical sight distance and allowed for traffic to be maintained in both directions during construction. The I-80 to Dolby Street widening and realignment benefits residents, businesses, drivers, and pedestrians by creating a safer roadway and new sidewalk, allowing easier access for the greater Clarion community.

Thank you to all who submitted projects for consideration and congratulations to all of the winners!

2021 ASHE Mid-Allegheny Outstanding Highway Engineering Awards

The ASHE Mid-Allegheny Section will again be sponsoring Outstanding Highway Engineering Awards for projects in which construction was completed in 2021. More information and applications will be sent to the membership by email and will be available on the Section website in the near future. The applications are due by February 25, 2022.

Fall 2022 Scholarships

The ASHE Mid-Allegheny Section will again be sponsoring a scholarship program for the Fall 2022 semester. Scholarships will be provided for students seeking both two-year and four-year degrees related to CADD, engineering technology, engineering design, and civil engineering. Applicants must be residents of the state of Pennsylvania. More information and scholarship applications will be sent to the membership by email and will be available on the Section website in the near future. The applications must be postmarked by March 1, 2022.

Volunteering Opportunity

The Conemaugh Valley Conservancy is planning for the long-term maintenance of the 15-mile West Penn Trail between Blairsville and Saltsburg. This hiking and biking facility is located along the border of Westmoreland and Indiana Counties and features several historic stone arch bridges within the Conemaugh River Lake flood control reservoir. The CVC is seeking volunteers to participate in

the special repair projects as well as routine maintenance, including possible design work. They are particularly looking for volunteers with an engineering background to provide assistance. Please contact Laura Hawkins at (724) 858-0463 to learn more.

Upcoming events include:

- Dinner meeting on January 13, 2022 at 5:30 PM at the Rustic Lodge with a presentation on *The PA 53 Lilly-Cassandra Culvert Project* by Brian Krul, P.E., PTOE and Robert Patassi, P.E. from TranSystems. The project involved rehabilitation of two historic, stone masonry arch culverts. Both culverts were constructed in 1832 and were originally part of the Allegheny Portage Railroad system and now carry vehicular traffic along SR 53 over Bear Rock Run and Bens Creek.
- ASHE National Conference from May 12-15, 2022 in Columbus, OH

Additional information on the events above can be found on our website.

We sincerely thank all of our Members and Sponsoring Firms for your continued support of the Section.

Contact the ASHE Mid-Allegheny Section

Website: www.midallegheny.ashe.pro

Email: ashe.midallegheny@gmail.com

If you have comments or suggestions related to presentations, meetings, or this newsletter, please forward a brief e-mail to the effect. Our board welcomes feedback so we can better serve our membership and industry.

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