THE

TRANSPORTATION TIMES

AMERICAN SOCIETY OF HIGHWAY ENGINEERS, DELAWARE VALLEY SECTION

2023-24 Edition #1



Meeting Schedule

Dinner Meetings

September 20

October 11 (second Wednesday)

November 8 (second Wednesday)

January 17

February 21

March 20

April 17

Please see the article on Dinner Meetings on page 3 for more information on our planned program.

Technical Sessions

Technical Sessions will be scheduled throughout the season and will be conducted virtually. See page 3 for more information on this.

President's Message

As the summer comes to an end, we look forward to a great year ahead for our Section and seeing everyone at our dinner meetings and events. Our Section has a fantastic membership, and we thank you all for your participation in making ASHE Delaware Valley a premier professional society in this region and one of the most active ASHE Sections in the country. Our calendar of events provides the opportunity to see and meet with our peers, colleagues, and friends, continue learning about the latest in our industry, and to grow our community together.

The ASHE Delaware Valley Board members and Committee members are second to none with their commitment to creating a full calendar of events and a balanced approach to represent our entire Section. It is an honor of mine to serve as the President of the Section with them and I very much look forward to the upcoming year.

While we hope everyone has had an opportunity to enjoy the summer season with family and friends, as an industry it has been quite busy. Engineering has been at the forefront of news headlines across the globe with efforts to rebuild infrastructure. In our region, the incredible effort of those who managed and reconstructed the I-95 collapse reminded many of the ability we have as an industry to work together and accomplish anything we set as a goal. The engineering profession and the feats of rebuilding infrastructure in this country

have been examples of times where people come together for a common goal. As a profession we can set the example of working together and leading towards how our infrastructure needs to look like and function for our changing world and for our communities moving forward.

Our program and events this year are focused on providing a balance of topics to highlight the way our industry works together, and to provide opportunities for our membership to network and find ways to grow our relationships. Consultants, contractors, government agencies, and all those who are a part of our great profession accomplish the most productive projects by working together, and have the opportunity to highlight our work for all of society to see what we can accomplish when called upon.

Cheers,

Isaac Kessler, PE President, ASHE Delaware Valley Section

"Changing of the guard"

Incoming President Isaac Kessler presents a plaque of appreciation to outgoing President Nate Parrish at our Annual Meeting (April 19), as the Section Presidency was handed off and the gavel exchanged, wrapping up yet another successful season for our Section.



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2023-24 Delaware Valley Section Officers and **Board of Directors**

President

Isaac Kessler Remington & Vernick Engineers

First Vice President

Amber Midgley **AECOM**

Second Vice President

Steve DiSciullo Michael Baker International

Treasurer

Matt Ward **TranSystems**

Secretary

Kevin Rice HNTB

Immediate Past President

Nate Parrish* **HNTB**



Our Section Officers and Directors for the current season are listed here. Please thank these individuals for their volunteer service in the administration and operation of our Section.

Board of Directors

Term expires 2024

Elaine Elbich* Pennsylvania Department of Transportation

Alexa Egan Harper* Gannett Fleming

Sarah McInnes Pennsylvania Department of Transportation

Kimberly Waters JMT

Term expires 2025

Peter Berthold*

Pennsylvania Department of Transportation

Bruce Masi* Gannett Fleming

Sean Pence Traffic Planning & Design

We welcome back previous members of the Board, Sarah McInnes and Drew Sirianni (Past President), after their short "sabbaticals", and thank outgoing Board Members Corey Hull and Bob O'Neill for their service.

This slate of Officers and Board members was installed at our Annual Membership meeting on April 19.

We remain strong with a solid based of knowledge and experience on our Board, with eight Past Section Presidents being part of the group.

Thanks to the 2022-23 Nominating Committee - Isaac Kessler (Chair), Bruce Masi, Amber Midgley, Jeff Obrecht, Nate Parrish and Matt Ward - for their help with the development and preparation of this slate.

Juli Wolfe RFTTFW

Term expires 2026

Don Gusic CDM Smith

Mariah Kerr Traffic Planning & Design

Drew Sirianni* Pennoni

Steve Windle McMahon

Regional Director John Caperilla*

CDR Maguire

Section Executive Bob Wright* McMahon

* Past Section President

Section Committees/ **Chairs**

ASHE/PennDOT **Breakfast Meeting**

Alexa Egan Harper, Chair Alex Eadline, Co-Chair

Auditing

Rob Prophet

Dinner Meetings Steve Windle

Educational

Juli Wolfe

Environmental

Susan Giannantonio

Golf Don Gusic

Hotel

Bob Wright

Membership Mariah Kerr

Newsletter **Bob Wright**

Nominating Amber Midgley

Outreach

Steve DiSciullo

Professional Society Relations

Elaine Elbich

Program

Kim Waters

Project of the Year

Alex Eadline

Scholarship

Bruce Masi

Student and Young Members

Sean Pence

Over the summer, the Section Board reviewed the previous committee structure and scope/coverage of each group and proposed some "tweaking" to determine if consolidation and merging would permit a somewhat streamlined and more effective approach. What had been as many as 21 different committees in the 2022-23 season was rethought and revamped to result in the current group of 16 committees, accomplished by this:

- Dinner Meetings will expand to include the formerly separate 50-50 Committee
- Educational (new) will include the formerly separate Technical Papers and Technical Sessions Committees
- Outreach will expand to include the formerly separate Public Relations and Website Committees, except for Scholarship publicity (see below)
- Professional Society Relations (new) will be the renamed Social/Society Relations Committee
- Scholarship will include the role of publicity of Scholarship recipients formerly handled within the Public Relations Committee
- Student and Young Members (new) will expand to include the formerly separate Adopt-A-Highway, Student Chapters, and Young Members Committees

We believe these mergers and consolidations will help to provide the same (or better) levels of service and attention to all of our areas of concern.

If you have an interest in being part of any Committee for the coming season, please contact Section President Isaac Kessler (information is provided on page 10).

Please note that some committees have co-chairs to assist in the often-complicated tasks they must handle.

DVSP Program Sponsorship - Wrapping Up Season 18, Ready to Begin Season 19

Our Section started the Delaware Valley Section Patron (DVSP) Program in the 2005-06 season to allow supporting firms to be recognized. As you may be aware, the proceeds of the DVSP are entirely dedicated to our Section's Scholarship Fund. For a single

DVSP benefits (\$200 for the season)

Logo and Hotlink on Section Website (delvalley.ashe.pro)

Logo in THE TRANSPORTATION TIMES

fee for the season, sponsoring firms are cited for their support with their logos displayed on our website and in each edition of THE TRANSPORTATION TIMES. This also provides a "hot link" to access the firm's website directly from ours.

We thank our 32 sponsors who have participated this past season for their generosity and support. They are represented by their logos, shown on page 6 as well as on our website. We very much appreciate your "service" as a DVSP participant.

If you are not already a DVSP and would like to join or find out more about the program, please

contact Bob Wright (information provided on page 10). We will be soliciting renewals and new sponsors for the 2023-24 season in September.

We are pleased to note that five DVSP participants - AECOM, McCormick Taylor, McMahon, TPD and Urban Engineers - have been sponsors for all 18 years of the Program. Thank you for your long-time support!

Please note that the cost of sponsorship will be increasing this season. More details will be provided in the renewal reminders.

Dinner Meetings - Back in Person, And Still Moving Around ...! Technical Sessions, Still Virtual ...

We have managed to conduct a successful season of in-person **Dinner Meetings**, the first time we have had a complete season of these since 2018-19 (hard to believe...!). We enjoyed a full program of seven well-attended and informative meetings, and we accordingly believe we have accomplished our goal in the scheduling of a good and diverse program of meeting topics for the season. We hope you were able to take advantage of our meeting program and earn professional development credit/hours (PDH) as you need.

For the last three meetings of last season, we tried new venues (February and March, at Maggiano's in King of Prussia, April at the Crowne Plaza Philadelphia-Valley Forge Hotel in King of Prussia), and this seemed to be welcome by many. Based on the success of this schedule, we are planning to return to meetings at each of these venues this season. As previously reported, ironically, a number of years ago, the Crowne Plaza, in its former branding as a Holiday Inn, was our "home base" for many years, thus in several ways this is a "coming home" for us.

The change in venues brought with it an inevitable price increase, a combination of recent inflation and cost increases from providers that managed to creep up on us. Thus, we had to make the difficult decision to raise our Dinner Meeting cost accordingly. We think you will agree that the quality of the dinners, along with the ambience, amenities and atmosphere of the locations somewhat justify the cost increase, and we will continue to do what we can to get the maximum benefit for our meeting attendees at the optimal cost.

Technical Sessions will continue to be virtual events for this season. Six such Sessions were offered last season, and we are looking to schedule at least that many in 2023-24 with varying and interesting topics. They will continue to be scheduled, with different starting times (12 Noon or 4 PM), a format that has been popular and has worked successfully over the past three seasons. As always, they will continue to offer the important and valuable PDH benefit.

More information will be provided on coming Technical Sessions in upcoming editions of THE TRANSPORTATION TIMES as well as in separate Session flyers and e-mails. We hope you have been able to take advantage of these informative sessions.

Reminder - Membership Applications Are Now Electronic! (and Your Dues May Be Due...)



If you know someone who is considering becoming an ASHE member, our Membership Application can be downloaded and completed, then submitted via e-mail, with payment available via PayPal. Please visit our website (delvalley.ashe.pro) and click on the **Membership** tab for more information and details on this.

Please feel free to share this information with anyone who may be interested in joining our Section.

We are proud to report that we currently have **341** Section members, making our Section one of the largest in the national ASHE organization. Thanks to those of you who continue to support our Section.

Membership renewals were sent in June. If you haven't already done so, please plan to renew promptly to maintain your membership. As you may be aware, dues must be paid by mid-September for you to avoid being removed from our membership rolls.

If you are reading this and realize that you have not yet renewed, you will unfortunately be subject to late payment fees.

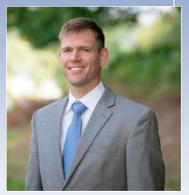
Members in Transportation/Transition

Section Recognizes Young Member and Member of the Year

Last season, our Section initiated awards to recognize the significant contributions and activities of Section members, with the intent of annually citing a Young Member of the Year and a Member of the Year. Nominations were solicited in December and two recipients were selected for these honors, which were awarded at the Section's Annual Meeting on April 19.

Alexander J. Eadline, PE was selected as the Section's Young Member of the Year. Alex serves as a Project Manager with CDM Smith at its office in Wayne. He has 14 years of progressive transportation engineering experience with work performed in both the highway and aviation industries. His project management and design experience has been with highway projects ranging from bridge replacements to large-scale roadway reconstruction projects. As a project technical lead, he handles engineering oversight of design tasks for project deliverables and addresses client-specific technical requests.

Alex was an integral part of the I-95 Section BS1 project in Philadelphia, managed by PennDOT District 6-0, an \$80 million reconstruction effort that is part of PennDOT's Revive 95 program. He has continued to play a critical role in his area of passion, drainage design, and has developed several creative recommendations to help address water quality and provide context sensitive solutions. Section BS1 is the first project to incorporate a water quality structure with media filters that is owned and maintained by PennDOT. His many contributions to the I-95 corridor infrastructure improvements are shaping the future of the Delaware Valley region.



Alex has been a member of ASHE since 2010 and has been with the Delaware Valley Section for the past six years, where he serves on the PennDOT Breakfast Meeting planning committee. He lives in Honey Brook, Chester County.

Robert M. Wright, PE was named as the Section's Member of the Year. Bob is a Project Manager in the Center City Philadelphia office of McMahon, a Bowman Company, and has been with the firm for the past six years, with a total of 44 years of experience in



the transportation engineering field. For the first 27 years of his career he was with the City of Philadelphia Department of Streets and ultimately served as the Department's Chief Engineer and Surveyor, directing all transportation, highway and bridge design efforts. In his time at the City he managed over 60 major projects with a combined construction value of over \$130 million through design and to implementation. Among these were major corridor improvements on West River Drive, Broad Street, Market Street, Chestnut Street, Delaware Avenue and routes throughout Center City, as well as initial efforts on the Schuylkill River Park. He additionally served as the City's representative and project director on a number of significant PennDOT undertakings, among them the completion and ramps/interchange programs on I-95, the complicated construction of I-676 through Center City, and the reconstruction of I-76. Similarly he oversaw several significant improvements to the Southeastern Pennsylvania Transportation Authority's (SEPTA) trolley network that were coordinated with and provided as part of City roadway and traffic signal upgrade projects.

In his consulting career over the last 17 years Bob has continued to manage and be involved in several large local projects including work on the Spring Garden Street corridor, the Benjamin Franklin Parkway, roadways in the Philadelphia Navy Yard, several traffic signal corridor modernization efforts, and the ReStore Philadelphia streetscape corridor program. He also ventured outside of Philadelphia to direct several major roadway projects in New York City.

Bob has been a member of the Delaware Valley Section since 1986 and has been part of the Section's Board in several capacities since 2003, including service as Section President in 2014-15 and Section Executive for the past four years. He has been the Editor of the Section's newsletter, THE TRANSPORTATION TIMES, since 2005 and participates in several other Section committees as well. He is a lifelong resident of Philadelphia, having grown up in South Philadelphia and later moving to Roxborough.

We congratulate Alex and Bob on their honors.

Kessler Moves to New Spot

Section President **Isaac Kessler** recently started a new position as Bucks County Office Manager within his firm, Remington & Vernick Engineers. Congratulations to Isaac on this move!



Young Members Committee Happenings - 10 Years of Service!

The Committee is proud to have celebrated its tenth year of service last season, with many and various events, activities and gettogethers planned and conducted over that time. Many of these were outlined throughout the Committee's reports in THE TRANSPORTATION TIMES last season. As reported in those updates, it seems like just yesterday that the founding members got things off the ground with a number of happy hours and social events, which have grown to include the twice-yearly Adopt-A-Highway efforts, bowling competitions, bicycle rides, ice skating, and many more interesting sessions and happenings. These have often been scheduled as joint undertakings with the American Society of Civil Engineers (ASCE) Philadelphia Section's Younger Member Forum (YMF).

The Adopt-A-Highway cleanup, in conjunction with ASCE YMF on the groups' "co-adopted" segment of Bethlehem Pike in Fort Washington/Ambler, resumed after the easing of virus shutdowns in October 2021 and has continued on its twice-yearly regular schedule since then (of course followed by the "mandatory" happy/social hour). On Sunday, April 23 (trying a different day as past events have been on Saturdays), the combined forces of YMC and YMF, totalling 15 volunteers, participated in the clean-up. The second such effort for 2023 will be scheduled in the fall. Please watch for the separate flyer on this for registration and other details.

YMC tied up their best kicking shoes to field a team for the Multi-Society Kickball Tournament, and headed over to Fairmount Park's Edgely Fields for this competition on June 15. Squads from ASCE's Younger Member Forum as well as the Mid-Atlantic Section of the

Institute of Transportation Engineers (MASITE) took part in this event as well. Thanks to the impeccable catching hands of YMF's fielders and steady pitching efforts, its crew was able to score victories over both the YMC contingent (5-2) and MASITE (3-0), thus was the proud recipient of the first-ever, yet already coveted, Traffic Cone Trophy. Attendees enjoyed a variety of pizza, deli wraps, and cold beverages with lots of networking in between matches. The weather cooperated nicely and a good time was had by all (the representatives of all three teams are shown in the photo below, and with no particular colors, uniforms, etc. being utilized, it would

have been difficult to tell who was playing for what group even with the proverbial program).

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NEXT 2 MILES

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ASCE PHILA

As we have covered in all of the editions of THE TRANSPORTATION TIMES last season, YMC has successfully accomplished a great deal in its ten years of existence and will continue to plan and schedule events geared toward our Section's younger members (as well as those who are young at heart). One of its primary goals with its formation was to help accommodate young professionals who wanted to join ASHE and make them feel more included and comfortable in the Section, and it is very

clear that the original "mission" of the group has been duly and successfully accomplished. The Committee owes its foundation and start to then-Board Member (now Past President and current Board Member) **Alexa Egan Harper**, who spearheaded its formation to give younger members a way to get involved and be active in our Section.

As always, please watch for more information on planned and upcoming activities in event flyers which will be available in e-mail blasts and communications as well as on the tables at our upcoming Dinner Meetings.



Induction of the 2023-24 Board at our Annual Meeting (April 19) - from left, Bob Wright, Peter Berthold, Don Gusic, Elaine Elbich, Drew Sirianni, Mariah Kerr, Kevin Rice, Bruce Masi, Sean Pence, Matt Ward, Juli Wolfe, Steve DiSciullo, Amber Midgley, Isaac Kessler, and Nate Parrish, with John Caperilla handling the Oath of Office at the podium.



































Architecture Engineering & Consulting



















HIGHWAY ENGINEERING, LLC.



Stantec











Environmentally Speaking...

All the news you NEPA to know!

Welcome back to the **Environmentally Speaking** column for the 2023-24 Term! We hope that as the seasons change, the advent of fall will bring some relief from the heat, if not the Dad-jokes! The following article has been provided to us by **Ryan Whittington** of **HNTB** and summarizes proposed changes to the National Environmental Policy Act.

NEPA

- . Clean Air Act
- Environmental Justice
 Executive Order
- U.S. Department of Transportation Act of 1966; Section 4(f)
- . Clean Water Act
- Section 106 of the National Historic Preservation Act
- EndangeredSpecies Act

Proposed Changes to the National Environmental Policy Act (NEPA)

The Biden Administration has published a proposed change to the National Environmental Policy Act (NEPA). The proposed changes roll back requirements previously set on public comments for them to be considered by agencies, remove provisions which require litigants to post a monetary bond when seeking a preliminary injunction, reinstate a provision requiring agencies to consider direct, indirect and cumulative impacts, and remove a provision that limited the courts' ability to provide injunctive relief in the case of violations under NEPA.

The proposed changes enable agencies to create new types of Categorical Exclusions based on programmatic reviews and similar actions, instructs agencies to consider impacts on climate change during alternatives analysis and environmental review, and encourage agencies to incorporate mitigation to avoid or reduce disproportionate effects on Environmental Justice Communities. Finally, these changes require the agencies to appoint a chief public involvement officer to lead community engagement during NEPA.

This revision is available for public comment until September 29 with public meetings scheduled for August 26, August 30, September 11, and September 21. The full text of the proposed changes can be viewed at http://www.ceq.doe.gov.

We need your help!

Do you have a local environmental event you love to support? Such as a park cleanup, a tree planting, or similar event in the Delaware Valley you want to gather volunteers for? The Environmental Committee is looking for our Del Val Section membership ideas on local events to join for environmental volunteer days. We will be selecting an event to support so please email your suggestions to Susan Giannantonio at sgiannantonio@ntmeng.com

If you have ideas for articles concerning environmental issues of interest to our industry, please reach out to either Bob O'Neill (roneill@ntmeng.com) or Bob Wright (rwright@bowman.com) and share your thoughts with us.

PILLARS OF NEPA

"The People's Environmental Law"



TRANSPARENCY

The government must disclose to the public plans to build or fund certain projects.



INFORMED DECISION MAKING

The government must conduct an evaluation of the project and relay the results to the public.



PUBLIC INPUT

Before it's started and throughout the project the government must elicit and consider public input.



ACCOUNTABILITY

NEPA helps the public utilize the courts to hold the government accountable.



2022 Projects of the Year

Our Section recognized two efforts as part of our Project of the Year competition last season. As has been done in the past, the process was broken into two categories based on construction cost (under \$20 million and \$20 million and over).

Summaries of our award-winning projects are provided here. For additional information, please see the ASHE Scanner, available on-line at ashe.pro/scanner.html.

Project of the Year - Under \$20 million SR 320, South Gulph Road, Hanging Rock Improvements

The South Gulph Road Project was completed by PennDOT District 6-0 in June 2022. It includes a mile-long stretch of roadway along SR 320 between Arden Road and Upper Gulph Road and the intersection of Route 320 and Upper Gulph Road in Upper Merion Township, Montgomery County. The corridor includes the historic Hanging Rock, which protrudes into the roadway and causes clearance issues, along Gulph Creek. McCormick Taylor, the design consultant, was able to work through the challenges and

complete the preliminary engineering and final design. The resulting design and construction included the realignment of SR 320 away from Hanging Rock, raising of the profile of SR 320 to meet the 100-year flood elevation requirements, reconstruction of the cantilevered structure that carries SR 320 over Gulph Creek, reconstruction of the wall separating SR 320 and Gulph Creek, addition of a southbound right-turn lane at the intersection with Upper Gulph Road, installation of ADA curb ramps,

traffic signal modernization, and upgrades to drainage facilities, with a construction cost of \$9.2 million.

Route 320 (Hanging Rock) Improvements

Owner - PennDOT District 6-0 Contractor - Allan Myers Designer - McCormick Taylor Inc

Inspection - PennDOT District 6-0



There were several challenging aspects, including the size and location of the historic Hanging Rock, the proximity and regular flooding of Gulph Creek, and the intricate permitting process. After commencement of preliminary engineering, there were some delays with environmental clearance and permit approval, with most of the permitting issues related to the flooding of Gulph Creek. During normal rain events the road would close often for hours to allow the water to recede. After development and evaluation of several options, McCormick Taylor was able to coordinate with the involved regulatory agencies to achieve consensus on the design and satisfy requirements for the anticipated needed permits. The permitting process was completed in nine months with just one submission and minimal comments from the agencies.

The final roadway design raised the profile above the 100-year flood plain and shifted the alignment away from the rock in order to provide sufficient clearance for vehicles and trucks to safely travel on the roadway. To accommodate the shift, a retaining wall with a unique cantilevered roadway section over Gulph Creek was designed, which was 6' wide at its maximum point. This section utilized a precast wall system (T-wall), and coordination was critical to achieve the correct properties for the design. This extended one lane of the roadway over the Creek for approximately 1000' to avoid impacting the Hanging Rock. The scour protection along the wall was upgraded from the existing gabion baskets to a modified R-7 riprap which should be more resilient against the expected flood surges.

This project reinforces and improves PennDOT's network and enhances safety on a heavily-traveled section of SR 320, while also preserving the historical importance of Hanging Rock. The reconstructed road benefits the residents and commuters alike and reduces the maintenance and resources needed for flood cleanup. The project improves safety in the area by eliminating ongoing flooding events and the associated roadway closures and disruptions, and enhancing traffic controls with upgraded traffic signals. The signals were linked to PennDOT's Traffic Control Center, which allows SR 320 to be used as a diversion route when accidents or weather events occur on the parallel I-76. Emergency programs based on the time of day can also be established in advance to make quick adjustments. Additionally, a southbound right-turn lane at the intersection with Upper Gulph Road intersection was included to improve traffic flow.

Construction was initially delayed due to complexities with the prefabrication of the wall and shop drawings, as well as remnants of Hurricane Ida that flooded an exposed and open job site. PennDOT incentivized the project for the contractor to finish as soon as possible. The initial schedule was delayed by roughly one construction season; however, the contractor was able to work through the winter months and complete the project in June 2022, finally bringing what had become a legacy project for the District to a close.

There were 5 entries submitted in the 2022 Competition. In addition to the winners, other submissions were:

Less than \$20 million

Broad Street Bridge Reconstruction, Philadelphia

\$20 million and above

SR 1 Group 3S Section RC1, US1 Reconstruction PennDOT District 6-0 Regional Traffic Management Center/Parking Structure

Project of the Year - \$20 million/over SR 3, Chestnut Street Bridges

The Chestnut Street Bridges Rehabilitation project consisted of seven bridges and two retaining wall structures located along this corridor in the University City and Center City sections of Philadelphia, from 31st Street to 23rd Street, and on Schuylkill Avenue West from Market Street to Walnut Street (which is located above I-76) It also included the I-76 on- and off-ramps to/from Schuylkill Avenue at Walnut Street and Chestnut Street.

SR 3, Section CH1, Chestnut Street Bridges

Owner - PennDOT District 6-0 Contractor - Buckley & Company Designer - Alfred Benesch & Co. CM/Inspection - JMT, Urban Engineers Chestnut Street (SR 3) serves as a vital river crossing from West Philadelphia into Center City. Located one block south of the major multi-modal transportation hub, William H. Gray III 30th Street Station, it connects residents, commuters and visitors to schools and businesses. The roadway operates as



one-way eastbound and carries 18,300 vehicles per day, as well as pedestrians and bicyclists. Schuylkill Avenue West parallels the Schuylkill River with on- and off-ramps located at the north and

south of the project limits. The project goal was to maintain and enhance safe and efficient transportation facilities for all modes and users while serving the existing and future transportation needs in this area. The work was designed by Alfred Benesch and Company with the assistance of several team members/subconsultants. The overall construction cost of the program was \$105.4 million.

The work consisted of rehabilitation of the five structural steel bridges and two brick masonry arch bridges in the corridor, including internal strengthening to remove the 15-ton load posting on the Chestnut Street arch bridges. To prolong the life of the steel bridges, structural steel plates were repaired and select steel members were replaced to improve vertical clearance and bridge ratings. The steel bridge superstructures and substructures were also painted. The brick masonry arch structures were partially dismantled, earthen fill was removed and replaced with lightweight flowable fill, and the masonry was reconstructed in accordance with PennDOT historic bridge management plans and manuals.

Other major structural improvements included concrete deck and sidewalk replacements, bridge joint replacements, backfilling of void spaces with lightweight flowable fill and lightweight foamed glass aggregate, concrete retaining wall repairs, and repair to the East River Wall structure supporting the Schuylkill River Trail. The roadway improvements involved pavement reconstruction on Chestnut Street and installation of a parking-protected bike lane, as well as the upgrading and replacement of street lighting, navigation lighting and traffic signals. The City's first bicycle signal indication was installed at the intersection of Chestnut Street and Schuylkill Avenue West as a pilot location as part of this project. Built-up sediment in the Schuylkill River was removed from the West River Wall, the bulkhead structure adjacent to I-76, from Market Street to Walnut Street.

The urban setting made coordination with stakeholders a challenge throughout design and construction. The project spanned two major railroad lines, Amtrak's Northeast Corridor Line and CSX's mainline freight route, in addition to the River, a navigable waterway, thus railroad and agency coordination was key to moving the project forward in design and construction. East of the River, private building structures abutting Chestnut Street partially supported the public sidewalk. The design focused on modifying the sidewalk supports to eliminate reliance on the private structures and place the sidewalk support solely on PennDOT-maintained structures in the public right-of-way.

The vertical clearance for the CSX crossing is the lowest along this rail corridor, therefore reduction of more than 1" during construction was not permissible. To meet this stringent requirement, the Benesch team designed a steel arch rib structure with steel towers for support that was installed with an integral work platform on the fascia of the arch. Rail outages during construction had to be minimized, with accelerated bridge construction methods used. The steel arch ribs were designed in sections and lifted in with cranes from Chestnut Street and set into place on steel truss columns during a series of four-hour track outages. The second span of this crossing is located over abandoned railroad right-of-way. In lieu of traditional timber supports, PennDOT elected to use lightweight foamed glass aggregate to fill the Span 2 opening from the original railroad station platform level, formerly the Baltimore & Ohio Railroad's main passenger station, to the arch intrados. The easy transportability of the foamed glass allowed the contractor to deliver it along the CSX haul road and off-load it with a conveyor system into the abandoned span. The fill was retained utilizing the PennDOT-standard GRS wall system matching up with the arch face.

Pedestrian access was maintained during construction to all adjacent properties, with a minimum of one sidewalk maintained on Chestnut Street to either side of the River and on Schuylkill Avenue West. A signed detour one block north on Market Street was established for pedestrians and bicycles. Traffic and transit routes were detoured eastbound via Market Street starting at 33rd Street. A new left-side bike lane with a parking-protected buffer and dedicated bicycle signal at Chestnut Street and Schuylkill Avenue West improved bicycle safety within the corridor.

PennDOT and the design and construction teams worked closely with a conservator to restore the brick masonry arch bridges and salvage sections of the original ornate metal railing. PennDOT District 6-0's historic preservation team also served a lead and vital role in the accurate handling and recreation of elements that were felt to be contributing to the overall historic elements of the bridges.

Contact Us

THE TRANSPORTATION TIMES, the newsletter of the Delaware Valley Section, is published and distributed to our members several times each season to advise and update all on current events and happenings in our Section.

If you have news items for future editions of THE TRANSPORTATION TIMES, please feel free to contact us.

Isaac Kessler

Section President Remington & Vernick **Engineers** Lower Makefield Corporate Center North 1010 Stony Hill Road Suite 175 Yardley, PA 19067 610-451-1650 isaac.kessler@rve.com

Bob Wright

Editor/Section Executive McMahon, a Bowman Company 1515 Market Street Suite 1360 Philadelphia, PA 19102 215-433-1660 x5056 rwright@bowman.com

REMINDER

Deadline for copy/ information for the next edition of THE TRANSPORTATION TIMES

October 20

VISIT OUR WEBSITE!

Please visit delvalley.ashe.pro for all the Section's current information you'll need to keep up-to-date on things.

Annual Golf Outing (XXVII) - Success!

Our Golf Committee was able to pull off our 27th Annual Section Outing on a somewhat overcast but pleasant June 12 (the promised rain storms held off until almost the finish), with 106 "golfers" coming out to Bella Vista Golf Course in Gilbertsville to smack a few balls around as well as to network with colleagues, peers and friends. Play followed a scramble format, with the proceeds (just over \$10,000) to benefit our Donna Prentice Memorial Section Scholarship Fund. We especially appreciate the generosity of our sponsoring firms (listed below).

The winning team had to be decided with a tie-breaker, with two squads reporting in with scores of 54 (12 under par...!). Based on the tie-breaker rules, the winners were as follows:

First place, TRC Group

Second place, CDR Maguire Group

Individual prizes were also cited and awarded as follows:

Closest to pin, hole 14 Christine Frey, 13' 11" Dan McGeever, 5'1"

Long drive, hole 9 Megan Dennis Scott Christie

Thanks to the Golf Outing Committee and Chair Don Gusic, as well as the volunteers on hand, for another successful event. We look forward to our 28th Annual Outing next year.

And, of course, thanks to all who sponsored and participated to make the Outing a success once again!





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Provide a forum for members and partners of the highway industry to promote a safe, efficient and sustainable transportation system through education, innovation and fellowship