

# DIAMOND AWARDS

For Engineering  
Excellence

ACEC/PA

AMERICAN COUNCIL OF ENGINEERING COMPANIES  
*of Pennsylvania*

2025  
CALL FOR  
ENTRIES



2024 Grand Conceptor Winner

Alfred Benesch & Company  
I-95 Bridge Collapse Emergency Repairs



The American Council of Engineering Companies of Pennsylvania's (ACEC/PA's) Annual Diamond Awards for Engineering Excellence recognizes engineering firms for projects that demonstrate a high degree of achievement, value and innovation. The program is open to consulting engineering firms practicing in Pennsylvania. Dues must be paid in full prior to September 30, 2024, to participate. Non-ACEC/PA members must call the ACEC/PA office at (800) 651-1946 ext. 111 for more details.

### Diamond Awards for Engineering Excellence entries are accepted in one of 14 project categories:

- ◆ Studies, research and consulting engineering services
- ◆ Building/technology systems
- ◆ Structural systems
- ◆ Surveying and mapping technology
- ◆ Environmental
- ◆ Waste and stormwater
- ◆ Water resource
- ◆ Transportation
- ◆ Special projects
- ◆ Small projects
- ◆ Energy
- ◆ Industrial and manufacturing processes and facilities
- ◆ Construction Management/Construction Inspection
- ◆ Medium Projects

The winner of each category is then eligible to participate in the ACEC National competition.

A distinguished panel of judges is convened to critique the projects. These professionals have backgrounds in engineering, architecture, state and federal government, media, academia, and the military.

Projects from across the globe are rated based on uniqueness and originality; future value to the engineering profession and perception by the public; social, economic and sustainable development considerations; complexity; and successful fulfillment of client/owner needs, including schedule and budget.

A special award — **The Best Panel Design Award** for Communication of Engineering Excellence — recognizes the best photographic display panel submitted as an entry in the Diamond Awards for Engineering Excellence competition. The objective of the award is to promote communication of engineering excellence by creating displays that are both visually exciting and stimulating to read, as well as promoting the achievements of the engineering profession.

**\*A company that submits a Pennsylvania-based project will receive five bonus points.**

**NOTE:** ACEC/PA is committed to being a sustainable organization. All award submission materials will be electronic. The only exception is the photographic display panel. Please see Page 8 for more information.





### **HDR Engineering Inc.**

Fern Hollow Bridge Emergency Replacement Project



### **GPD Group**

2020 Large Diameter Sewer Rehabilitation



### **McCormick Taylor, Inc.**

Pollinator Habitat Pilot Project

## **ELIGIBILITY**

Any engineering or surveying firm that is a member in good standing with ACEC/PA is eligible to enter the awards program. Non-ACEC/PA members may call the ACEC/PA office at [\(800\) 651-1946 ext. 111](tel:8006511946) for more details.

## **General Criteria**

**1**

Research and Studies (Category A) or Surveying and Mapping projects (Category D) must have been publicly disclosed by the client between November 1, 2022 to October 31, 2024. Construction of projects (Categories B through N, except for Category D) must have been substantially completed and ready for use between November 1, 2022 to October 31, 2024.

**2**

ACEC/PA reserves the right to determine the eligibility and category classification for all entries. A project can only be submitted in one category.

(Please note: All submission materials will be duplicated as-is and used for promotional purposes.)

**3**

Each entry must consist of the following three components:

- Official electronic entry
- Photographic display panel
- Entry fee payment

(See "Preparing Your Entry for the 2025 Diamond Awards for Engineering Excellence" on [Page 6](#).)

Please read the requirements thoroughly. Noncompliance with the rules will disqualify an entry.

**4**

ACEC/PA will not be responsible for any damage or loss to an entrant's photographic display panel.

# JUDGING

Entries will be judged based on:

- ◆ Overall engineering excellence in each of the 14 categories listed on Page 7.
- ◆ The work performed by the entering firm only.
- ◆ The rating guidelines listed below.

Winners will be notified shortly after the judging is completed.

# AWARDS

The panel of judges will select 15 awards at its discretion – 14 category winners and one Grand Conceptor. The Grand Conceptor will be announced at the gala as the top winner selected by the judges, whose decisions on all awards are final. Awards will only be presented to the clients/owners and entering firms submitting the winning entries.

# IMPORTANT INFORMATION FOR ENTRANTS

In conjunction with an ACEC goal to promote the essentiality of engineering, we strongly encourage that all project entries, no matter the category, also highlight an emphasis on the project's direct benefits to the public.

Examples include:



## Water Resources

The number of gallons of clean water that will result from the project and the potential impact.



## Resiliency

Efforts to protect X number of people from the impact of rising sea levels and floods.



## Climate Change

Examples of how much the project will reduce tons of carbon into the atmosphere, thus also reducing a project's footprint.



## Transportation

Examples of reduced congestion and improved safety; improve previously restricted community access; and reduced commuting time.

# ACEC/PA

AMERICAN COUNCIL OF ENGINEERING COMPANIES  
*of Pennsylvania*



# RATING GUIDELINES FOR JUDGING

1. Uniqueness and/or innovative applications of new or existing techniques . . . . .	20%
2. Future value to the engineering profession and perception by the public . . . . .	20%
3. Social, economic and sustainable development considerations . . . . .	20%
4. Complexity . . . . .	20%
5. Successful fulfillment of client/owner needs . . . . .	20%
<b>Total. . . . .</b>	<b>100%</b>

\*A company that submits a Pennsylvania-based project will receive five bonus points.

## RATING GUIDELINE DEFINITIONS

### **1 Uniqueness and/or Innovative Applications of New or Existing Techniques:**

- ◆ Does the entry demonstrate the use of a new science or a breakthrough in the general knowledge of engineering?
- ◆ Does the entry represent a unique application of new or existing technology, techniques, materials or equipment?

### **4 Complexity:**

- ◆ Did the entry successfully address complex criteria or unique problems?
- ◆ Were extraordinary problems of site, location, hazardous conditions, project requirements or similar elements present?
- ◆ Did the entry require the use of out-of-the-ordinary technology or ingenuity for achievement of the project's goals?

### **2 Future Value to the Engineering Profession and Enhanced Public Awareness/Enthusiasm of the Role of Engineering:**

- ◆ Will the entry redefine current engineering thinking?
- ◆ Does the entrant's project increase the public awareness/enthusiasm about the role of engineering in their everyday lives?

### **5 Successful Fulfillment of Client/Owner Needs:**

- ◆ Did the engineer or entrant successfully engage the client/owner in the overall project development process?
- ◆ Was it an economical and cost-effective solution?
- ◆ How did the final cost relate to the original budget estimate?
- ◆ How closely does the entrant's solution meet the total goals of the client/owner?
- ◆ Did the entrant meet the client's time schedule?

### **3 Social, Economic and Sustainable Development Considerations:**

- ◆ Do the solutions identified produce secondary benefits of value to the community/environment?
- ◆ Does the entrant's approach provide society with social, economic or sustainable development benefits?
- ◆ Does the entrant's contribution to the project improve the health, safety, or welfare of the public or affected environment?

# PREPARING YOUR ENTRY

This section describes all required submission materials for entering the 2025 ACEC/PA Diamond Awards competition. All materials must be submitted exactly as designated below. Digital files must be PC compatible and appropriate to the information being submitted (i.e., Microsoft Word for text, JPEGs for photos or other images, Adobe PDFs, etc.).

**If the submission does not meet the requirements listed, it will be disqualified.**

If any part of an entry does not meet the requirements listed, that portion of the entry may not be presented for judging.

**Extraneous materials will be discarded prior to the judging. Please follow the guidelines; no extra pictures and no extra materials are permitted. No reference to other awards is permitted in your submitted materials.**

## DATES TO REMEMBER

**October 11, 2024  
by noon**

Completed submission materials **MUST BE RECEIVED** by ACEC/PA. Any materials received after this date will NOT be accepted. All materials submitted for judging in the competition become the property of ACEC/PA and may be used in ACEC/PA publications. Panels may be used for displays or other promotional or educational purposes. Electronically submitted materials will NOT be returned.

**October 14, 2024**

ACEC/PA will begin accepting nominations for Client of Distinction, Award of Merit, Most Valuable Subcontractor, and Diversity, Equity, Inclusion & Belonging Award.

**November 15, 2024**

Deadline to submit a nomination for Client of Distinction, Award of Merit, Most Valuable Subcontractor, and Diversity, Equity, Inclusion & Belonging Award.

**January 23, 2025**

Diamond Awards for Engineering Excellence gala held in Lancaster, Pennsylvania.

## SUBMISSION REQUIREMENTS

The following components must be submitted for each 2025 ACEC/PA Diamond Awards for Engineering Excellence competition entry:

1. Member in good standing with ACEC/PA
2. Official electronic entry
3. Photographic display panel
4. Entry fee payment

**NOTE:** No QR Codes or embedded links are permitted in any portion of an award submission.



# CALL FOR ENTRIES - CATEGORIES

## **CATEGORY A:** **Studies, Research and Consulting**

Nondesign services, projects not involving the preparation of construction documents consisting of but not limited to the following types of projects:

- ◆ New products, materials and technologies
- ◆ New products, materials and technologies
- ◆ Expert testimony
- ◆ Basic research and studies
- ◆ Computer/software technology
- ◆ Technical papers
- ◆ Public outreach/involvement
- ◆ Water conservation
- ◆ Security plans
- ◆ Project feasibility studies/economic/risk
- ◆ Value engineering

## **CATEGORY B:** **Building/ Technology Systems**

- ◆ Mechanical/electrical/ plumbing
- ◆ Computer/technology
- ◆ Communications
- ◆ Acoustics
- ◆ Software systems
- ◆ Sustainability or carbon neutrality
- ◆ Efficiency certification standards, e.g., LEED
- ◆ Energy efficiency– new and retrofit
- ◆ Secure facilities (military, research, correctional)

## **CATEGORY C:** **Structural Systems**

- ◆ Foundations
- ◆ Tunnels
- ◆ Buildings
- ◆ Seismic design
- ◆ Towers
- ◆ Bridges
- ◆ Stadiums

## **CATEGORY D:** **Surveying and Mapping Technology**

- ◆ Geometrics, ALTA, land title and rights surveys
- ◆ Control, GPS, monitoring or construction surveying
- ◆ Survey mapping, GIS/LIS photogrammetry

## **CATEGORY E:** **Environmental**

- ◆ Hazardous waste
- ◆ Solid waste
- ◆ Restoration/reclamation/ remediation
- ◆ Air quality
- ◆ Noise
- ◆ Recycling
- ◆ Waste pond management
- ◆ Carbon sequestration and trading
- ◆ Mitigation

## **CATEGORY F:** **Waste and Stormwater**

- ◆ Wastewater collection/ treatment and disposal
- ◆ Residuals management and reuse
- ◆ Graywater systems
- ◆ CSOs
- ◆ Mine tailings
- ◆ Agricultural
- ◆ Stormwater management
- ◆ Erosion control

## **CATEGORY G:** **Water Resources**

- ◆ Hydraulics, hydrology
- ◆ Surface and groundwater supply development
- ◆ Treatment
- ◆ Transmission, distribution and storage
- ◆ Watershed management
- ◆ Water use reduction
- ◆ Flood risk management
- ◆ Climate adaptation
- ◆ Coastal and ecosystem restoration
- ◆ Locks/dams/water control structures
- ◆ Irrigation

## **CATEGORY H:** **Transportation**

- ◆ Highways
- ◆ Rail
- ◆ Airports
- ◆ Marine/ports
- ◆ Public transit
- ◆ Intermodal facilities

## **CATEGORY I:** **Special Projects**

- ◆ Safety and security
- ◆ Corrosion protection/cathodic protection
- ◆ Program management

## **CATEGORY I:** **Special Projects** (continued)

- ◆ Land development
- ◆ Trenchless technologies/ directional boring
- ◆ Recreational facilities
- ◆ Subsurface engineering

## **CATEGORY J:** **Small Projects**

- ◆ Total project construction budget does not exceed \$2.5 million (At the entrant's discretion, except for entries in Category A, projects under \$2.5 million are not limited to this category.)

## **CATEGORY K:** **Energy**

- ◆ Transmission and distribution
- ◆ Power generation
- ◆ Renewable energy
- ◆ Cogeneration
- ◆ Energy storage technologies
- ◆ Energy usage reduction programs
- ◆ Demand-side management

## **CATEGORY L:** **Industrial and Manufacturing Processes and Facilities**

- ◆ Petrochemical
- ◆ Biotech
- ◆ Manufacturing
- ◆ Heavy industry
- ◆ Industrial waste
- ◆ Materials handling
- ◆ Mining, metallurgy, mineralogy

## **CATEGORY M:** **Construction Management/ Construction Inspection\***

- ◆ Non-design category
- ◆ All markets qualify

## **CATEGORY N:** **Medium Projects\***

- ◆ Total project construction budget is above \$2.5 million but does not exceed \$10 million.

\*Winners of these categories may still submit to the national competition but in one of ACEC's existing categories.

# OFFICIAL ELECTRONIC ENTRY

All project information shall be submitted electronically. Each document must be uploaded separately through ACEC/PA's Awards Submittal Portal. Additional materials may be required for entry in the ACEC National competition if selected to enter. The electronic entry must contain the following items:

## 1. ELECTRONIC PROJECT SUBMISSION FORM

Located on the ACEC National website — <https://eea.acec.org/pennsylvania>. Information provided must be accurate and complete. Project owner and submitting firm's client may be different. Name your project exactly as you would like it to appear on the projection screen, in the program book, and etched on the award, but limit it to 45 characters. Ensure everything is correctly spelled and each entity is accurately represented as they are to appear in formal print. Specifications: PDF format.

The original completed entry form must be signed by both the entrant and the client/owner (senior executives/officials), stating that the submitted project was substantially completed and ready for use between November 1, 2022 and October 31, 2024. Electronic signatures are accepted.

The following project information must be uploaded individually and included with your submittal.

## 2. CLIENT/OWNER LETTER (one page max.)

This is an endorsement and/or release letter addressed to ACEC/PA with the signature of the client on client and/or owner letterhead. Specifications: PDF format.

## 3. EXECUTIVE SUMMARY (250 words max.)

Overview of project. Describe the problem and solution in layman's terms. Project title and entry category must appear at the top of the page.

**Specifications: 8.5" x 11"; 1" side margins; single-spaced text; 12 pt. minimum size font; PDF format.**

## 4. PROJECT DESCRIPTION (three pages max.)

Tell the story of the project. Address items a, b, c, and d as listed below. Project title, entry category and page number must appear at the top of each page. Entrants may use text, photos, graphics or charts as needed. Do not reference other awards the project has won.

**Specifications: 8.5" x 11"; 1" side margins; single-spaced text; 12 pt. minimum size font; PDF format.**

Text must include all the following information, including budget information and summary:

### a) ROLE OF ENTRANT'S FIRM in the project

### b) ROLE OF OTHER CONSULTANTS participating in the project.

### c) ENTRANT'S CONTRIBUTION TO THE PROJECT:

A brief description of the entrant's contribution addressing each of the following Rating Guidelines (refer to "Rating Guideline Definitions" on Page 5 for detailed rating and judging information):

- ◆ Uniqueness and/or innovative application of new or existing techniques.
- ◆ Future value to the engineering profession and enhanced public awareness/ enthusiasm of the role of engineering.
- ◆ Social, economic and sustainable development considerations.
- ◆ Complexity.
- ◆ Successful fulfillment of client/owner needs.

Include total project construction budget cost, total project construction actual cost, entrant's portion of the total project construction budget cost, entrant's portion of the total project construction actual cost, and project scheduled and actual dates of completion (as indicated on the electronic project submission form).

Reminder: These costs are not Engineering Fees.

### d) SCRIPT/PROGRAM SUMMARY (150 words max):

This summary will provide the basis for all ACEC/PA publicity of the project, will be used verbatim in the program book and will be used to create spoken scripts for winning projects. Please be as clear and simple as possible, as the intended audience is the general public. No abbreviations can be used without clarification of the abbreviation first.





**Jacobs Engineering**  
The Wetlands at Long's Park



**McCormick Taylor, Inc.**  
Pymatuning Spillway Trail/  
Messerall Truss Project



**WSP USA Inc.**  
Broad Street Bridge  
Reconstruction

**NOTE:** If key participants or additional firms are listed within any part of the submission, the submission must list the legal company name, which can be found on the [ACEC/PA website](#). This is for ACEC/PA members only.

## 5. KEY PARTICIPANTS

List the key participants on the project including firm name, address, phone number, website and e-mail address of each participant. Include other engineers, architects and designers significantly involved in the project.

**Specifications: 8.5" x 11"; Excel file.**

## 6. PHOTOS OR GRAPHICS

Six (6) different photos or graphics (one per page) with captions describing the subject matter (refer to "Image Guidelines" below). Captions shall begin with: Photo 1, Photo 2, etc.

Specifications: JPEG file; RGB format; High Resolution (300 dpi).

Photo Captions: Once photos are uploaded, type in the captions in the small box under each photo on the online submittal site. No text is permitted on the photos other than the cover slide.

### IMAGE GUIDELINES:

Because the images could be projected on a large screen during the gala, it is very important to submit sharp, high-quality, high-resolution images. Three of the photographs must show the completed project and provide the highest level of visual impact for publicity. Three of the photographs must display the planning, startup and/or construction phases of the project.

## 7. PHOTOGRAPHIC DISPLAY PANEL

Small-size copy of the photographic display panel.

**Specifications: JPEG file; RGB format; High Resolution (300 dpi).**

## 8. SUPPLEMENTARY REPORT

(Category A submissions only) Include a supplementary report containing the findings portrayed with text, graphs or photos, as needed.

**NOTE:** ACEC/PA member dues must be paid in full by September 30, 2024. Entry fee of \$300 and photographic display panel must be in possession of ACEC/PA by noon on October 11, 2024.



## Greenman-Pedersen, Inc.

Rehabilitation of  
SR 92 Section 750



## Johnson, Mirmiran & Thompson, Inc.

Monongahela Subaqueous Interceptor  
CIPP Rehabilitation

## HOW YOUR FIRM CAN BENEFIT

Firms of all sizes and disciplines have recognized the public relations and marketing value of participation in the ACEC/PA Diamond Awards for Engineering Excellence program. The activities of these firms have underscored the direct business promotion that firms have achieved and can be enhanced through feature stories, brochures and firm newsletters.

The program includes projects that provide a benefit by the solutions you have created. Past participants have reported the recognition received contributed directly to obtaining new project assignments — a win/win prospect for every entry.

## PHOTOGRAPHIC DISPLAY PANEL

Display Panel is a key part of the project submittal and the text and photos should demonstrate the challenges, solutions, innovation, complexity and unique aspects of key project elements. The panel should be prepared with high-quality photos and graphics and with text as described below.

Photographic panel requirements:

### 1. PANEL SIZE:

30" x 30" square, with a matte finish, laminated front and back as follows:

- Front lamination thickness: 5 mil
- Back lamination thickness: 5 mil
- Panel stock thickness before lamination: no more than 5-6 mil
- Total panel (with lamination) thickness: 15-16 mil

**NOTE:** Framed or mounted panels will NOT be accepted. Do NOT mount panel on foam-core board or any other solid surface.

**NOTE:** If you need help finding a printer who can follow these specifications, contact Carrie Doyle at Keystone Displays: 717-612-0340 or [carrie@keystonedisplays.com](mailto:carrie@keystonedisplays.com). They are the company ACEC national uses as well and they are located in Central Pennsylvania.





## 2. PHOTOS/GRAPHICS:

Maximum of six (6) photos and/ or graphics shall be used on the panel. Each image shall be a minimum of 7" x 5" or 35 square inches in area. A background photo is not considered a photograph.

## 3. TEXT/FONTS:

Panel text may not exceed 250 words total, not including captions. Font sizes: 32 pt. minimum font for text or descriptions; 28 pt. minimum font for captions and graphics.

## 4. REQUIRED ELEMENTS:

The front of the panel shall also include the ACEC/PA logo, title and location of the project or study, client/owner's name and location, and entering firm's name and location (minimum 32 pt. font size).

## 5. BACK OF PANEL LABEL:

Add a label to the back of the panel on the lower right hand side with the name of the entrant's firm, the firm address, the project name and the entry category.

## SHIPPING INFORMATION

Please email Sarah Babski at [sbabski@acecpa.org](mailto:sbabski@acecpa.org) when you are ready to ship the panel to provide approximate date of arrival and/or tracking information. Panels being dropped off at the ACEC/PA office in person should be prearranged.

**Ship photographic display panel to:** **ACEC/PA**  
**Attn: Sarah Babski**  
**800 N. Third St., Suite 301**  
**Harrisburg, PA 17102**

**NOTE:** All photographic display panels must be collected immediately following the gala. If a member of your firm does not attend the gala, ACEC/PA will store your panel in its office until February 21, 2025.

**ACEC/PA will have a special award for the Best Panel. This special award recognizes the best photographic display panel submitted as an entry in the Diamond Awards for Engineering Excellence.**

## • THE BEST PANEL AWARD •

### **I-95 Bridge Collapse Emergency Repairs**

*Philadelphia, PA*

On June 11, 2023, a critical East Coast transportation link, I-95, partially collapsed. A tanker truck carrying gasoline lost control on the Cottman Avenue off-ramp in Philadelphia leading to a devastating fire that engulfed the northbound mainline bridge of I-95. The steel superstructure of the I-95 northbound bridge yielded and collapsed within minutes and the southbound bridge was compromised, leaving the bustling corridor severed.

As the prime consultant on the contract that included the original bridge design approximately 10 years ago, Benesch worked alongside PennDOT and Buckley, the contractor, to develop a plan to quickly restore traffic along this corridor that accommodates 160,000 vehicles daily. The team implemented a temporary roadway plan utilizing ultra-lightweight foamed glass aggregate fill, precast barriers, and a temporary geogrid wire wall retaining system to support the temporary roadway. In just 12 days, three lanes of traffic in each direction were restored. The I-95 solution was a true testament to collaboration, expertise, and resilience.



Ultra-lightweight fill

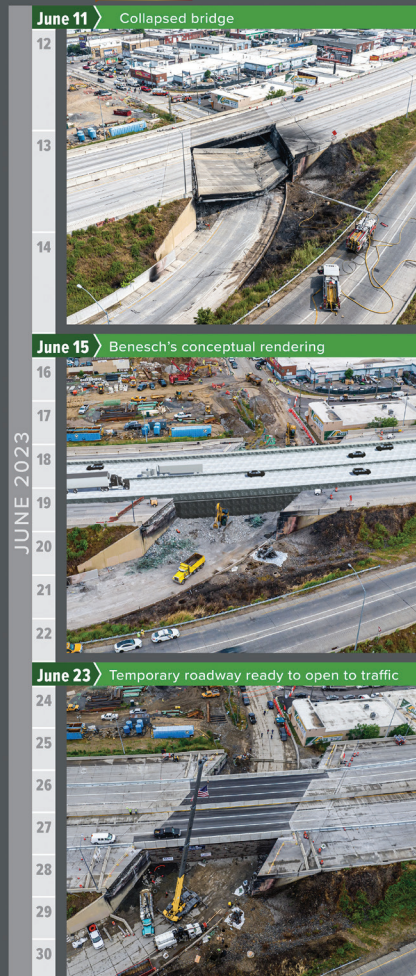


Geogrid retaining wall

 **pennsylvania**  
DEPARTMENT OF TRANSPORTATION  
District 6-0 // King of Prussia, PA



**ACEC/PA**  
AMERICAN COUNCIL OF ENGINEERING COMPANIES  
of Pennsylvania



Alfred Benesch & Company  
Allentown & Pottsville, PA

 **benesch**

**The annual Diamond Awards for Engineering Excellence celebrates, with pride and elegance, the outstanding achievements of the engineering profession.**

The Best Panel Award is given to the firm that creates the best display panel. The objective of the award is to promote the communication of engineering excellence by creating displays that are both visually exciting and stimulating to read, as well as promoting the achievements of the engineering profession.

A panel of communication professionals will determine the winner of the award.

All panels will be eligible. Non-ACEC/PA members must call the ACEC/PA office for further details.

Remember, the deadline to enter the 2025 competition is just around the corner.

All entries must be received in the ACEC/PA office by **noon on October 11, 2024.**



# SUBMISSION CHECKLIST

## ☐ **OFFICIAL PROJECT SUBMISSION ENTRY FORM**

- ☒ Have ACEC/PA membership dues been paid in full?
- ☒ Does the project completion or disclosure date fall within the range of November 1, 2022 to October 31, 2024?

## ☐ **DO I HAVE ENTRY FEE PAYMENT OF \$300?**

- ☒ Please mail a check to the ACEC/PA office or to pay with a credit card, contact Sarah Babski at sbabski@acecpa.com.

## ☐ **CLIENT/OWNER LETTER** endorsement/release letter with signature of the client/owner on organization letterhead must contain all the elements from the template?

## ☐ **EXECUTIVE SUMMARY** limited to 250 words?

## ☐ **PROJECT DESCRIPTION** limited to three pages? Specifications: PDF; 8.5" x 11"; 1" side margins; single- spaced text; 12 pt. font size? (Please note: All submission materials will be duplicated as-is and be used for promotional purposes.)

## ☐ **KEY PARTICIPANTS** on the project?

NOTE: If key participant or additional firms are listed within any part of the submission, the submission must list the legal company name, which can be found on the ACEC/PA website. This is for ACEC/ PA members only and found here.

## ☐ **PHOTOGRAPHIC DISPLAY PANEL** was shipped to the ACEC/PA office?

## ☐ **SUPPLEMENTARY REPORT** included if this is a Category A submission?

## ☐ **PHOTOS**

- ☒ Did I include six different color photos or graphics? Do they have captions that are not embedded?
- ☒ Did I include three photographs of the planning, startup and/or construction phase of the project?
- ☒ Did I include three photographs of the completed project?

For questions, please contact Sarah Babski at ACEC/PA at  
**(800) 651-1946 ext. 111 or sbabski@acecpa.org.**