ENTRY FORM

DVASE
2021 Excellence in Structural Engineering Awards Program

PROJECT CATEGORY (check one):

Buildings under $5M		Buildings Over $100M	
Buildings $5M - $15M	X	Other Structures Under $1M	
Buildings $15M - $40M		Other Structures Over $1M	
Buildings $40M - $100M		Single Family Home	

Approximate construction cost of facility submitted:	$6.66 million
Name of Project:	Hickory Run State Park Visitor Center
Location of Project:	White Haven, PA
Date construction was completed (M/Y):	09/2020
Structural Design Firm:	Hunt Engineering Company
Affiliation:	**All entries must be submitted by DVASE member firms or members.**
Architect:	Converse Winkler Architecture LLC
General Contractor:	Lobar Inc.

Company Logo (insert .jpg in box below)

HUNT ENGINEERING COMPANY

Important Notes:

- Please .pdf your completed entry form and email to bsagusti@barrhorstman.com.
- Please also email separately 2-3 of the best .jpg images of your project, for the slide presentation at the annual virtual presentation and for the DVASE website. Include a brief (approx. 4 sentences) summary of the project for the DVASE Awards Presentation with this separate email.

- Provide a concise project description in the following box (one page maximum). Include the significant aspects of the project and their relationship to the judging criteria.

The new Hickory Run State Park Visitor Center was a joint effort between the Pennsylvania Department of General Services and the Department of Conservation and Natural Resources to address a need for a more diverse welcome center in the Carbon County state park. With a team led by Converse Winkler Architecture, the design professionals set out to create a visitor center that not only provided administrative spaces in one wing but also incorporated exhibition spaces and public use space in the "public" wing that melded structure and necessity with the serene settings of the park. As part of Governor Wolf's sustainability initiatives, the project was designed incorporating LEED criteria and was recently certified LEED Silver.

The single story 13,000 square foot lodge style structure featured numerous structural challenges in order to accommodate architectural design features and the team's sustainability goals. The structure included a multitude of construction types including reinforced concrete, CMU, structural steel, glulam beams, wood framing, tongue and groove decking, exposed timber trusses, common timber trusses, open web wood trusses and structural insulated panels. The slab on grade was designed with insulated panels to accommodate radiant floor piping. With various construction throughout the building, the lateral system utilized wood shear walls with anchor hold downs.

Despite the building's size, the unique structure featured numerous custom structural design features which required tireless coordination with the design team to ensure budgetary, constructibility and sustainability constraints could be met. Hunt Engineering Company's structural engineers utilized numerous modeling techniques to tackle these challenging features which included:

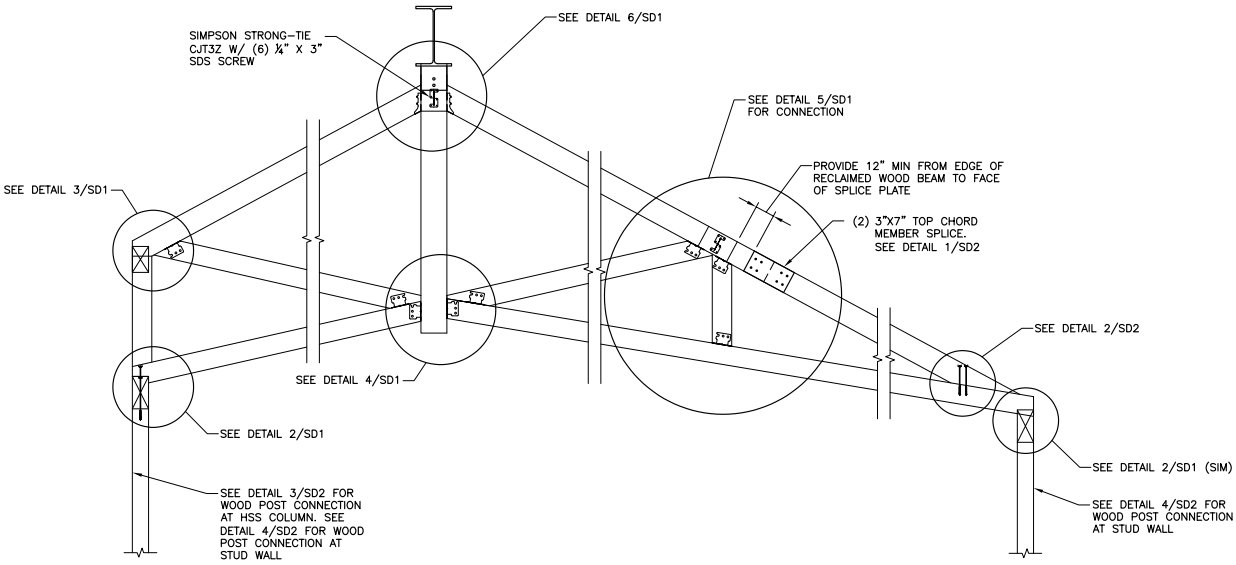
•An exterior pavilion that, while adjacent to the main building, was designed as an independent structure requiring custom steel moment resisting column base shoes.
•Custom connections for the exterior porch timber trusses and columns.
•Custom glulam beam and post connections to accommodate concealed electrical wiring.
•Custom designed roof rafters for the front entry to accommodate gutter cut outs in the structure's cantilevered ends.

With sustainability as a leading goal of the project, one of the most exciting but structurally challenging aspects of the building's design for Hunt Engineering Company's team were the wood trusses in the center's lobby. The trusses utilized reclaimed wood from an existing carpenter shed on a nearby site. The wood was modified and assembled by a local Amish carpenter which necessitated custom truss and connection design supported from a structural steel ridge beam and adjacent wood framing. During both the design and construction phases the incorporation of the reclaimed wood elements with the structure constructed by the general contractor required extensive design iterations due to structural limitations of the wood and constructibility concerns.

The visitor center celebrated its grand opening in the fall of 2020 and the public portion of the building is now providing round the clock accommodations for park visitors. Public exhibits are planned for the building to educate the public about the park's natural and cultural history as well as foster a sustainable future for the park.

- The following 5 pages (maximum) can be used to portray your project to the awards committee through photos, renderings, sketches, plans, etc…

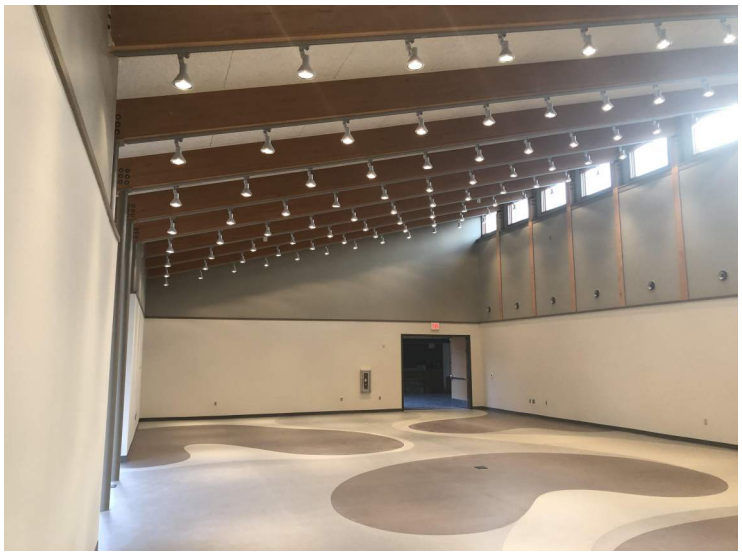
Finished Exterior Views



Reclaimed Wood Trusses

Pavilion with Custom Column Base Shoe Connections

Integration of Various Structural Framing Materials and Systems



Miscellaneous Photos

By signing, signatory agrees to the following and represents that he or she is authorized to sign for the structural design firm of record.

All entries become the property of DVASE and will not be returned. By entering, the entrant grants a royalty-free license to DVASE to use any copyrighted material submitted.

If selected as an award winner, you may be offered the opportunity to present your project at a DVASE breakfast seminar. Would you be willing to present to your colleagues? ☒ ***YES*** ☐ ***NO***

Submitted by:

Print name:	**Signature:**	**Date:**
Lori Piscopo. PE	Lori E. Piscopo	4/1/21

Submitting Firm:	Hunt Engineering Company	
Mailing address:	22 E. King St, PO Box 537 Malvern, PA 19355	
Telephone:	**Fax:**	**Email:**
610-644-4600	610-644-2466	lpiscopo@huntengineering.com