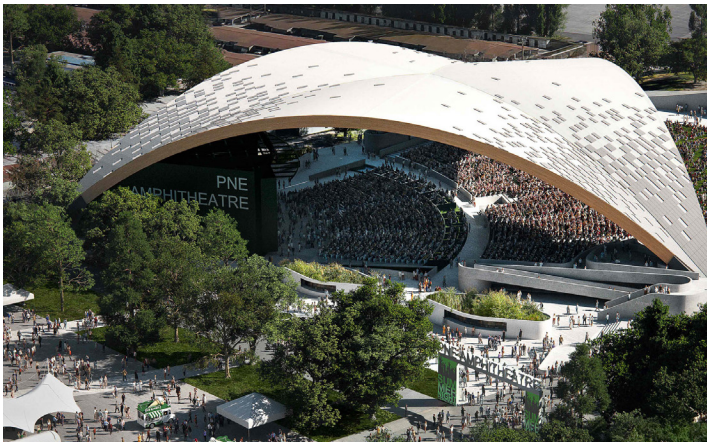
PNE AMPHITHEATRE

Vancouver, BC | Design Phase

Role of the firm: Structural Engineer of Record
Area: 110,500 sq. ft (10,265 sq. m)
Budget: C$65 Million
Architect: Revery Architecture
Client: City of Vancouver



The Pacific National Exhibition (PNE), which provides over 3 million annual visitors with cultural, sporting and family entertainment events, is now revamping its beloved outdoor amphitheater space to provide a world-class experience for performers and guests. The new amphitheater will have state-of-the-art infrastructure, a permanent stage, and improved seating and amenities. It will also feature a spectacular mass timber roof that connects the audience to the landscape of the north shore mountain ranges.

When tasked with designing the roof structure, our team worked alongside Revery Architecture to come up with a solution that would not only offer attendees protection from the elements in a column-free space, but an optimal acoustic experience as well. The result is a unique starburst arch structure that covers the amphitheater by landing on only three points. The form is comprised of six-barrel vaulted segments intersecting at diagonal planes, creating a clear span of 105m (345') from buttress tip to buttress tip. This will be one of the longest timber arch roofs in the world, covering approximately 7,200 sq meters of area and cementing the PNE as a destination site for locals and visitors alike. It is slightly longer than the Richmond Oval completed in 2008.

One of the key features of the new amphitheater is its scalability, which means it can function efficiently as a venue for up to 10,000 guests or as intimate as 500. Construction is scheduled to begin in 2024 and be completed by early 2026. When finished, the renewed amphitheater will be a vibrant multi-functional hub for events and social connectivity in an unparalleled setting at historic Hastings Park.