

Strawbery Banke to raise the c. 1750 Penhallow House for a new foundation to preserve house from impacts of groundwater

Portsmouth, NH (October 9, 2023) - Strawbery Banke Museum recently announced plans to lift the c. 1750 Penhallow House to build a wet-proof basement to protect the home from increasing impacts of groundwater intrusion. On October 10th and 11th, the house will be carefully lifted approximately 10 feet into the air by Preservation Timber Framing, using hydraulics, structural steel and cribbing. The lift and preservation work on Penhallow House can be viewed via livestream webcam via StrawberyBanke.org/livestream-webcams.

"After much consideration and consultation with experts including preservationists, engineers, and architects, Strawbery Banke made the decision to create a new foundation for the Penhallow House," said Linnea Grim, President and CEO, Thomas W. Haas Endowed Chair. "This decision was not one that the Museum took lightly. It is imperative for Strawbery Banke to adopt new preservation strategies to protect and preserve these historic structures and their history for decades against the ever-growing threat of rising sea levels."

Strawbery Banke Museum is composed of 37 historic houses, most of which are on their original sites and foundations. Four of these historic structures – including the Penhallow House — are extremely vulnerable to sea level rise and are experiencing deterioration due to salt water infiltration during storm surge and astronomically high tides.

In September, Preservation Timber Framing, the company to conduct the restoration of the Penhallow House, began the careful work of designing and preparing for the installation of a wet-proof basement with the design and engineering team, which is a major step in the groundwater-intrusion adaptation strategy. After the house is lifted, gravel and filter fabric will be added to the basement to encourage drainage to perimeter drains and the City of Portsmouth's storm water system, and a new foundation will be created.

Funding for the Penhallow House restoration was provided in part by grants from the National Endowment for the Humanities: Democracy demands wisdom (NEH) and the New Hampshire Land and Community Heritage Investment Program (LCHIP). Additionally, funding came through the Cogswell Benevolent Trust, the Samuel P. Hunt Foundation, an anonymous foundation, and the McIninch Foundation, as well as from private donations to the *Building Community: the Campaign for Strawbery Banke*.

"The strategies to combat the damages associated with groundwater and the increasing levels in the Piscataqua River vary for each house," said Rodney Rowland, Director of Facilities and Environmental Sustainability. "In the case of Penhallow, the strategy is to create and install a new foundation that will give a more managed control of the water."

"The wet proof basement and foundation design allows water to enter the basement, eliminating the pressure on the foundation walls," continued Rowland. "Water will exit the foundation walls through gravity and mechanical means. Strawbery Banke will also consult with a mechanical engineer to address potential relative humidity impacts that may occur in this new foundation space. Preservation Timber Framing will also add a moisture barrier to protect the frame of the house from high relative humidity and off gassing that may occur in the basement area."

Preservation Timber Framing is a well-known building preservation company that has worked on dozens of historic structures, including homes, churches, barns, and museums, across Maine and New Hampshire for over 30 years. Their founder, Arron Sturgis, has strong connections to both Maine Preservation and the New Hampshire Preservation Alliance.

Exterior work on Penhallow House is expected to be finished in May of 2024. Once restored, the Museum plans to open the house for the first time to the public and interpret 20th-century Black experience in the Penhallow House.

About Strawbery Banke Museum:

Strawbery Banke Museum, in the heart of downtown Portsmouth, NH, is a 10-acre history museum interpreting well over 300 years of history, from Indigenous beginnings to the present day. The expansive history of this area is represented through historical houses on their original foundations, heirloom gardens, traditional crafts, and costumed roleplayers who share the stories of the families who lived in the authentic waterfront neighborhood of Puddle Dock. The Museum welcomes visitors, members, schoolchildren, and volunteers for daily programs, exhibits, skating, and signature special events throughout the year. Strawbery Banke Museum is funded in part by grants from the New Hampshire Charitable Foundation; the New Hampshire State Council on the Arts & National Endowment for the Arts; the Institute of Museum and Library Services; the National Endowment for the Humanities: Democracy demands wisdom; and the New Hampshire Land and Community Heritage Investment Program. For more information and a complete calendar of events, please visit StrawberyBanke.org.

About Preservation Timber Framing:

Preservation Timber Framing is a traditional timber framing company based out of Berwick, Maine that specializes in the structural repair of historic timber framed buildings. Owned and operated by Arron Sturgis, a historic preservationist with over 30 years of experience, Preservation Timber Framing employs a team of talented craftspeople who are dedicated to the preservation of historic buildings. The company has worked on numerous projects with museums across New Hampshire and New England, including the American Independence Museum, Canterbury Shaker Village, the Museum of Fine Arts, Moffatt-Ladd House, the Sheafe Warehouse, and the Warner House Museum. To learn more, visit PreservationTimberFraming.com.