As The USC Pacific Asia Museum readies to reopen its doors to the public following a year and a half long project renovating the nearly century-old building, preservation experts – including the project’s architect and the museum’s director – are hosting a public discussion tonight to talk about the engineering feat.

The iconic museum at 46 North Los Robles Avenue was the vision of the city’s famed “merchant princess,” Grace Nicholson, who constructed building in 1924 to house exotic art she brought back from foreign travels and be her her home. She lived there until her death two decades later.

Now, nearly one hundred years later, much needed repairs in the form of seismic retrofitting and temperature controlled systems to better preserve the museum’s trove of precious artifacts are among the features that give the aging building new life. “Pasadena is definitely a place where this cultural heritage is really at the core of the city and there’s a big commitment to that. Our museum can be a good case study and we are very eager to welcome our visitors and our guests back,” said USC Pacific Asia Museum Director Christina Yu Yu.

A group of experts that included architects, engineers, and preservation personnel created a master plan for the museum a few years back as a way to determine how to transform the nearly 100-year-old building into an institution that can sustain itself well into the future. “It’s a comprehensive approach to the building and we look at every single floor and every single corner of the building to really have a balance in keeping its historical integrity, but we also want to bring in some 21st-century experiences into the building as well,” said Yu Yu.

The long-awaited project that is just days away from nearing its completion is Phase 1 of the master plan, according to Yu Yu, which focuses on the structural aspects, seismic retrofitting, and upgrading art storage capabilities.

According to Yu Yu, the building did not pass USC’s engineering code of seismic stability. “Right after USC learned about that, they made this big commitment of doing this seismic retrofitting and fully funded it,” said Yu Yu.

Yu Yu did not disclose the price tag for the retrofitting project, but described it as
being “in the millions.”

Phase 1 is expected to be the museum’s only intrusive renovation process which resulted in a year and a half closure to the public.

“We even had to pack our fifteen thousand pieces of art and move it offsite,” explained Yu Yu. “This is the only time we need to move the collection because we do not want to disturb these treasures from hundreds of years ago. In later phases we do not need to move our collection,” said Yu Yu.

In 1924 Grace Nicholson hired the leading Pasadena architectural firm Marston, Van Pelt and Maybury, to design the building which now houses the USC Pacific Asia Museum using illustrations which carefully followed the Imperial Palace Courtyard style.

Grace Nicholson made sure every detail was correct by having the roof tiles, stone and marble carvings, and bronze and copper work imported directly from China, or faithfully executed by Pasadena area craftsmen.

By some accounts, this work could not be duplicated today at any cost.

“When she commissioned the building she was thinking of Asian experience, Asian art, and also a place for her to live in Pasadena right on the premises. That was pretty remarkable and forward-looking for her,” said discussion panelist and Pasadena Heritage Executive Director Sue Mossman.

Born in Philadelphia, Nicholson moved to California with a modest inheritance in 1901 and set up a small curio shop on Raymond Avenue in Pasadena.

Her interest in Southwestern Indian handiwork began with two of her early customers who had been involved in archaeological excavations in Arizona, according to the USC Pacific Asia Museum. Through these customers, Nicholson spent the few hundred dollars she had remaining on Indian basket collections and over time she became increasingly interested in Native American art and culture and would frequently buy directly from the weavers on reservations.

Nicholson would eventually outgrow the modest shop on Raymond Avenue and in 1924 and built the the Chinese-style building on Los Robles Avenue — now the site of the USC Pacific Asia Museum.

According to the project’s architect, Kelly Sutherlin McLeod, protecting the irreplaceable art collection in a stable structure is critical.

Phase 1 also included a new climate control system for the basement art storage.

“It is imperative for the collection to be housed in a climate with strictly controlled temperature and humidity,” said McLeod.

Nabih Yousef Structural Engineering designed the structural strengthening plan to meet USC’s requirements for university-owned buildings, working closely with KSMA to keep the work minimally invasive to the original building design and character features.

“The goal is to not create more change, but rather to fit new systems into the existing fabric. The less change the better is a typical rule of thumb for a preservation project, but sometimes change is critically important because it makes a big difference for the longevity of the building,” explained Mossman.

Preliminary research that went into preserving the building found that only a partial piece of the original blueprint survived throughout the years.

“Some of the things we had to discover while we were in construction,” said Yu Yu.

The building was erected within a span of three years between 1921 and 1924 and was built in two separate parts.

“In the basement, there is a space where you can see that the north part of the foundation and the south part do not match,” explained Yu Yu about the height differences. “I was hoping that during this construction we could bring everything back to one level, but once we started to open up some of the concrete we found out there is a big pipe that is still functioning and we could not remove it,” said Yu Yu.

Prior to the retrofit, a portion of the building was actually sinking into the ground, according to Yu Yu.

“Now we don’t have to worry about that part of the building,” said Yu Yu about the new concrete that now secures the building intact.

“We tried to do everything we could to try to match the new concrete color with the existing one. We did between fifteen and twenty different kinds of color testing,” said Yu Yu.

This type of painstaking patience and trial and error work flow comes with the territory of historical preservation, according to Mossman.

“You’ll probably never even know what was done when the project is finished, but the building will be much better off because of it,” said Mossman.

Today, museum staff offices are spread throughout her former living space, where fireplaces and other architectural elements serve as reminders of the building’s history.

Nicholson gifted the building to City of Pasadena in 1943 for art and cultural purposes anchored with the stipulation that she would live in her private room until she passed away.

The Grace Nicholson Building has been designated a Cultural Heritage Landmark by the cities of Pasadena and Los Angeles. In 1976 the building was placed on the National Register of Historic Places, and in 1989 was declared a Historical Landmark by the State of California.

The public is invited to join the USC Pacific Asia Museum’s event “Preserving a Pasadena Treasure” to learn about the process of preserving and restoring historic buildings and the USC Pacific Asia Museum building in particular.