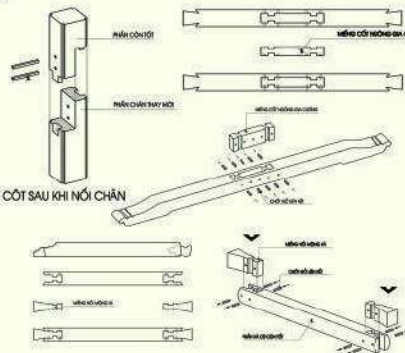




To build the exterior construction cover-up to protect the monument, and create a convenient space for visitors during the construction work.



The complete or partial dismantlement is precisely considered prior to implementation. The dismantled components are carefully measured, drawn, photographed, and preserved during the restoration work.

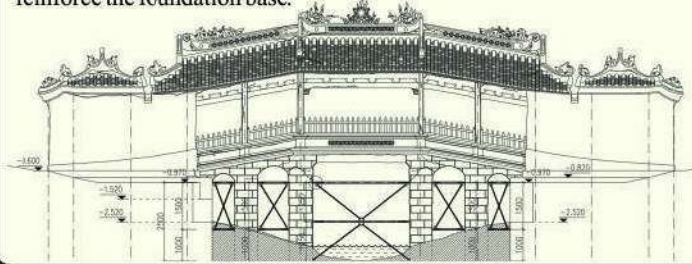


The reinforcement, connection of wooden components, ridge sections, decorative patterns must be elaborately and carefully considered to ensure the sustainability, art and material similarity.

To mark all the corresponding structural members between status quo and drawings prior to dismantling for the purpose of re-positioning after the treatment work.



Support stably the entire construction foundation and footing; apply resin and mortar to the cracks; dredge the river, and add concrete to reinforce the foundation base.



Reinforce to partially dismantle the decorative patterns, and ridge sections; and re-install the structural members in an effort to keep the original components to the maximum.



The roof tiles are dismantled in order, cleaned, classified, preserved and reused to the maximum. The new replaced tiles must be similar in size, shape, and material structure to the old ones in each position.



The partial dismantlement of wooden framework is implemented after a careful consideration of the applied method. The reinforcement and repair work to maintain the original components to the maximum are prioritized. The alternative components must be similar to the old ones, including in paint.

With active and meticulous preparation in all aspects, in the coming time, the project on restoration of the Japanese Covered Bridge is expected to achieve fruitful results. We would like to thank all individuals and organizations domestically and internationally for their great contributions to the preparation and implementation of restoration of this important monument.



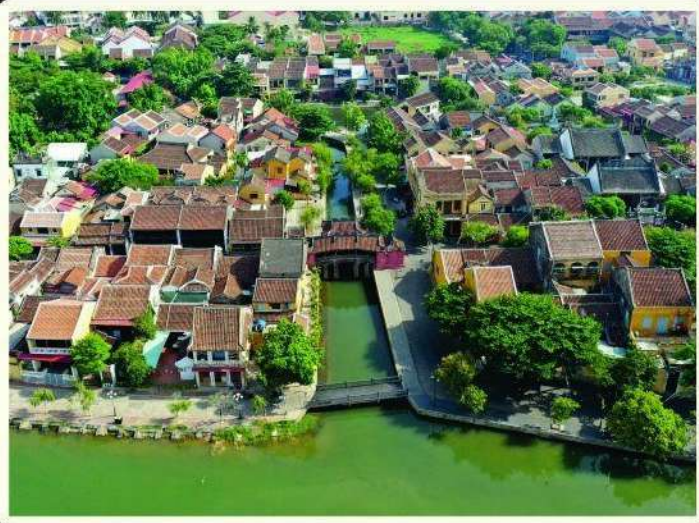
THE PEOPLE'S COMMITTEE OF HOI AN CITY
HOI AN CENTER FOR CULTURAL HERITAGE MANAGEMENT AND PRESERVATION

BASIC PROJECT INFORMATION

THE RESTORATION OF THE JAPANESE COVERED BRIDGE (LAI VIEN KIEU)



- Investor: The People's Committee of Hoi An City
- Construction Design & Consultation Unit: Consulting Center of Monument Conservation - Institute of Monument Conservation
- Estimated project time: October, 2022



The Japanese Covered Bridge, also known as Lai Vien Kieu or Chua Cau, is a unique architectural and artistic monument and has become the symbol of Hoi An town - a World Heritage Site. The monument has been in existence for nearly 400 years and undergone at least seven times of renovations and restorations process. Not commone from the ups and downs of different era, the Japanese Covered Bridge has not escaped the degradation even with the preservation efforts of many generations in Hoi An. So it is very important to preserve the Japanese Covered Bridge in order to maintain its values in a complete and durable manner.

With the special iconic importance, the restoration of the Japanese Covered Bridge is considered as one of the most urgent tasks which needs to be implemented in a meticulous and methodical manner in all stages of preservation work, from researching, through surveying to gathering the content for framework and organizing construction work.



The early 20th century



The mid - 20th century



The 1980s



Now

The Japanese Covered Bridge through the ages

The technical status assessment category is going to be particularly focused and carried out carefully, comprehensively. The work will be done general to specific with visible and invisible components through the combination of traditional experience and modern technologies.



Geological drilling for infrastructure assessment



Measuring the vibration of monument



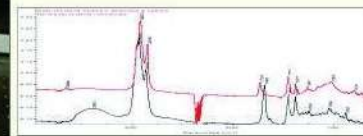
Evaluating timber fittings through practical experiences

A lot of research on the historical, cultural and architectural values and technical status of the Japanese Covered Bridge has been done to ensure the scientific factors, authenticity and principles of preservation in conservation work.

The publication "The Japanese Covered Bridge" with many articles on reporting the research results and providing different perspectives on preservation solutions.



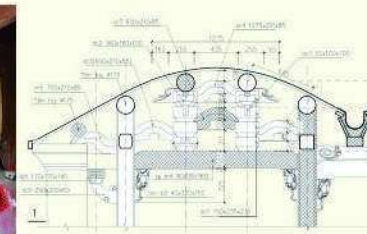
Chemical testing to identify the property of original materials will be carried out at the beginning of construction.



The 3D digitization creates a scientific database in order to support upcoming dismantling and restoration of the Japanese Covered Bridge.

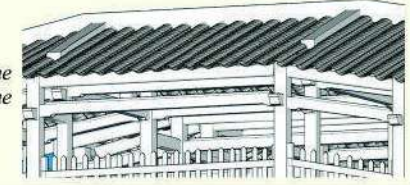


Digitizing by 3D laser scanning technology



Architectural drawing

Creating 3D model of the monument with support of the Japanese side.



Perspectives on preservation solutions has been discussed carefully through various conferences, seminars and community consultation as well.



The signing ceremony of minutes of meeting regarding the support of Japanese experts for restoration project



The international symposium on the Japanese Covered Bridge restoration in 2016

Basic principles of preservation: Retaining the maximum of original fabric; maintaining the value and function of the monument at the same time; every single intervention must be based on science, history in order to ensure the long-term viability of monument; applying the latest science and technologies to preservation work; conducting regular consultations; documenting the work processes; ...