

# REPORT ON THE MISSION to the “Gusuku Sites and Related Properties of the Kingdom of Ryukyu” (Japan)

**From 13 to 14 June 2023**



Model of Shuri-jō Castle and Reserve, strategically located on top of a hill overlooking the surrounding landscape. © C.Forbes 2023

**Joint Reactive Monitoring Mission undertaken by  
World Heritage Centre, ICOMOS and ICCROM**

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## ACKNOWLEDGEMENTS

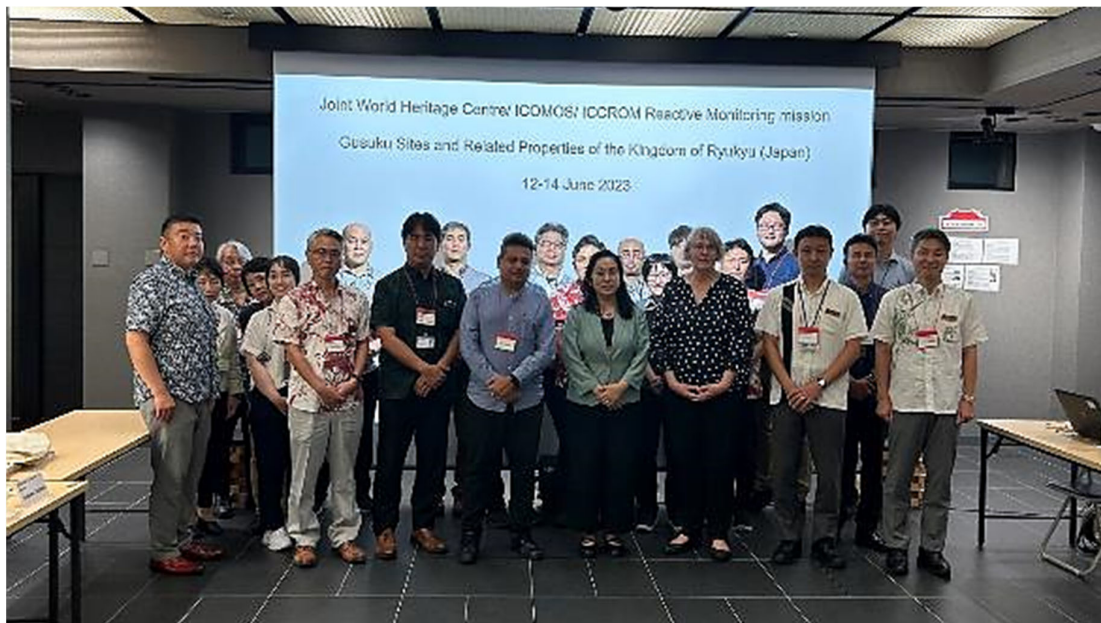
The members of the joint World Heritage Centre /ICOMOS/ ICCROM Reactive Monitoring mission would like to express sincere gratitude to the Japanese authorities of all state levels for their kind facilitation, support, availability and assistance before and throughout the mission.

The mission team was impressed by the excellent organization of the mission and friendly collegial atmosphere among the various partners charged with the protection and management of the World Heritage property.

The mission team would like to thank all those who delivered the presentations and explanations during the mission, helping the members of the mission understand what has been achieved and what is planned for implementing the World Heritage Committee decisions.

Special gratitude goes to Mr. Kohei Okawa, Mr Chihei Suzuki and Mr.Kazuho Nakatani and Ms Asumi Matsushita of Agency for Cultural Affairs, for their great contribution to the mission and the gratitude is also extended to Mr Yuuji Hiratsuka and Mr Tomohiro Ooishi and staffs of Okinawa General Bureau of the Cabinet Office and staffs of Okinawa Prefectural government and Okinawa Churashima Foundation for all the work needed for conducting this mission.

The mission team would also like to convey its gratitude to experts and representatives of local communities who have played a critical role in providing input to the recovery and reconstruction of Shuri-jō, for their contributions and for expressing their views on issues related to the project.



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Joint World Heritage Centre, ICOMOS and ICCROM Reactive Monitoring Mission team meeting with Japan State Party representatives as well as advisors, representatives from local NGOs and community stakeholders.

## EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

The Joint World Heritage Centre/ ICOMOS/ ICCROM Reactive Monitoring mission to Gusuku Sites and Related Properties of the Kingdom of Ryukyu was conducted from 12 to 14 June 2023. The mission was carried out in accordance with Decision 44 COM 7B.29, the World Heritage Committee (Fuzhou/ Online, 2021).

The main purpose of the mission was to assess the damage caused by the fire of 31 October 2019 and the proposed restoration works to be undertaken, as well as to examine other aspects of the state of conservation of the property. During the mission, site visits were carried out and meetings undertaken with relevant national and local authorities and other stakeholders including non-governmental organizations (NGO) and experts.

The mission has found that although the fire destroyed several of Shuri-jō's significant replica buildings, which are used to interpret the site's OUV to visitors, it had minimal impact on the significant attributes of the site (archaeological remains) or the OUV of the World Heritage Property (WHP) as a whole. The archaeological remains suffered minimal damage (0.05%) and these have now been stabilised and protected to prevent further damage during recovery and reconstruction of the site's replica buildings.

### Summary Response to Terms of Reference

The mission team makes the following observations regarding each of the terms of reference for the mission:

#### **Issue 1: First immediate safeguarding measures taken after the fire**

The State Party responded promptly to the fire and undertook all the necessary emergency response measures to protect and salvage the heritage attributes of the site, including those that express OUV. The approach taken to protection, salvage and investigation works has been professional, systematic and thorough.

#### **Issue 2: Disaster prevention, preventive actions taken and coping mechanism at the property following the fire**

Considerable analysis has been undertaken by the State Party to identify the critical points of failure in the fire detection and protection systems that existed on site prior to the fire, and these are being addressed in the recovery and reconstruction work.

Improvements include a coordinated approach to emergency management and emergency response across the two portions of the site (Shuri-jo Castle and the adjoining Castle Reserve), improved access to the site for emergency services, upgrades to security cameras for better night surveillance, introduction of more sophisticated fire detection, alarm, sprinkler and drencher systems, improved electrical installations with circuit breakers and insulation monitoring, introduction of fire separation between buildings, smoke barriers and improved emergency egress provisions, and provision of back up water supply, hydrants and easy to use fire hoses with greater reach in the grounds.

#### **Issue 3: Review the restoration/reconstruction plans and restoration works undertaken so far**

Investigations into the damage to the archaeological remains have been thorough, and the stabilisation of the archaeological remains in keeping with heritage conservation best practice. Protective measures have been implemented for the duration of the site's recovery to ensure that no further damage is incurred. The research underpinning the documentation



for the reconstruction of the replica structures has been thorough. Reconstruction, which is solidly evidence based, appears to be progressing well.

The measures proposed to minimise future risk to the structures and the site are extensive but appear to be focused primarily on fire risk. The fire prevention measures have been designed to minimise heritage impacts on the buildings, archaeology and cultural landscape and on the property's heritage values including OUV. The proposed measures are state-of-the-art and will reduce fire risk to the reconstructed buildings in the future.

Although a disaster risk management plan has been prepared by the State Party for the site, it could not be reviewed by the mission team as it is only available in Japanese. Hazards such as typhoons and long periods of torrential rain were discussed during the mission, but details on how these risks are managed were not provided by the State Party. Nor has information been provided on the management of risks to other attributes of the site, such as the castle walls and ramparts. Although there has been community engagement in the recovery of the site, there does not appear to have been any engagement with the local community in developing disaster risk management strategies for the site.

#### **Issue 4: Impact of fire on Outstanding Universal Value (OUV)**

Although the fire impacted Shuri-jō and the replica buildings that interpret the site's OUV to visitors, it had minimal impact on the significant attributes that express the site's OUV, that is the archaeological remains below the buildings and the castle ramparts.

#### **Issue 5: Reconstruction and General State of Conservation of the Property**

Although nine buildings at the centre of the Shuri-jō site were destroyed, the structures and landscape surrounding them remain intact. The recovery of the Shuri-jō site has been carefully considered in order to maintain the integrity and authenticity of the site. The significant attributes (archaeological remains) have been conserved in situ and the replica buildings are being rebuilt based on the best available evidence, utilising as much of the original fabric as could be salvaged from the fire (including ground materials from foundation stones and tiles) – thus the integrity of the remains and the site is being retained. Traditional skills, materials and methods are being used in the reconstruction of the buildings, particularly detail elements, to ensure authenticity is maintained.

#### **Issue 6: Community and Visitor Engagement**

The inclusion of the community by the State party in recovery of the site is to be commended. The opening of the site to visitors during the recovery is also to be commended as it has provided an educational opportunity for visitors.

### **Recommendations**

The approach taken by the State Party to the salvage and recovery of the fire damaged World Heritage Property has been exemplary and is to be commended. The mission team make the following recommendations to the State Party:

- The recovery of Shuri-jō and its replica buildings should continue as planned and documented.
- The proposed fire protection measures for the replica buildings and the site should be implemented as documented.
- Similar measures should be extended to other buildings on the Shuri-jō site.
- Lessons learned from the fire should be addressed in updates to the disaster risk management plan for Shuri-jō and the other sites comprising the World Heritage property.

- The disaster risk management plan for the property, when it is next updated, should consider and adopt a multi-hazard approach, that addresses both common and high impact hazards such as typhoons, long periods of torrential rain, theft and vandalism, as well as fire and earthquakes. It should consider the effect of multiple hazards occurring simultaneously and cascading disasters where one hazard may trigger another with a multiplicity of consequences.
- Consideration should be given to including the local community in managing risks to the property, including fire risk. Community volunteers should be included in training sessions and traditional social networks utilized for preparedness, response and recovery.
- An overview (Summary Document) of the Disaster Risk Management Plan (DRMP) for Shuri-jô should be made available in English. The DRMP should identify the high impact and common threats/ hazards affecting the site and outline measures to address or mitigate the threats/ hazards, including measures to be put in place/ taken prior to, during and post disaster.
- Further development be undertaken on the identification and description of the attributes of OUV, and the way in which they convey OUV (what are the key sources of information) on the basis of the Statement of OUV for all nine component parts that comprise the WHP.

The mission team commend the State Party on their approach to involving the community in recovery of the site and its welcoming of visitors to the site through the recovery.

## I. THE PROPERTY

The Shuri-jō site is one component of the World Heritage property “The Gusuku Sites and Related Properties of the Kingdom of Ryukyu”, which was inscribed on the World Heritage List in 2000 as a cultural property under criteria (ii), (iii) and (vi). The property is composed of nine sites and the archaeological ruins of two stone monuments, five castles, and two cultural landscapes, which are scattered across Okinawa Island. This group of sites and monuments represent five hundred years of Ryukyuan history (12th-17th century). It covers 54.9 ha with a buffer zone of 559.7 ha.

**Criterion (ii):** For several centuries the Ryukyu islands served as a centre of economic and cultural interchange between south-east Asia, China, Korea, and Japan, and this is vividly demonstrated by the surviving monuments.

**Criterion (iii):** The culture of the Ryukyuan Kingdom evolved and flourished in a special political and economic environment, which gave its culture a unique quality.

**Criterion (vi):** The Ryukyu sacred sites constitute an exceptional example of an indigenous form of nature and ancestor worship that has survived intact into the modern age alongside other established world religions.

In 2014, a Retrospective Statements of Outstanding Universal Value of the property was adopted by the World Heritage Committee. The complete version can be found at: <https://whc.unesco.org/en/list/972/>.

### Integrity

Five Gusuku sites, two related monuments, and two cultural landscapes are included as component parts of the property. Each of the individual component parts of the property is an outstanding representative of the religious beliefs and activities unique to the Ryukyu cultural tradition. Moreover, they are self-contained with their own boundaries and buffer zone.

### Authenticity

The entire region suffered considerable damage during the Second World War and reconstruction work has taken place on many of the component parts. The authenticity of the form/design and materials/substance of each part of the property remains at a very high level, as they have been rehabilitated and restored under strict rules for more than one hundred years. Authenticity of location/setting has been maintained in that none of the component parts of the property has been moved from its original location and traces of buildings discovered through archaeological excavations have been preserved underground. With respect to craftsmen’s skill, a high level and homogeneous authenticity is properly maintained, and their traditional techniques are applied to all projects for restoration, rehabilitation and preservation on an extensive scale.

The full Statement of Outstanding Universal Value (SOUV) is attached as Annex 4.

### Attributes of Shuri-jō that express OUV

The SOUV does not clearly identify the attributes of Shuri-jō that express OUV. As a designated Historic Site under the 1950 Japanese Law for the Protection of Cultural Properties, the key attributes of the Shuri-jō site have been identified as comprising the surviving remains of Shuri-jō Castle – the archaeological remains of the ramparts, fortifications and buildings that stood on the site prior to World War II. The buildings, castle walls and gates were destroyed during World War II and were reconstructed following the return of Okinawa (and the site) to Japan. Although rebuilt during the 1980s and 1990s, the buildings are not identified as significant attributes under Japanese Law.

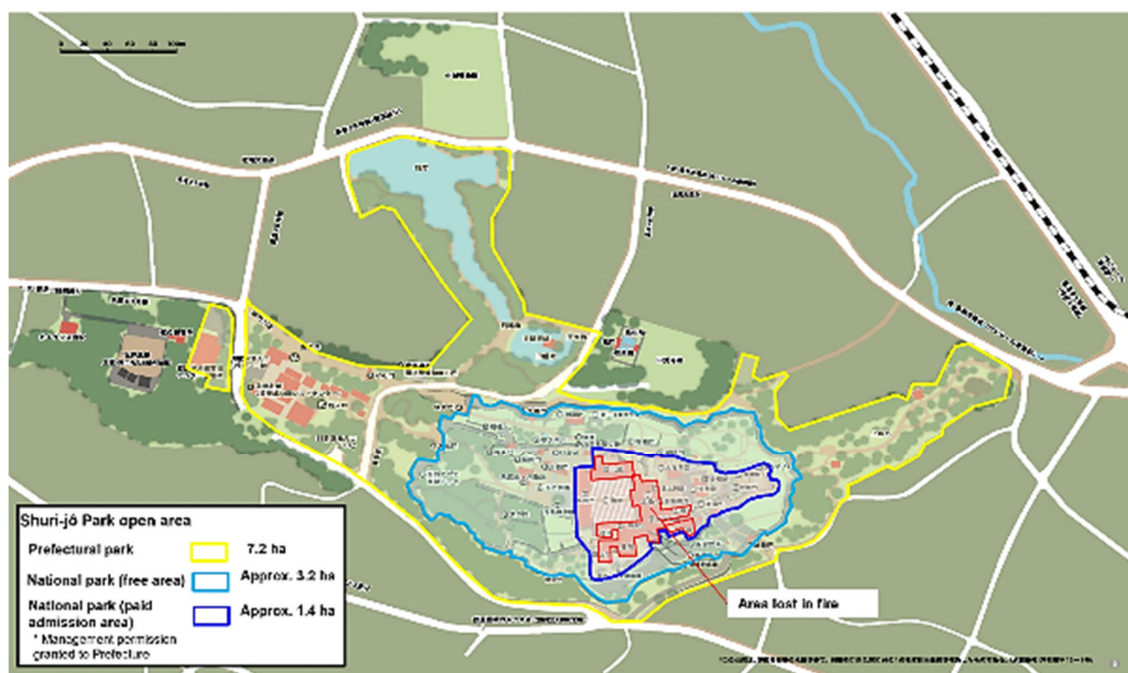
### Decision 44COM 7B.29

On 31 October 2019, a fire occurred at the Shuri-jō site, one of the nine component parts of the property. During its 44th extended session, the World Heritage Committee, in its Decision **44COM 7B.29**, commended the State Party for the efforts to safeguard the property, and requested the State Party to invite a joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to assess the damage caused by the fire and the proposed restoration works to be undertaken, as well as to examine other aspects of the state of conservation of the property. (Committee Decision Annex 5).

## II. SUMMARY OF THE NATIONAL MANAGEMENT SYSTEM FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

The Law for the Protection of Cultural Properties is the principal legislation for the conservation, preservation, and management of cultural property in Japan. Each component part of the property is designated as a National Treasure, a Historic Site or a Special Place of Scenic Beauty under the 1950 Law for the Protection of Cultural Properties and subjected to strict preservation and management.

The component parts of the property are owned either by the Government of Japan as a nation, a wide range of municipalities or, in some cases, particular private persons. Shuri-jō is the joint property of the Government of Japan and Okinawa Prefecture. It is composed of a prefectural park area located outside the castle walls (outer enclosures) and a national government park area inside the castle walls.



Map of Shuri-jō Park showing the boundaries of the areas administered by the National government and the Prefecture.



The Agency for Cultural Affairs is the agency with management authority and responsibilities for preservation, repairs and utilization of the component parts of the park. The Okinawa General Bureau, Cabinet Office is the owner and manager of national government park assets. The Government of Japan and Okinawa Prefecture are authorized to provide necessary financial and technical assistance.

The Comprehensive Management Plan for the World Cultural Heritage, “Gusuku Sites and Related Properties of the Kingdom of Ryukyu” was prepared in 2013 by Okinawa Prefecture in cooperation with the municipal governments concerned in the management of the sites comprising the property, to ensure its long-term conservation and protection. The Plan for Establishment of Shuri-jō Park Management System was formulated in April 2022 and acts as a combined Conservation Management plan and Disaster Risk management plan for Shuri-jō site specifically.

After the fire, the “Ministerial Meeting on the Reconstruction of the Shuri-jō”, composed of relevant national governmental authorities, was established to ensure unified government support in the rebuilding of the Shuri-jō state hall and the other structures, which were destroyed by the fire. It finalized the “Basic Policy for the Reconstruction of the Shuri-jō” and the “Work Schedule for the Rebuilding of the Replica of the State Hall and Other Replica Structures of Shuri-jō site”, which are now being implemented. Based on the “Basic Policy for the Reconstruction of the Shuri-jō”, an advisory panel for technical examination and four working groups on (i) Disaster Prevention, (ii) Lumber and Roof Tiles, (iii) Colouring and Engraving; and (iv) Rebuilding the North Hall and Southern Hall were established and managed by Okinawa General Bureau.

### III. THE MISSION

The Gusuku Sites and Related Properties of the Kingdom of Ryukyu was inscribed on the WH list in 2000. Unfortunately, a large fire broke out on 31 October 2019, which significantly impacted the Shuri-jō site and affected several reconstructed buildings, including the *Seiden* (state hall), an important part of the symbolic reconstruction of the site, as well as some underground remains. The fire ravaged buildings were replica structures, constructed after 1989 based on detailed documentation, that assisted in the visual interpretation of the property’s Outstanding Universal Value (OUV).

Immediately after the fire occurred, Japan expressed its intention to restore the property and devoted a great deal of energy and resources to carrying out emergency works. UNESCO worked closely with the government of Japan to help ensure the appropriate recovery of the property to preserve its OUV.

An on-site UNESCO expert mission scheduled for March-April 2020 was postponed due to the COVID-19 pandemic. On 5 June 2020, the World Heritage Centre organized an online meeting with the Japanese authorities and international heritage experts, and technical advice was provided on questions of restoration and site management, especially relating to additional fire prevention measures, the participation of local communities and the fostering of local and traditional crafts.

At its extended 44th session, the World Heritage Committee requested the State Party of Japan to invite a joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to the World Heritage property ‘Gusuku Sites and Related Properties of the Kingdom of Ryukyu’ (Fuzhou, 2021 - Decision **44 COM 7B.29**) (Annex 5). The main objective of the mission was to assess the damage caused by the fire of 31 October 2019 and the proposed

restoration works to be undertaken, as well as to examine other aspects of the state of conservation of the World Heritage property.

The Terms of Reference (Annex 1) of the mission comprised the following:

- Assess the damage caused by the large fire of 31 October 2019, with particular attention accorded to Shuri-jô site of the property;
- Meet with the relevant Japanese authorities to understand the first immediate safeguarding measures taken after the fire,
- Review the disaster prevention and other preventive actions taken and coping mechanism at the property following the fire;
- Review the restoration/reconstruction plans developed and the restoration works undertaken so far;
- Evaluate the impact of the fire on the Outstanding Universal Value (OUV) of the property;
- Assess and provide advice on the reconstruction and the general state of conservation of the property, and on the authenticity and integrity of the attributes which contribute to its OUV, in line with the Operational Guidelines and other guidance;
- Conduct working sessions with the relevant authorities and experts to review lessons learnt.

The joint Reactive Monitoring mission took place from 13 to 14 June 2023 with the following members:

- Ms Himalchuli Gurung representing the UNESCO World Heritage Centre
- Ms Catherine Forbes, representing ICOMOS
- Mr Rohit Jigyasu, representing ICCROM

The Agency for Cultural Affairs (ACA) was responsible for the overall arrangement of the mission and provided all the necessary support during the mission. Agency for Cultural Affairs facilitated consultation meetings on 13 and 14 June 2023, bringing together representatives of ACA, Okinawa General Bureau of the Cabinet Office, Okinawa Prefectural Government, local communities, non-governmental organizations (NGOs), civil society and scientists and experts (List of participants attached as Annex 3). A field visit to the Shuri-jô site and its surroundings was also organized on 13 June for the mission team and the stakeholders present at the consultation meetings. Relevant documents and reports were provided to the mission team by ACA prior and after the mission (List of documents Annex 6).

## IV. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

The following discussion addresses the six key issues identified in the ToR for the mission. These are:

1. Measures taken immediately after the fire to safeguard the site and protect it from further damage.
2. Actions taken, coping mechanisms employed and disaster prevention measures implemented at the property following the fire.

3. Plans for restoration of fire damaged archaeological remains and reconstruction of fire-damaged replica structures, including fire prevention mechanisms to be implemented.
4. Impact of the fire on the OUV of the property.
5. State of conservation of the property, including the impact of reconstruction on the integrity of attributes and authenticity of the property.
6. Risk preparedness plans and manuals developed for the site in response to lessons learned from the 2019 fire. This issue is discussed under issue 3 and not separately.

A further issue, that of community and visitor engagement in the recovery, is also discussed as this was found to be a very important component of recovery of the site. This issue is identified as issue 6 in the discussion below.

### Issue 1: First immediate safeguarding measures taken after the fire

Immediately after the fire occurred, Japan expressed its intention to restore the property and devoted a great deal of energy and resources to carrying out emergency works. These works included securing the site, protecting the archaeological remains from further damage, stabilizing the two partially damaged structures, and managing the debris and salvaging materials and significant elements from the seven destroyed structures. As the site was cleared, detailed damage assessments of the archaeological remains and fire-damaged buildings were undertaken and exhaustive investigations were carried out into the cause of the fire. A work schedule for rebuilding the state hall was established at the end of March 2020, and its implementation has begun.

The following items were identified in the ToR for specific consideration by the mission team:

- a) Security around the Shuri-jô site, including access and prevention of further damages:

The entire Shuri-jô site was closed to the public immediately after the fire to maintain safety and prevent unauthorised access. This allowed site managers and experts to implement protective measures within the confines of the castle walls. Activities included detailed damage assessments and investigations into the cause of the fire, stabilisation works, sorting of debris and preparation for recovery.

As the site has been cleared, surviving but damaged structures stabilised and provisions made for visitor safety, restrictions have been relaxed. Visitors are now able to visit the site and watch the recovery from elevated walkways and through viewing windows, whilst the work area remains secure.

- b) Debris Management:

Systematic removal of rubble from the replica structures destroyed or partially damaged by the fire commenced in December 2019 and began in earnest in February 2020. This proceeded as the investigations into the cause of the fire progressed.

Scaffolding, temporary walkways, protective ground coverings, and other temporary facilities were installed, including a ramp to facilitate removal of rubble from the site and to provide access for construction vehicles. All works were undertaken with great care so as not to impact the surviving components of the site. Careful consideration was given to protecting and preserving the building foundations and archaeological

remains on the site. These had been and continue to be protected under layers of earth beneath the buildings.

- c) Emergency measures for the safeguarding the remaining elements and collections of the Shuri-jō site, including their inventory, packing, transportation, relocation and storage in a safe place, and initial conservation treatment:

The State Party responded promptly to the fire and undertook all the necessary emergency response measures to protect and salvage the heritage attributes of the site, including those that hold OUV.

Where possible building materials, such as roof tiles, were salvaged and cleaned for reuse. Members of the local community were engaged as volunteers in cleaning undamaged tiles and grinding damaged ones so that the clay could be used in the manufacture of replacement tiles.

Decorative elements, most of which were severely damaged and beyond repair, such as the glazed terracotta dragons from the roof of the Seiden and the carved stone pillars in front of the Seiden, were salvaged for analysis and for use as models for replication and reinstatement on the reconstructed buildings.

Surviving artefacts from the arts and crafts collections held on site at the time of the fire were carefully salvaged, photographed, inventoried, transported and stored off site at a local university and museums, where they will be conserved and restored by experts and students under their supervision. This work is anticipated to take many years.

- d) Documentation of the emergency response process as well as of damaged artefacts:

The emergency response has been well documented. The mission team viewed reports, photographs and videos.

- e) Damage Assessment:

The extent of damage to the archaeological remains below the State Hall was assessed through visual inspections as well as through strength testing of mortar and stone samples. It was found that the remains that had been exposed to the fire had lost up to 50% of their strength. Therefore, to prevent further damage, it was decided to consolidate the materials using resin.

- f) Planning for Recovery:

An advisory panel and four working groups were established to investigate and advise on (i) Disaster Prevention, (ii) Lumber and Roof Tiles, (iii) Colouring and Engraving; and (iv) Rebuilding the North Hall and Southern Hall.

Technical reports included the results of the investigations and recommendations for recovery policies, material procurement processes, principles for restoration and reconstruction and appropriate work methodologies for the recovery and rebuilding of the replica structures including the State Hall (Seiden) and other buildings damaged by the fire. Work schedules for the rebuilding of the State Hall and other structures were also prepared.

## **Mission Team Comments**

The State Party responded promptly to the fire and undertook all the necessary emergency response measures to protect and salvage the heritage attributes of the site, including those that convey OUV. The approach taken to the protection, salvage and investigation works was professional, systematic and thorough. The State Party has also put in place appropriate measures to ensure smooth transition from response to post disaster recovery.

## **Recommendations**

- The post fire recovery continue as proposed.

## **Issue 2: Disaster prevention, preventive actions taken and coping mechanism at the property following the fire**

Following the 2019 Shuri-jô fire, the State Party undertook a review of the fire prevention measures that were in place at the time of the fire. The fire detection, warning systems, and suppression systems were reviewed, alongside the coordination of the emergency response and evacuation measures for visitors and collections. A range of issues were identified which are currently being addressed.

- New “Fire Prevention Measures for the State Hall of Shuri-jô Site” were developed in 2020 to prevent a future recurrence of similar fires. These measures (highlighted in the discussion of Issue 3 below) are to be adopted for the rebuilding of the state hall and other replica structures. They include:
  - New more sophisticated detection and suppression systems.
  - Physical interventions such as the introduction of fire-resistant materials to provide fire separation within and between buildings.
  - The introduction of new fire escape stairs and additional exits.
  - Provision of additional fire hydrants, hoses and backup water supply to enable more effective response to fires in the future.
- New measures have also been adopted to promote greater cooperation between the managers for the two portions of the Shuri-jô site (Shuri-jô Castle managed by the Japan national government and the surrounding park managed by the prefecture). This includes a plan for the reorganisation of the site’s Disaster Prevention Centre Functions to ensure a coordinated approach to the management of disaster risk and disaster response across the site. These measures are also discussed under issue 3.
- Other disaster prevention measures being taken by the State Party include seismic strengthening of the replica structures, installation of improved electrical systems with circuit breakers for fire and seismic events, and installation of new highly advanced security cameras.

## **Mission Team Comments**

Considerable analysis has been undertaken by the State Party to identify the critical points of failure in the fire protection systems that existed on site prior to the fire, and these are being addressed in the recovery and reconstruction work.



## Recommendations

- The proposed fire protection measures be implemented in the recovery of the Shuri-jô site and the reconstruction of the replica buildings on the site.
- Similar measures be extended to other buildings on the Shuri-jô site.
- Lessons learned from the fire be addressed in updates to disaster risk management plans for the other sites that comprise the World Heritage property as needed.

## Issue 3: Review the restoration/reconstruction plans and restoration works undertaken so far

Nine of the principal buildings at the heart of Shuri-jô were destroyed by the fire, including the Seiden (State hall), the Hokuden (Northern hall) and the Nanden (Southern hall) and several other Royal Palace buildings located close to the Seiden and Nanden. Two additional buildings were damaged by the fire— the Hoshimmon gate leading into the central compound and another building to the rear of the Seiden.

Extensive planning has been undertaken for the recovery of Shuri-jô, including for the stabilisation and protection of the archaeological remains affected by the fire, repair of the two structures damaged by the fire and reconstruction of the nine structures destroyed by the fire. All reconstruction work is to be evidence based.

### Reconstruction plans and recovery strategy

- In December 2019, an advisory panel for technical examination and three working groups were established based on the basic policies.

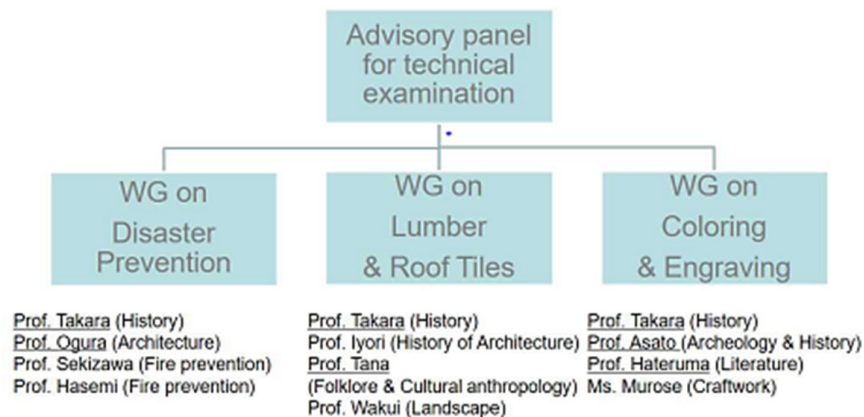


Figure: Structure of the advisory panel and working groups

- A “Work Schedule for the Rebuilding of Shuri-jô” was formulated in March 2020, which adopts a staged approach to recovery and reconstruction. The Seiden (State Hall) is to be rebuilt first, followed by the northern and southern halls and other buildings destroyed by the fire.

## Work Schedule for the Rebuilding of Shuri-jô

Year										
		2019	2020	2021	2022	2023	2024	2025	2026	2027 and after
Seiden (state hall)	Material survey (large lumber )	Market survey								
	Design		Basic design	Execution design						
	Material procurement (large lumber )			Procurement/drying						
	Construction		Temporary road Rubble removal	Lumber storage	Order procedure (WTO)	Construction works				
Hokuden (northern hall), Nanden (southern hall), etc.			Removal	Use as construction yard for the rebuilding of the replica of the state hall						
			Consideration							Construction

- In line with this work schedule, the reconstruction of the Seiden began in November 2022 and is planned to be completed by 2026. Reconstruction of the Hokuden, Nanden and other structures will follow.
- Extensive research has been undertaken to inform the reconstruction of the replica buildings.
- The replacement buildings will be set out directly above the footings (archaeological remains) of the original buildings to ensure the site layout and building configuration are consistent with the pre-War layout. However, they will utilise the footings built for the 1980s-1990s replica buildings, which are independent of the archaeological remains, ensuring that the remains are isolated and protected beneath the structures.
- As done previously, the pre-war built form of the buildings will be replicated, based on archaeological and documentary evidence.
- For most of the buildings there is insufficient evidence to support accurate reconstruction of interiors or details. The exception to this is the Seiden, for which there is considerable evidence to enable a reasonably accurate reconstruction.

### Restoration of the Archaeological Remains

- The fire had minimal impact on the surviving archaeological remains of Shuri-jô as these are generally protected underground. Only two very small portions of the remains were impacted by the fire (0.05%) – those that were exposed inside the Seiden as part of the interpretation of the site to the public.
- The stone and mortar in these areas were damaged resulting in some loss of strength.
- The affected portions have been cleaned and stabilised with resin to prevent further decay.
- They have also been temporarily covered by a protective layer of sand, fabric and polystyrene foam to protect them during the reconstruction of the Seiden, which is to be rebuilt over the top of them.

- It is proposed to reopen the remains to view within the Seiden once reconstruction is completed. They are to be protected by a thick transparent sheet of acrylic.

#### ***Reconstruction of the Seiden***

- Reconstruction of the Seiden will be based on extensive historical research and the documentation prepared for the previous structure destroyed in the fire. “Final Design of the State Hall” was created in 2022. There will be some modification to the detail design based on new evidence found since the previous building was completed.
- The Seiden will be rebuilt using the same evidence used for the previous rebuilding as well as new evidence that has come to light since the previous rebuilding. This additional evidence relates primarily to some of the fine detailing of the building, including:
  - Composition of traditional paint materials to be used;
  - Traditional yellow lacquering, gold polishing and painting techniques to be used;
  - More accurate rendition of engravings and sculptures on the façade of the building;
  - Design of decorative roof tile elements; and
  - More accurate detailing of internal balustrades and hanging ornaments.
- The new building will include infrastructure to reduce future risk to the building as discussed below.
- Some modifications will be made to the internal layout of the building to improve functionality and facilitate management of visitors.
- New stairs will be introduced to facilitate safe evacuation from the building in case of disaster.

#### ***Reconstruction of the Northern Hall, Southern Hall and Other Structures***

- “Basic Policies for Rebuilding the Northern Hall, Southern Hall, and Other Structures” were developed in March 2023 for the rebuilding of the northern hall, southern hall and other structures.
- As there is still insufficient evidence for a more detailed reconstruction of these buildings, they will be rebuilt as per the previous rebuilding, using steel and concrete for their internal structures and timber for their external cladding.

### **Proposed Risk Management Measures, including fire prevention mechanisms**

#### ***Managing Risks to the Seiden Building***

The new Reiwa Seiden building will include infrastructure to reduce future risk to the building including:

- Improvements to the electrical system, including earthing, circuit breakers (including seismic circuit breakers) and insulation monitoring to reduce the risk of electrical failure causing a fire.
- Improvements to security through the installation of surveillance cameras that can operate in low light conditions to enable monitoring of intruders and/or conditions inside the building at night.
- Improved fire detection systems, including smoke, heat, flame and arson monitoring sensors to enable potential fires to be identified early.
- Improved alarm system that is connected to the security office and with a dedicated automated phone connection to the local fire department to ensure an immediate response to a fire.

- Installation of an internal automated sprinkler system to extinguish a fire as soon as it is detected.
- Installation of an upgraded external drencher system that is divided into four quadrants to ensure effective use a limited water supply. Drenchers will discharge according to the location of the fire to prevent fire spread between buildings.
- Installation of new easy to operate fire hydrants and hoses inside the building.
- Introduction of non-combustible materials to the eaves to provide a fire barrier and reduce the risk of fire spread from one building to another.

**Note:** The detail of this is yet to be finalised as the barrier really need to be continuous to function effectively.

- Provision of seismic reinforcement in the floor and ceiling structures. Steel will be used for seismic strengthening in line with the current Japanese building code for new buildings.
- Installation of smoke barriers to the rebuilt stairs to minimise smoke entering the upper floors.
- Installation of internal and external steel fire escape stairs.
- Installation of fire doors around the internal fire stairs to create a fire/smoke proof area around the stairs.

**Note:** For these to work it is assumed that the surrounding walls will also need to be fire-rated. How this will impact the interior of the building is unclear.

#### ***Managing Risks to the Northern and Southern Halls and other structures***

Risks to the Northern Hall, Southern Hall and other structures will be managed in a similar way to the Seiden. Additional measures will include:

- Installation of fire control equipment suited to the preservation of arts and crafts in exhibition areas and storage areas.
- Improving fire separation between buildings by improving the fire resistance of eaves, installing fire shutters and using fireproof materials on connecting elements between buildings.

#### ***Managing Risks to the Shuri-jō Site***

Risks to the Shuri-jō site as a whole have been addressed by:

- Development of an integrated management operation systems that encompasses both Shuri-jō castle and the surrounding prefectural park.
- Development of improved communications and coordination between the castle and the emergency office in the surrounding Shuri-jō Park.
- Construction of large new water tanks and cisterns adjacent to the castle walls. These are to be dedicated to firefighting at the castle.
- Installation of a new water piping and fire hydrants in the grounds of the castle, which fire trucks parked outside the walls can be connected to.

### **Progress on implementation of recovery strategy**

#### ***Restoration of archaeological remains***

- The archaeological remains have been cleaned, stabilised and covered to protect them during the reconstruction of the Seiden.

- The remains will be exposed to view again once the reconstruction of the Seiden is completed.

#### ***Restoration of fire damaged replica structures***

- The Hoshimmon gate has been repaired and provides entry to the central precinct for visitors.
- Temporary buildings located in the courtyard in front of the gate provide ticketing and other visitor facilities.

#### ***Reconstruction of destroyed replica structures***

- The reconstruction of the Seiden commenced in 2022 following much research and planning.
- Timber has been sourced and milled on site, salvaged tiles cleaned and salvaged materials prepared for reuse in the reconstruction.
- It is anticipated that the main Seiden structure will be erected during 2023 and the building completed, including all decorative work, in 2026 as scheduled.
- The northern and southern halls and other structures will commence on completion of the Seiden in 2026.
- At this stage the reconstruction of the replica structures aligns with the schedule for rebuilding established in 2020.

#### ***Implementation of disaster risk management measures***

- The new inground water tank for firefighting is about to be commenced.

#### **Consultation with experts**

- The Advisory Panel for the technical examination of the reconstruction of Shuri-jô is comprised of specialists from various universities, the Okinawa Prefectural Museum and Art Museum and a traditional lacquerware artist.
- The working groups are comprised of local experts who have provided technical advice on disaster prevention, timber, roof tiles, colouring / painting and engraving.
- Advice has also been provided by the architect involved in the previous reconstruction of Shuri-jô.
- Input has also been sought from a local community representative.

#### **Mission Team Comments**

Investigations into the damage to the archaeological remains have been thorough, the stabilisation in keeping with heritage conservation good practice/ principles and methods, and protective measures implemented for the duration of the site's recovery adequate to ensure that no further damage is incurred during the recovery process.

The research underpinning the documentation for the reconstruction of the replica structures appears to be thorough and provides for an evidence-based reconstruction of the structures. Reconstruction appears to be progressing well.

The measures proposed to minimise future risk to the structures and the site are extensive but appear to be focused primarily on fire risk. The fire prevention measures have taken into consideration the heritage significance of the property (including OUV) and been designed to minimise heritage impacts on the archaeology, the buildings and their landscape setting. These measures include prevention, early detection, initial fire extinguishing, fire spread prevention, firefighting activities and safe evacuation. Detailed specifications of some of these measures have been provided by the State Party. These state-of-the-art measures will



definitely reduce the risk of fire to the reconstructed state hall and other ancillary structures that are part of the property.

Although a disaster risk management plan has been prepared by the State Party for the site, it could not be reviewed by the mission team as it is only available in Japanese. Common hazards such as typhoons and long periods of torrential rain were discussed by the mission team and State Party, but no details were provided by the State Party on how the risks are being managed. Nor has information been provided on the management of risks to other attributes of the site, such as the castle walls and ramparts. In some areas of the site bulging retaining walls provide some evidence of drainage issues that need to be addressed.

Although there has been community engagement in the recovery of the site, there does not appear to have been any engagement with the local community in developing disaster risk management strategies for the site. This could be highly beneficial as local community members who live around the site may be able to contribute to an emergency response when staff are not on site, such as at night.

### ***Recommendations***

- The disaster risk management plan for the property, when it is next updated, should consider and adopt a multi-hazard approach, that addresses both common and high impact hazards such as typhoons, long periods of torrential rain, theft and vandalism, as well as fire and earthquakes. It should consider the effect of multiple hazards occurring simultaneously and cascading disasters where one hazard may trigger another with a multiplicity of consequences.
- Community participation should be an essential component of the disaster risk management plan for the property. This would include training of community volunteers and utilization of traditional social networks for preparedness, response and recovery.
- An overview (Summary Document) of the Disaster Risk Management Plan for Shuri-jô should be made available in English. This should identify the high impact and common threats/ hazards affecting the site and outline measures to address or mitigate the threats/ hazards, including measures to be put in place or taken prior to, during and post disaster.



Interpretation panel showing the impact of the fire on the buildings surrounding the central courtyard.  
© Rohit Jigyasu 2023



The Hoshimmon gate, which provides entry to the central part of the castle complex, was damaged in the fire, but has been restored. Visitors enter the site through this gate. © C.Forbes 2023



Interpretive signage shows the principal buildings of the castle complex arranged around a central courtyard. The State Hall (Seiden) is shown standing directly opposite the Hoshimmon gate. © C.Forbes 2023



A large workshop has been built over the courtyard at the centre of the Shuri-jō Castle complex to facilitate the reconstruction of the destroyed replica buildings. It is built on an elevated platform and is clearly visible on approach to the site. © C.Forbes 2023



The side of the workshop is painted with an image of the Seiden, which stood the opposite the Hoshimmon gate across the courtyard. © C.Forbes 2023



Visitors enter through the Hoshimmon gate and are taken around the site on raised walkways. © C.Forbes 2023



Temporary access has been provided to the site for construction vehicles, materials and equipment. © C.Forbes 2023



Video image showing the workshop built on a raised platform over the central courtyard to ensure minimal impact on the archaeology below. © C.Forbes 2023



Temporary structures and services have been provided to enable the reconstruction of the replica buildings. These have been designed and installed so as not to impact the significant attributes (archaeology, ramparts) of the site and will be removed on completion of the work. © C.Forbes 2023





A large shed has been erected over the site of the Seiden to protect it during reconstruction. View from the highest point of the site. © Rohit Jigyasu 2023



A large shed protects the site of the Seiden and the archaeological remains while the building is being rebuilt. © C.Forbes 2023



The archaeological remains that were damaged in the fire have been stabilised and covered with temporary protective layers for the reconstruction of the Seiden. The ground surface and archaeology beneath are protected from vehicles and heavy equipment by large steel plates. © C.Forbes 2023



Interior of the workshop where the timber is milled, carved and prepared for the reconstruction of the Seiden. © Rohit Jigyasu 2023



Interior of the workshop showing well organised work area. © Rohit Jigyasu 2023



The large timber elements are mechanically milled and carefully measured. © C.Forbes 2023



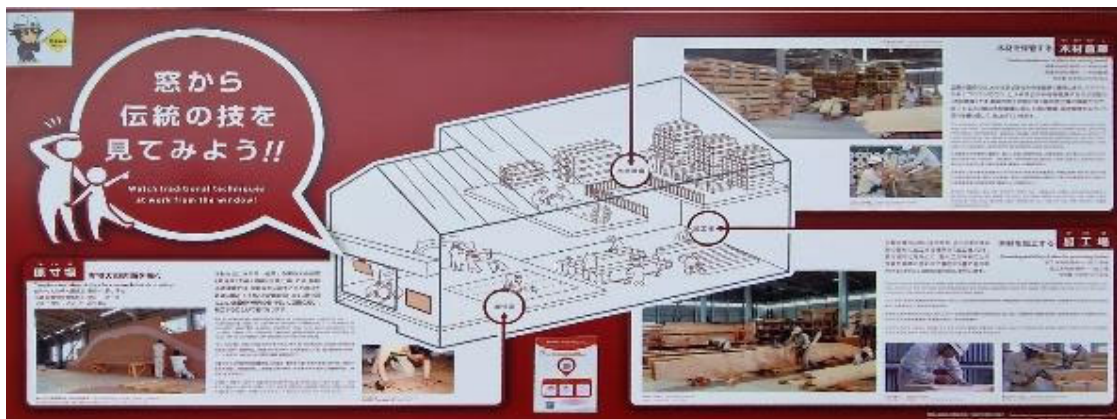
Joints are finished by hand to ensure a tight fit. Carvings will also be completed by hand. © C.Forbes 2023



A large space is used for full scale drafting of individual elements for reconstruction. Large windows in the workshop walls allow visitors to see the work in progress. © C.Forbes 2023



Full scale drawing of curved gable end to be reinstated over the entrance to the Seiden. © C.Forbes 2023



Interpretation panel showing the workshop and what is happening within. © Rohit Jigyasu 2023





Interpretation panels show the fire and its impact. © C.Forbes 2023



Interpretation panels show details of the Seiden and explain the work involved in their reconstruction. © C.Forbes 2023



Roof tiles that survived the fire have been salvaged and cleaned for reinstatement on the reconstructed building. © C.Forbes 2023



The roof on one of the surviving buildings on the site shows the traditional use of lime mortar to make the tiles weathertight. © C.Forbes 2023



Image from a video display on the site showing the damaged foundation stones and the debris that has been salvaged. © C.Forbes 2023



Image from a video display on the site showing the damage to the foundation stones. These have since been ground by community volunteers to enable the material to be used as a base coat for the lacquer to be applied to the reconstructed building. © C.Forbes 2023





Salvaged ceramic elements from the dragons mounted on the Seiden roof on display for visitors. © C.Forbes 2023



Salvaged artefacts from the destroyed replica buildings on display for visitors. © C.Forbes 2023



Fire damaged stone dragon from the entrance to the Seiden. © C.Forbes 2023



Salvaged stone dragon is displayed with a video showing the analysis of the fire damage to the stone. © C.Forbes 2023



Fire damaged lacquerware salvaged from the site. © C.Forbes 2023



Salvaged artefacts from the Shuri-jō Castle collection are safely packed, labeled and stored at the adjacent University. These will be restored by specialist craftspeople, conservators and students. © C.Forbes 2023



New water tank being excavated adjacent to castle to provide backup supply for future fires. © C.Forbes 2023



Sections of wall failing due to groundwater pressure have been temporarily stabilised and are to be repaired and site drainage issues resolved. © C.Forbes 2023

#### Issue 4: Impact of fire on Outstanding Universal Value (OUV)

Shuri-jō is one of nine sites that comprise the Gusuku and Related sites of the Ryukyu Kingdom World Heritage Property (WHP) and is one of the five Gusukus that form part of the listing. As a designated Historic Site under the 1950 Japanese Law for the Protection of Cultural Properties, its key attributes comprise the surviving remains of Shuri-jō Castle. These include the archaeological remains of the ramparts, fortifications and buildings that stood on the site prior to World War II. The buildings destroyed by the fire were reconstructed after the war, following the return of Okinawa (and the site) to Japan.

The fire had minimal impact on Shuri-jō's surviving archaeological remains (the attributes that have been identified as expressing the site's OUV) as these are generally protected underground. Only 0.05% were damaged. The major impact of the fire has been on the interpretation of the site and its OUV to the public. The buildings that were destroyed were critical to public understanding of the site and its place at the heart of the Ryukyu Kingdom. Shuri-jō accommodated the royal palace and the State Hall (Seiden) where foreign dignitaries would meet with the King. It also included ceremonial spaces, reception and administrative buildings, and sacred places. It functioned as a centre of diplomacy, international trade and cultural exchange in the region. Thus, it has special significance that cannot be represented by the other sites of the WHP.

The site does, however, retain many features that contribute to understanding its significance and OUV. It retains its prominence on top of a hill overlooking the Naha Port and surrounding areas. It retains the castle walls, ramparts and gates that enclose the site. It retains its sacred spring and the landscape that surrounds the castle (Shuri-jō Castle Park). It also retains its relationships with surrounding cultural sites and other sites that form the WHP, including Tamaudun (Royal mausoleum), Sonohyan-utaki Ishimon (gate to the sacred forest adjacent the castle) and Shikinaen (Summer palace and garden). It remains an imposing site that still clearly expresses its importance.

#### Mission Team Comments

The attributes that express OUV are not clear from the Statement of OUV (SOUV) for the Gusuku sites World Heritage property. The mission team had to seek clarification of the significant attributes from the State Party to make this assessment. It is important that the State Party further develop the analysis and description of the attributes of OUV for all nine component parts of the property based on the SOUV, the Nomination dossier and all other relevant documentation used as a basis for conservation, protection and management, and



share such expanded description of the attributes of OUV with the World Heritage Centre and the Advisory Bodies.

Although the fire impacted Shuri-jô and the replica buildings that interpret the site's OUV to visitors, it had minimal impact on the significant attributes that express the site's OUV.

Shuri-jô is only one of the components that make up the World Heritage property, however, it is the principal site due to its royal status. The recovery of the site and its replica buildings is important to regaining the site's identity.

The fire had minimal impact on the OUV of the World Heritage property as a whole.

### **Recommendation**

- Further development be undertaken on the identification and description of the attributes of OUV, and the way in which they convey OUV (what are the key sources of information) on the basis of the Statement of OUV for all nine component parts that comprise the WHP.



The castle walls and ramparts remain intact following the fire. © C.Forbes 2023



The castle gates remain intact following the fire. © C.Forbes 2023

## **Issue 5: Reconstruction and General State of Conservation of the Property**

The nine buildings at the centre of the Shuri-jô site have been destroyed, but the structures and landscape surrounding them remain intact. Recovery of the site and its OUV through reconstruction of the lost buildings is progressing well.

### **Maintaining OUV through Recovery**

OUV will be maintained and its understanding enhanced through the recovery of the site.

The archaeological remains that express the OUV of the WHP are mostly invisible to the public as they are underground. Therefore, recovery of the buildings lost in the fire is important to public understanding of the site and its OUV.

Reconstruction of the buildings destroyed by the fire will support the understanding of the OUV of the WHP as the story of Shuri-jô and the Ryuku Kingdom will again be able to be interpreted to visitors to the site.

### **Maintaining Authenticity in Recovery**

The buildings will be rebuilt based on extensive research and documentation.

The buildings will be rebuilt using a combination of traditional and modern materials and techniques, based on the available evidence. The buildings, while replicating the previous buildings as far as possible, particularly in size, form, configuration and external materiality, they will be clearly buildings of their own time in their details.

- The timber for rebuilding has been locally sourced from Okinawa and Japan, rather than being imported from Taiwan as was done previously. Imported timber had to be used previously due to the lack of local supply after the war.
- Modern technology is being used to increase the efficiency of the rebuild. Major elements have been made using modern mechanised milling equipment, a mill and workshop having been set up on site, including a drawing space for full scale drafting of component elements by hand. All joints and finishing, however, is being done by hand by skilled carpenters using traditional methods to ensure a tight fit.
- Craftspeople will undertake the carving and lacquer work.
- Some roof tiles have been salvaged for reuse. Severely damaged tiles have ground up so that the material can be used in the manufacture of new terra cotta roof tiles. These will be made in Okinawa and installed using traditional lime lacquer to seal the joints. This makes the roof weatherproof and wind proof in extreme weather events.
- Severely damaged foundation stones have been ground to provide a base coat to the new lacquer work.
- Steel will be used for seismic strengthening in line with the current Japanese building code for new buildings.
- The most up to date fire protection systems are to be installed and the separation between buildings achieved through the use of fire rated materials where necessary.

The use of modern materials and improvements to improve resilience is consistent with 'building back better' to minimise risk to the world heritage site. These modifications to the replica buildings have been clearly documented and should not impact the authenticity of the site or the WHP.

### **Maintaining Integrity of Attributes in Recovery**

The fire had little impact on the integrity of the significant attributes of Shuri-jō, that is the archaeological remains of Shuri-jō and its imposing site. The damaged remains have been stabilised and protected to prevent further loss.

The rebuilding of the lost castle buildings is consistent with a pattern of rebuilding following disaster that has occurred at Shuri-jō ever since its establishment in 1472. Fire, earthquake, typhoon and conflict have all impacted the site in the past and the affected structures have all been rebuilt, in many instances with modifications to improve their use, presence and resilience. It is anticipated that the structures rebuilt following World War II and the new structures will most likely gain significance over time, as they contribute to the integrity of the site and the WHP and support its OUV.

### **Mission Team Comments**

The nine buildings at the centre of the Shuri-jō site have been destroyed, but the structures and landscape surrounding them remain intact. Recovery of the site and its OUV through reconstruction of the lost buildings is progressing well.

The recovery of the Shuri-jō site has been carefully considered in order to maintain the integrity and authenticity of the site.

### **Recommendations**

- Recovery of the site and structures should proceed as planned.



## Issue 6: Community and Visitor Engagement

The inclusion of the local community in the salvage of significant elements from the fire damaged buildings so that they can be reused has been exemplary.

- Thousands of local community members have been involved in cleaning the surviving roof tiles in good condition so that they can be reused in the reconstruction. They have ground the severely damaged tiles so that the powder can be used in the production of new roof tiles.
- Community members have also been involved in grinding the severely damaged foundation stones so that the powder can be used as a base coat for lacquer work.

In addition, the approach to opening the fire damaged site to the public so that they can watch the recovery and reconstruction has also been inspirational.

- Walkways and windows into work area provide an opportunity for visitors to continue visiting the site and to watch the progress of its recovery.
- Interpretation and displays of damaged elements (eg. tiles, carvings and the dragons from the roof of the Seiden) have been strategically arranged around the site to show the visitors what was there and how it is being replicated.

### **Mission Team Comments**

The inclusion of the community in recovery of the site is to be commended.

The opening of the site to inform visitors is also to be commended as it has provided an opportunity for visitors to learn about the recovery process and what is involved in the conservation of places of significance, including the high standard of workmanship employed.

### **Recommendations**

- The approach taken by the State party to involving the community in the recovery should be adopted as an exemplar for other post disaster recovery of other disaster affected World Heritage sites as appropriate.
- Similarly, the approach to inviting and accommodating visitors through the recovery of the site should also be adopted as an exemplar for recovery of other disaster affected World Heritage sites as appropriate.

## V. CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Shuri-jô is one of the components that make up the World Heritage property—the Gusuku Sites and Related Properties of the Kingdom of Ryukyu, (Japan). It has been found that the fire had minimal impact on the attributes of Shuri-jô or the OUV of the World Heritage property.

Although the fire destroyed several of Shuri-jô's significant replica buildings used to interpret the site's OUV to visitors, it had minimal impact on the significant attributes expressing the site's OUV. The archaeological remains suffered minimal damage (0.05%) and these have now been stabilised and protected to prevent further damage during recovery and reconstruction of the replica buildings. Recovery of these buildings is regarded as important

to regaining the site's identity for the local community and for visitors. The recovery of the site and its replica buildings has been well planned and is progressing well.

The mission team makes the following observations regarding each of the terms of reference for the mission:

### **Issue 1: First immediate safeguarding measures taken after the fire**

The State Party responded promptly to the fire and undertook all the necessary emergency response measures to protect and salvage the heritage attributes of the site, including those that convey OUV. The approach taken to protection, salvage and investigation works has been professional, systematic and thorough. The State Party has put in place appropriate measures to ensure a smooth transition from emergency response to post disaster recovery.

### **Issue 2: Disaster prevention, preventive actions taken and coping mechanism at the property following the fire**

Considerable analysis has been undertaken by the State Party to identify the critical points of failure in the fire protection systems that existed on site prior to the fire, and these are being addressed in the recovery and reconstruction work.

Improvements include a better coordinated approach to emergency management and emergency response across the two portions of the site (Shuri-jo Castle and the adjoining Castle Reserve), improved access to the site for emergency services, upgrades to security cameras for better night surveillance, introduction of more sophisticated fire detection, alarm, sprinkler and drencher systems, improved electrical installations with circuit breakers and insulation monitoring, introduction of fire separation between buildings, smoke barriers and improved emergency egress provisions, and provision of back up water supply, hydrants and easy to use hoses with greater reach in the grounds.

### **Issue 3: Review the restoration/reconstruction plans and restoration works undertaken so far**

Investigations into the damage to the archaeological remains have been thorough, the stabilisation in keeping with heritage best practice/ principles and methods, and protective measures implemented for the duration of the site's recovery adequate to ensure that no further damage is incurred during the recovery process.

The research underpinning the documentation for the reconstruction of the replica structures is thorough and provides for an evidence-based reconstruction of the structures.

Reconstruction appears to be progressing well.

The measures proposed to minimise future risk to the structures and the site are extensive but appear to be focused primarily on fire risk. The fire prevention measures have taken into consideration the heritage significance of the property (including OUV) and have been designed to minimise heritage impacts on the buildings, the archaeology and the landscape. These measures include prevention, early detection, initial fire extinguishment, fire spread prevention, firefighting activities and safe evacuation of people and objects. Detailed specifications of some of these measures have been provided by the State Party. The proposed measures are state-of-the-art and will reduce the risk of fire to the reconstructed buildings and the property in the future.

Although a disaster risk management plan has been prepared by the State Party for the site, it could not be reviewed by the mission team as it is only available in Japanese. Other hazards such as typhoons and long periods of torrential rain were discussed by the mission team and State Party, but no details were provided on how these risks are managed. Nor has information been provided on the management of risks to other attributes of the site,

such as the castle walls and ramparts. In some areas of the site bulging retaining provide some evidence of drainage issues that need to be addressed.

Although there has been community engagement in the recovery of the site, there does not appear to have been any engagement with the local community in developing disaster risk management strategies for the site. This could be highly beneficial as local community members who live around the site may be able to contribute to an emergency response when there are fewer staff on site, such as at night.

#### **Issue 4: Impact of fire on Outstanding Universal Value (OUV)**

Although the fire impacted Shuri-jō and the replica buildings that interpret the site's OUV to visitors, it had minimal impact on the significant attributes that express the site's OUV.

The fire had minimal impact on the OUV of the World Heritage property as a whole.

#### **Issue 5: Reconstruction and General State of Conservation of the Property**

Although nine buildings at the centre of the Shuri-jō site have been destroyed, the structures and landscape surrounding them remain intact. Recovery of the site and its OUV through reconstruction of the lost replica buildings is progressing well.

The recovery of the Shuri-jō site has been carefully considered in order to maintain the integrity and authenticity of the site. The significant attributes (archaeological remains) have been conserved in situ and the replica buildings are being rebuilt based on the best available evidence, utilising as much of the original fabric as could be salvaged from the fire (including ground materials from foundation stones and tiles) – thus the integrity of the remains and the site is being retained. Traditional skills, materials and methods are being used in the reconstruction of the buildings, particularly detail elements, to ensure authenticity is maintained.

#### **Issue 6: Community and Visitor Engagement**

The inclusion of the community by the State party in recovery of the site is to be commended.

The opening of the site to visitors during the recovery is also to be commended as it has provided an educational opportunity for visitors.

### **Recommendations**

#### **The mission team make the following recommendations to the State Party**

- The recovery of Shuri-jō and its replica buildings should continue as planned and documented.
- The proposed fire protection measures for the replica buildings and the site should be implemented as documented.
- Similar measures should be extended to other buildings on the Shuri-jō site.
- Lessons learned from the fire should be addressed in updates to the disaster risk management plan for Shuri-jō and the other sites that comprise the World Heritage property.
- The disaster risk management plan for the property, when it is next updated, should consider and adopt a multi-hazard approach, that addresses both common and high impact hazards such as typhoons, long periods of torrential rain, theft and vandalism, as well as fire and earthquakes. It should consider the effect of multiple hazards occurring simultaneously and cascading disasters where one hazard may trigger another with a multiplicity of consequences.

- Consideration should be given to including the local community in managing risks to the property, including fire risk. This would be including community volunteers in training sessions and utilizing traditional social networks for preparedness, response and recovery.
- An overview (Summary Document) of the Disaster Risk Management Plan for Shuri-jô should be made available in English. This should identify the high impact and common threats/ hazards affecting the site and outline measures to address or mitigate the threats/ hazards, including measures to be put in place or taken prior to, during and post disaster.

Further development be undertaken on the identification and description of the attributes of OUV, and the way in which they convey OUV (what are the key sources of information) on the basis of the Statement of OUV for all nine component parts that comprise the WHP.

**The mission team make the following recommendations to the World Heritage Committee, ICOMOS and ICCROM**

- The approach taken by the State Party to involving the community in the recovery should be adopted as an exemplar for post disaster recovery of other disaster affected World Heritage sites.
- The approach to accommodating visitors and educating them through the recovery of the site should also be adopted as an exemplar for recovery of other disaster affected World Heritage sites.

**In summary**

The approach taken by the State Party to the salvage and recovery of the fire damaged World heritage Property has been exemplary and is to be commended.

## **VI. ANNEXES**

1. Terms of Reference (ToR) of the mission
2. Mission Itinerary and programme
3. List of people met
4. SOUV of the property
5. Committee Decision (Decision 44 COM 7B.29)
6. List of key documents shared by State Party

## TERMS OF REFERENCE

### Joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission

#### Gusuku Sites and Related Properties of the Kingdom of Ryukyu (Japan)

12-14 June 2023

At its extended 44th session, the World Heritage Committee requested the State Party of Japan to invite a joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to the World Heritage property '**Gusuku Sites and Related Properties of the Kingdom of Ryukyu**' (Decision **44 COM 7B.29**, Annex I). The main objective of the mission is to assess the damage caused by the fire of 31 October 2019 and the proposed restoration works to be undertaken, as well as to examine other aspects of the state of conservation of the World Heritage property.

In accordance with Decision **44 COM 7B.29**, the mission will carry out the following tasks:

1. Conduct field visits to the World Heritage property with the view to assessing the damage caused by the large fire of 31 October 2019, with particular attention accorded to Shuri-jō site of the property;
2. Meet with the relevant Japanese authorities to understand the first immediate safeguarding measures taken after the fire, including:
  - a. Security around the Shuri-jō site, including access and prevention of further damages;
  - b. Proper debris management;
  - c. Emergency measures for the safeguarding of the remaining elements/collections of the Shuri-jō site, including their inventory, packing, transportation, relocation and storage in a safe place, and initial conservation treatment;
  - d. Documentation of the emergency response process as well as of damaged artefacts.
3. Review the disaster prevention and other preventive actions taken and coping mechanism at the property following the fire;
4. Review the restoration/reconstruction plans developed and the restoration works undertaken so far, including fire prevention mechanisms as well as to assess the progress made with the implementation of a comprehensive recovery strategy for the property, including a restoration plan for the archaeological remains and the reconstruction of fire-damaged replica structures, in consultation with the relevant experts and in line with the national laws and regulations;
5. Evaluate the impact of the fire on the Outstanding Universal Value (OUV) of the property;
6. Assess and provide advice on the reconstruction and the general state of conservation of the property, and on the authenticity and integrity of the attributes which contribute to its OUV, in line with the *Operational Guidelines* and other guidance;
7. Conduct working sessions with the relevant authorities and experts to review lessons learnt, including for Risk Preparedness Manuals;

To facilitate the preparation of the mission, the State Party should, as soon as possible and preferably no later than one month prior to the mission, provide the World Heritage Centre, ICOMOS and ICCROM with necessary background information and technical materials on the property, including the following documents:

- a. Updated information on the damage to the property caused by the fire, including images, drawings and other graphic illustrations, as well as analysis of issues relating to the fire such as its causes and management issues;
- b. Pre-fire documentation of the Shuri-jô site such as site maps, plans and pre-fire photos (interior and exterior);
- c. All documentation available on the restoration/reconstruction plans of the Shuri-jô site including proposed fire protection and mitigation measures to be implemented;
- d. Updated information on the progress of the restoration/reconstruction works of the Shuri-jô site;
- e. The most recent conservation management plan and disaster risk management plan including risk assessments for natural and human hazards and identification of possible risks for the property.

This information should be made available in English (or accompanied with the necessary translation). Additional information may be requested during the mission, as required.

The mission should hold consultations with the relevant national and local Japanese authorities, including with the Agency for Cultural Affairs, Okinawa General Bureau of the Cabinet Office and Okinawa Prefectural Government as well as other relevant stakeholders, including local communities, non-governmental organisations (NGOs), civil society and any relevant scientists and experts. The State Party should facilitate and organize the site visits and meetings with the above-mentioned stakeholders and submit a draft agenda for the mission one month prior to the mission. A concluding meeting with representatives from all relevant national ministries in Tokyo after the site visit is highly recommended.

Based on the results of the above-mentioned reviews, assessments and discussions with the State Party representatives, authorities and stakeholders, the mission will prepare a concise report (Annex II of the Mission Report Format) on the findings and recommendations following the site visit. The mission's recommendations to the World Heritage Committee will provide guidance to the State Party to ensure the ongoing conservation of the property's OUV. It should be noted that recommendations will be provided within the Mission report and not during the Mission.

**Joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to  
World Heritage property 'Gusuku Sites and Related Properties of the Kingdom of  
Ryukyu'**

**Itinerary**

**Mission experts:**

Ms Himalchuli Gurung	Chief of Asia and the Pacific Unit, World Heritage Centre, UNESCO
Ms Catherine Forbes	ICOMOS International expert
Mr Rohit Jigyasu	ICCROM expert

**Programme:**

Date	Time	Agenda	Participants	Venue
13 June	10:00-13:00	<b>Introductory meeting:</b> <ul style="list-style-type: none"> <li>- Briefing on mission agenda, past state of conservation reports, recovery plan, progress of recovery works, etc.</li> <li>- Consultation with Participants</li> <li>- Q&amp;A session</li> </ul>	<ul style="list-style-type: none"> <li>- Agency for Cultural Affairs</li> <li>- Okinawa General Bureau of the Cabinet Office</li> <li>- Okinawa Prefectural Government</li> <li>- Okinawa Churashima Foundation</li> <li>- Local experts</li> <li>- Local residents</li> </ul>	Shuri-jo Castle Park (1-2 Kinjocho, Shuri, Naha City)
	14:00-17:00	<ul style="list-style-type: none"> <li>- <b>Site Visit</b></li> </ul>	<ul style="list-style-type: none"> <li>- Agency for Cultural Affairs</li> <li>- Okinawa General Bureau of the Cabinet Office</li> <li>- Okinawa Prefectural Government</li> <li>- Okinawa Churashima Foundation</li> </ul>	Shuri-jo site
14 June	10:00-12:00	<b>Concluding meeting:</b> <ul style="list-style-type: none"> <li>- Q&amp;A session</li> <li>- Wrap-up session</li> </ul>	<ul style="list-style-type: none"> <li>- Agency for Cultural Affairs</li> <li>- Okinawa General Bureau of the Cabinet Office</li> <li>- Okinawa Prefectural Government</li> </ul>	Shuri-jo Castle Park



## Annex 3

### List of Participants

#### **(Mission experts)**

Ms Himalchuli GURUNG	Chief of Asia and the Pacific Unit, UNESCO World Heritage Centre
Ms Catherine FORBES	ICOMOS International Expert
Mr Rohit JIGYASU	Project Manager, Urban Heritage, Climate Change & Disaster Risk Management, Programmes Unit, ICCROM

#### **(National authorities)**

Mr Kohei OKAWA	Director, Office for International Cooperation on Cultural Heritages, Agency for Cultural Affairs (ACA)
Mr Chihei SUZUKI	Senior Specialist for Cultural Properties, ACA
Mr Yuuji HiRATSUKA	Office Manager, Commemorative National Government Park Office, Okinawa General Bureau (OGB)
Mr Tomohiro OOISHI	Senior Officer for Park and Urban Policy Management, Development Construction Department, OGB

#### **(Local authorities)**

Mr Tsutomu ARAKAKI	Group leader, Cultural Assets Division, Okinawa Prefectural Board of Education
Mr Hideki CHINEN	Section manager, ShuriJo Castle Reconstruction Division, Okinawa Prefectural Office
Mr Munenori MACHIDA	Manager, ShuriJo Castle Park Management Center, Okinawa Churashima Foundation

#### **(Local expert) \*13 June only**

Mr Kurayoshi TAKARA	Chairperson, Advisory Panel for Technical Examination
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#### **(Local resident) \*13 June only**

Ms Teruko KUBOTA	Chairperson, Civil Association for the Preservation of the Revive of Shuri-Jo castle
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## Gusuku Sites and Related Properties of the Kingdom of Ryukyu, Japan

### Outstanding Universal Value

#### Brief synthesis

Five hundred years of Ryukyuan history (12th-17th centuries) are represented by this group of sites and monuments.

The nine component parts of the property include the sites and archaeological ruins of two stone monuments, five castles, and two cultural landscapes. They are scattered across Okinawa Island, collectively covering 54.9 ha. The surrounding buffer zone covers a total area of 559.7 ha.

In the 10th-12th centuries, Ryukyuan farming communities (*gusuku*) began to enclose their villages with simple stone walls for protection. From the 12th century onwards powerful groups known as *aji* began to emerge. They enlarged the defences of their own settlements, converting them into fortresses for their own households; these adopted the term *gusuku* to describe these formidable castles.

The castle ruins of the Gusuku sites on imposing elevated locations, are evidence for the social structure over much of that period, while the sacred sites provide mute testimony to the rare survival of an ancient form of religion into the modern age. The wide-ranging economic and cultural contacts of the Ryukyu Islands over that period gave rise to a unique culture.

**Criterion (ii):** For several centuries the Ryukyu islands served as a centre of economic and cultural interchange between south-east Asia, China, Korea, and Japan, and this is vividly demonstrated by the surviving monuments.

**Criterion (iii):** The culture of the Ryukyuan Kingdom evolved and flourished in a special political and economic environment, which gave its culture a unique quality.

**Criterion (vi):** The Ryukyu sacred sites constitute an exceptional example of an indigenous form of nature and ancestor worship that has survived intact into the modern age alongside other established world religions.

#### Integrity

In Ryukyu there remain more than three hundred Gusuku sites and related assets, of which five Gusuku sites, two related monuments, and two cultural landscapes are included as component parts of the property. Each of the individual component parts of the property is an outstanding representative of the religious beliefs and activities unique to the Ryukyu cultural tradition. Moreover, they are self contained with their own boundaries and buffer zone. They embody not only the geographical and historical characteristics but also the political, economic, and cultural uniqueness of the kingdom's five hundred years' regime. They firmly maintain the top-quality wholeness and integrity of the property.

## **Authenticity**

The entire region suffered considerable damage during the Second World War and reconstruction work has taken place on many of the component parts. In Japan the authenticity of the form/design and materials/substance of each part of the property remains at a very high level, as they have been rehabilitated and restored under strict rules for more than one hundred years. Authenticity of location/setting has been maintained in that none of the component parts of the property has been moved from its original location and traces of buildings discovered through archeological excavations have been preserved underground. Extensive measures have been taken to make it possible to differentiate original materials from those used for rehabilitation and restoration, while sufficient care has been taken in the course of choosing materials. In the immediate aftermath of the Second World War, there were some cases of using improper materials, but adequate steps have been taken to replace these with proper materials or to establish clear distinctions between proper and improper materials. All the projects for such procedures are based on detailed surveys and research conducted in advance.

The main hall of Shuri-jô was restored not only on the basis of the surveyed plans and photographs of the actual architecture as it was seen before its destruction by the wartime fire, but also in strict accordance with the findings of the excavation covering a wide area. The exact replica of the lost structure is now a great monument symbolizing the pride of the Ryukyu people.

Shikinaen was restored utilizing similar procedures, the royal villa and garden being recreated with great precision. The underground structural remains were excavated and documented with the utmost care and, when necessary, covered by layers of innocuous earth or sand in order to facilitate differentiation from the structure restored on the original site, thus protecting the existing remains from the work of restoration and rehabilitation while preserving them in good condition.

With respect to craftsmen's skill, a high level and homogeneous authenticity is properly maintained and their traditional techniques are applied to all projects for restoration, rehabilitation and preservation on an extensive scale.

As described above, the property retains a high level of authenticity in terms of form/design, materials/substance, traditions/techniques, location/setting, function and spirit.

## **Protection and management requirements**

Each component part of the property is designated as an Important Cultural Property, a Historic Site or a Special Place of Scenic Beauty under the 1950 Law for the Protection of Cultural Properties and subjected to strict preservation and management.

The component parts of the property are owned either by the Government of Japan as a nation, a wide range of municipalities or, in some cases, particular private persons. Seifa-Utaki and Zakimi-jô are owned by the respective municipalities where they are located. Nakijin-jô, Katsuren-jô and Nakagusuku-jô are publicly owned for the most part except for a small portion under private ownership. Shuri-jô is a joint property of Japan and Okinawa Prefecture. Tamaudun is jointly owned by Okinawa Prefecture and Naha City. Sonohyan-Utaki-Ishimon and Shikinaen are owned by Naha City.

The Agency for Cultural Affairs is the agency with management authority responsibilities for preservation, repairs and utilization of those component parts are assumed by the respective

owners and administrators. The Government of Japan and Okinawa Prefecture are authorized to provide necessary financial and technical assistance.

The Okinawa Prefecture is in the process of establishing itself as an internationally resort area promoting the unique natural setting and cultural tradition but the various development plans provide for the protection of the property's component parts. In the buffer zones separating the individual component parts of the property, the height, design, coloring and other factors are also restricted according to the ordinances of the respective municipalities. In addition, almost all such buffer zones are included in the municipalities' city park, which have been or are about to be put into effect with a view to improving the environments of the component parts and promoting exhibition to the public. Individual management plans are in place for the Nakijin-jô site, Nakagusuku-jô site and Katsuren-jô site, however an overall management plan for the entire inscribed property was lacking. Therefore, the Comprehensive Management Plan was established in 2013 by Okinawa Prefecture in cooperation with the municipal governments concerned, in order to ensure the long term conservation and protection of the property.

**Decision: 44 COM 7B.29**

The World Heritage Committee,

1. Having examined Document WHC/21/44.COM/7B,
2. Expresses its solidarity with the State Party for the damage caused to the Shuri-jō site, a component part of the “Gusuku Sites and Related Properties of the Kingdom of Ryukyu” World Heritage property, by a fire on 31 October 2019;
3. Takes note of the information provided by the State Party concerning the damage, emergency measures and restoration works already undertaken to recover the property, and commends the State Party for the efforts of the responsible national and local authorities to ensure the safeguarding of the property despite the difficulties encountered;
4. Requests the State Party to implement a comprehensive recovery strategy for the property, including a restoration plan for the archaeological remains and the reconstruction of fire-damaged replica structures, in consultation with the relevant experts and in line with the national laws and regulations;
5. Also requests the State Party to invite a joint World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission to the property to assess the damage caused by the fire and the proposed restoration works to be undertaken, as well as to examine other aspects of the state of conservation of the property;
6. Welcomes the establishment of basic policies and a work schedule for the recovery, including the installation of strengthened fire prevention measures and the reconstruction of replica structures at the state hall, and further requests the State Party to integrate appropriate measures for multi-hazard risk reduction, including fire prevention, into the upcoming reconstruction plan for other replica structures, in line with the “Fire Prevention Guidelines for National Treasures and Important Cultural Properties (Buildings)” established by the Agency for Cultural Affairs and other necessary risk preparedness guidelines, and encourages the State Party to continue facilitating the participation of all stakeholders, including local communities, in the recovery process of the property;
7. Finally requests the State Party to submit to the World Heritage Centre, by **1 December 2022**, an updated report on the state of conservation of the property and the implementation of the above, for examination by the Committee at its 46th session.

## List of Key documents shared by State Party

### **Pre-fire documentation of the Shuri-jô site**

- Site-plan drawing of the pre-fire structures
- Elevation drawings of the pre-fire state hall
- Photographs of the pre-fire exterior and interior

### **Restoration/reconstruction plans of the Shuri-jô site including proposed fire protection and mitigation measures to be implemented**

- Work Schedule for the Rebuilding of Shuri-jô
- Final Design of the State Hall
- Fire Prevention Measures for the State Hall of Shuri-jô Site
- Basic Policies for Rebuilding the Northern Hall, Southern Hall, and Other Structures
- Reconstruction of the Shuri-jo, The Reiwa Era State Hall

### **Other plans**

- Comprehensive Preservation and Management Plan
- Plan for Establishment of Shuri-jô Park Management System (only available in Japanese)