THE RESTORATION OF SUFFOLK HOUSE, PENANG, MALAYSIA

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ABSTRACT:

Suffolk House known as the first 'Great House' of Penang, believed to have been built in 1790 by Captain Francis Light, the founder of the British Settlement of Penang. Suffolk House was the home of the early governors and the scene of many important social and official events. Situated at Ayer Itam, Penang, Malaysia, the building is the purest example of Anglo-Indian architecture outside of India and the sole example of Anglo-India Garden House in Penang. The campaign to restore Suffolk House began as early as 1961 but it's fully restoration was started at the end of 2000. A fund RM 500,000 had been allocated by the State Government of Penang to restore the building. This paper highlights the historical background of the building and the architectural significance, building conditions, restoration principle and scope of work covered in the restoration project. It also discusses some issues associated with the project.

1. INTRODUCTION

Suffolk House situated at Ayer Itam, Penang was the purest example of Anglo-Indian architecture building in Malaysia. After been left ruins for a decade and with a serious campaign by Penang Heritage Trust the effort to restored it back were ascertainable in year 2000. The restoration of Suffolk House was carried out phase by phase depend the allocation of fund. In October 2000, State Government of Penang had allocated RM 500,000 to Department of Civil Works, for the restoration projects of Suffolk House. The phase one projects involved the restoration of roof, ballroom and stabilized the wall structure. The restoration Suffolk House was carried out in eight months period and completed in middle of 2001.



Figure 1. The Suffolk House

1.1 Historical Background

Suffolk House is the double-storey building situated in open grounds along the banks of the Ayer Itam River. This building was built by Captain Francis Light (born Suffolk, England 1740, died Penang, 1794), founder of Penang British Settlement in 1790. Suffolk House is one of the earliest surviving 'great house' of the region and the purest example of Anglo-Indian architecture outside of India. It is also the sole example of

Anglo-Indian Garden House in Penang. Almost of all materials were imported from India and Burma using the East Indian Company trade routes, and construction techniques mirrored those found in Garden Houses from Madras.

After Light's death, the house was revived until Martina Rozells, who also inherited Light's house sold Suffolk house and the surrounding estates to W.E. Philips in 1805. Suffolk House served as the Governor's Residence for Philips and his father-in-law J.A. Bannerman, both who repeatedly served as Acting Governors of Penang at various time. During Philip's time the residence was enjoyed by his charmed circle, the Penang elite, and praised by visitors from far and wide. The Suffolk House has been served as Government House in the 1810's – 1820's. Beside the social and administrative events, this house was the place where Raffles came and discussed the critical political issues about establishing a British port east of Malacca, which later turned out to be Singapore.

In its prime, Suffolk House was featured by Captain Robert Smith and other 19th century painters. After many changes in ownership, Suffolk House was used as the canteen of the Methodist Boy's School, until it was abandoned more than a decade ago. The campaign to restore Suffolk House began in 1961, but short of funding and lack of support and interest in conservation, the house left ruins. In 1993, Penang Heritage Trust has conducted a dilapidation survey of Suffolk House. The Trust also sourced for fund to clear up the surrounding area, put scaffolding around the wall and cover the roof as temporary protection from the weather. Today, Suffolk House stands as a grand ruin. It is almost completely hidden from Ayer Itam Road by the school building, but it still surrounded by green open space on the bank of Ayer Itam River.

2. BUILDING CONDITION

The existing condition of Suffolk House can be summarized as follows:

2.1 Roof Structure

This is the major problem to the house. The roof is badly leaking and generally in poor condition. Most of the roof tiles were broken and falling dawn. Some of the roof structure such as timber trusses and rafters were rotting and infected by termite. The slipped roof tiles also have causing water penetration through roof to ceiling areas. The ceiling was facing a serious wood rot and ceiling board getting moist and deteriorated.



Figure 2. The leaking roof



Figure 3. Ceiling board was damaged cause by water penetration through leaking roof.

2.2 Flooring

The floor was in poor conditions. The timber floorboard at first floor was rotten and prone to water penetration and termite attack. The damage floorboards were falling down to the ground level and damage the marble floor.



Figure 4. The damage floorboard

2.3 Walls and Columns

All walls in the Suffolk House were made of plastered bricks, which were painted with lime wash. Most of the wall surface was in poor conditions including peeling plaster, fungal growth, fading lime wash paint and effects of air pollution. The walls and column are not only affected from rising damp but also from moister that seeps through the roof. Most of the wall plaster was crumbling and many surfaces have either no plaster left exposing the bricks and mortar joints.



Figure 5. Wall surface covered with fungal and mosses.



Figure 6. The upstairs building condition, timber door was rotten and damage. The columns were mostly effected with rising damp and crumbling plaster problems.

2.3 Rising Damp problem

Rising damp problem was affecting all wall and columns. The rising damp problems is effecting so bad that moisture had not only risen to the ground floor but also up to the first level. Despite the weathering and structural problems, the rising damp was appeared due to the poor drainage system. The lack of proper and efficient water outlet from the building and surrounding area, and high water table have caused the rising damp problems to the buildings. The wet condition of the building and the surrounding area has encouraged the impregnated plants growth bigger near the wall and caused the cracks to the brick walls.



Figure 7. View from East.

3. RESTORATION PRINCIPLE

The restoration of Suffolk House was based on 1818 form. From historical research, the most significant period in its history and architecture was in 1818 when it achieved its most complete and perfect form as a Garden House. The aim of restoration project is to restore back the original building using the original material and associate with design, texture, colour, workmanship and setting. The restoration project also be taken to restrain the process of decay and stop future destruction without damaging the character of building, and altering the features which have given the building it's historic and architectural important. Some of the fundamental restoration principle such as minimum intervention and minimal loss of existing fabrics have been applied.



Figure 8. The Fort Cornwallis, circa 1818.

4. SCOPE OF WORK

The restorations of Suffolk House were undertaken in 3 stages:

4.1 Building Survey and Documentation

- 1 Conducting building survey including inspection and analysis of structure conditions, roof, ceiling, flooring, walls and drainage system.
- 2 Preparing measured drawings for the house including building plans, sections and elevation.
- 3 Documenting photographs

4.2 Clean-up the Building Site Before Restoration

- Make clear to the surrounding area, cut all the unwanted vegetation and poison it to prevent future root damage.
- Removal all the broken tiles and unwanted materials on the site



Figure 9. The Inspection of roof structure

4.3 Building Conservation

- Removal of dirt, fungal and harmful growth on wall and column.
- 2. Dismantling roof tiles and storage the salvage.
- Cover the roof structure before started restoration works.
- 4. Removal of any rotten timber trusses and ceilings.
- 5. Reconstruct the central Jack Roof
- 6. Laying new clay tiles
- 7. Fixing water proofing membrane to roof
- 8. Remove and replace the badly decayed timber floor
- 9. Hack off the crumble plaster
- 10. Re-plastering and painting the wall with lime wash
- 11. Reconstruct the collapse and damage column to the original form
- Remove and re-pointing loose mortar on the exposed bricks.
- 13. Restoring any decayed door, window and fanlights
- 14. Laying and fixing new marble floor



Figure 10. Laying and fixing new roof tiles

A project team consisting of a project manager, architect, quantity surveyor and contractor has been formed to carry out the works in phase one. Weekly technical meetings are held by the project team to discuss any problem encountered on site. The team also receives an advice from Department Museums and Antiquity regarding the conservation methods. Monthly reports prepared by the project manager and be submitted to client and architect consultant to highlight the current work progress, problems on site and the upcoming work schedule.

5. ISSUES AND PROBLEMS

There are some issues that been facing at the restoration project. At the earlier stages of the projects, a lack of skilled and experienced workers in the conservation field has affected the work progress of the project. However after several months, with close monitoring and constant guidance from the project consultants, the project contractors and the workers have developed a good understanding of the work involved and harnesses their skills in heritage conservation.

Despite on the skill workers, the projects also have a problem in getting the original material to reconstruct the buildings. The materials like roof tiles and timber truss was not from local. The existing roof tile is a clay China tiles and to get this source the contractors had to import it from China and it cost of time. The timber truss was identified as 'meranti' hardwood, although the source is from local but the contractor must get the same material to match with the original material.

This project has been very challenging in every aspect but lot of knowledge has revived through the exploratory of restoration works. The success of the restoration of Suffolk House project was largely attributed to the close supervision high spirits of teamwork among the consultants, contactor and government officials. The conducting of weekly and monthly technical meetings on-site throughout the project was very important in order to keep track of the work schedule and to solve various technical problems on site.

6. CONCLUSION

In Malaysia the practice of building conservation is considered new in the local architectural scene. Presently, there are practically no skilled laborers and technical experts in conservation methods and techniques. This is the major problem because almost all conservation projects involve both repair and maintenance stages requiring an understanding of and analysis of building defect diagnoses. There is also the question of testing and treating building material, choosing appropriate tools and the methods to conserve the building. As such the restoration of Suffolk House poses a challenge to many especially the architect consultants and conservation contractor. The restoration of Suffolk House also has posed a commitment and positive efforts by Malaysian government to conserve the heritage building in Penang and the country for the future. The restoration of Suffolk House project has breath new life and a hope to develop the future uses and plan for restrain the building to future generations.

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