# PROPOSED RECOVERY WORK FOR BLOCK 4 AT THE CENTRAL POLICE STATION COMPOUND

#### 1. PURPOSE

This Paper briefs Members of the Antiquities Advisory Board (AAB) on the recovery work for the Married Inspectors' Quarters ("Block 4") at the Central Police Station (CPS) Compound, which partially collapsed on 29 May 2016. This Paper follows a submission on eight initial options for the recovery of Block 4 to the AAB on 8 September 2016 (Board Paper AAB/33/2015-16).

In this paper, a narrative of the work since the previous submission to the AAB is set out. This is followed by an analysis of all the options previously submitted, along with brief guidelines to assist consideration, and a shortlist of three of the options. The AAB is invited to comment on the options.

#### 2. BACKGROUND

Block 4 is one of 16 heritage buildings in a cluster of declared monuments formed by the Central Police Station, the Central Magistracy and the Victoria Prison. First developed in the 1840s, the CPS site has undergone many changes and structural extensions, demolitions and reconstructions were common to the buildings including Block 4. Many of these buildings, Block 4 included, have been in a poor to very poor condition and required extensive works to extend their usable lifespan. The purpose of the Central Police Station Revitalisation Project is to open up the once-closed government site for public use, and a key aspect of the project is to renovate these buildings to meet modern standards so that they can be used by the public safely.

Members are referred to the previous Paper, noted above, for details of the background of the significance of the building; the policies set out in the Conservation Management Plan<sup>1</sup> for the restoration works; the renovation works planned, completed or in progress up to the point of the partial collapse; the works immediately following the collapse; and the commissioning and terms of reference of an Independent Review Panel set up to look into the partial collapse.

<sup>&</sup>lt;sup>1</sup>Conservation Management Plan for the Central Police Station 2008; reviewed and updated 2013; Purcell

#### 3. CURRENT POSITION

#### 3A. CONDITION OF THE BUILDING

Approximately 15% of the building collapsed on 29 May 2016. The extant building has been propped with temporary supports, and sensors have been installed to measure any movement in the structure. The sensors are monitored regularly; to date, no causes for concern have arisen. A salvage operation of reusable material has been carefully undertaken, and those materials that were salvageable have been recorded and set aside off-site for possible re-use. Only a small quantity of materials proved to be salvageable and were decorative elements; these include granite stoneworks, joinery, and metal parts of the balconies.

#### 3B. INDEPENDENT REVIEW PANEL

The findings of the Independent Review Panel (the Panel) appointed by The Hong Kong Jockey Club (The Club) were published on 3 November 2016. In the Panel's view on the three most likely causes of the partial collapse were: settlement of the West Corbel; cutting of holes in the North Wall; and the combined effect of localised weak masonry and the cutting of holes at the brick piers.

#### 3C. BUILDINGS DEPARTMENT

The statutory authority responsible for the safety of buildings, the Buildings Department (BD), released its report on the partial collapse on 31 May 2017. It concluded that "...the key.....factor for the collapse is most likely attributable to the hollowing out of multiple pockets in brick...walls for the installation of steel [beams] for the strengthening works at the first floor...".

#### 3D. THE NEED FOR STRUCTURAL STRENGTHENING

The findings of the Panel and BD were taken into account as part of a wideranging review of the building for its recovery. This review included an examination of the engineering issues (fire and structural safety) and statutory requirements (compliance – other than fire and structural safety). This review has prompted a re-think in the approach to the restoration of the building and concluded that substantial structural strengthening works should be done, over and above statutory requirements, to the entire building to ensure that it will be safe to the public. This will have a significant impact on the interiors of the building and affects all options for recovery of the building, except for options that involve demolishing the extant building. Relevant government departments have been consulted on the structural strengthening work on the extant building and have no objection.

#### 4. RECOVERY OPTIONS

The eight options that were stated in the previous Paper, marked A - H, are restated below but with shortened titles to facilitate easy recognition.

- A. [Restoration]: Restore the collapsed parts of the building by using salvaged or traditional materials, if feasible, and use the building for adaptive reuse.
- B. [Reconstruction]: Reconstruct the collapsed parts of the building by using modern materials and use the building for adaptive reuse.
- C. [Adaptation]: Rebuild the collapsed part in a contemporary design with associated internal alterations throughout for adaptive reuse.
- D. [Preservation]: Conserve the partially collapsed building as found, and keep the remaining standing parts of the building for adaptive reuse.
- E. [Façade retention]: Demolish part of the building as necessary to make safe, reconstruct the collapsed part, and keep the building as a monument, with no intended reuse of the building.
- F. [Façade and interior retention]: Retain the façade and interior partitions of the building, and keep the building as a monument, with no intended reuse of the building.
- G. [Total Reconstruction]: Demolish the remaining parts of the building and construct a new building with the original appearance and layout on the same site for adaptive reuse.
- H. [Demolition]: Demolish the remaining standing parts of the building and create an open courtyard on the site.

#### 5. ASSESSMENT OF THE OPTIONS

The options have been assessed based on three criteria, namely:

- (1) Engineering feasibility: whether an option is executable in a manner that is safe to the building, the site and people;
- (2) Heritage value: whether an option will result in insignificant or significant damage to the historic fabric of the building;
- (3) Contextual value: whether an option is compatible with the intention of the revitalisation project.

# Criterion 1: Engineering feasibility

As noted in the previous presentation to the AAB on 8 September 2016, safety is the primary consideration and the practicality of the options would be dependent upon the engineering feasibility of them. As such, engineering feasibility is the overarching criterion in this assessment.

Option A [Restoration] stipulates that salvaged or traditional materials are to be used to restore the collapsed part of Block 4. As noted in Section 3A in this paper, materials salvaged from the collapsed part of Block 4 are in small quantities and are primarily decorative elements. Furthermore, the use of traditional materials and methods alone cannot sufficiently strengthen Block 4 to meet prevailing buildings code and safety standards. In order to safely strengthen the rebuilt part of Block 4 it is necessary to use new and modern materials (i.e. steel and concrete) substantially. This option cannot recover Block 4 safely and is therefore not feasible from an engineering perspective.

<u>Assessment:</u> Option A [Restoration] is not recommended and hence not shortlisted.

# Criterion 2: Heritage value

Noting that the partial collapse has already resulted in some loss of heritage value, an examination of international heritage conservation practices has been conducted to assess the impacts of each of the remaining options on heritage value.

Both Option G [Total Reconstruction] and Option H [Demolition] would require total demolition of the extant building. This will completely remove the remaining historic fabric of Block 4 and will be undesirable. In addition, such removal will be unnecessary because, as noted in Section 3D above, structural strengthening is a feasible solution to ensure the safety of the extant building.

<u>Assessment:</u> Option G [Total Reconstruction] and Option H [Demolition] are not recommended and hence not shortlisted.

#### Criterion 3: Contextual value

As noted in Section 2 in this paper, the revitalisation project aims to restore and revitalise the historic buildings in the Compound for adaptive reuse. An underlying principle that guides the project, as stated in the Conservation Management Plan, is that "The best way to conserve a building is to use it."

Hence the remaining five options, B to F, are evaluated on their impact on the contextual value, or integrity, of the revitalisation project.

Both Option E [Façade retention] and Option F [Façade and interior retention] aim to restore the physical appearance of Block 4, with only minimal strengthening works that will keep the building standing safely.

Without sufficient strengthening to increase the safety factor, these options would make Block 4 a monument that will not be used for adaptive reuse. These two options are not compatible with the aim to reuse the building and are not sustainable in the long term.

<u>Assessment:</u> Option E [Façade retention] and Option F [Façade and interior retention] are not recommended and hence not shortlisted.

From the above assessment, five of the eight options are not recommended because they do not meet the criteria of engineering feasibility, or heritage value, or contextual value. Out of the eight options, three options meet all three assessment criteria and have been shortlisted and recommended for consideration by the AAB; they are options B [Reconstruction], C [Adaptation] and D [Preservation].

#### 6. THE SHORTLISTED OPTIONS

All three recommended options require substantial structural strengthening works throughout the building to ensure the structure will be fit for adaptive reuse. In addition, all three options are compliant with international heritage conservation practices. However, they represent different, albeit equally acceptable, approaches to the recovery of the building.

Option B – [Reconstruction]

This option seeks to reinstate the building to its appearance prior to the partial collapse. The evidence of the partial collapse and its rebuilding would not be distinguishable from afar. To rebuild the collapsed part, approximately 8% of the extant building would be removed to facilitate the construction of new foundations. The collapsed part and demolished part would be subsequently rebuilt as a facsimile. New and modern materials (i.e. steel and concrete) would be used for the reconstruction although some of the salvaged materials can be reused for non-structural strengthening works. This option would retain all the original floor area, spatial configuration and the intended uses as low-traffic venues (NGO spaces and retail shops).

# Option C – [Adaptation]

This option seeks to differentiate the rebuilt section from the original building in a contemporary manner, which would noticeably tell the history of the partial collapse and its rebuilding. To rebuild the collapsed part, approximately 8% of the extant building would be removed to facilitate the construction of new foundations. The contemporary reconstruction would allow for substantial strengthening of the structure and provide flexibility for spatial reconfiguration of the interior without changing the footprint of the original building, hence allowing the use of the building for high-traffic public activities (such as visitors centre and exhibition spaces). This would be compatible with the intent of the revitalisation project, the overall character of the site, and improve sustainability in the long term.

# Option D – [Preservation]

This option seeks to make safe the building as it is and to leave the lost part of the building exposed to tell the history of the partial collapse. The remainder of the building would be retained for use as originally planned before the partial collapse (as low-traffic NGO spaces and retail shops), and the footprint of the lost part would become a courtyard.

Relevant government departments have been consulted on the assessment of the recovery options.

#### 7. CONCLUSION

The Central Police Station Revitalisation Project is an important conservation initiative to open up a heritage site for adaptive reuse. Block 4 is an important heritage building in the CPS Compound that has undergone many

reconfigurations and has been in a poor condition. The partial collapse of Block 4, with a loss of approximately 15% of the building, was a regrettable event. The work done to date has showed that the extant building can be and should be structurally strengthened. For recovery of the lost part of the building, the choice is between those options that strike a sensible balance between preserving the heritage value of the building and the wider site, sustainability and practicality. The three shortlisted options place the emphasis in one or other of these values, but all are acceptable approaches to the recovery of the building.

The Hong Kong Jockey Club is fully committed to delivering the CPS compound revitalisation project. Although the impact of the recovery options on cost and on the time to complete the project are noted, these are not regarded as determining factors to be taken into account in the decision about which option is to be selected.

Members of the AAB are invited to offer comments on the shortlisted recovery options.

The Hong Kong Jockey Club

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