

Major Repair to Tang Ancestral Hall, Ping Shan

Project Profile



**Antiquities and Monuments Office,
Leisure and Cultural Services Department**

June 2004

Major Repair to Tang Ancestral Hall, Ping Shan

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1. BASIC INFORMATION

1.1 Project Title

Major Repair to Tang Ancestral Hall, Ping Shan.

1.2 Purpose and Nature of the Project

1.2.1 The purpose of the project is to reconstruct the roof, to repave the floor, to carry out internal and external redecorations and to undertake minor repairs and restorations as necessary for the Tang Ancestral Hall at Ping Shan, Yuen Long (“the ancestral hall”) (Location plan showing the project area is at Appendix I)

1.2.2 The main roof of the ancestral hall is extensively affected by termite infestation which has caused serious weakening of the roof purlins; the plaster and paintings on the internal walls of the ancestral hall have peeled-off and the flooring tiles have deteriorated. (Photos showing the deteriorated components of the ancestral hall are at Appendix II). As the Antiquities and Monuments Office (AMO) has the responsibility to keep Hong Kong’s declared monuments in a sound maintenance condition, a major repair to the Tang Ancestral Hall at Ping Shan is proposed and funded by the AMO.

1.2.3 The repairs strategy and a draft specification was prepared by Architectural Services Department (Arch SD) and vetted and agreed by AMO. The work consists of the following major repair items and ancillary work:

- (i) Repair the floor of the ancestral hall with cement mortar or granite slabs as appropriate matching the existing style.
- (ii) Re-plaster and re-paint the internal walls of the ancestral hall.
- (iii) Clean, repair and re-point the external wall and “dentist” replacement to individual damaged bricks. Also, re-paint the frieze of the external wall to match original form.
- (iv) Dismantling of existing main roof, including roofing tiles and timbers. Then, reconstructing the main roof timbers and then tiling. Also, repair and re-paint the ridge and gable ridge.
- (v) Repair and re-paint the timber doors, wooden frame and the windows.
- (vi) Clean, repair and repaint a number of wooden plaque and boards of the ancestral hall.
- (vii) Clean and repair the existing drainage system.

1.2.4 Drawings showing the proposed work are attached at Appendix III to V.

1.3 Name of Project Proponent

Antiquities and Monuments Office (AMO), Leisure and Cultural Services Department

1.4 Location of Project

Tang Ancestral Hall, Hang Mei Tsuen, Ping Shan, Yuen Long.

1.5 History of the Tang Ancestral Hall

- 1.5.1 The Tang Ancestral Hall was constructed by the fifth generation ancestor of Tang Clan about 700 years ago and it is the main ancestral hall of the Tang Clan of Ping Shan.
- 1.5.2 The Tang Ancestral Hall is a magnificent three-hall structure with two internal courtyards and is one of the finest examples of its kind in Hong Kong. The wooden brackets and beams of the three halls are elegantly carved with auspicious Chinese motifs. The main ridges and roofs are decorated with fine *Shiwan* dragon-fish and pottery unicorns.
- 1.5.3 The Tang Ancestral Hall was declared a monument on 14 December 2001 while it is still owned by the Tang Clan of Ping Shan. The ancestral hall has been used for worship and celebrations of traditional festivals and ceremonies, as well as a meeting place for the Tang Clan of Ping Shan.

1.6 Number and Type of Designated Project to be covered by the Project Profile

- 1.6.1 The proposed work is a designated project under Section Q.1 of Schedule 2, of the Environmental Impact Assessment (EIA) Ordinance because the project will involve building works wholly in an existing site of cultural heritage (namely a Declared Monument).

1.7 Contact Person(s)

Mr. Bill Greaves

Senior Projects Manager
Antiquities and Monuments Office
Phone: 2721 2421
Fax: 2721 6216
Email: wdgreaves@lcsd.gov.hk

Mr. S.L.LAM

Senior Property Services Manager
Architectural Services Department
Phone: 2773 2200
Fax: 2765 6611
Email: lamslg@archsd.gov.hk

1.8 Estimated Cost

\$ 3.1 million.

2. OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

2.1 Responsibilities of Parties

- 2.1.1 In this project, AMO is the project proponent, who will manage and monitor the project. AMO have engaged the Arch SD as their works agent who will be responsible for preparing the specification and the tender documents. Also, Arch SD will take part in monitoring the project while AMO will act as the historic conservation adviser. The owner of the property is the Tang Clan of Ping Shan who will be consulted at all stages of the project.
- 2.1.2 The works will be undertaken by a specialist contractor (“the Contractor”) on the List of Approved Specialist Contractors for Repair and Restoration of Historic Buildings provided by the Environment, Transport and Works Bureau. In addition, this Contractor will be responsible in carrying out the mitigation measures for minimizing the environmental impacts induced by the project.

2.2 Site Survey

- 2.2.1 A full structural and condition survey of the ancestral hall has already been carried out to identify problem areas and has recommended corrective action necessary. The draft specification for the proposed work has been vetted and revised by AMO to check that it fully complies with international conservation standards. Any further environmental requirements that specify in the environment permit would be inserted into the final specification document prior to tender action.

2.3 Method of Construction

- 2.3.1 As the work involves a historic building, a higher degree of care will be taken in all phases of the work. In particular, the temporary scaffolding will be provided to a high standard to ensure that all sections of the roof will be easily accessible for dismantling and no undue stress will be placed on any damaged materials.

2.4 Reconstruction of the Chinese Tiled Roof

- 2.4.1 Existing roofing tiles are to be carefully removed and stacked for reuse. New tiles and sound old tiles will then be reused for the retiling of the roof. New tiles should be of matching size, quality and colour to original. Sample of tiles is to be approved before ordering.
- 2.4.2 All new timber is to be the best of its kind, free from worm holes or other defects such as cracks.
- 2.4.3 During taking down of rotten or broken timber for replacement or repair, great care is required to take out the built-in section so as not to damage the adjoining plaster work. The Contractor may be required to cut the exposed part of the timber away first and carefully break down the built-in section into pieces by drilling (using only hand-held powered tools) before taking the section out.

- 2.4.4 All new timbers are pre-treated by the timber-suppliers in their own workshops with approved preservative. Termiticide will be sprayed on the existing and salvaged timbers to prevent termite infestation. The works will be conducted by specialists with great cares to avoid negative environmental impacts.

2.5 Replacement of Deteriorated Bricks

- 2.5.1 Deteriorated bricks include those cracked, broken bricks, worn bricks for more than 3mm depth, and bricks with the hard surface skin worn away. Areas of missing or deteriorated bricks to be replaced by new or salvaged bricks shall be indicated on site to the Contractor by the Arch SD and AMO.

- 2.5.2 Replacement of bricks shall be done by “piece-in” method as follows:

- (i) Areas identified to be replaced including deteriorated bricks, mortar/cement fillings or plaster should be completely taken out without affecting the neighbouring sound bricks.
- (ii) All existing mortar joint and pointing to be carefully removed to leave a tidy position to receive the piece in bricks.
- (iii) Header and tie bricks adhered to both the inner and outer leave of the walls should be completely taken out even though only one side of it may be deteriorated or missing.
- (iv) The final surface over the replaced area should be flat in relation to the existing surface of the wall.
- (v) Bricks used for piece in repair should in one complete piece with similar colour and dimensions as the existing neighboring bricks and should be laid in the same pattern as the existing.

2.6 Flooring

- 2.6.1 Using the hand-held power tools to hack-up the cracked and defective areas of existing floor finish (i.e. cement sand screed) at the entrance hall, side rooms, central hall, side aisles, rear side rooms, rear hall, front yard and the rear yard. Carefully make good to the exposed base with cement mortar in matching colour.
- 2.6.2 Carefully filling and compacting the ground to ensure the new floor surface is flat and match the existing finishing floor level with respect to neighbouring features.

2.7 Drainage

- 2.7.1 Clean and clear the existing drainage system of the property, including the surface channel from internal areas and courtyards inside the building.
- 2.7.2 Repair and reconstruct individual drains or pipes if necessary to render the entire

drainage system in good working order, while ensuring that the design and material used match the existing.

2.8 Implementation Programme

The tentative implementation programme (as agreed with the Tang Clan) is as follows:

Pre-contract preparations

(i.e. Design, Tender Documents, EIAO, etc) Apr./2004 to Oct./2004

On-site Construction Period

Oct./2004 to Apr./2005

3. MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

- 3.1 The project site is located in a semi-urban area in Ping Shan, Yuen Long. The site is located between the villages of Hang Tau Tsuen and the Hang Mei Tsuen, and this area consists a number of low-rise residential buildings (known as “*Ding Uk*”). The nearest groups of *Ding Uk*, which are considered to be sensitive receivers, are located approx. 3m from the site. In addition, another declared monument, the Yu Kiu Ancestral Hall, locates just beside the Tang Ancestral Hall..
- 3.2 The Tang Ancestral Hall is one of the significant landmarks along the Ping Shan Heritage Trail. There are several historical buildings within 300 meters of the site, including Yeung Hau Temple, Hung Shing Temple, Ching Shu Hin and Kun Ting Study Hall. However, no adverse impact on these buildings is anticipated due to their remoteness from any affects of the building works on the subject site.
- 3.3. The major noise source area is caused by road traffic coming to and from the car parking area immediately in front of the project site.

4. POSSIBLE IMPACTS DURING CONSTRUCTION PHASE

4.1 Cultural Heritage

- 4.1.1 The roof of the Tang Ancestral Hall has decayed over the years due to a combination of termite attack and natural weathering. Also, the existing wall painting has deteriorated over time and needs to be “made good”. The major part of this project is that the roof of the ancestral hall will be reconstructed. Special care and attention will be paid for maintaining the historic nature of the ancestral hall; therefore all building and painting works are to be carried out in a careful and skilled manner by very experienced artisans only, who will be subject to a high level supervision by staff of AMO and Arch SD to ensure that the works are of the highest standard and the materials are exactly as that required. On completion of the proposed major repair project there will be a positive benefit to the environemnt in general and to the users and tourists of the ancestral hall in particular.
- 4.1.2 Another declared monument, Yu Kiu Ancestral Hall, together with several historic buildings are located within a 300m radius from the site. Due to the nature and scale

of this project, as well as the distance of these buildings from the project site, no major adverse impact is anticipated.

4.2 Noise

- 4.2.1 The distance between the site and the windows of the nearest residential dwellings is about 3m. Although these residential blocks are quite close to the site, only minor noise impacts are anticipated, as no heavy power-operated machinery will be involved in this project. The only construction noise will be that generated by hand-held power tools, which will be at a very low level. It is therefore believed that the noise impact on the surrounding sensitive receivers is considered to be minimal.

4.3 Air Quality

- 4.3.1 The problem of dust emission from construction work is expected to be minimal since the demolition of the existing roof and the hacking-up of existing floor finishing will be mainly carried out by hand-held power tools. The amount of dust generated is expected to be low and will be controlled with using good site management procedures that are included in the specification.

4.4 Traffic Impacts

- 4.4.1 Some traffic impact on the nearby Ping Ha Road will be inevitable due to lorries occasionally transporting construction materials to and from the site, such as timber, bricks, builders waste, etc. Yet these impacts are considered to be very limited due to the busy nature of these roads for normal everyday users.

4.5 Solid Waste

- 4.5.1 During the working period, about 20 cubic meter of construction and demolition material (C&D material) may be produced, including cement mortar, roof timbers, roof tiles and wall plaster. Any sound roof tiles and roof timbers should be retained on-site for reuse after inspection by experts from Arch SD and AMO. Those unwanted C&D material will be removed off site promptly and transport to the landfill sites. The guidelines concerning temporary store and proper disposal of C&D material will be strictly monitored. Therefore, no significant impact due to the generation and disposal of the limited and non-toxic solid waste is therefore expected from the works.
- 4.5.2 Spent chemicals from any waste termiticide and normal domestic detergent will be handled, stored and disposed of in accordance with the Waste Disposal Ordinance. Where necessary, the hotline (2755 3554) for chemical waste control and chemical waste disposal will be contacted for enquiry on technical requirements for handling chemical wastes. Any waste termiticide should be carefully returned to its container and taken back to the contractor's workshop for filtering and future reuse. In view of the cost of the termiticide, the waste chemical is not expected to exceed 1 litre in total.

4.6 Spoil Water

- 4.6.1 Spoil water is likely to be generated from washing down the brick walls, granite columns and the floors using a mild detergent and fresh water solution. Such waste water will be no more harmful than normal domestic waste water; however it will be filtered before discharge to remove any pieces of waste materials that may block up the drains. Quantity of waste water generated is not expected to exceed 1,000 litres total. Also, all the effluent discharge from the site will be subject to the Water Pollution Control Ordinance.

4.7 Dangerous Goods

No designated Dangerous Goods are involved in the project.

4.8 Ecological Impact

- 4.8.1 There are no trees, shrubs or planting either within the project site or close enough to the site to be damaged by the intended works. No landscaping issues therefore are expected to arise on this occasion.
- 4.8.2 Regarding possible bats and birds within the site, representatives from Agriculture, Fisheries and Conservation Department (AFCD) and experts of Kadoorie Farm and Botanical Garden (KFBG) were invited to attend a joint-site visit with AMO's staff in May 2004 for checking the evidence of any bat roosts or bird nest.
- 4.8.3 Experts of KFBG pointed out that no signs of bats residence inside the ancestral hall were found while the ancestral hall had been just used as a feeding roost (a place for short staying to eat their preys) for bats. As buildings similar to this ancestral hall (i.e. Yu Kiu Ancestral Hall) could be found nearby for providing alternative feeding roosts for the bats, so that additional measures for relocating the bats during the work period would not be necessary.
- 4.8.4 Moreover, during the joint-site visit, no bird nests were found at the roof space of the ancestral hall. In view of the above, the experts of KFBG also thought that the proposed works would be less likely to cause disturbance to the wildlife nearby the site.

5. ENVIRONMENTAL PROTECTION MEASURES TO BE INCORPORATED IN THE DESIGN

5.1 Measures to Minimize Environmental Impacts

- 5.1.1 From above section, it is assessed that noise, air quality, traffic, solid waste and spoil water arising from the project are minimal. At the same time, standard mitigation measures in accordance with the latest version of "Recommended Pollution Control Clauses for Construction Contracts" will be adopted for further reducing the environmental impacts.

5.2 Cultural Heritage

5.2.1 Antiquities and Monuments Ordinance

According to the Section 6(1) of the Antiquities and Monuments Ordinance (Cap. 53), no person shall demolish, remove, conduct, deface or interfere with a monument, unless a permit is granted. As the Tang Ancestral Hall is a declared monument, the required permit will be obtained from the Antiquities Authority before any work may commence on-site. Any person who contravenes Section 6(1) shall be guilty of an offence and shall be liable on conviction to a fine of \$100,000 and imprisonment for 1 year. Moreover, the proposed works will comply with the requirements of the Permit in respect of building preservation.

5.2.2 Standard of Workmanship

- 5.2.2.1 All works to be carried out shall match the original design and care has to be taken to trace from the existing building what the original construction including materials, dimensions and colours etc. should be or should have been.
- 5.2.2.2 On completion of the works, the new building works and paintworks should not appear too obvious and for this reason all colours for painting and all materials employed must be approved by the Arch SD and AMO before use.
- 5.2.2.3 The Contractor is required to employ experienced craftsmen and artists to reconstruct missing or damaged or deteriorated elements of the building where no similar elements can be found.
- 5.2.2.4 The Contractor is required to keep a record of methods and materials adopted in this project while the format of the record should be accepted by the Arch SD and AMO. A copy of the record will be given to the AMO for future maintenance purpose.
- 5.2.2.5 The record shall contain types of materials used (including common names and technical names), area of application, mix proportion, method of mix, method of application, etc., to allow future maintenance with the same materials and methods.

5.3 Noise

- 5.3.1 Demolition of the existing roof and hacking-up of existing floor finishing by the hand-held power tools will cause slight amount of noise nuisance during the initial stage of the project. Although the nearest receiver is very close to the site (approx. 3m away from the hoarding), the anticipated noise level will be very low since no heavy power-operated machinery will be involved.

- 5.3.2 For further reducing the noise disturbance, appropriate mitigation measures will be implemented to control noise level within acceptable limit as stipulated under Noise Control Ordinance, EIAO and other relevant regulations during the construction, such as the use of quieter tools, proper maintenance of plant and good working practices will be adopted.
- 5.3.3 No construction works will be carried out during 7 p.m. to 7 a.m. and any time on Sundays and General Holidays, as a result, there will not be any noise generated during these sensitive hours.

5.4 Air Quality

- 5.4.1 Dust pollution will not be allowed to cause a major impact, as only a small amount of dust will arise from the demolition works during the taking down of the roof and removing floor tiling. In addition, the Air Pollution Control (Construction Dust) Regulation will be strictly followed and monitored. The following mitigation measures will be carried out:
- (i) Avoid free falling of debris while roof material is being removed and dismantled, baskets or similar containers shall be used to carry such material from the roof to ground level for disposal.
 - (ii) Regularly dampen the floor with clean water to avoid spread of dust during the hacking-up of and removing of existing floor finishing.
 - (iii) Spray the debris with clean water so that it remains damp before it is carted away. In addition, water will be continuously sprayed on the surface where any drilling, cutting or other small-scale breaking operation is carried out by using hand-held power tools.

5.5 Solid Waste

- 5.5.1 About 20 cubic meter C&D material would be produced from the demolition or site clearance (i.e. broken clay tiles, roof timber, old clay bricks, cement mortar, plaster, etc.) After sorting out those that can be re-used, all the unwanted C&D material will be removed from the site to the approved land-fill sites. Moreover, all the C&D material will be handled and disposed in accordance with the Waste Disposal Ordinance, as a result, the environmental impact from waste disposal is minimal.

5.6 Water Quality

- 5.6.1 When cleaning the brick walls, columns and the floor as well as carrying out small scale brickwork, spoil water would be produced. Such spoil water will be filtered before discharge into drains. Also, the Water Pollution Control Ordinance would be strictly monitored for discharging such waste water from the site. Moreover, there are no water sources in the vicinity of the site that would be impacted or affected by the project.

5.7 Further Environmental Implications

Severity, Distribution and Duration of Environmental Effects

The possible severity, distribution and duration of environmental effects and further implications are summarised below:

Impact	Effects	Severity	Distribution	Duration
Cultural Heritage	Enhance the condition and attractiveness of the ancestral hall as well as the Ping Shan Heritage Trail	Beneficial	Tang Ancestral Hall	Long-term
Noise	Noise nuisance from demolition and clearance works	Minimal	Project Site only	About 3 months
Air Quality	Dust generated from demolition works and construction activities	Minimal	Project Site only	About 3 months
Solid Waste	Handling and disposal of about 20m ³ of demolished building material	Minimal	Project Site only	About 3 month
Water Quality	Discharging the spoil water with appropriate filtering process	Minimal	Project Site only	About 3 month
Traffic	Additional lorries to and from works site	Minimal	Ping Ha Road	About 3 months

5.8 Public Consultation

5.8.1 The Tang Clan has been kept constantly informed through regular progress meetings. As the ancestral hall is one of the most attractive tourism spot at the Ping Shan Heritage Trail and is a meeting place for the local villagers, the Contractor will be urged to complete the project on time.

5.8.2 The local villagers have requested the government to undertake this project for a number of years and therefore strongly support its urgent completion. It is also understood that they are willing to tolerate reasonable disturbance during the construction period providing the level is minimal and appropriate mitigation measures will be adopted. Constant dialogue between AMO and the Tang Clan will be maintained for better understood their concerns.

5.8.3 The Antiquities Advisory Board have been informed of the proposed project and they strongly support the proposal.

5.9 History of Similar Project

5.9.1 During February 2004 to June 2004, similar roof reconstruction works are being carried out at Tin Hau Temple, Causeway Bay.

6 USE OF PREVIOUSLY APPROVED EIA REPORTS

The approved Project Profile for Tin Hau Temple, Causeway Bay (Ref: DIR-091/2003) could be referred to in this present case, since both of them involve restoration/repair work to a traditional Chinese Declared Monument.

7 CONCLUSIONS

- 7.1. Water quality, noise, dust, traffic and solid waste impacts will be minimal during the construction phase. Moreover, by adopting appropriate mitigation measures, no adverse impacts are anticipated and the sensitive receivers will be protected from impacts. (The mitigation measures are summarized in Appendix VI). Moreover, on-site environmental monitoring and audit will be carried out by Arch SD and AMO to ensure the proposed mitigation measures are properly implemented throughout all phases of the project.
- 7.2. The project will repair the Tang Ancestral Hall at Ping Shan while preserving and enhancing the traditional features of the building. The Contractor will strictly comply with the requirements specified in the permit issued under Section 6 of the Antiquities and Monuments Ordinance by the Antiquities Authority. All the repair works will be carried out by experienced craftsman and workers. Experts from Arch SD and AMO will monitor and supervise the works in order to ensure the historic value and architectural features of the building would be kept intact.
- 7.3. This project is intended to put the ancestral hall back into good repair for a number of years in order that it may again be fully used by the Tang Clan, as well as being enjoyed by both residents of the neighbourhood and visitors alike. As the building is one of the landmark in the Ping Shan Heritage Trail, its restoration will help to promote cultural tourism and heritage education in Hong Kong.
- 7.4. As the environmental impact arising from the project is not considered to be adverse, but on the contrary is considered very beneficial to the community, an application for permission to apply directly for environmental permit under EIA Ordinance is therefore requested.

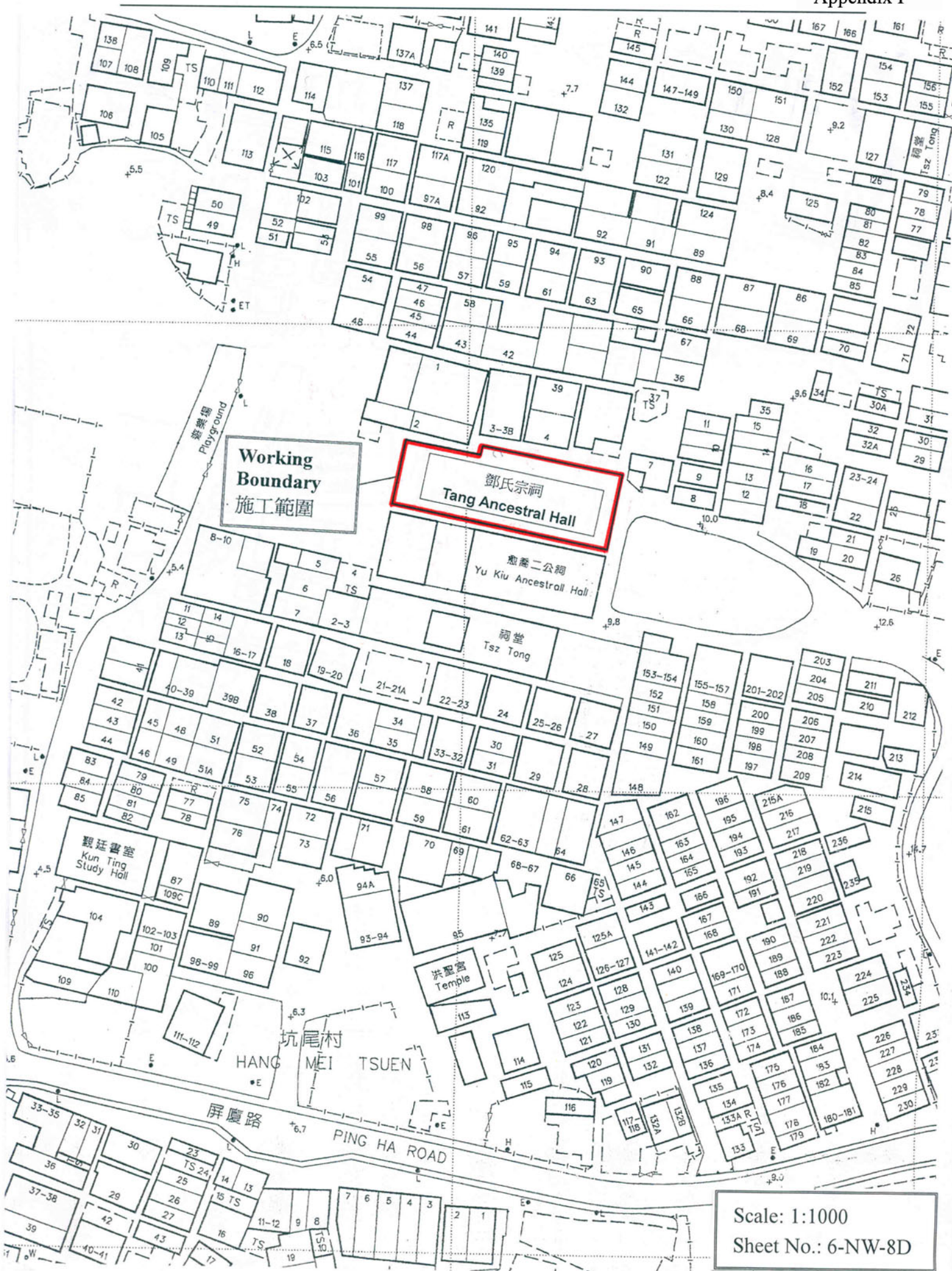




Photo 1 Front view of Tang Ancestral Hall at Ping Shan



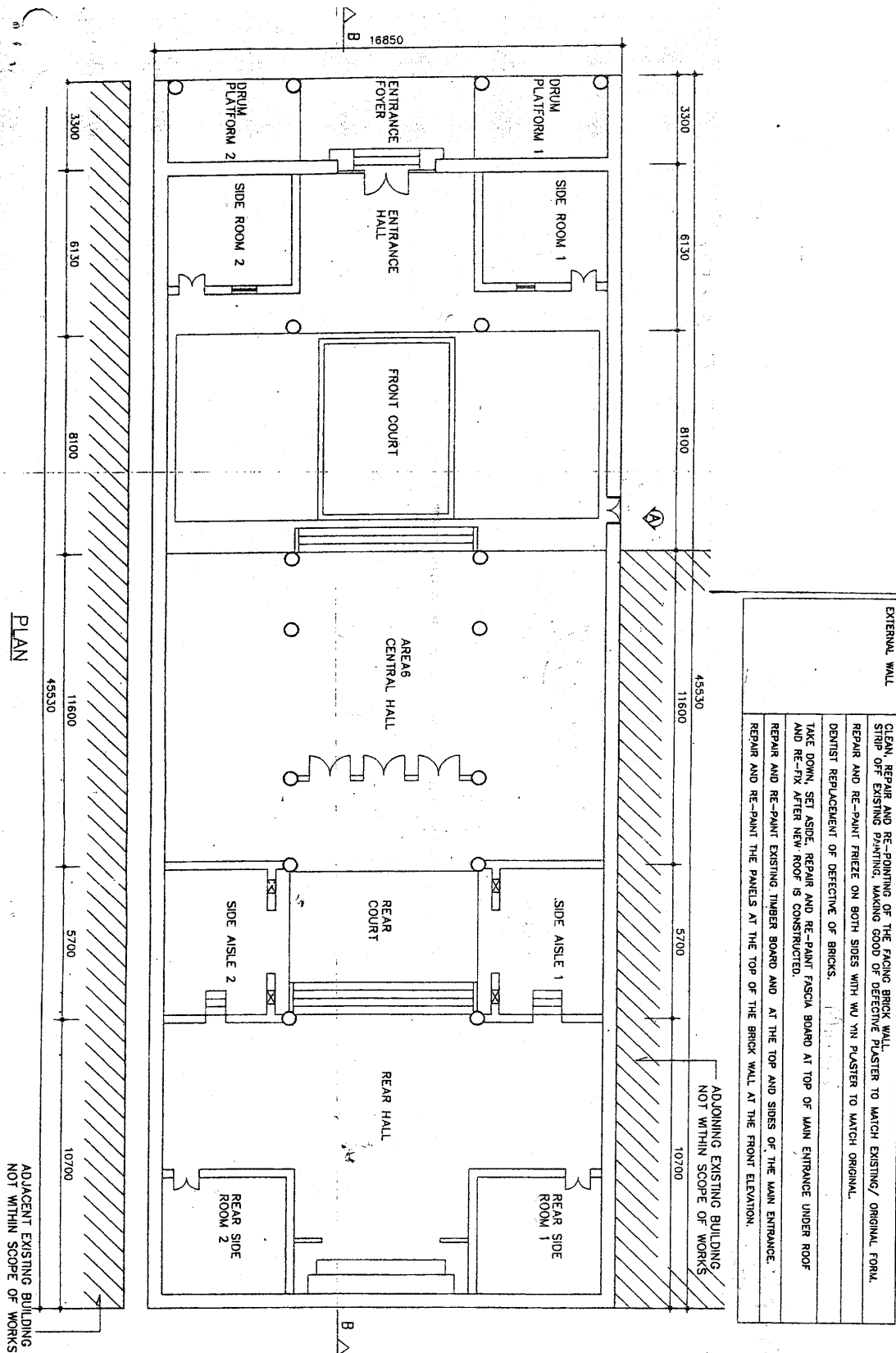
Photo 2 The timber beams of the ancestral hall are under serious termite infestation



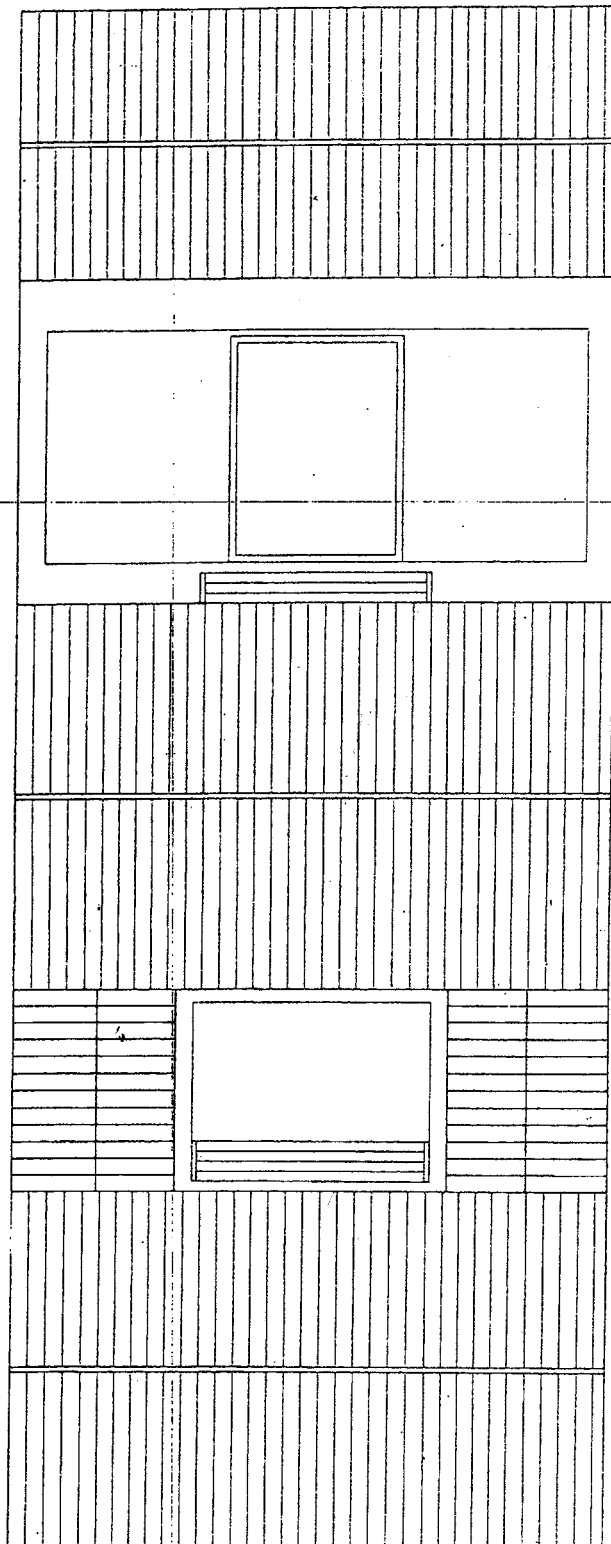
Photo 3 The vivid water-marks on the walls indicate that the ancestral hall has been seriously affected by the problem of rising-damp



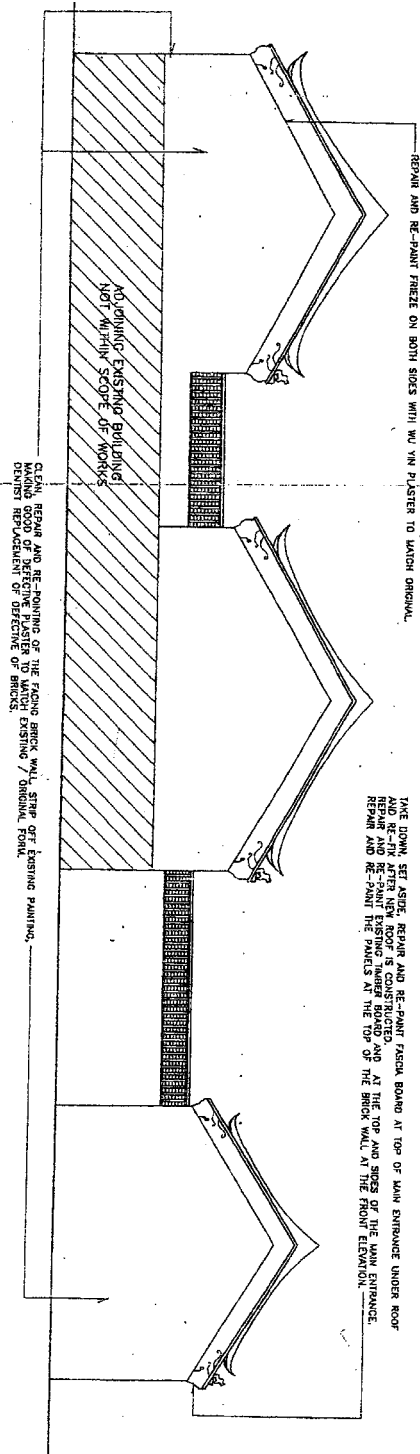
Photo 4 The plaster and painting on the internal walls of the ancestral hall have peeled-off



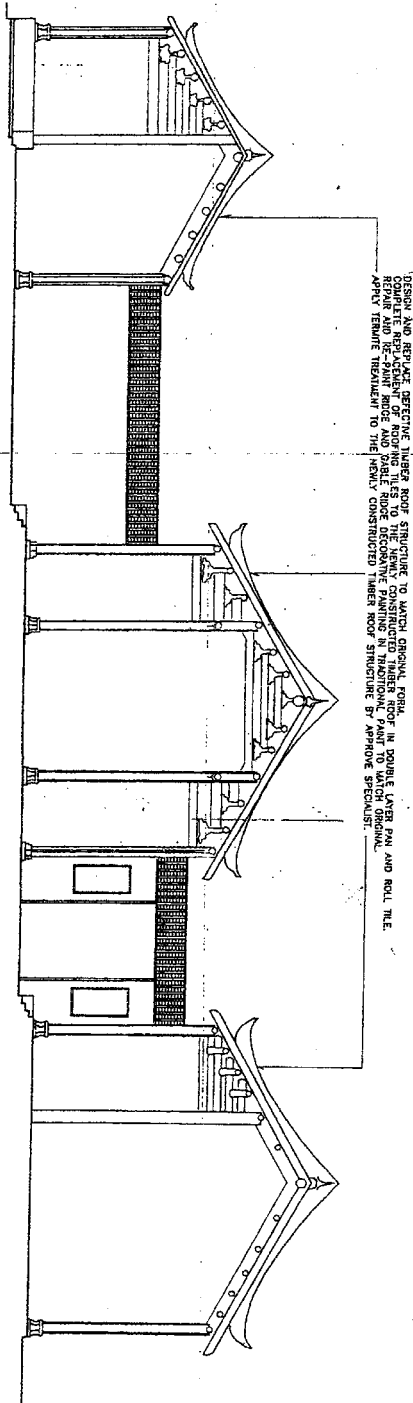
<p>TIMBER ROOF STRUCTURE & ROOFING TILES</p>	<p>DESIGN AND REPLACE DEFECTIVE TIMBER ROOF STRUCTURE TO MATCH ORIGINAL FORM. COMPLETE REPLACEMENT OF ROOFING TILES TO THE NEWLY CONSTRUCTED TIMBER ROOF IN DOUBLE LAYER PAN AND ROLL TILE. REPAIR AND RE-PANT ROOF AND GABLE ROOF DECORATIVE PAINTING IN TRADITIONAL PAINT TO MATCH ORIGINAL. APPLY TERMITTE TREATMENT TO THE NEWLY CONSTRUCTED TIMBER ROOF STRUCTURE BY APPROVE SPECIALIST.</p>
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ROOF PLAN



ELEVATION A



SECTION B-B

Summary of Mitigation Measures

Major Repair to Tang Ancestral Hall, Ping Shan

Project Profile Sections	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main Concerns to address	Who to implement the Measure(s)?	Location of the Measure	When to implement the measure?	What requirements or standards of ordinance/ guidelines for the measure to achieve?
5.2.1.1	Apply the Section 6 Permit of the Antiquities and Monuments Ordinance (Cap.53)	As the Tang Ancestral Hall at Ping Shan is a declared monument, permit will be obtained from the Antiquities Authority before any work may commence on-site	Contractor	Tang Ancestral Hall	Before the commencement of the project	Antiquities and Monuments Ordinance (Cap.53)
5.2.2.1	Works carried out shall match the original design	To preserve the historical and architectural significance of the ancestral hall	Contractor	Site area	During the construction period	---
5.2.2.2	All colours for painting and materials employed must be approved by the Arch SD and AMO	To preserve the historical and architectural significance of the ancestral hall	Arch SD and AMO	Site area	During the construction period	---
5.2.2.3	Employ experienced craftsmen and artists	To preserve the historical and architectural significance of the ancestral hall	Contractor	Site area	During the construction period	---
5.2.2.4 & 5.2.2.5	Keep record of material and means adopted in the project	For future maintenance purpose	Contractor	Site area	During the construction period	---
5.3.2	Implement noise mitigation measures (e.g. use quieter tools, proper maintenance of plant, good working practices)	To minimize noise impact due to construction	Contractor	Site area	During the construction period	Noise Control Ordinance

Project Profile Sections	Recommended Mitigation Measures	Objectives of the Recommended Measure & Main Concerns to address	Who to implement the Measure(s)?	Location of the Measure	When to implement the measure?	What requirements or standards of ordinance/ guidelines for the measure to achieve?
5.3.3	No works will be carried out during 7 p.m. to 7 a.m. and any time on Sundays and General Holidays	To minimize the noise impacts at sensitive hours	Contractor	Site area	During the construction period	Noise Control Ordinance
5.4.1 (i)	Use basket and the like to carry debris from the roof to ground level for disposal.	To minimize the dust problem created by the demolishing works	Contractor	Site area	During the construction period	Air Pollution Control (Construction Dust) Regulations
5.4.1 (ii)	Regularly dampen the floor	To avoid spread of dust during the hacking-up of and removing of floor finishes	Contractor	Site area	During the construction period	Air Pollution Control (Construction Dust) Regulations
5.4.1 (iii)	Water spray	To minimize the dust problem caused by the demolishing works, drilling, cutting polishing or other small-scaled mechanical breaking	Contractor	Site area	During the construction period	Air Pollution Control (Construction Dust) Regulations
5.5.1	Construction and demolition material would transport to the landfill site	To minimize the impacts from waste disposal	Contractor	Site area	During the construction period	Waste Disposal Ordinance
5.6.1	Waste water would be filtered before discharge into drains	To minimize the impacts of waste water	Contractor	Site area	During the construction period	Water Pollution Control Ordinance