



AGA KHAN TRUST FOR CULTURE

Historic Cities Support Programme



**CONSERVATION PROJECT OF THE
ASLAM AL-SILAH DAR MOSQUE**

**QUARTERLY PROGRESS REPORT
DECEMBER 2006-FEBRUARY 2007**

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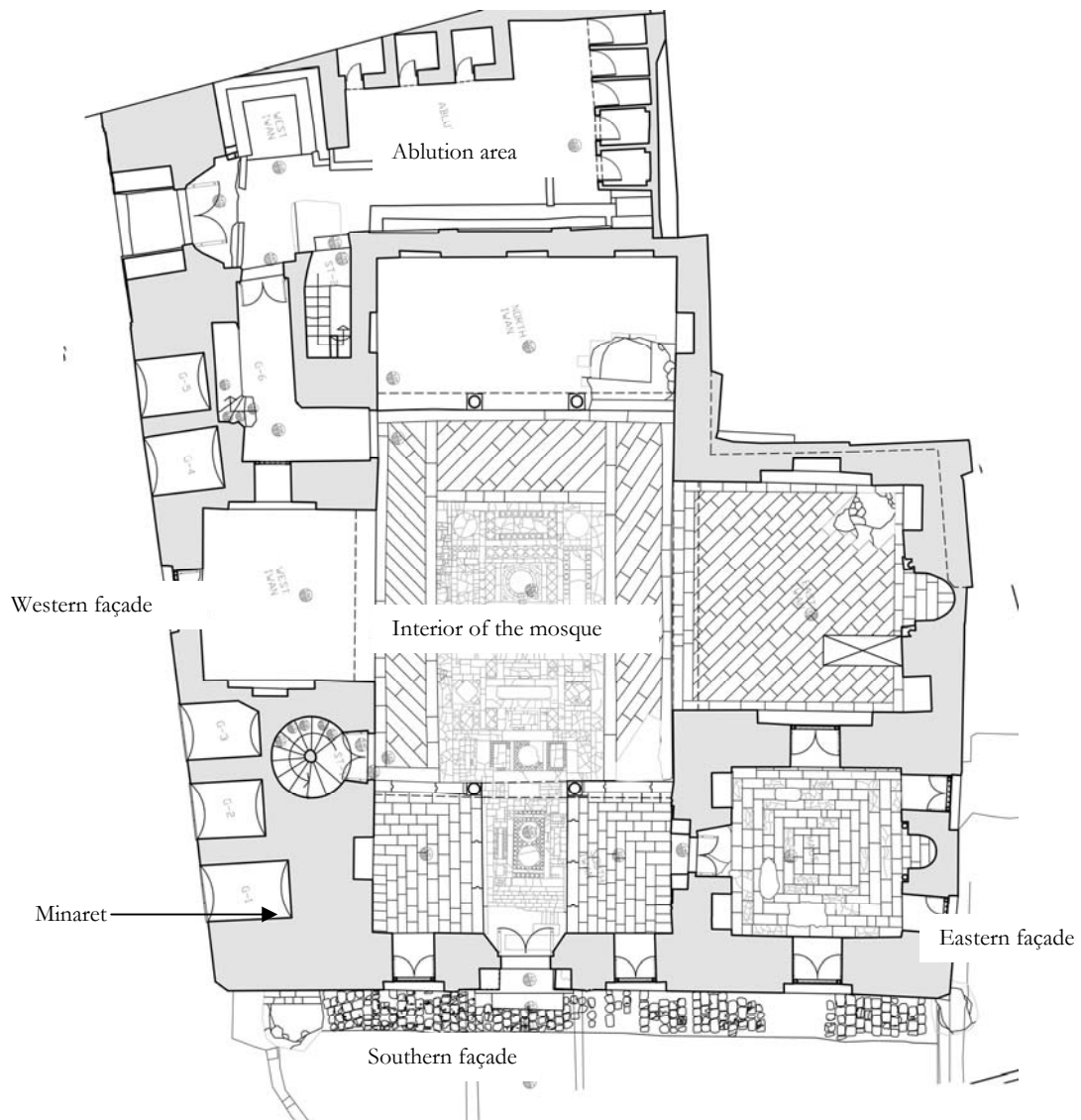
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1. Description of the Project's components

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| 1. The exterior elevations: | Southern façade, eastern façade, western facade |
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2. TECHNICAL REPORT

Summary

Architectural surveys started at end May 2006 have been completed and a full-set of plans-sections-elevations is completed. An electro-mechanical design package was prepared by ACE Moharram-Bakhroum and the sanitary work for the ablution area is planned to be started.

Conservation work is taking place mainly in two areas: stone replacement at the base on the walls is proceeding together with brick masonry consolidation on the walls of the first floor; the timber carpentry and insulation of the roof is under completion. The aim of such works is to provide a safe and water tight shelter before entering into interior fine conservation.

1. Documentation and design:

Architectural documentation:

Architectural surveys started on 25 May 2006 have been completed. A full set of plans, sections and elevations has been finalized. Architectural survey currently underway includes now details of woodwork, metalwork, gypsum windows and mosque furniture. The survey technique is an association of topographic grid, rectified photography and hand measures.

Engineering studies:

A design package of electrical, sound and sanitary engineering was prepared by ACE Moharram-Bakhroum and is under review. It includes the electrical circuits and outlets needed for lighting and power supply, the cables and loudspeakers of a sound system and the water supply and drainage of the ablution area. The guidelines established for wall and floor mounted cables are to integrate them as much as possible within the surfaces and hide them. The exterior and interior lighting scheme will associate high technology metal halide floodlights with replication of historical brass and glass suspended lights.



View of the southern elevation of the Aslam al-Silahdar Mosque during conservation

2. Conservation-restoration work:

Works completed during the period December 2006-February 2007

Exterior facades: Southern and eastern facades

A campaign of selective stone replacement was completed at the southern and eastern facades: damaged plain facing and decorated lime stones were carefully replaced by new stones of a similar nature.

The southern and eastern elevations have been entirely cleaned using humid poultice made of bentonite and paper pulp with a low concentration (3-5%) of Ammonium Bicarbonate. This has revealed the original polychromy of the lime stone made of alternated white and orange horizontal stone courses and has made it possible to identify several stages of construction and restoration.



View of the marble panel on the main façade during cleaning



Cleaning of the southern façade by poultices and mechanical techniques



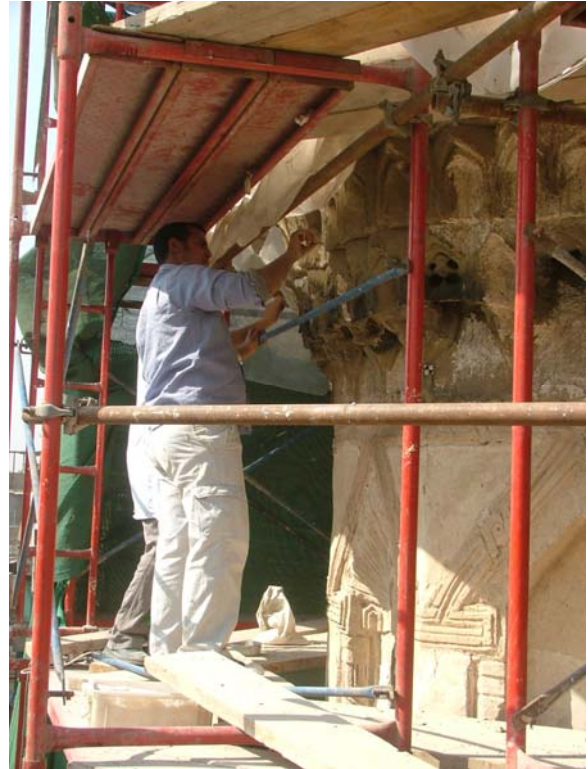
Cleaning of the inscription band on the Eastern façade by poulticing



Stone replacement activities taking place on the Southern façade of the mosque

Minaret:

The exterior surfaces of the minaret made of gypsum and lime stucco are under cleaning by micro sand blasters and injection of lime grouts. The deteriorated status of the stucco makes it vulnerable to harsh weather conditions. The upper segment was reconstructed probably during the 19th century (the earliest photographs taken in the 1880's show it similar as today). The pencil shape of the top and the upper part of the brick drum are in a poor condition: the lead roofing is totally ruined, the timber carpentry is almost under collapse and the upper part of the brick drum is affected by serious cracking. A comprehensive restoration is planned in order to re-establish the last documented condition of the minaret as of the 1880's, without attempting to return back to a pre-Ottoman undocumented condition.



Cleaning activities on the minaret by poulticing



Brick restoration activities taking place on the upper part of the minaret

Exterior of the dome

Following the erection of exterior steel scaffolding around the dome, cleaning was initiated by micro-sand blasting and temporary stabilization of the unstable parts was done. The cleaning revealed that the cupola is built with bricks covered by a thick (10-14cm) crust of plaster. Some remains of lime wash are still visible in the recessed angles. Although the cupola is not affected by structural problems, its surfaces and remains of polychrome tiling decoration are in moderately damaged condition.



Dome exterior after scaffolding erection



Stabilization of unstable plaster crusts



Cleaning of the Cupola by micro-sand blasting

Roof

The replacement of broken and damaged beams was done and more than half the surface of the entire roof was already insulated using a bitumen sheet covered with mortar screed. The carpentry of the central shokhsheikha was restored and the construction made by the Comité in 1908 was maintained. It is planned to be covered with lead sheets in order to minimize the dead load.



Assessment of wooden shingles and beams of the central shokhsheikha



Ceiling after restoration



Carpenters replacing damaged wooden shingles



Brick construction of damaged roof parapets



View of roof after insulation

Interior of first floor rooms

The brick masonry of the first floor rooms was affected locally by vertical cracking caused by earthquake loads. In the areas concerned with this damage pattern, the masonry was repaired by brick stitching. This concerns both southern and northern large rooms and the small qa'a along the western elevation.



Brick repair of cracks in upper level rooms



Plastering of rooms on first floor



View of room on first floor after brick repair and plastering

Interior of the mosque

Stone replacement of the damaged lower parts of the walls was performed and is still in progress.

No conservation intervention of the surfaces of walls and ceilings will take place before September 2007.



Stone replacement activities in the qibla iwan



Stone replacement in main staircase



Stone replacement activities in the qibla iwan

Ablution area

The existing structures of the ablution area were found in an advanced state of deterioration and were dismantled after survey. The location may be used as storage till the second quarter of 2007.



View of ablution area used as storage area

Works planned during the period March-May 2007

Exterior facades: Southern and eastern facades

The stone replacement campaign is planned to be entirely completed in March 2007. The cleaning, conservation and repointing of both the southern and eastern elevations are planned to be completed by mid April 2007.

Minaret:

The exterior surfaces are planned to be cleaned and conserved in order to integrate the restoration and selective reconstruction of the upper segment according to the last documented condition of the minaret as of the 1880's. The restoration will include the construction of a pencil shaped carpentry top, to be covered by lead sheets. The timber handrail of the middle platform will be restored using the design of the few conserved fragments.

Exterior of the dome

The cleaning by micro-sand blasting will be continued and completed. Local injections will re-attach the loose parts of plaster crust. The conservation is currently under testing in order to determine the feasibility of filling the cavities of the upper part of the dome's plaster.

The conservation of the tiling decoration will be tested in March 2007 and a proposal of integration of lost fragments will be developed for implementation in May 2007.

Roof

Carpentry and roofing activities are planned to be completed by April 2007 in order to provide a safe and water tight shelter to the Mosque.

Interior of first floor rooms

The brick masonry of the first floor rooms is planned to be achieved by April 2007, together with plaster and stone tiling finishes. The electrical network will be embedded into the brick masonry.

Interior of the mosque

Stone replacement of the damaged lower parts of the walls is planned to be achieved by April 2007.

No conservation intervention of the surfaces of walls and ceilings will take place before September 2007.

Ablution area

The modern modifications above the ablution area are planned to be dismantled and a remodeling of the area is planned to provide a more rational support for the first floor terrace and to give space to the new ablution area.

The underground canalizations of water supply and drainage are planned to be installed in May 2007.

This report was prepared by Christophe Bouleau and Lara Iskander on 13 March 2007.



3. Appendix:

- Full set of architectural drawings of the pre-conservation condition
- Detailed survey and proposal of restoration of the minaret upper segment
- Master schedule by area and activity