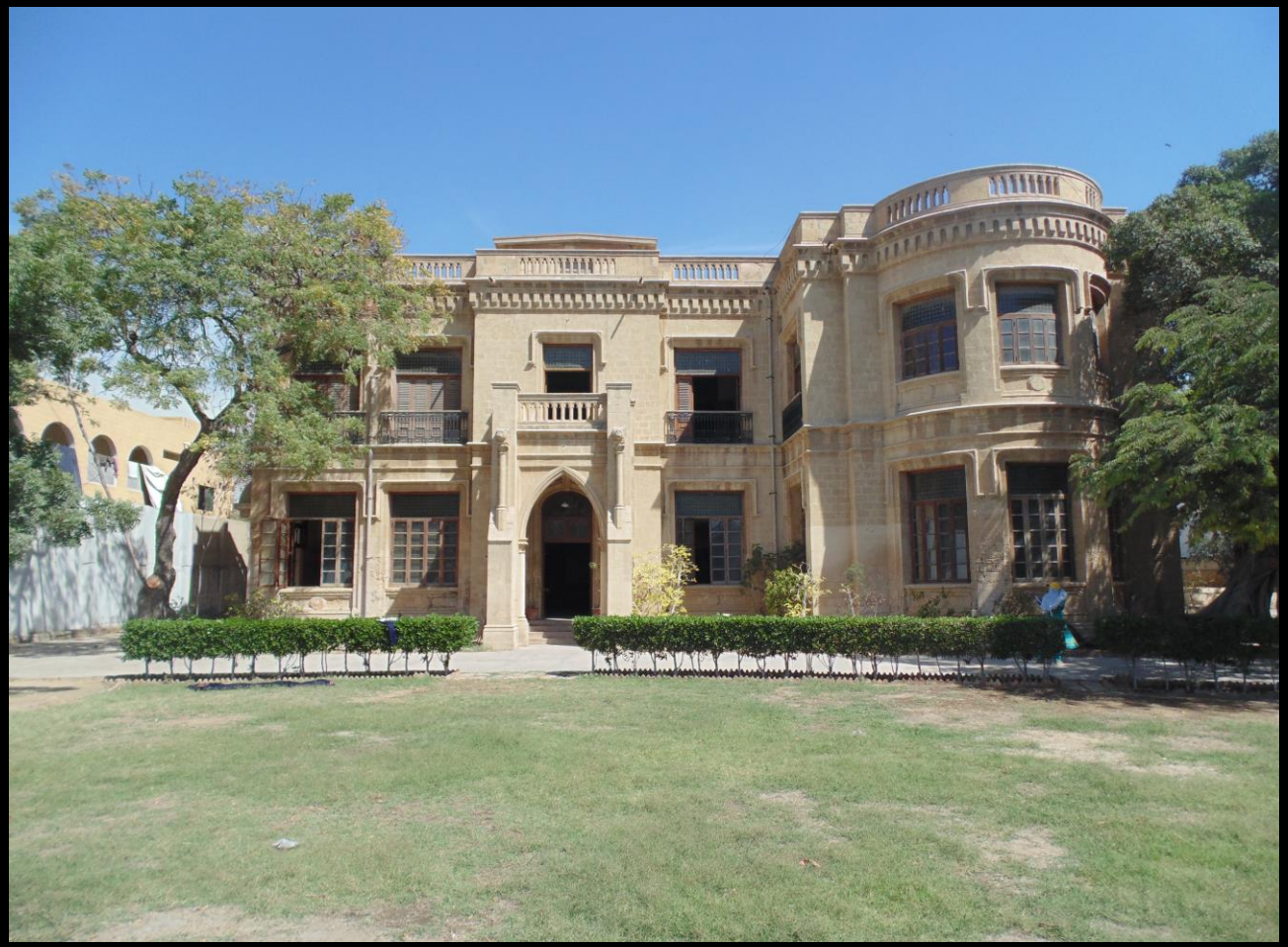

AMAN HOUSE

PROJECT TEAM

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STATE OF CONSERVATION REPORT

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Contents

INTRODUCTION:

The Aman House located in the Cantonment Quarter is a listed heritage of Karachi, notified as protected under the Sindh Cultural Heritage Preservation Act 1994. Its enlistment number in the records of the Department of Culture, Government of Sindh is 1997-179.

The boundaries of Karachi Cantonment Quarter surrounded by Madina Road on the West, Fatima Jinnah Road and Agha Khan III (Clarke) Road on the east with Moulana Din Mohammad Wafai Road on the south east, Garden Road on the north east and School Road on the south. The total numbers of listed heritage buildings in Karachi Cantonment are 109. Historic buildings in Karachi Cantonment Quarter predominantly fall within the category of ground (G) or ground plus one (G+1) storeys. The Dinshaw House building was originally built as a residential bungalow, but now this property is converted to commercial usage.

HISTORY:

In 1985, Ayaz Fakiruddin bought the house. It was built in 1926 by the Dinshaw family, wealthy Parsi merchants who commissioned many buildings. Fakir's house was situated on a hectare of land. In 1994, the house was given heritage status, meaning it was legally protected. Things did not run smoothly, however, a previous owner had leased out part of the land. Although Mr. Fakir temporarily regained ownership of the entire plot, the army took over a section of it when his lease ran out and promptly started building housing for soldiers. Fakir and his family sold the house, but the large army building on the adjacent plot – so close to it is almost touching – overshadows the house and diminished its historic grandeur.

THE SITE AND ITS LOCATION:

Karachi is host to an array of architectural monuments and historical landmarks. When driving down Fatima Jinnah Road (formerly Bonus Road) in the Cantt. Metropolis of the city, one finds a vast stretch of garden adjacent to the historical Frere Hall, built in Gothic Style, Dinshaw House is one of the many remnant buildings of the British colonial era that still exist in Karachi. The ideal location of this property near a main road allows convenience in terms of accessibility both with private as well as public transport. The ground plus one storey bungalow is built within an independent compounded plot with surrounding open spaces, visible from the road. The main building covers an area of 6493.8921 sq.ft. The huge lawn spaces and large trees around the structure provide a complete buffer from the traffic noise and pollution as well as the adjoining properties. This dense foliage creates an enchanting impression over visitors while getting towards the main building block.

DESCRIPTION OF THE STRUCTURE ON THE SITE:

Like many other residences of Karachi, the architecture of the Dinshaw house told the story not just of colonization but also of the rise of mercantile class. The architects were inspired by the western designs prevalent across the subcontinent at the time, but also incorporated elements of local design. The layout of the Dinshaw House is the perfect blend of British and local constructional tastes, incorporating features such as pointed arches, decorative parapet, Corinthian columns, and gargoyle. Mosaic and pigmented design tiles are used on the floors. Stained glass was used in windows, so that the light would shine through the painting. It is a form of painting that began over 1,000 years ago and is still essentially

made the same way today. The house makes use of Jodhpur pink sandstone and yellow Gizri sandstone. While an abundant supply of Gizri stone was quarried from the nearby Gizri hills, pink sandstone was brought from Jodhpur, Rajasthan. The hue of the stone had attracted many British architects of those times.

The plan of the house featured an asymmetrical with semicircular pavilion on the front and contains a porch that provides a foyer before entering the house. The main entrance is centered in the ground floor, leads to a rectangular passage which links to minor rooms with old-wooden u-shaped staircase passing through huge Corinthian columns on the front leads to the first floor where another staircase on the back leads to the top floor. The second floor is similar in plan to the first floor and features a main hallway and a total of five bedrooms. All the bedrooms on each side have separate bathrooms, the only dominating features adorning the exteriors being two semicircular rooms on ground and first floor creating a feature of interest on the western façade, and the dominant patio on the southern façade.

The western façade has the main entrance to the building with covered entry porch having pointed arches and contains arched door opening, while the northern and southern facades serve as the secondary entrances with hexagonal/octagonal rooms on both the floors of each sides. This western façade is also adorned with lion face gargoyle, a gargoyle is a carved stone grotesque with a spout designed to convey water from a roof and away from the side of a building. The historic roofline including the cornice, parapet, and other elements adds beauty to the front façade. The openings on the northern and southern sides are also semicircular arched openings decorated with a dominating key stone. The side elevations have a simple non-decorative character, but the eastern

façade, being the back side is even simpler, treated as of secondary importance. Besides the openings on western, southern and eastern facades, the remaining doors and windows on both the floors have rectangular profile.

ALTERATIONS INTERVENTIONS AND ADDITIONS:

Over the years most of the old historic houses and buildings in Karachi have been altered to suit our modern lifestyle, nearly always to the detriment of the building. Many historic buildings received additions over time as the need for more space occurred. In some cases, owners added a wing onto a primary structure for use as a new bedroom, or to expand a kitchen. Additions should be designed in a manner that makes clear what is historic and what is new. Design for the new work may be contemporary or may reference design motifs from the historic building. In either case, it should always be clearly differentiated from the historic building and be compatible in terms of mass, materials, relationship of solids to voids, and color. Additions were often located at the rear, such that the original primary facade retained its significance. Some Major and minor additions were found inside and outside of the historic site of Aman house.

MAJOR ADDITIONS:

1. MASS ATTACHED TO BUILDING:

Adding onto the back preserves the historic façade of the house, thereby maintaining the historic character of the home and the context of the neighborhood. The extension of the Aman house was considered after determining that requirements cannot be successfully met by altering non-significant interior spaces, these are kitchen and family room additions. The Extension

built at the rear of the house increases the original floor area of the house, but equal in height than the original structure. The extension reduces the open space at the back of the house which has to be reserved exclusively for the use of the occupants of the house.

2. MASS ADDED TO LOT

New mass was added at the back side of the Aman house for parking purpose. These later added structures have unimpressive architectural quality, built as make-shift spaces using block masonry.

MINOR ADDITIONS:

1. COLOR CRETE:

In Aman house the plinth level have been concreted (pigmented cement sand plaster applied manually) over the main building which hides the area of evaporation of moisture, possibly causing more moisture to rise into the walls. Rendering and plastering reduce evaporation significantly from the outside surface of the wall, and cause damp to rise further up the wall. Renders crack and allow water to penetrate through, either by capillary action into fine cracks or directly as penetration into larger cracks and de bonded areas. The water is then trapped behind the render and can penetrate to the inside.

2. ADDITION OF FALSE CEILING:

False ceiling were added in the washrooms to hide the duct work, pipes and electrical wires.

3. PARTITION WALLS:

Non-load bearing interior walls was added to divide a large room into two smaller rooms. The partitioning walls are of block masonry, having a thickness of only

4– 5 inches. The subdivided spaces include a bed room and a toilet.

4. COVING AND WALLPAPERS:

Coving is the plain mould used for decoration was added to bridging the joint between walls and ceilings where cracks can often appear. Coving can be used when the walls were in poor conditions. Similarly wall covering with wallpapers is one of the easiest and most inexpensive ways to hide old walls, paint blistering and add color, art and design to the house.

5. BLOCKING UP EXISTING DOORS:

Moving or blocking-up existing doors, or adding a new door to a historic building will almost change its character. Unwanted doorway was blocked by using bricks.

6. WOODEN PANELING ON WALLS:

The wall finish is a basic specification for the interior décor of a space and can include painting, wall papering, or wooden paneling. However covering the interior wall with wood will cause the wall to be thicker and hide the original wall.

DECAY AND DAMAGES:

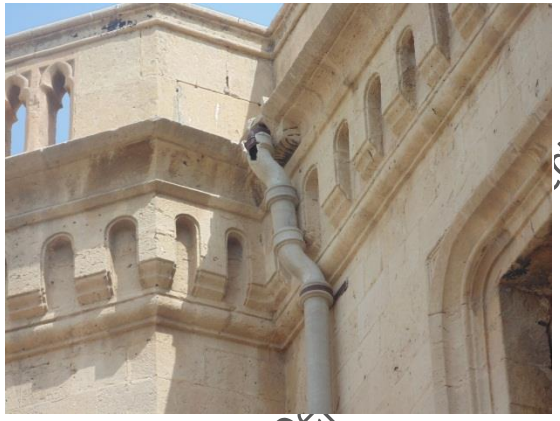
The survey team consisting of professionals carried out the building surveys and inspections covering site investigations, structural survey, building condition and defects, air-conditioning systems; and photographic study of Aman house (one of the colonial buildings) built between 1900 and 1930.The building was studied externally and internally following permission from its occupants or owners. The main purpose of the surveys and inspections is to study the common building defects or problems and proportion of building conditions. Building defect is

one of the major components of building problems that significantly needed attention. Defects and deterioration are common problems in any built structures. However, various defects are more common in an old structure. Common types of building defects include: structural defects resulting in cracks or collapse; defective or faulty electrical wiring defective or faulty plumbing, inadequate drainage systems, faulty ventilation, cooling or heating systems, insufficient insulation or sound proofing, Plus, fungus, or termite may also be the result of a building defect.

1. RISING DAMPNESS:

Rising damp is usually easy to recognize. It is given the name because it is caused by moisture being drawn up through the wall from the damp ground below. This is referred to as capillary action. The reason that it does not go higher than about a metre, is that once this height is reached; the weight of water becomes too much for the capillary action to be able to draw it any higher. In Old colonial building of Aman house, walls were built thick enough so as damp would not penetrate to the inside. The joints were more porous than the building elements of stone so as the joints would drain and shed water by evaporation, therefore not allowing damage to the masonry. Water from the ground contains salts. Initially for many years the moisture in the walls would evaporate off harmlessly outside during fine dry weather. When water from the ground evaporates the soluble salts it contained are left in the walls at the point from which it evaporated which would be in the surface of the masonry or in plaster finishes. Salts block the pores and cause damp to rise further up the walls to evaporate. Rising damp tends to rise higher in thick walls than thin walls; this is due to the lower surface to volume ratio of thicker walls. The basic

causes observed for Rising damp at different locations of Aman house are plants and trees growing too close to the house. The problem with these is that moisture and rain gets trapped, with little airflow behind to help dry off the moisture when the weather is reasonable. Another factor cause's rising damp observed during survey are Water leaking into the property from outside, e.g. leaking roof or defective guttering and drainpipes, or inside the property from leaking plumbing pipes / fixtures, such as around the bathroom fixtures and water supply pipes causing dampness.



2. STONE DETERIORATION:

Stone is the natural, porous and oldest material used in the construction of buildings. With the help of this material monumental and durable architecture of the past had been produced. Due to the use of stone, a durable and lasting material, many of the centuries' old buildings are still surviving. Water acts as an engine of decay in stone. As water repeatedly penetrates and evaporates from stone, it can trigger a variety of processes leading to erosion. The effects are made worse if these cycles are combined with larger volumes of water, exposure to other contaminants, or where carved or moulded stones project out from a wall face. The western, southern and northern facades of Aman house are facing the same problems. Our examinations and analyses show that the cause of the decay is the deposition of crystalline materials in the pores and intergranular spaces of the stone, due to cycling between wet and dry conditions. That is, the

stone becomes wet in certain zones after every rainfall when water migrates into the stone upwards, by capillary rise, and downwards, by diffusion, from the rain which has soaked into the top horizontal surfaces. This water carries dissolved salts in it, and when the stone dries out, the evaporation of the water leaves these salts behind.

3. SOILING AND BLACK CRUST:

The Northern and Southern Facades of Aman House contains the most extreme form of soiling usually because of air pollution called black crust. Dirt or "soiling" on stone buildings may consist of particles of dust. It is particularly common under cornices, window sills, or other projecting decorative features.

4. CRACKS:

It is the nature of many construction materials to crack as they age and as they expand and contract, particularly with exposure to moisture as they get wet and dry out alternately. There are cracks in common areas, such as exterior walls, interior walls at corners of doors and windows, and ceilings (usually in the middle).

5. BROKEN GLASS PANES/DOORS/LOCKS:

Historic interior features such as shutters/glass panes of the windows and original locks of the doors of Aman house were found broken during the survey. It should be conserved and maintained. Repair of the shutter/glass panes/locks is always preferred over replacement. If replacement is necessary, the shutters/glass panes/locks should match the original in form, style, material, dimensions, texture, and method of installation. Historic Windows should be conserved and must not fill in with wood, brick, or any other material.

6. HISTORIC LANDSCAPE FEATURES:

Historic landscape features around a heritage building are important to the context of the building as well as the overall streetscape. During the survey the team founds the traces of old trees, which may be removed illegally or because it was dead, dying or dangerous or causing a nuisance. One of the old fountains of the era is now in a sorry state where water dried up years ago.

7. SEEPAGE AND PAINT BLISTERING:

The Aman House is also suffering from the problems of water leakage. The effects of damp ingress showed in various locations throughout the building, at high and low level in walls, and in some ceiling soffits. These characteristics indicate that the sources of water ingress are varied: rising damp, due to moisture emanating from the ground; penetrating damp, due to rain falling on the building; and water leakage, due to defective supply and/or drainage pipework. Rainwater drains through a system of open channels on the roofs and into downpipes on external walls. The downpipes are a combination of original cast iron and UPVC pipes. A number of pipes show leakage and failure also.

8. BIRDS DROPPINGS AND NESTING:

Bird droppings and nesting can lead to the spread of a number of diseases. There are huge risks associated with birds on buildings and ledges. Bird droppings are acidic and can cause structural damage by eating through paint, some roofing materials and fabrics resulting in massive spending on restoration and complete replacement. Bird nests were also found inside the house located near lights and electrical boards. Birds that nest inside may contaminate equipment and products

9. STAINS/DUST/SPIDER WEBS:

Stains spilled liquids were found inside the house which can cause permanent damage to the floor. Dust, beetle nut stains, food stains and spider webs are seen on the floors, walls and ceilings and if this is not completely removed the place will have a permanent dirty look.

10.MICRO BIOLOGICAL GROWTH:

In recent years water on external walls has become a major source because it promotes soiling and microbiological growth. During the survey the team pointed out that microbiological growth on building facades is due to the high values of surface moisture. The microbiological growth is mainly algae and lichens.

11.EXPOSED ELECTRIC WIRING:

Exposed electrical wirings were found inside and outside the building which can cause serious damage. Exposed wires or terminals are hazardous therefore all the openings must be closed immediately.

12.TERMITE AND WASP DAMAGE:

Serious damage can be done by Termite and wasp on the inside of the walls. During the survey, wasp nest were found near a window and on ceiling of the second floor. Wasps and termites inside the house may damage the wallboard or ceiling.

13.OPEN MORTAR JOINTS:

Mortar joints are the spaces between bricks, blocks and stones; this is because of the sealing and water proofing. These joints were found on the Boundary wall as well as on the Western, Northern and Southern facades of Aman house during the survey.

14. IRON NAILS ON FACADES:

Ferrous anchors or pins are another damaging source for the stone walls. Some iron nails were found on the building southern and eastern façade during the survey. Previously installed anchors or pins, which are no longer in use, cause damage to the stone. The problem is severe as the iron starting to corrode and forming rust stains on the facades.

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15. DAMAGED ARCHITECTURAL FEATURES:

Architectural details play roles in defining the character of an historic structure. Features such as gargoyle, window hoods, pointed arches and cornices exhibit materials and finishes often associated with particular styles, and therefore their preservation is important.