

**AL AIN OASIS**  
**CULTURAL QUARTER MASTER PLAN**  
**(AAOCQMP)**

**CULTURAL HERITAGE REVIEW**

July 2010



أبوظبي للثقافة و التراث  
ABU DHABI CULTURE & HERITAGE

**Abu Dhabi Authority for Culture and Heritage (ADACH)**

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## 1. INTRODUCTION

### a. Purpose of the Heritage Review

This document is prepared by the Abu Dhabi Authority for Culture and Heritage (ADACH), with the purpose of informing the Abu Dhabi Urban Planning Council (UPC) and other stakeholders concerned of the **significance** of the **cultural heritage resources** identified in **Al Ain Oasis** and the **approach and measures** ADACH is enforcing to ensure the protection of these resources within the context of the Al Ain Oasis Cultural Quarter Master Plan/AAOCQMP (or Al Ain Oasis Master Plan/ AAOMP).

The document is aimed to embellish the Concept Planning Application (CPA) (Modified Form C submission) to the Abu Dhabi Urban Planning Council (UPC), to which conceptual approval with conditions was granted by UPC on 21 April 2010, and to support the Environmental Impact Assessment (EIA) application being made to the Environment Agency – Abu Dhabi (EAD) for the AAOCQMP, thus acting as a guidance for future development activities in and around Al Ain Oasis. It has been prepared to act in lieu of the PCR conducted for external agencies' applications, due to the particular case that ADACH is at once in the role of a "developer" for the AAOMP, and also the responsible agency for ensuring the protection of Al Ain Oasis.

### b. ADACH Mandate and Portfolio

The Abu Dhabi Authority for Culture and Heritage (ADACH) is charged, by Law no. 28 of 2005, with the integrated preservation, conservation, management and promotion of the tangible and intangible cultural heritage of the Emirate of Abu Dhabi. The ADACH Entity Strategic Plan (ESP) 2009-2013 defines targets for this end, including the completion of inventories, international recognition, enhancing and managing the potential of Al Ain's oases areas, and conserving the Emirate's cultural landscapes, historic buildings and archaeological sites.

The ADACH ESP defines twelve **Priority Areas** under which various initiatives are planned:

1. Conserve and enhance the threatened **tangible** cultural heritage of Abu Dhabi.
2. Document, promote and enhance the **intangible** cultural heritage of Abu Dhabi.
3. Rehabilitate existing **institutions** for culture and heritage and create new ones with qualified professional and trained staff to manage them.
4. Amend and improve **legislation** pertaining to the protection, management, promotion of culture and heritage.
5. Develop **professional capacities** in the fields of culture and heritage.
6. Nurture **creativity** in the fields of culture and heritage.
7. Introduce arts, culture and heritage **education** to schools, universities and the family environment.
8. **Promote** Abu Dhabi's culture and heritage regionally and **internationally**.
9. Enrich Abu Dhabi's **cultural agenda** and portfolio.
10. Provide ADACH with the adequate **cultural infrastructure** to deliver its strategy and programs.

11. Continue to develop ADACH's **internal training** capacities.
12. Develop research capacities in the field of sustainable architecture.

The Al Ain Oasis Cultural Quarter Master Plan is part of the ADACH portfolio of development projects in Al Ain, being defined within the scope of the above-mentioned Priority Area No. 10 as **Strategic Initiative 10/4: "Design and build the Al Ain Oasis Cultural Quarter"**.

### 3. AL AIN OASIS CULTURAL RESOURCES

#### a. Location of Al Ain Oasis

Al Ain Central District (Wasat Madinat) Oasis Area (centre east of Al Ain city), Abu Dhabi Emirate, UAE

Coordinates: East 374792, North 2678852 (Clarke 1880 Projection, Datum WGS84, Coordinates UTM Zone 40)

#### b. Description and Historical Background of Oasis Resources <sup>1</sup>

##### i. Overview of Al Ain's Oases

The historical development of the Oases of Al Ain can be traced back to the **Early Bronze Age**, or to the beginning of the 3rd millennium BC. A significant Early Bronze Age culture is known to have existed in Al Ain, evidenced by settlements such as those at Hili. Al Ain's oases sustained the settlement of the area in the 2nd millennium BC; they now constitute an indissoluble aspect of the landscape of the city. Each oasis most likely started with one farm or a group of trees, possibly watered by a deep well, and then grew larger as technological innovations associated with the invention of the ***falaj*** (pl. *aflaj*) **irrigation system** made it possible to increase cultivation, sustain a larger settlement and grow surpluses which were then traded against other commodities. Today, the oases are dense irrigated date palm gardens surrounded by bustling modern city quarters.

The oases are unique archaeological and **ecological settings** that can be exploited for the natural resources they provide in an otherwise dry, inhospitable environment. They provided the means for **human settlement and expansion**, creating opportunities for a new culture to emerge with sophisticated forms of cultural expression, whether it is through architecture, funerary traditions, agriculture and engineering, trade and the arts. To understand their current state, one must understand the history of human interaction with this unique eco-zone.

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<sup>1</sup> For more detailed information, please see the Cultural Sites of Al Ain Serial Property Nomination submitted to the World Heritage Center of UNESCO dated January 2010.

By the third millennium BC, **towers** became characteristic of large oasis settlements like at Hili Archaeological Park, for example. Excavations at the site of Hili 8 have uncovered a well at the centre of the one of the towers, suggesting that the towers were fortified residences for prominent members of the community, whose affiliates, clients, and kin-related groups were housed at the foot of or near the tower. The well probably opened into the central space of the living quarters, providing a permanent supply of water to those who lived inside. The earliest known tower at present is building III at Hili 8 dated to 3000 BC. Though not actually located within the modern boundary of an oasis, Hili 8 was situated nearby to control and manipulate the water for the adjacent oasis.

The traditional *falaj* irrigation method is generally believed to have been introduced at the beginning of the first millennium BC. This complex and skillful system of underground and/or surface channels brought water across several kilometres of rugged countryside to large oases and small gardens throughout the area.

The oases were sustained over the centuries, as they provided much-needed water, shelter, nourishment, and commerce for much of Al Ain's history. The surge of development across the UAE since the 1970s has had a more moderate effect on Al Ain, leaving the oases largely untouched, encircling rather than developing them. Despite some loss in the agricultural productivity and changes in crop regimes, the oases have maintained their dense fabric, particularly when compared to the oases of Buraimi, on the Omani side, which are known to be in a poorer state. The main factor in protecting the Al Ain oases has been the influence of the late Sheikh Zayed bin Sultan al Nahyan, who resided in Al Ain in the early days of his political history. Sheikh Zayed is known to give much importance to the preservation of the oases and the green character of Al Ain, and his wishes were faithfully followed. In the period following his passing away, **Oases Laws** issued by Sheikh Tahnoon in 2004 and by Sheikh Mohamed bin Zayed in 2005 have contributed to the ongoing protection of the oases. The fringes of some oases have seen some encroachment, but the oases are overwhelmingly intact and well-maintained.

#### ***Historic Buildings associated with the Oases***

Historic buildings in the oases are of several types, including **forts**, defensive **towers**, and fortified **houses** (*murabbaas*) built to protect the inhabitants of the oases and their produce. Also found in oases are **mosques** and even a traditional **market** or **souk**. Fortifications and outlook towers are believed to have been erected in the surrounding desert to defend the oases. All these buildings demonstrate the traditional building techniques of Al Ain – massively thick **mud walls** with limited small openings for light and air, roofed with **palm logs** and **palm mat roofs**, and mud plaster floors and walls. In these buildings, materials, climate and construction enter into a natural functional symbiosis, particularly developed to suit the environment as well as socio-economic practices.

Traditional building materials in the mountains are stone, whilst along the coast of the UAE they are a combination of local beach rock and coral, and sometimes 'arish, but inland at Al Ain there is a long and rich tradition of mud brick building using clay collected from the wadis (ravines) that bring down water from the nearby mountains. Surviving ancient examples of local mud brick architecture include the houses of the Iron Age settlement at Rumailah as well as round buildings with massively thick mud brick walls found in both the Bronze Age and Iron Age settlements of Hili. Archive photographs show that mud brick houses, often supplemented by

arish structures (made from palm branches and leaves), continued to be extensively used in Al Ain until the end of the pre-oil era in the 1960s.

Historic mud brick buildings have evolved as an integral part of the oasis systems, although some of them lie within the actual oasis limits, defined by the boundaries of individual farm plots, some buildings lie outside these limits. Usually, they are found in groups at the edges as well as at a central 'clearing', and on tells<sup>2</sup> of excavated material, which are not suitable for growing vegetation. The relationship of many of them with the main oasis areas have been severed by modern development.

## ii. Al Ain Oasis

Located in the centre east of the city, in the Central District, Al Ain Oasis is the largest among Al Ain's oases. It is bounded on the west, north and east sides by highways and to the south by retained wadi channels. Shaped roughly in a downward-facing crescent, the Oasis spans about 2.5 km both in an east-west and north-south direction, with a maximum reach of 3 km from NW to SE.

The **vegetation** of the Oasis is **dense**, with few historic buildings within the palm gardens, but several important buildings at its western and eastern edges (described in more detail below). The agricultural fabric that predominates in the Oasis consists of individually **farmed plots** containing **palm trees and fruits**. The farms are fed by **two main aflaj** running in from the SE of Al Ain. The more northern one is named the Al Aini Falaj; the southern one the Dawoodi Falaj. The sources of the aflaj are not definitively known at this time, but reported by a farm owner to be Al Marakh. To the SE of the city is a municipal district called Al Aflaj. It is presumed the aflaj pass through this area from the foothills of the Hajar Mountains in the SE.

The farm plots are accessed via **pathways** crossing the Oasis in different directions, which are mostly retained structures 2 to 3m above the plots. The walls lining the pathways have originally been built of mud bricks, but have been replaced with concrete and industrial blockwork in the late 1990's by Al Ain Municipality. Also around that time, the Municipality erected monumental **gateways** at the entrances to the Oasis, made of a mixture of concrete and palm trunks as building material. The paths are open to pedestrian and limited vehicular traffic (reduced recently as only pass holders can drive through), providing a shaded and secluded atmosphere to visitors that contrasts with the busy character of the city centre which envelops the Oasis.

The historic character of the Oasis can be gleaned from the aerial photographs taken of Al Ain in 1968 (see Figure 1), when the development of modern Al Ain had not begun to take effect. Some areas of traditional settlement can still be observed around the northern ring encircling the Oasis; although having disappeared from the streetscape today, these areas present both potential archaeological discoveries beneath ground level, and a vernacular urban pattern that can be taken as a point of reference for contemporary design interpretations.

Table 1: Statistical information on the Oases.

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<sup>2</sup> A tell is an earthen mound created by the occupation and abandonment of cities over time.

Oasis	Falaj Name	No. of Palms	Area / m sq.	No. of Historic Buildings
Al Ain Oasis	Al Aini falaj + Dawoodi falaj	147,120	1308578	8
Al Ain City Total		374,695	5,002,003	55

### ***Historic Buildings associated with Al Ain Oasis***

The ADACH Database of Historic Sites includes a total of 55 historic buildings within the six oases and 72 in Al Ain in total. Two of these buildings, Bin Shehail Al Mottawa Al Dhahiri House and Rashed Bin Mutawaa Al Dhahiri Mosque, are located within the perimeter of the Oasis, at the southwestern corner. As stated above, some other important buildings can be found at the edges of the Oasis. These include Al Murabbaa Fort, Eastern (Sultan) Fort and the Al Ain National Museum on the east; Sheikh Zayed Palace Museum and Jahili Fort and Mosque on the west, and Naqfa Fort on the south.

**Al Murabbaa Fort:** Located in the center of Al Ain, the fort takes its name from the large, rectangular, three-storey tower ('murabbaa' meaning a rectangular type of building) that dominates its low-walled courtyard, which is a later addition. At the street entrance, the multi-foil arch has a traditionally constructed ceiling of date palm trunks and woven palm-frond matting. The newly-constructed 'arish or palm branch hut which can be seen to one side of the main tower is an excellent example of traditional Emirati vernacular architecture. The late Sheikh Zayed bin Sultan Al Nahyan ordered the construction of the fort in 1948 when he was the Ruler's Representative in the Eastern Region, and its original use was as a watchtower and headquarters for the royal guards. In the 1950s the tower was known as Murabbaat Zayed and in the blockade of Hamasa which took place during the Buraimi dispute of 1953-55 it was the centre of an arish camp housing the Trucial Oman Levies (TOL) squadron base. An aerial photograph taken during his period shows a falaj running broadly east west to the north of the tower. By 1968, aerial photographs show the tower had been enclosed by a mud wall forming a large rectangular open courtyard, with several administrative buildings within and outside it. The latter appear to have been the forerunner of the existing police station in the same location. Murabbaa Fort once formed the focal point of the community, providing a venue for wedding ceremonies, religious festivals such as Ramadan, and formal appointments. Subsequently it was used as a prison and police station.

**Eastern (Sultan) Fort:** The Eastern or Sultan Fort at the edge of Al Ain Oasis is another historic building associated with the increased influence of the ruling family in Al Ain from the end of the nineteenth century onwards. The fort is a well-preserved mud brick structure with towers at three of the corners and a gate in the southern façade. It was built, as the inscription suggests, and occupied by the son of Sheikh Zayed I, Sheikh Sultan, in 1910, apparently in preference to the fort at Jahili, which then went into decline. It now lies within the grounds of the Al Ain National Museum and forms one of its major attractions. The fort has been maintained as part of the museum grounds. Future plans involve restoring the former visibility of the fort as a prominent landmark within the landscape of the Oasis of Al Ain and the centre of the town.

**Al Ain National Museum:** Al Ain National Museum, located next to the Eastern (Sultan) Fort, is the oldest museum in the UAE. It was founded in 1969 under the direction of the late Sheikh Zayed bin Sultan al Nahyan, and inaugurated in 1971 by Sheikh Tahnoun bin Mohammed al Nahyan. Housing collections from all emirates, the museum is divided into two main sections (the Ethnographical and Archaeological), and provides visitors with an overview of the country's traditions and culture alongside the much older story of the people who inhabited the area up to 7,500 years ago. The two sections correspond to the two parts of the museum structure that were built in two consecutive phases: the first section (the two main halls) was built when the museum was first founded, and the second (two additional halls) in 1974. The Ethnographical Section displays traditions pertaining to the pre-oil history of the country, including a special collection of black and white photographs from the 1960s, a series of dioramas illustrating everyday life with scenes of traditional learning and children's pastimes, household items, medical instruments, costumes and jewellery, farming methods and agricultural tools, fishing and pearl diving, musical instruments, religious books and copies of the Qur'an, weaponry and falconry. The Archaeological Section contains finds from the Stone Age through to the Islamic Period. The oldest discoveries testifying to human occupation nearly 7,500 years ago include flint tools, stone scrapers and arrowheads. Funerary artifacts, such as pottery, stone vessels and copper objects, have been found in collective graves at Hili and Umm an-Nar and reveal the extent of trading activity with places such as Mesopotamia, as long ago as 5,000 years. Ancient settlements and graves from the Iron Age have given archaeologists evidence of sophisticated industries producing bronze artefacts. A separate exhibit explains the history and construction of the *falaj*. This ingenious system for managing water using subterranean channels was first introduced into the region during the Iron Age. Other exhibits include pottery from the Islamic Period, and porcelain imported from China several centuries ago.

**Al Naqfa Ridge and Fort:** Al Naqfa Ridge is one of the two northerly extensions of the series of ridges leading from the main mountain of Jebel Hafit towards Al Ain. The other extension is the Western Ridge, which contains a group of tombs. Al Naqfa Ridge is located immediately south of Al Ain Oasis, on the western bank of the Wadi Idan, which is the eastern one of the two wadis running in a north-south direction along the ridges. The Al Naqfa Ridge contains the ruins of a Late Islamic structure, possibly a fort, which has traces of earlier Iron Age occupation beneath it. The ridge commands the approach to the Oasis of Al Ain from the south, and represents the Fort's eastern defensive barrier; the remnants of a destroyed wall remain to the west. Some of the area's caves were covered in a unique type of mud, and landscaping created a gradual incline on the mountain. The fort may represent the earliest surviving defensive structure in the city, though further archaeological investigation is required to confirm this and provide a definite date for its construction. The location of the modern-day cemetery to the west of Naqfa and the use of the area to the west for communal prayers during holidays gives some indication of the significance this location has had in the past cultural life of Al Ain. The former Department of Antiquities and Tourism carried out work to stabilize and support the structure and some limited excavation in 2004, leading to the discovery of three rooms and remains of three towers jutting from the exterior wall, which was built in the shape of a semi-circle following the topography of the ridge. A large collection of Iron Age pottery was made but it is still too early to say that this fort was built on top an Iron Age structure. Further excavations are required to clarify this point.



**Sheikh Zayed Palace Museum (previously also known as the Al Ain Palace Museum):** Located on the western edge of Al Ain Oasis, the Palace of the late Sheikh Zayed bin Sultan al Nahyan was built in 1937. The palace was one of Sheikh Zayed's residences in Al Ain between 1937 and 1966. It was converted into a museum and opened to the public in 2001. The original structure comprised a private residence for the ruler and his family within a complex of courtyards. The external courts each house a different *majlis* or meeting room where the Sheikh could receive local and foreign dignitaries. Separate women's quarters were provided for the guests of the Sheikh's wife. An inner courtyard contained the main kitchen and store-room, adjacent to which was the palace's well. In addition to a replica of the grand court tent in the palace grounds, the museum houses portraits of the ruling family, and a family tree depicting the Sheikh's lineage, as well as a schoolroom where the ruling children were tutored. Architecturally, the Sheikh Zayed Palace Museum replicates many of the characteristic features of important buildings in the UAE. The towers on either side of the main entrance were added during the restoration of the palace in the 1980s, in imitation of the multi-storeyed tower in Jahili Fort. The buildings were kept reasonably cool through the inclusion of broad square verandas that shaded the main rooms and decorative perforated stone or wooden screens through which the breeze could pass.

**Al Jahili Fort:** Al Jahili Fort is located near the west edge of Al Ain Oasis, at a distance of a few hundred meters, within the Jahili Public Gardens adjacent to the Oasis. Built in 1891-1898, at the time when consolidation of the power of the ruler of Abu Dhabi over Al Ain was achieved by Sheikh Zayed the First, this fort was probably erected to ensure the security and integrity of the Oasis, and as one of the forts built as part of an agreement made with the Sultan of Oman. The Jahili Fort complex contains within one site many of the different individual elements of traditional mud brick architecture preserved in other parts of Al Ain, including a round watchtower, a square fort with defensive towers at the corners, a larger enclosure wall, and a mosque outside the walls. Recent work has even uncovered the remains of a falaj or covered irrigation channel, which probably formed part of the public works carried out during the expansion of Al Ain that accompanied the arrival of the Al Nahyan family at the end of the nineteenth century. The significance of Jahili lies in its central location in modern Al Ain and the survival within it of a large and imposing traditional building. The different elements of this building provide a strong physical and visual link to important local and regional historical events of both the nineteenth and twentieth centuries. The fort preserves important associations with the rise of the Nahyan family and the person of Sheikh Zayed the First, as well as the formative historical events of the region during the 1950s, namely the Buraimi dispute of 1952-55 and the Jebel Akhdar war in Oman in the years 1954-59. Indeed, the location and landmark status of the site is such that Al Jahili Fort has come to symbolize the traditional architecture and cultural heritage of the UAE. From 1986-89 the former Department of Antiquities and Tourism undertook a restoration of the fort which included the removal of some of the buildings of the British-period administrative compound to create a single large courtyard, and addition of the present monumental entrance and the arcaded gallery forming the western edge of this courtyard. More recently, ADACH rehabilitated the Al Jahili Fort so that it now houses a visitor's center, a permanent exhibition on the explorer Wilfred Thesiger, a temporary exhibition space, and other visitor facilities (described further in the section on the Al Jahili Fort Rehabilitation Project).

### c. Cultural Significance of Al Ain Oasis

#### i. Values of the Oases

The oases of Al Ain are a cultural landscape of palm groves, falaj irrigation systems, dwellings, forts, palaces and mosques, which continue to be cultivated today and present a central element of Abu Dhabi's cultural heritage. The values of the oases are manifold, encompassing:

- symbolic value as the national heritage of UAE;
- cultural and architectural value, as the historic foci around which settlement developed, reflecting local building traditions and lifestyles;
- ecological value as important urban green areas;
- socio-economic value as a landscape embedded in city life and a featured attraction of the tourism in the Emirate of Abu Dhabi;
- and economic/ agricultural value, with a cultivation regime in the course of change and needing our protection by managerial means.

The oases also need to be treated as a whole entity associated with other cultural, natural and intangible elements in Al Ain.

#### ii. Proposed World Heritage Site Criteria related to the Oases

- **Criterion (iv): Outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history (for the oases):** The continuously settled oases agricultural areas with tightly knit farmlands irrigated by a complex network of falaj systems with an embedded architectural ensemble of historic buildings where people lived, collected the produces of the oases, stacked their surpluses traded and defended their water and food resources against attackers.
- **Criterion (v): Outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change (for the oases):** The oases of Al Ain, with roots in the Bronze and Iron Age cultures of the place represent this outstanding traditional and continuous human interaction with the arid desert environment, gathering the resources of the land to enable growth and development of a distinctive oasis culture with unique agricultural, architectural and technological achievements and a socio-administrative organization very much reflective of tribal structures which revolve around the unit and the whole, all bound by one destiny sharing resources, security and identity, both in life and death. It is exactly this settlement pattern, land use, human interaction with the environment and belief in the collective fate in the afterlife, which are reminiscent of millennia of continuous evolution that is coming under threat today due to the irreversible change brought forth by the oil economy, galloping development and insufficient water resources. The oasis model continues and survives today in Al Ain, incarnating the traditions of engineering, agricultural, architectural,

social and economic models, which evolved from ancient times and continue to evolve and adapt themselves to the constraints of today.

### iii. Statement of Outstanding Universal Value (OUV)

The significance of Al Ain Oasis, beside the above-mentioned aspects, is also expressed within the scope of the overall cultural significance of the series of interrelated sites in Al Ain. The oases are a main component and contributor to the collective value that these cultural sites form together. The Statement of Outstanding Universal Value (OUV) made in the application for UNESCO World Heritage Site nomination of January 2010, expresses this as follows:

*The cultural sites of Al Ain are reminiscent of the cultures of Hafit (both type-sites) and Umm an-Nar. They are set together in a landscape characterized by the oasis, the desert and the mountain, and constitute an assemblage of sites of outstanding universal value since they bear witness to **unique cultural traditions**, which developed on the crossroads of ancient routes between what is nowadays Oman, Saudi Arabia and the coastal settlements of the UAE. These cultural sites are the remaining representatives of a vanished culture which developed and manifested its cultural expression via unique and quite distinctive **technological developments** such as the ingenious falaj system and its associated falaj management system as evidenced in Hili 14, through specific **architectural traditions** as evidenced the circular fortified settlement at Hili 8 and through the specific **funerary traditions** as evidenced at Hafit and Hili Grand Tomb, among others.*

### iv. Overview of Condition and Integrity/ Authenticity

From a broad perspective, the city of Al Ain maintains its unique environmental setting consisting of a lush canopy of palm trees and other native desert trees, desert dunes and mountainous ridges. The modern urban fabric, although of a different morphology than the cultural sites as a result of prevalent concrete-based building materials and techniques, does not conflict greatly with these sites due to its low scale and substantial amount of open and green space within it. The fact that Al Ain maintains strict **regulations over building heights** in the city preserves views across from the cultural sites in the city.

In terms of the integrity of the oases, intact oases endure in the urban terrain as a symbol of life in the past and the capacity of man to settle and adapt to the harsh desert environment, although they are now subject to the new threat of encroaching urban development. Remote sensing data in the form of both a time series of satellite images and **historic aerial photographs** taken in 1968 provide a valuable key indicator of their integrity and authenticity. **Remarkably little has changed on their boundaries** since the pre-oil era. Water management continues to be successfully administered by the Aflaj Directorate at Al Ain Municipality. The oases are surrounded by urban fabric which is undergoing increasing development, but the relatively moderate level of change, accompanied by conscious planning efforts added to existing measures such as the strict height restriction, offer a delicate window of opportunity to sustain essential aspects of the landscape and its character. On a social level, Al Ain's inhabitants remain largely loyal and proud of their **socio-cultural values**, and aspects of traditional life. Also, despite the huge impact of large international shopping malls, **traditional markets** continue to be popular among the local community- Al Ain Oasis itself being the setting for a well-established, central souk. Al Ain's relative state of protection from rapid urban change is due in large part to

the late Sheikh Zayed's vision to preserve the '**Garden City**', which recognizes the critical importance in sustaining the identity of the country through its fast transition.

The above said, the Al Ain oases are not entirely safe from **threats** to their integrity and authenticity. **Human processes** affecting their condition include partial infringement on oases boundary limits; unsympathetic developments affecting visual significance of oases areas; and littering within the oases. **Natural processes** (particularly impacting mud brick structures) include erosion of architectural surfaces; exposed structures where coving of base of walls occurs; fragmentation of fabric due to salt crystallization; sand blasting by wind-born particles; and vegetation damage. Various issues are brought about by modern development including pollution and depletion of landscape resources. The physical **carrying capacity** of the historic sites is limited by the robustness of site materials. The private land under cultivation in the oases is sensitive to soil compaction and invasive flora/fauna. **Agricultural** activity affects date palm cultivation and associated crop regimes, which are central to the oases' significance. **Economic** pressures, like falling date palm prices, may compel farm owners to adopt higher-yield, unsustainable harvesting techniques or to stop cultivation altogether. **Tourism** pressures, although currently below the carrying capacities, are likely to increase over the next decade, as Al Ain gains increased recognition nationally and internationally, and warrants proper visitor management facilities to absorb the increases. On a **social** level, the fact that few Emiratis today are willing to work within date palm oases, hence employing expatriate labor to manage their date palm gardens for them. Thus the knowledge of traditional management of oases agriculture is being lost to the younger generation of Emiratis.

Historic buildings and archaeological sites in the Oases Areas of Al Ain are mostly composed of **earthen** materials, which are sensitive to the abrasion that may result from increased use and visitation. The historic buildings exhibit a varied state of conservation, but can be said to generally fall into **two groups**: those that were **restored or rebuilt** by the former Department of Antiquities in the 1980's and 90's, and those where **no restoration** or conservation work has been carried out previously. The previous restorations have helped to preserve the form of the structures, but led to the loss of authentic fabric and architectural elements, as well as creating maintenance issues resulting from unsustainable materials and techniques used in the interventions. These restorations are now being readdressed to correct errors in repair, while the buildings not previously restored are being conserved with meticulous methodologies ensuring proper documentation and minimal intervention to the authentic fabric. Recent policy has been to combine sympathetic reuse of the modern parts of the buildings with protection and conservation of the remaining areas of authentic historic fabric. In the case of ruins, ADACH implements a careful program of conservation and stabilization that secures structural integrity without compromising authenticity or cultural value.

In general, the location of most historic buildings in and around the oases affords some degree of protection from ongoing real estate development in Al Ain, although increased vehicular traffic to serve the agricultural function of the oases has undoubtedly had an effect on the condition of some of the buildings. The presence in some oases of large numbers of low-wage workers has also created additional pressure on the surviving historic buildings, some of which have been occupied and reused for informal housing.

Of the historic buildings in and around Al Ain Oasis, all but two have previously been restored. Bin Shehail Al Mottawa Al Dhahiri House, which is in a substantially ruinous state, is currently being stabilized under the ADACH Emergency Conservation Program. Naqfa Ridge, which

constitutes an archaeological site incorporating Naqfa Fort, has several issues of conservation, mainly to do with natural processes; these include erosion of grave construction material and collapsed structural components.

## 4. CONSERVATION AND MANAGEMENT OF AL AIN OASIS

### a. Legal Framework

The safeguarding of the cultural resources of the Emirate, including Al Ain Oasis, is based on a legal framework comprising several components. ADACH is the mandated emirate-level agency in charge of culture and heritage, although this mission is adopted by other local agencies such as Al Ain Municipality, the Urban Planning Council and the Abu Dhabi Environment Agency.

- **ADACH Establishment Law:** As previously mentioned, the Abu Dhabi Authority for Culture and Heritage (ADACH) is charged, by Law no. 28 of 2005, with the integrated management and promotion of the tangible and intangible cultural heritage of the Emirate of Abu Dhabi. This law gives ADACH broad powers related to culture and heritage.
- The **Preliminary Cultural Review (PCR)** form the cultural component of Environmental Impact Assessments (EIAs) administered by the Abu Dhabi Environment Agency (EAD), as required by the UAE Federal Environment Laws no. 23 and 24 of 1999. Development projects are required to undertake necessary EIA & PCR procedures before being granted environmental and construction permits. The PCR is the primary legal tool for controlling impact of development on the Emirate's cultural heritage resources, through mandatory applications to ADACH, which are evaluated before a decision is issued on whether or not permission may be granted, or the conditions for permission. The review process involves desktop research, site surveys, and in some cases further procedures of the **Cultural Heritage Impact Assessment (CHIA)**, (for more information, see <http://www.adach.ae/en/portal/heritage/introduction.aspx>). The new emirate-wide development review system that has been in preparation by the Abu Dhabi Urban Planning Council (UPC) in recent months introduces a series of planning approvals, preceding the permits for project construction. ADACH expects that, as a result of the ongoing coordination efforts between ADACH and the UPC, the PCR will continue to be administered as a mandatory measure, as early in the development review process so as to ensure the greatest influence in the development process, which may incur irreversible damage on the heritage if allowed to go unregulated into advanced stages of design.
- **Al Ain Oases Law:** As mentioned earlier in the Overview of Al Ain's Oases, two laws were established to ensure the continued sustainable farming practices and to prevent urban encroachment toward the oases. The first law was issued on the 10th April, 2004; a second law, no. 38 of 2005, is largely based on the 2004 Law, incorporating small variations such as reference to ADACH.
- In addition, a federal **cultural heritage law** is currently in preparation by the National Council for Tourism and Archaeology (NCTA), and expected to be adopted in the coming months.

## **b. ADACH Policy on Al Ain's Oases and Al Ain Oasis**

As part of its mandate to conserve the heritage of Abu Dhabi Emirate, ADACH has been developing policies and programming numerous initiatives for the conservation of historic buildings, archaeological sites and cultural landscapes including the oases of Al Ain. Initiatives directly related to the oases include:

- developing **master plans** (such as the Al Ain Oasis Cultural Quarter Master Plan) for the revitalization of the oases, which introduce programming that will help build the cultural infrastructure of the Emirate as well as catering to other needs of the community in Al Ain;
- and developing **management plans** for the oases that will address implementation of the master plans and longer-term issues of safeguarding and maintaining the oases (see also section 4.c.vi: Al Ain Oasis Conservation Management Plan below). The oases' management will serve as a part of the comprehensive conservation and management scheme of Al Ain's entire city and surroundings, also in accordance with the nomination as a World Heritage site. ADACH is collaborating with other relevant sectors concerned including the UPC and authorities for town planning, agriculture, tourism and water and electricity, in order to enhance the oases through management tools.

Beside the above initiatives, ADACH endorses the following principles related to Al Ain's oases:

- **Al Ain Oases Laws:** The protection of the oases in Al Ain in terms of agriculture and development control has been officially approved with this law reflecting Sheikh Zayed's vision. However, potential threat of inappropriate development in the surrounding area needs to be monitored and addressed. The Al Ain Oases Law is a legitimate foundation for this, which should be maintained and developed through the provision of new legislation.
- **Accessibility and amenity:** The current physical situation of the oases should be improved for protection and for better accessibility and amenity for users and visitors.
- **Tourism:** Tourism is a vital force that can help revitalize the Oases, but the potential tourism pressure should be monitored and managed. ADACH aims to integrate the oasis heritage into the tourism of Al Ain, the Emirate of Abu Dhabi and UAE, and meanwhile reduce negative impact to and improve the quality of their fabric. (Al Ain Oasis is identified as the focus of tourism activity, to balance tourism with other community-related functions throughout the entirety of Al Ain's oases.)
- **Agricultural sustainability and water resources:** The ownership and inheritance of the farms should be monitored in order for sustainable maintenance of the farms. As the water level is decreasing, the land form of the oasis is being changed for irrigation. To keep the falaj system and irrigation of the farms, the overall water resource in the city needs to be properly attributed.

### c. Measures for Safeguarding the Cultural Resources of Al Ain Oasis

#### i. Research, surveys and development regulation

The cultural resources of Al Ain need a continuing, **long-term effort of research, investigation and interpretation** to understand the full extent of the resources and their significance and inform relevant parties engaged in the Emirate's urban and regional development. A considerable amount of work has already been done, but there are as yet outstanding issues and gaps in information that are being addressed over a long-term program of **inventorying and documentation**. ADACH employs a variety of reactive and proactive tools and procedures that are in place for this end, such as:

- Explorative desktop research, site investigations, archaeological investigations undertaken by ADACH staff or associated consultant and academic teams as part of **general inventory works** or **ADACH site conservation and redevelopment projects**;
- **Patrol officers/ rangers**, conducting regular visits to sites to monitor their condition and identify any threats to their protection.
- **Preliminary Cultural Review (PCR)** and the **Cultural Heritage Impact Assessment (CHIA)** procedures, mentioned in the Legal Framework section above. In the case of **Al Ain Oasis and its buffer zone**, all of the above tools are have already been employed or are imminently to be employed for all or parts of the site. The PCR process is active, as several development applications have been in review for sites surrounding the Oasis, such as that of ICT complex at the northwest corner, the Murabbaa Police Station and the Sorouh development in the Naqfa area. This **Cultural Heritage Review** document has been prepared for the Al Ain Oasis Cultural Quarter Concept Master Plan, to act in lieu of the PCR conducted for external agencies' applications, due to the particular case that ADACH is at once in the role of a developer for the AAOMP, and also the responsible agency for ensuring the protection of Al Ain Oasis. For further stages of the master plan, ADACH is preparing to conduct a full **CHIA** for various parts of the Oasis, to inform sensitive and appropriate design in the upcoming building projects as defined within both the Concept Master Plan and the subsequent Detailed Master Plan. For the same end, archaeological investigations, geotechnical surveys and architectural/ art historical studies are currently being conducted.

#### ii. Conservation Projects related to Oases of Al Ain

Since its establishment in October 2005 and in accordance with its Strategic Plan, ADACH has been implementing projects for the documentation, conservation and maintenance of cultural properties. Several historic houses and buildings located within the oases, many of which were predominantly constructed with mud bricks, are currently undergoing conservation works. Whenever feasible, the buildings' original uses are being revived (e.g., an old traditional market in Qattara); otherwise, new uses are introduced in order to integrate these buildings into the living structure of the city and thus guarantee their long term maintenance (e.g., Al Jahili Fort, which has been fully rehabilitated and now houses the city's information center as well as two exhibition spaces). Apart from the buildings themselves, ADACH is planning to restore the mudbrick walls of the oases to their original nature, or develop alternative design solutions that are appropriate in terms of character and authenticity. Accordingly, solutions are being developed as part of the AAOMP for the oases boundary walls and access ways. Within this

framework, conservation projects relevant for the Al Ain Oasis are described below (see also Section 3.c.iv: Overview of Condition and Integrity/ Authenticity):

**iii. Conservation Projects related to Al Ain Oasis**

**Al Jahili Fort Rehabilitation Project:** This project was begun in 2007 as a flagship historic building conservation and rehabilitation project setting ADACH standards of best practice in conservation. The project was designed and conducted with equal concern to all layers of the building's history, from local founders through British occupation and recent interventions. The fabric of the building was carefully preserved and sensitive restoration work has recreated much of its original 19th century appearance through a combination of traditional materials and new technologies. The aim was to alter the building as little as possible, whilst at the same time equip it with the requirements of a modern visitor facility. The facility, housing a visitor's center, a permanent exhibition on the explorer Wilfred Thesiger, a temporary exhibition space and other visitor facilities, was opened to visitation at the end of 2008. A video project documented the whole conservation process. The large central courtyard is now used for public events, including a major classical musical festival that takes place in March each year. An innovative walk-through audio-visual installation will be added in 2010. This multi-media experience, which will be displayed in the fort's iconic round tower, will focus on the history and development of Al Ain city.

**Al Ain Oasis Restaurant:** A project is being advanced to replace an earlier, obsolete restaurant set in a central intersection of pathways of Al Ain Oasis with a new building, to function again as a café/ restaurant. The new restaurant, to be built in earth, is designed as a contemporary interpretation of vernacular oasis architecture, based on a study of traditional building and oasis plot typology. ADACH has been liaising with Al Ain Municipality to resolve issues such as access, safety, security and farm plot boundaries, and to promote the approach that introduction of a sensitively-designed restaurant will increase the quality of the Oasis environment and help in its revitalization as an important part of city life. Although not a historic building conservation project in the strict sense, the project contributes to sustaining the general oasis character, by preserving the former use of the site.

**Emergency Conservation Program:** In addition to projects for individual buildings, is an intensive program for Emergency Conservation covering all buildings of the Emirate. This program was launched in Summer 2008 with the purpose of directing conservation at structures in urgent need of intervention. This program will ensure the safety of these buildings and prevent further decay. Activities within the scope of the program include the development of methodologies; site condition surveys carried out in consultation with a structural engineering specialist; scheduling of interventions; fencing, cleaning, shoring work, and preliminary consolidation; photographic and photogrammetric documentation; and consolidation work, accompanied by archaeological investigations. The program has one building in Al Ain Oasis, the Bin Shehail Al Mottawa Al Dhahiri House, included in its scope.

**Building conservation projects defined in the scope of the AAOMP:** Most of the historic buildings found in and around Al Ain Oasis are being addressed within the AAOMP, with each its own distinct theme of interpretation and presentation, and with varying approaches to their physical conservation. The themes are set out in the AAOMP interpretive brief (see next section). In terms of the conservation of physical historic fabric, the detailed proposals are yet to



be developed; however, these proposals can be expected to follow some main principles, such as:

- conservation of the **earthen, pre-Oil era buildings** that have been previously restored, and refurbishment of their internal spaces to accommodate new uses or enhancement of old uses, and to reinstate authentic significant architectural elements where possible (Al Murab'a Fort, Eastern (Sultan) Fort and Sheikh Zayed Palace Museum);
- rehabilitating and partially redeveloping **modern, post-Oil era buildings** to accommodate new uses (Al Ain National Museum)
- consolidating **ruinous earthen buildings** that exhibit an archaeological character to preserve them in their current state and treat them as open air sites (Naqfa Fort, Bin Shehail Al Mottawa Al Dhahiri House).

#### **iv. Al Ain Oasis Master Plan Principles Related to Cultural Heritage**

The principles and proposals of the AAOMP are laid out in detail in the UPC Form C- Concept Planning Application; here, the main principles and components of the scheme are briefly reviewed in terms of implications for safeguarding the significance and sustainability of the Oasis.

As mentioned in the **Interpretive Brief** of the Master Plan submission, the aim of the Master Plan is to **preserve and improve Al Ain Oasis** as a historic landmark by **connecting** it to the City.

- An interconnected **network of cultural venues and public spaces** are to be created within the Oasis and at its periphery, re-establishing a primary **visual and physical relationship with the surrounding city**, while supporting planning initiatives within the adjacent Al Ain Central Business District to ensure a cohesive and vibrant urban center.
- The Master Plan strives to reassert the Oasis as the **conscious center of the city** by promoting **pedestrian activities** at its edges and throughout its interior.
- The Master Plan also calls for the preservation of the Oasis as both a natural and agricultural **resource**, promoting the sustainable restoration of traditional UAE farming practices such as intercropping. **"Living exhibits" and demonstration areas** are proposed throughout the Oasis to provide a better understanding of practices and crafts unique to the Al Ain region, including date harvesting, "falaj" irrigation and mud brick fabrication.
- In addition, **commercial programs** such as the adjacent souks are reconceived to facilitate an **authentic working environment** where tourist interest and resident life may coexist with mutual interest.
- All of the above are to take place without compromising the **archaeology of the oasis**.

The above principles are **aligned with ADACH aims** to revitalize Al Ain's oases and strengthen their identity and presence as important landmarks in the city. Rehabilitation and reorganization of existing public spaces, introduction of interpretive themes and development of commercial

programs are all activities that will help the protection and promotion of the heritage resources of Al Ain Oasis, provided they are approached and implemented in a **cautious and sensitive manner**. ADACH has been supervising the development of these proposals with a view to guard these interests, and will continue to do so even more rigorously as the scale of the proposals advances into more detail.

As further mentioned in the Interpretive Brief, ADACH has proposed that a **cultural district** should be created with the Oasis at its centre. On the **eastern edge** of the Oasis ADACH is proposing to create a **cultural campus** which will comprise:

- A reinvigorated **National Museum**: the new Museum's world-class programming will boost ADACH's capability for cultural resource management. In terms of spatial impact on the Oasis, a large part of the Museum is planned to be underground, which will help preserve the indigenous open terrain leading to Muraba'a Fort; potential impact to underground remains are being addressed through archaeological and geotechnical surveys. In terms of impact to the existing museum, this building has functional significance as the first museum of the UAE, and expected to become part of the upcoming inventory of modern architectural heritage in the Emirate. Hence, the approach here is being advised by ADACH as keeping at least the original core, possibly the second phase and selected displays that would reflect the museological practices of the time of the museum's founding, while rehabilitating these in a way to support the redevelopment of the Museum as an institution.
- The historic **Sheikh Sultan (Eastern) Fort**: The Fort can be considered as a part of the adjacent existing Museum and its redevelopment effort, and its proposed interpretive theme suggests a minimal intervention to complement the Museum, which would be done according to international conservation standards.
- A **Centre for Music in the World of Islam**: This new institution, the theme of which will be a valuable contribution to research and promotion of an important element of local intangible heritage, will be housed in a new building, which will be predominantly above ground and designed according to criteria of compatibility with the historic setting. Any related underground construction will be subject to the constraints informed by archaeological and geotechnical survey results related to potential impact to underground remains.
- A **Visitor Centre** introducing people to the Oasis and its role in defining the city, its people and culture: This new facility, which will contribute to increased visibility and connectivity of the Oasis, will be housed in a new building, which will be designed according to criteria of compatibility with the historic setting. Related underground construction will be subject to the constraints informed by archaeological and geotechnical survey results related to potential impact to underground remains.
- Walks into, through and amongst the **canopy** of the working Oasis: This will be a positive contribution to interpretation and presentation of the natural landscape of the Oasis; the design of these routes will need to be considered carefully so as not to add overly conspicuous physical additions that may be visually disruptive.
- A protected **area of desert** that will ensure the historic and authentic relationship between the Oasis and the surrounding desert can be clearly understood: This area will need to be

landscaped according to criteria of authenticity, i.e. distinction between original and new fabric/ typologies.

These in turn will be supported by further developments on the **perimeter** of the Oasis, including:

- A revitalised **souk**: The Al Ain Souk is a valued place for the local community, and significant in that Sheikh Zayed was instrumental in establishing it in this location. According to Khalfan al Dhaheri, the first souk building was constructed of mudbricks some time before 1957; it could only be built by (direct order) of Sheikh Zayed, who chose the place himself. Although the souk structures have changed into the present-day concrete structures, the Souk survives as a significant element through its location and function. The new design of the souk will be sensitive to authentic and valued elements that constitute the *genius loci* and functional identity of the existing souk, and continue to accommodate the needs of buying/selling users, while improving the environmental and architectural quality of the premises.
- Re-interpreted and rehabilitated **historic monuments**: The re-interpretation of **Muraba'a Fort** and **Sheikh Zayed Palace Museum** will contribute to enhanced appreciation and use of these sites; in terms of physical intervention, the former is expected to undergo extensive rehabilitation works, while the latter to undergo limited refurbishment; in all cases, intervention proposals and implementation will need to adhere to international standards of conservation. **Al Naqfa Fort** will also benefit from the development of interpretive themes and related landscaping in its surrounding; this scheme will need to adhere to standards of conservation and archaeological site management.
- Coffee shops, mixed **retail**: These new facilities will contribute to access to and appreciation of the Oasis. They will be housed in new buildings, which will be designed according to criteria of compatibility with the historic setting.
- New Oasis fingers/ **parks, public spaces and pathways** linking the Oasis to the city: An improved public realm and green open space around the Oasis will contribute to the main principle of the AAOMP to improve connectivity. Their landscaping and urban design will need to be in accordance with criteria of compatibility with the historic setting. The treatment of pathway walls will be a major issue, and discussions are currently being held to obtain feasible and acceptable solution (see also section 4.c.iii: Conservation Projects related to Al Ain Oasis).

#### v. World Heritage Site Process

ADACH's strategy for attaining international recognition of the uniqueness of some of Abu Dhabi's heritage assets has begun to be implemented through the inscription of Al Ain on the tentative list of **UNESCO World Heritage Sites**.<sup>3</sup> The nomination of Al Ain on this list features the cairn tombs, the falaj system, historic buildings, the Jebel Hafit cultural landscape, social

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<sup>3</sup> ADACH, *Description of World Heritage Site nomination on the tentative list: Al Ain*, Ref.: 5266, 05.02.2008.

customs and traditions, and other cultural and natural landscapes including the six oases<sup>4</sup>, among which is Al Ain Oasis.

Currently, the process of full inscription is underway for the serial property of ‘**The Cultural Sites of Al Ain (Hafit, Hili, Bida bint Saud and Oases)**’. Following the submission of January 2009 and subsequent revisions as requested by the World Heritage Center, the nomination has passed the completion check; delegations are now expected to visit for on-site evaluation, and the final decision is scheduled to be made in the WHC Session of July 2011 (see Appendix 1: Executive Summary of the WHS Nomination dated March 2010).

In the period leading up to the anticipated inscription, and for the period after inscription, ADACH has been preparing a **Site Management Plan** for the serial property, as a requirement that has come to be standard practice in World Heritage Sites. The management plan, which is an evolving document that guides the process of managing change and maintaining the site’s significance over time and new developments, addresses issues such as ownership, means of implementing protective measures, critical Issues and proposed solutions, sources and levels of finance, sources of expertise and training in conservation and management techniques, visitor facilities and statistics, staffing levels (professional, technical, maintenance) and monitoring.

Another fundamental issue related to site management is **development control**, both in the actual ‘**cultural sites**’ forming the serial property and the ‘**buffer zones**’ defined around them to protect their setting and offset encroaching development. Current efforts are being spent for this end by ADACH in coordination with other government agencies, mainly the UPC and Al Ain Municipality. **Al Ain Oasis** has presented the **first phase** of these efforts, due to being the focus of the current master planning efforts and the concurrent initiatives of the UPC for Plan Al Ain 2030 Structure Framework Plan and subsequent Al Ain Wasat Madinat (Central District) Plan.

Both the **WHS buffer zone protection** and the **AAOMP** processes have been undertaken in coordination with the **Wasat Madinat Plan**. This coordination has taken various forms, from the alignment of plan recommendations, to integrating the AAOMP and its buffer zones as a **Special District** within the Wasat Madinat Plan, and jointly preparing specialized **development guidelines** for the buffer zones. This has been a great fortune that has surely benefited all sides and added value to all initiatives.

#### vi. **Al Ain Oasis Conservation Management Plan**

As mentioned above, Al Ain Oasis can be said to be serving as a pilot case for the wider planning and management of Al Ain’s cultural sites. As these cultural sites are quite large in number and scattered throughout the city, it is likely that the best way to approach their management will be through separate but coordinated management plans, for the oases and the archaeological site assemblages. Hence, the Al Ain Oasis Conservation Management Plan (CMP) has begun to be prepared, to address **operational issues** of **implementing** the AAOMP and **maintaining** the significance of the Oasis over the long term. ADACH has been collaborating with the relevant sectors concerned, such as town planning, agriculture, tourism, utilities, and will continue to do so for effective management of the site. The intended scope of the CMP can be seen in the draft **Table of Contents** (Appendix 2).

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The Oases of Al Ain, Al Qattara, Al Jimi, Hili, Al Mutaredh and Al Muwajji

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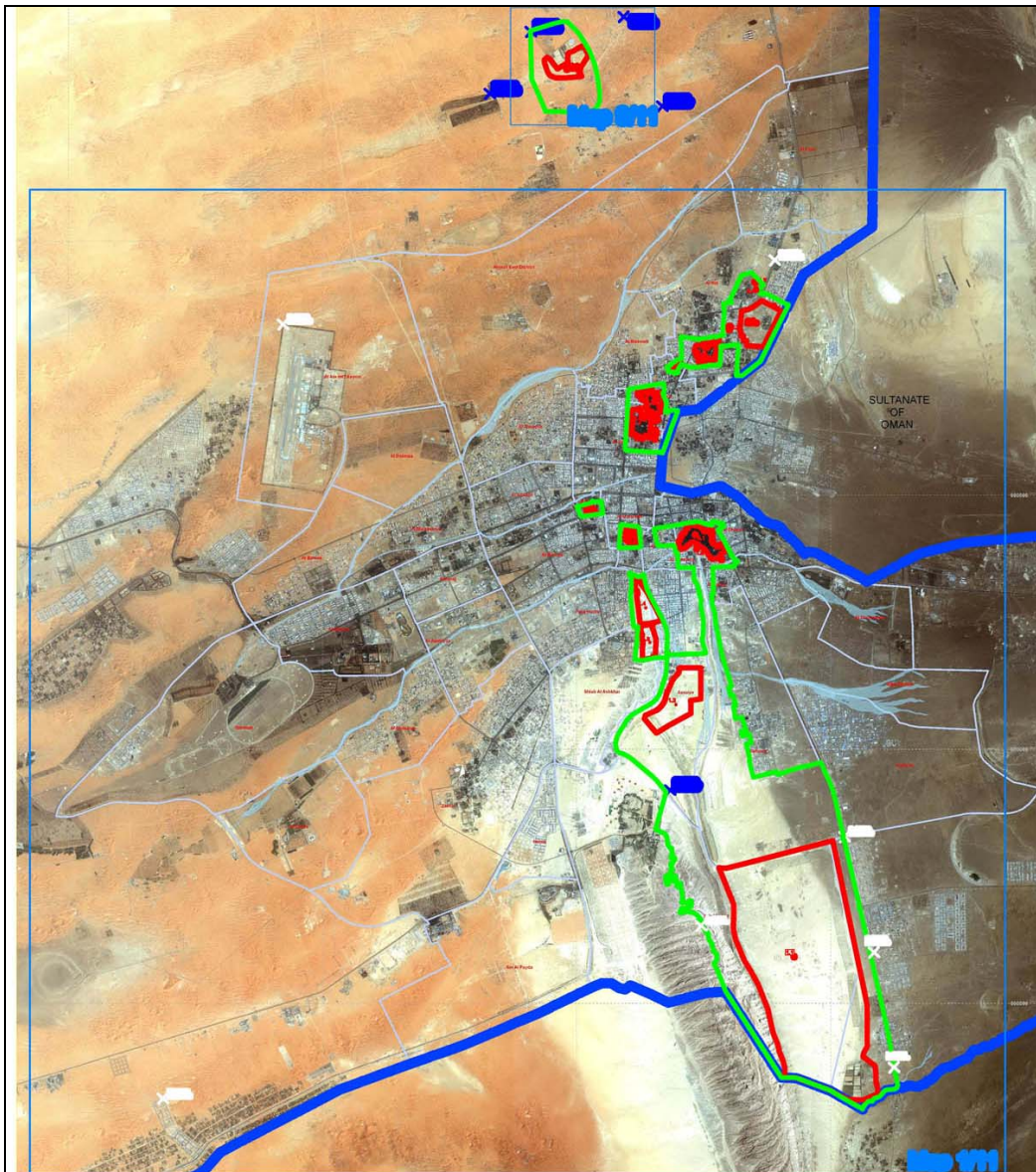
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**APPENDIX 1: Executive Summary of the World Heritage Site Nomination**

<b>State Party</b>		United Arab Emirates		
<b>State, Province or Region</b>		Abu Dhabi		
<b>Name of Property</b>		The Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)		
<b>Geographical coordinates to the nearest second</b>		Please see table below. For the full list of component and buffer zones boundary coordinates, please refer to Annex 2.		
<i>SITE NO.</i>	<i>COMPONENT CODE</i>	<i>COMPONENT NAME</i>	<i>COORD. EAST</i>	<i>COORD. NORTH</i>
	<b>Component Group 1</b>	<b>Hafit Assemblage</b>		
001	Component 1.1	Jebel Hafit Desert Park	378679	2662265
002	Component 1.2	Jebel Hafit North Tombs	374030	2672186
003	Component 1.3	Al Ain Wildlife Park Tombs	373000	2674623
004	Component 1.4	West Ridge Hafit Tombs	372846	2675984
005	Component 1.5	Al Naqfa Ridge	374951	2678315
	<b>Component Group 2</b>	<b>Hili Assemblage</b>		
006	Component 2.1	Hili Archaeological Park	377195	2687187
007	Component 2.2	Hili 2	376128	2686986
008	Component 2.3	Hili North Tomb A	377134	2688791
009	Component 2.4	Hili North Tomb B	377197	2688511
010	Component 2.5	Rumailah Site	374073	2685476
	<b>Component Group 3</b>	<b>Bidaa Bint Saud</b>		
011	Component 3.1	Bidaa Bint Saud	369749	2697151
	<b>Component Group 4</b>	<b>Oases</b>		

012	Component 4.1	Al Ain Oasis	374792	2678852
013	Component 4.2	Hili Oasis	375139	2685901
014	Component 4.3	Al Jimi Oasis	372593	2683241
015	Component 4.4	Al Qattara Oasis	373195	2684088
016	Component 4.5	Mutaredh Oasis	372247	2678788
017	Component 4.6	Al Muwaiji Oasis	370653	2679845
<b>Textual description of the boundary(ies) of the nominated property</b>		The areas proposed for World Heritage nomination are specifically those sites which constitute the elements of the cultural significance of Al Ain, i.e., the Hafit Assemblage, south of Al Ain; Hili, in the northeast sector of the city; Bidaa Bint Saud, set at about 14 km north of Hili; and the Oases (Al Ain Oasis, Mutared, Muwaiji, Hili, Jimi and Qattara) scattered across the city's interior.		
<b>Justification- Statement of Outstanding Universal Value</b>		The cultural sites of Al Ain are reminiscent of the cultures of Hafit (both type-sites) and Umm an-Nar. They are set together in a landscape characterized by the oasis, the desert and the mountain, and constitute an assemblage of sites of outstanding universal value since they bear witness to unique cultural traditions, which developed on the crossroads of ancient routes between what is nowadays Oman, Saudi Arabia and the coastal settlements of the UAE. These cultural sites are the remaining representatives of a vanished culture which developed and manifested its cultural expression via unique and quite distinctive technological developments such as the ingenious falaj system and its associated falaj management system as evidenced in Hili 14, through specific architectural traditions as evidenced the circular fortified settlement at Hili 8 and through the specific funerary traditions as evidenced at Hafit and Hili Grand Tomb, among others.		
<b>Criteria under which property is nominated</b>		<p><i>(i) represent a masterpiece of human creative genius</i></p> <p><i>(iii) bear a unique or exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared</i></p> <p><i>(iv) Outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history</i></p>		

*(v) Outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change*





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Draft, July 2010

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    - 4.2.3. Ecological value
    - 4.2.4. Landscape value
    - 4.2.5. Architectural value
    - 4.2.6. Social value
    - 4.2.7. Economic value
    - 4.2.8. Educational value
    - 4.2.9. Value Mapping
  - 4.3. Outstanding Universal Value (WHS)
  - 4.4. General statement significance
  - 4.5. Authenticity and Integrity
    - 4.5.1. State of conservation
5. Management framework
  - 5.1. Ownership and stakeholders

- 5.1.1. Distribution of ownership
- 5.1.2. Relevant authorities
- 5.1.3. Neighborhood and local community
- 5.1.4. Key conservation bodies
- 5.1.5. Other stakeholders
- 5.2. Management background and constraints
  - 5.2.1. Planning and policy framework in Al Ain
  - 5.2.2. Current condition of conservation and protection in Al Ain
  - 5.2.3. Other relevant documents, strategies, plans and actions in Al Ain
- 5.3. Documentation and information management
- 5.4. Monitoring and review
- 5.5. Funding
- 6. Issues
  - 6.1. Overview of issues
  - 6.2. Consultation process
  - 6.3. Managing change
  - 6.4. Land use, design and adaptive re-use
  - 6.5. Conservation
  - 6.6. Ecology and environment
  - 6.7. Interpretation, education and research
  - 6.8. Physical access
  - 6.9. Visitor management
  - 6.10. Risk management
  - 6.11. Infrastructure and utilities
  - 6.12. Summary and SWOT analysis of issues
- 7. Policies
  - 7.1. Management Plan Objectives and Principles
    - 7.1.1. Main principles
    - 7.1.2. Long-term objectives
    - 7.1.3. Mid-term objectives
    - 7.1.4. Short -term objectives
  - 7.2. Protective designation
  - 7.3. Al Ain Oasis Master Plan design principles
    - 7.3.1. Character Zones
    - 7.3.2. Cultural Campus buildings (Eastern Triangle)
    - 7.3.3. Landscape
    - 7.3.4. Design implementation
  - 7.4. Urban setting
    - 7.4.1. Al Ain 2030 and Central District Plans and codes
    - 7.4.2. Buffer zone development regulations and design guidelines
  - 7.5. Land use
    - 7.5.1. Agricultural activities
    - 7.5.2. Urban uses
  - 7.6. Conservation of the built fabric
    - 7.6.1. Interventions to historic buildings
    - 7.6.2. Adaptive re-use of historic buildings
    - 7.6.3. Oasis pathways and walls
  - 7.7. Conservation of the natural environment
  - 7.8. Physical access
  - 7.9. Visitor management
  - 7.10. Maintenance and Facilities Management
    - 7.10.1. Baseline for minimum level of maintenance
    - 7.10.2. Historic buildings maintenance strategy

- 7.10.3. New buildings maintenance strategy
- 7.10.4. Oasis pathways and walls maintenance strategy
- 7.10.5. Landscaping maintenance strategy
- 7.11. Research and understanding
  - 7.11.1. Conservation-oriented site research
  - 7.11.2. Wider research
- 7.12. Interpretation and presentation
- 7.13. Education
- 8. Executive model for implementation
  - 8.1. Framework of execution and responsibility
    - 8.1.1. Steering group
    - 8.1.2. Advisory/ stakeholder groups
    - 8.1.3. Coordination office and technical teams
    - 8.1.4. Model of cooperation and governance
    - 8.1.5. Legal instruments
    - 8.1.6. Expertise, training and staffing
  - 8.2. Model of finance
    - 8.2.1. Budget
    - 8.2.2. Cost control
  - 8.3. Model of monitoring, reporting, review and update
    - 8.3.1. Key indicators for monitoring
    - 8.3.2. Monitoring procedures
    - 8.3.3. Documentation and reporting procedures
- 9. Action plans and project programming
  - 9.1. Framework of objectives and issues
  - 9.2. Methodology for developing action plans and programming projects
  - 9.3. Examples for short, mid and long-term action plans and projects
- 10. Appendices
  - 10.1. Short-term actions and projects (with responsible partners, action plan, targets, financial support and schedules)
    - 10.1.1. Action A
    - 10.1.2. Action B
    - 10.1.3. Action C
    - 10.1.4. ....
  - 10.2. Mid-term actions and projects (with responsible partners, action plan, targets, financial support and schedules)
    - 10.2.1. Action A
    - 10.2.2. Action B
    - 10.2.3. Action C
    - 10.2.4. ....
  - 10.3. Long-term actions and projects (with responsible partners, action plan, targets, financial support and schedules)
    - 10.3.1. Action A
    - 10.3.2. Action B
    - 10.3.3. Action C
    - 10.3.4. ....
  - 10.4. Relevant maps, survey drawings and diagrams
  - 10.5. Statistical information
  - 10.6. Legal documents
  - 10.7. ....
- 11. References

### APPENDIX 3: Figures

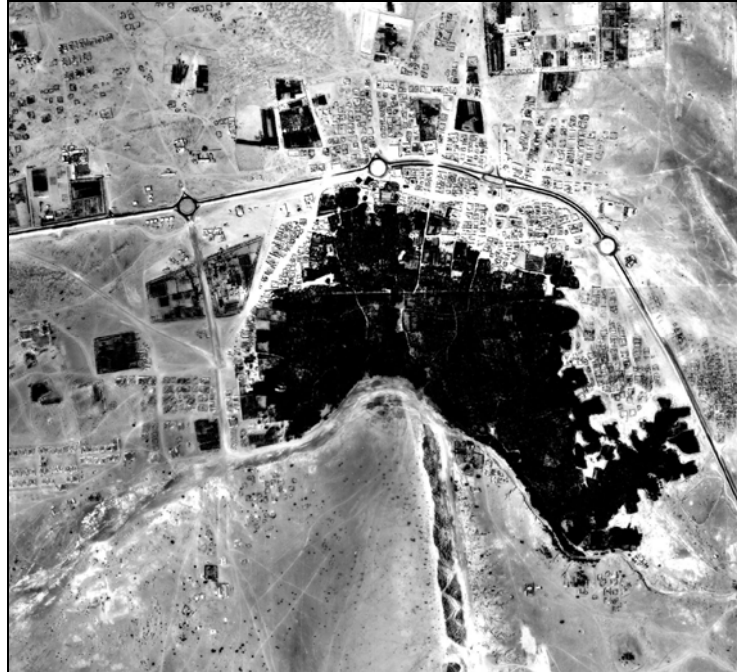


FIGURE 1. Aerial photograph of Al Ain Oasis taken in 1968 (Source: Blue Sky)



FIGURE 2. Aerial photograph of the northwest edge of Al Ain Oasis taken in the 1960s (Source: ADACH)

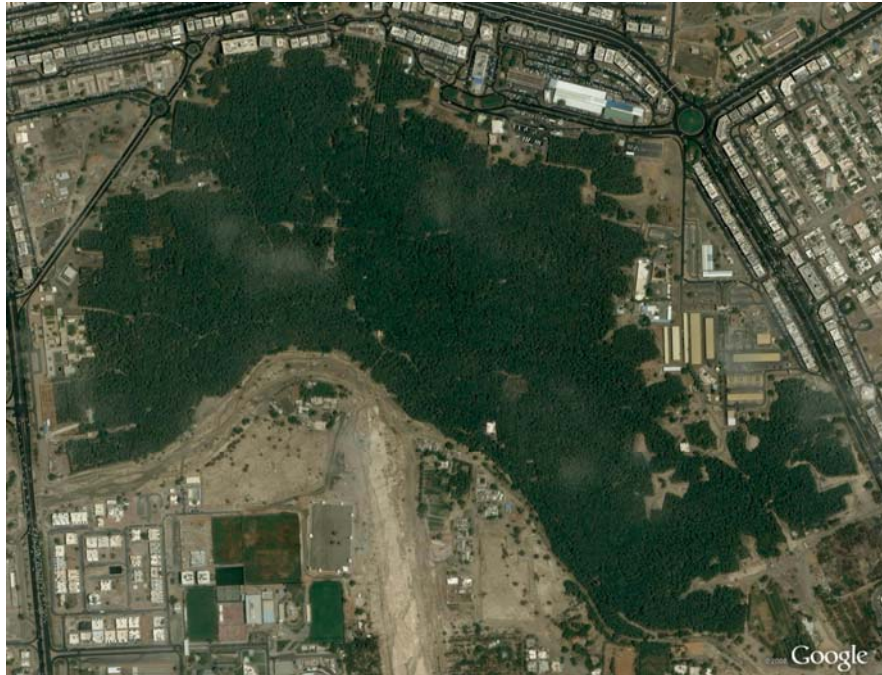


FIGURE 3. Aerial photograph of of Al Ain Oasis taken c 2002 (Source: ADACH)

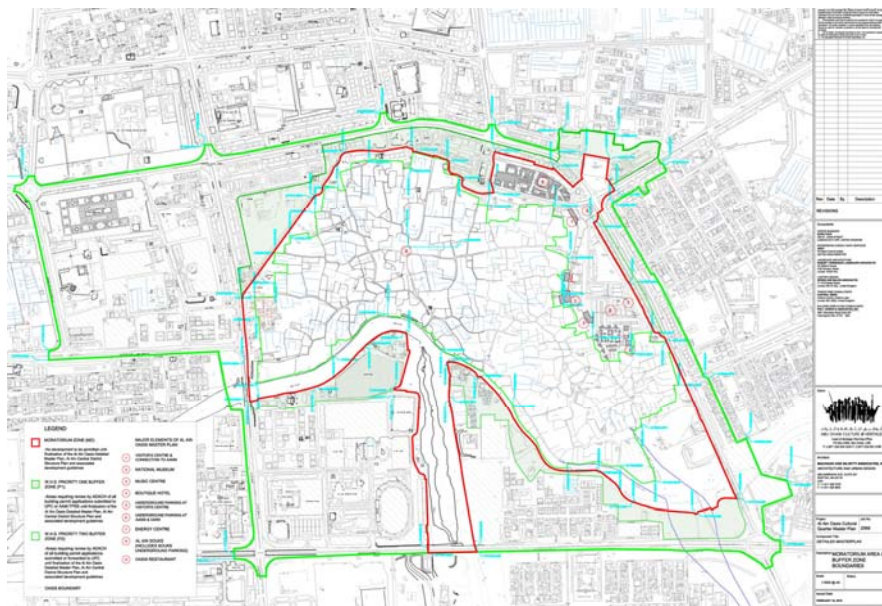


FIGURE 4. Boundaries of the Al Ain Oasis Cultural Quarter Master Plan Area and World Heritage Site Buffer Zones (Source: Machado Silvetti Associates)



FIGURE 5. Public paths in oases also afford transit by bicycle (Source: ADACH)

FIGURE 6. A section of the falaj system running throughout the oases (Source: ADACH)

FIGURE 7. A section of original mudbrick wall, with supporting buttressing on the farm side, and recent pathway walls constructed by Al Ain Municipality (Source: ADACH)

FIGURE 8. Bin Shehail House, view after Emergency Conservation intervention (Source: ADACH)



FIGURE 9. Sheikh Zayed Palace Museum (Source: ADACH)

FIGURE 10. Jahili Fort (Source: ADACH)

FIGURE 11. Sultan Fort (Source: ADACH)

FIGURE 12. Murabbaa Fort (Source: ADACH)