

Development of Heritage Places under UNESCO

Guidelines

Case Study: Al Maliha Neighbourhood in Riyadh City

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Abstract

Riyadh, capital of the Kingdom of Saudi Arabia, is the largest city in the Kingdom. It is also the capital of Riyadh Province, and is located in the historical regions of Najd and Al-Yamama and in the center of the Arabian Peninsula, on a vast plateau. Densely populated, with over 5.7 million people, it is the urban center of a region with about 7.3 million people. It consists of 15 municipal districts under the management of Riyadh Municipality, headed by the mayor of Riyadh, and the Riyadh Development Authority, chaired by the Governor of Riyadh Province.

This research aims at dealing with the development of Al Maliha Neighborhood, as a case study of development of heritage places.

Al Maliha neighbourhood is located in the center of Riyadh, bounded on the north by AL Jomla Suq and market, in the south by Al Salam garden, in the west by King Fahad Street and in the east by warehouses and a school from the south. There are also old heritage houses in the southeast of the area. The proposed project will develop the old heritage area, re-use it as a Heritage Museum, and demolish the warehouses to establish new galley rooms and Heritage research center.

The research methodology will follow the UNESCO regulations and guidelines followed for conservation of heritage places. It will also adopt Riyadh Municipality, and the Riyadh Development Authority regulations for the development of heritage places. The project is proposed for architectural students at level four in Dar Al Uloom University, to be completed within four months and presented for Prince Sultan Award 2006 for Heritage.

The aim of the research is to follow the KSA strategy in protecting and maintaining historical places like Al Daraya, old palaces and old mosques. The project will give a proposal study in managing and developing heritage places, by following the UNESCO guideline for heritage places and Riyadh Municipality regulations.

The research outlines conclusions and recommendations to decision makers, for application in the development of Al Maliha neighbourhood applied in developing Al Maliha neighbourhood

Keywords: Development of heritage places, UNESCO Guidelines for the development of heritage places, Al Maliha neighbourhood in Riyadh City

1. Introduction

1.1 *The Previous Studies*

The students were advised to make a site visit to the Riyadh National Museum; the study was recorded on 02/September/2015, between 8.00 am and 1.00 pm. The students made a tour around the museum, and noted down its contents, with their suggestions for technical solutions. The museum is located in the eastern side of King Abdul-Aziz historical center, the main building of which covers 28,000 square-meters, including exhibition halls, administrative offices and warehouses. The museum's main display halls on the ground and first floors provide an epochal sweep of Arabian history. They feature artifacts, documents, manuscripts, display boards, multi-media presentations, films and documentaries. The museum uses a wide range of state-of-the-art interactive technology, short films, and audio commentary in Arabic and English, to give a detailed overview of Arabian history from the time of creation to the unification of Saudi Arabia and the growth of Hajj. The Museum consists of eight temporal galleries and two permanent ones. The uniqueness of every hall at the National Museum is based on the fact that each is independent and complete in its respective presentations. All stages of the establishment of the Kingdom of Saudi Arabian and the emergence and spread of Islam have been covered. There are eight exhibition halls in the National Museum: Man and Universe, The Arabian Kingdoms, The Pre-Islamic Era, Prophet Mohammad's Mission, Islam and the Arab Peninsula, The First and Second Saudi States, The Unification of the Kingdom and The Hajj and Two Holy Mosques. The museum's halls are artistically designed. The lighting and the decorations of each hall can be modified without affecting the other parts of the museum. The museum's halls are designed to facilitate convenient access to electricity, telephone, and internet hookups.

The museum includes special research areas for scientific presentations and workshops: a laboratory room within the Man and Universe Hall, a special section for studying the environment and geology at the Man and Universe hall, a special section for explorations on the ground floor of the Arab Kingdoms Hall, two mezzanines at the Arab Kingdoms Hall (with an elevator for disabled persons), outside booths in the plaza area in the Man and Universe Hall on the western side, etc. The ground-floor warehouses have a separate entrance in the south-eastern corner of the building. The warehouses are equipped with cranes, sterilization rooms and other support services. The laboratories are equipped with ovens, cabinets, shelves and suction devices. There is a modern laboratory on the first floor. Temperature, humidity, and light intensity can be modified in each hall to meet specific exhibit requirements. The museum has a sophisticated security system, with sensors available at all entrances, in addition to internal and external cameras to monitor main entrances, which are all linked to the security unit. The museum's eight halls can be divided into two groups: the first includes the four halls on the ground floor: Man and Universe, Arab Kingdoms, Pre-Islamic, and Hajj and the Two Holy Mosques halls. The second includes four halls on the first floor: The Prophet's Mission, Islam and the Arabian Peninsula, the First and Second Saudi States and Unification of the Kingdom Halls. The museum has two halls for permanent display (Antiquities, 2015).

The Main points for the case study are:

1. Site, location and short note about the main concept and main content of the case study
2. The main environmental elements (study of the temperature, humidity, rain, pressure, wind direction, topography, contour lines, etc.).
3. Study of the relation between the site and the surrounding neighborhoods, using Google map and arrows to show the main context of views and the neighborhood
4. Redraw the plan, and use color to identify the use plan.
5. Relationship Diagram.
6. Pie Diagram to show the main contents and the area of each hall.
7. Study of the circulation (from outside to inside, how to go to the museum, the circulation from inside while walking from the reception to the 8 halls)
8. Study of the Building Material (on the outside wall, on the floor and on the ceiling, from inside and outside).
9. Study of the technical solutions for each hall and for the whole building, including sound, lighting, electricity, water, HVAC system and humidity control.
10. Study of the building envelope (the ceiling structure of the wall and the floor).
11. Study of the outdoor environment, including the landscape, sheds, canopies, water features-the trees-plants- floor-sitting areas, etc.)

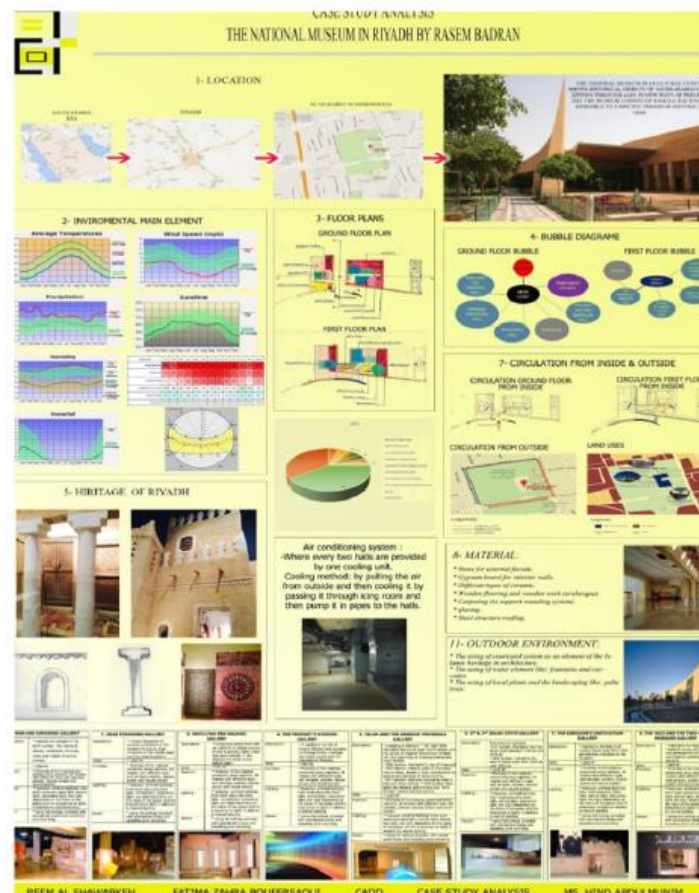


Figure 1. Board one, presenting the presentation of the case study, The Riyadh National

Museum

1.2 The Location of Al Maliha Neighbourhood

This research is aimed at developing Al Maliha Neighbourhood, as a case study of the development of heritage places in central Riyadh City; Al Maliha neighbourhood is located in central Riyadh. It is boundary from the north AL Jomla Suq and market, Al Madena Road and Al Salam garden from the south, Kink Fahad Street from the west, and warehouses from east. There is a school to the south and there are old heritage houses at southeast of the plot.

Parking Area =32415 m² (65%)

Old Housing =1000 m² (10%)

Warehouses =1217 m² (25%)

The plot contains old heritage houses in medium condition forming 35% of the total site and will be developed, old houses 10% which will be used as heritage museum, and 15% will be demolished and used as Gallery room. 65% of the site is parking area and will be utilized, as described in para (1.3), for constructing new buildings, parking and landscape.

1.3 The Aim of the Project

- 1) The project aims to introduce Al Maliha Neighborhood to visitors and tourists, through the Heritage Museum.
- 2) Allows research workers to avail the opportunity of conducting research on the historical city of Riyadh, through the provision of a small library and lecture rooms.
- 3) Audio visual rooms for documentary films and presentations are also included
- 4) The project will also introduce a Gallery for 2 D photos showing the Saudi heritage and history.
- 5) Services such as administration, parking, toilets and café will also be available.
- 6) The project ARC401 Comprehensive Design Studio, the main objective of which is to link the design studio with the other courses in the same level, like environmental control ARC404, lighting ARC406, Heritage ARC407, etc.

1.4 Challenges for the Students

- 1) Documentation of Al Maliha Neighbourhood, study of the present situation.
- 2) Identification of the boundaries
- 3) Giving proposal study for the AL Maliha Neighbourhood and re- use of suitable areas as heritage museum.
- 4) The design of the new building will be based on the interaction between contemporary architecture and heritage architecture and provide services in the surrounding neighbourhood, such as a new recreation area , heritage centre, a Gallery and research Centre.

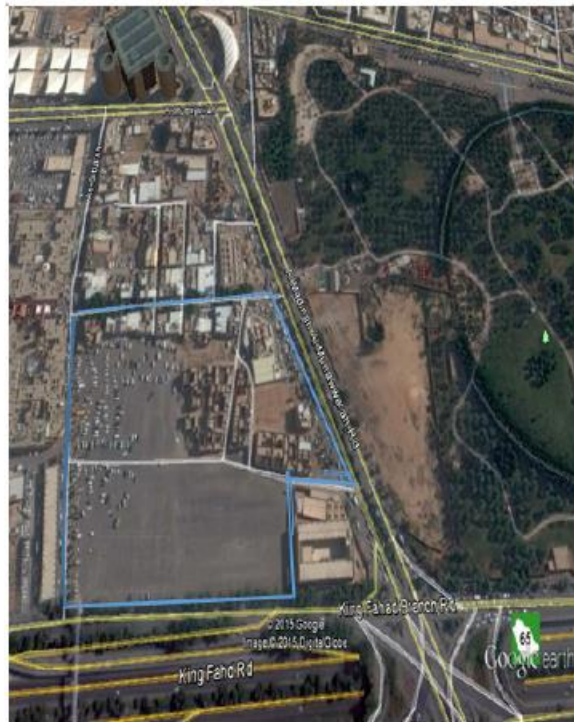


Figure 2. The site location identified by the blue line, lies between King Fahad Road in the West and Al Madina Road in the south

Main Points of the Site Analysis:

1. Study of the Site Location (Location of the KSA, Location of Riyadh, Al Maliha Neighbourhood).
2. Main Environmental Elements (study of the temperature, humidity, rain, pressure, wind direction, topography, and contour lines).
3. Study of the site and the surrounding neighborhoods, using Google map and arrows to show the views, and the main context of the neighborhood)
4. The site's main context and use of color is to identify the land use plan.
5. Study of the circulation (from outside to inside, How I come to the site?).
6. Sky Line.
7. Study of building quality as good – medium - old building and use color to identify them.
8. Study of the site services including electricity and water drainage system.
9. Solid and void study.
10. Contour line study.
11. Street level study.
12. Study of the Building Envelope (the ceiling structure –the wall-the floor). Using sketches is required.
13. The neighborhood pattern connected with the surroundings.



Figure 3. Presentation showing site analysis of Al Maliha Neighbourhood including all the above points

2. Objectives/Purpose of the Study Are Stated below:

- 1) The project aims to introduce Al Maliha Neighborhood to visitors and tourists through the Heritage Museum.
- 2) Allows research workers to avail the opportunity of conducting researches on Riyadh historical city through the provision of a small library and lecture rooms.
- 3) Audio visual rooms for documentary films and presentations are also included
- 4) Gallery hall to provide photos showing history of Riyadh
- 5) Services such as administration, parking, toilets and café.
- 6) Sustainability aspects were added by using local building materials such as stones, mud and wood.
- 7) Social aspects were added in walkway-design around the project to connect the project with the surrounding neighborhood. Small shops, parking area will also help the school on the south of our project.
- 8) Economic value will be added to the external gallery by providing funds to our project.

The Project Programme:

1) The Museum: (Developed from old heritage housing buildings):

1. The History of Kingdom of Saudi Arabia.
2. Building material used, especially in Riyadh.

3. Dresses worn.
4. Weapons used.
5. Saudi Arabia environment.
6. Writings and important books about the heritage are introduced in the research center.
7. Proposal study for rehabilitation of AL Maliha Neighborhood with technical solutions for lighting, sound, HVAC system and support building envelop-details
8. Re-drawing of the plan section, elevation of the AL Maliha Neighborhood, the part of the exhibition and submission of proposal for re-use as an exhibition.

2) **New Heritage Research Center:**

Will be located in the old demolished areas and part of parking area.

The main contents of the Heritage research center:

1-library

2-Lecture halls

3-Seminar rooms

4-Audio visual halls

5-Administration

6-Services

3) The Gallery room will exhibit photos about history of Riyadh and there will be an extension for external use as an economic value added to the project.

3. Methodology

1) The methodology starts with reading literature and reviewing the National Museum guides and UNESCO guidelines for heritage places, regulations for heritage areas from Amanat Al Riyadh.

2) The analysis requires heritage case study about Riyadh City: The National Museum designed by Architect Rasem Badran.

3) The study applies to the research project for the development of Al Maliha Neighbourhood and re-using it as a Traditional Museum, and application of technological solution following UNESCO regulations.

The guidelines for developing of the heritage places are as follows:

- a. Identification of the Property,
- b. Description of the Property,
- c. Justification for Inscription,
- d. State of conservation and factors affecting the property,
- e. Protection and Management,
- f. Monitoring,
- g. Documentation,
- h. Contact Information of responsible authorities.
- i. Signature on behalf of the State Party(s).

- 4) The second part is the design of a new building; which is a Gallery room and using it for the documentation of Riyadh heritage.
- 5) The third part is designing of a new building, which is the heritage research Centre.
- 6) Method of presentation in tables and figures showing the study steps and documentation.
- 7) The discussion follows UNESCO guidelines for heritage places.
- 8) A set of conclusions for developing Al Maliha Neighborhood

4. Results/Findings:

- 1) Al Maliha Neighbourhood is located at central Riyadh. 35% of the area is heritage housing area that can be developed as a heritage museum, while 15% of the area consists of buildings which may be demolished, as they are very old. 50 percent of the plot can be used for the construction of new buildings, parking area and landscape.
- 2) Al Maliha Neighbourhood is bounded in the north by AL Jomla Suq and a market, Al Salam garden in the south, King Fahad Street in the west, and warehouses in the east. There is a school from the south and there are old heritage houses in the southeast, forming 35% of the total area of the plot.
- 3) There is an electricity line at the side of King Fahad street and Al Madina Street
- 4) There is a drainage line inside the plot area, which belongs to the heritage housing area; the drainage system needs to be re-conditioned.
- 5) There is a telephone line belonging to the heritage housing area.
- 6) The conclusions from the site visit:
 - a) Most of the old houses need maintenance as re-construction of some collapsed walls, using the same building materials.
 - b) Uplifting of the ground level of the houses to bring it to the level of the street.
 - c) Manufacture of all doors and windows in the same design of the Najdi Style.
 - d) Walls should be painted from inside and outside using the same building material (mud blocks)
 - e) The grounds should be maintained by using the same building material (stones)
 - f) The old ceiling should be reconstructed by using the same building material (timber wood products).
 - g) Re-use of the old heritage housing as a heritage museum
 - h) The boundary has been identified with plot area (35000 M²)
 - i) The location has been studied
 - j) Technological aspects such as electricity, water, AC control, Alarms, security, materials finishing, etc. would be introduced to the heritage buildings.
 - k) Cultural value will be introduced in architectural elements by using the same construction material and method, the same decor, the same column and courtyard system.
 - l) Sustainability aspect would be introduced in building materials and technical solutions.
 - m) Economic value should be introduced in hiring the gallery museum for external uses and for providing research activities for graduate students and postgraduate studies. (Amanat Al Riyadh, 2015).

- n) There is a social aspect for this project too, by improving the surrounding neighbourhood through walkways, shops and pathways between the project and Alsalm Park.
8. The difficulties facing the project: 25% of the old buildings have collapsed, only 10% of the old buildings will be treated as heritage museum.
9. 65% of the open space and parking area will be used for new buildings, gallery, research centre and the landscape.
10. The old houses were found very dirty and untidy, which made it very difficult for measuring the dimensions from inside.

5. Discussion

The discussion follows UNESCO GUIDELINES FOR HERITAGE PLACES (UNESCO, 2012, p. 13).

It will focus on the following main points:

1. Identification of the Property

“The proposed boundaries of the property shall be clearly demarcated; Maps shall be sufficiently detailed to determine precisely which area of land is to be used”. (UNESCO, 2012)

The property was identified (see board two) by a map from Saudi Arabia. A close-up map of the area showing the location has been drawn by Auto-Cad programme in (board three) with full dimensions.



Figure 4. Identifying the property (Al Maliha Neighbourhood)

2. Description of the Property

The Description of the property shall include its identification and an overview of its history and development. All component parts that are mapped shall be identified and described. In

particular, where serial nominations are proposed, each of the component parts shall be clearly described. (UNESCO, 2012).

History and Development of the property describes how the property has achieved its present form and the significant changes that have been undertaken. This information provides the important facts needed to support and give substance to the argument that the property meets the criteria of Outstanding Universal Value and conditions of integrity and/or authenticity. This part is covered in the project programmer.

Riyadh, capital of the Kingdom of Saudi Arabia, is the largest city in Kingdom. It is also the capital of Riyadh Province, and is located in the historical regions of Najd and Al-Yamama and in the center of the Arabian Peninsula on a vast plateau. Densely populated with over 5.7 million people, it is the urban center of a region with about 7.3 million people. It consists of 15 municipal districts, under the management of Riyadh Municipality headed by the mayor of Riyadh, and the Riyadh Development Authority, chaired by the Governor of Riyadh Province. This research aims at dealing with the development of Al Maliha Neighborhood, as a case study of development of heritage places.

3. Justification for Inscription

“This section will indicate the World Heritage 77) under which the property is proposed, together with a clearly stated argument for the use of each criteria. Based on the criteria , a proposed criteria shall be given “.(UNESCO, 2012).

This part is outlined in the following objectives:

1. Documentation of Al Maliha Neighbourhood, study of the present situation.
2. Development of heritage housing buildings, to give proposal study for the AL Maliha Neighbourhood and re- use of the suitable areas as heritage museum.
3. Introduction of the issues of Cultural values.
4. Introduction of the new technological values in the design of the new buildings and development of the old buildings that will present a harmonious relationship between contemporary architecture and heritage architecture.

4. State of Conservation and Factors Affecting the Property

“This section shall include accurate information on the present state of conservation of the property (including information about the physical condition of the property and conservation measures applied in place). It shall also include a description of the factors affecting the property (including threats). Information provided in this section constitutes the baseline data necessary to monitor the state of conservation of the property recommended for inclusion in the future.” (UNESCO, 2012).

This part was covered in (board three): Study of present situation including

- 1) Redraw the site with scale: 1/500, showing the north, south, east, west sides, the streets widths from the four directions, the dimensions around each block of the heritage area and the dimensions of the parking area.
- 2) **UNESCO regulations**
- 3) **Amanat regulations for Riyadh heritage buildings**
- 4) A study of the building materials describing the existing material and their benefits

- 5) Part plan :1/200
- 6) Elevation: 1/200, elevation : B 1/200
- 7) SECTION A : 1/200, SECTION B: 1/200
- 8) Sketches of doors, windows, columns, architectural elements see - Figure 3presentation of the present situation.
- 9) The physical condition is covered in board two - site analysis, the threats affecting the property, (there are government directions for the demolition direction of all old housing areas, but by this study and research work, we have placed a proposal to keep the good ones among the old houses and make use of them by developing them into heritage museum showing the Riyadh heritage, besides providing a new building as a gallery room and heritage research centre. This part is covered in board three.

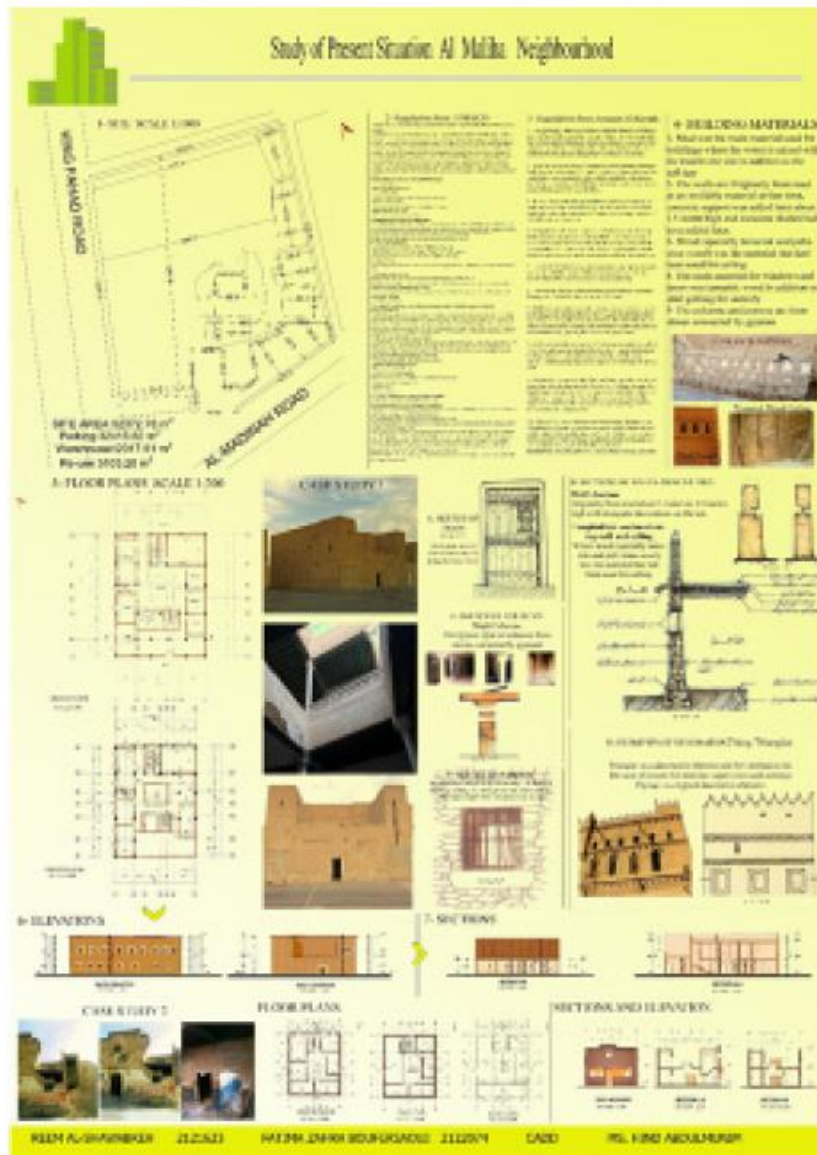


Figure 5. Study of the Present Situation of Al Maliha Neighbourhood

5. Protection and management

“Protection shall include the list of the legislative, regulatory, contractual, planning, institutional and/ or traditional measures most relevant to the protection of the property and provide a detailed analysis of the way in which this protection actually operates. In other words it will include the legislative, regulatory, contractual planning and/or institutional texts, or an abstract of the texts.” (UNESCO, 2012).

This part was given as an exercise to the student to browse through the internet about the heritage legislation in Riyadh city provided by Amanat Al Riyadh, as well as UNESCO regulations for heritage places and are written in board three.

Amana Al Riyadh for Heritage Buildings:

- 1) The Authority, after co-coordinating with the Ministry of Municipal and Rural Affairs and the relevant authorities, has embarked on the preparation and development of heritage protection scheme as part of Urban development, for according protection and development, as part of a comprehensive program, integrated to the region concerned.
- 2) The protection of architectural heritage buildings and sites scheme classified, and directions of protection and requirements, and easements, and controls methods intervention, including restoration, rehabilitation and urban and urban renewal, and Building Systems, and others.
- 3) Building regulations and specifications for Architectural Heritage buildings and their location may be applied and classified, unless the application is contrary to the requirements of classification or protection.
- 4) The obligations of the State to protect, preserve and develop the heritage areas; if the king her, and to participate in efforts to protect, preserve and develop it if was owned by the private sector, and the expropriation of the interest of the state if the Protection conditions are not available, and in accordance with the procedures set.
- 5) The need for maintenance, and restoration, and operation commensurate with the nature, without a change in any of its elements only to the extent necessary for process operating.
- 6) Prevention of changes in the protected zone leads to occurrence of damage, distortion, obstruction or off-use.
- 7) The owners of houses shall not undertake any work of construction and repair in the buildings. Neighborhoods and villages having architectural heritage will be classified only after obtaining License from the Ministry of Municipal and Rural Affairs, and the Ministry-approved Authority on the conditions for granting the license and procedures.
- 8) Shall not undertake any work of maintenance work or retail division in buildings and neighborhoods and villages architectural heritage classified only after approval Body, and the body to answer the demand during ninety days from the date of submission.
- 9) may not be the ownership of the buildings or architectural heritage sites classified as transfer Owned by the State; to natural or legal persons Own, any form of transfer of ownership, only after obtaining The approval of the Authority, is committed to the buyer or the terms of the new owner Classification set forth in this system and its regulations.

10) Private sector owners may sell or lease buildings and architectural heritage sites, or transfer ownership thereof, after obtaining the approval of the Authority, is committed to the new owner or tenant conditions of sale Or transfer of ownership or lease specified by the regulations. (Amanat Al Riyadh, 2015).

UNESCO Regulations:

This part has been covered as an exercise in board three

1. Cultural and Natural Heritage has been defined in Articles 1 and 2 of the World Heritage Convention.
2. *“Article 1: For the purposes of this Convention, the following shall be considered as "cultural heritage"; a) Monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of Outstanding Universal Value from history point of view of art or science; b) Groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of Outstanding Universal Value from the point of view of history, art or science; c) sites: works of man or the combined works of nature and of man, and areas including archaeological sites which are of Outstanding Universal Value from the historical, aesthetic, ethnological or anthropological points of view”.* (UNESCO, 2012)
3. Depending on the Type of Cultural Heritage
4. Form and design;
5. Materials and substance;
6. Use and function;
7. Traditions, techniques and management systems;
8. Location and setting;
9. Language, and other forms of intangible heritage;
10. Spirit and feeling; and
11. Other internal and external factors.

3-Boundaries for Effective Protection

The delineation of boundaries is an essential requirement in the establishment of effective protection of nominated properties. Boundaries should be drawn to ensure the full expression of the Outstanding Universal Value and the integrity and/or authenticity of the property.

4-The Current Strategic Objectives

1. Strengthen the Credibility of the World Heritage List
2. Ensure the effective Conservation of World Heritage Properties.
3. Promote the development of effective capacity-building in State’s Parties.
4. Increase public awareness, involvement and support for World Heritage through Communication.

5-Management Systems

The role of Communities in the implementation of the World Heritage Convention should be enhanced. Each nominated property should have an appropriate management plan or other

documented management system, which must specify how the Outstanding Universal Value of a property should be preserved, preferably through participatory means.

Operational Guidelines for the Implementation of the World Heritage Convention

6-Sustainable Use

World Heritage properties may support a variety of ongoing and proposed uses that are ecologically and culturally sustainable and which may contribute to the quality of life of communities concerned. The State Party and its partners must ensure that such sustainable use or any other change does not adversely affect the Outstanding Universal Value of the property, for some properties that the human usage of which would not be appropriate. Legislations, policies and strategies affecting World Heritage properties should ensure the protection of the Outstanding Universal Value, support the wider conservation of natural and cultural heritage and promote and encourage the active participation of the communities and stakeholders concerned with the property as necessary conditions to its sustainable protection, conservation, management and presentation. (UNESCO, 2012)

7-The Format includes the following sections:

- 1) Identification of the Property
- 2) Description of the Property
- 3) Justification for Inscription
- 4) State of conservation and factors affecting the property
- 5) Protection and Management
- 6) Monitoring
- 7) Documentation
- 8) Contact Information of responsible authorities
- 9) Signature on behalf of the State Party (ies)

8-Decision of the World Heritage Committee:

The World Heritage Committee decides whether a property should or should not be inscribed on the World Heritage List, referred or deferred.

9-Nominations to be processed on an emergency basis

The normal timetable and definition of completeness for the submission and processing of nominations will not apply in the case of properties, which, in the opinion of the relevant advisory bodies, would unquestionably meet the criteria for inscription on the World Heritage List and which have suffered damage or face serious and specific dangers from natural events or human activities. Such nominations will be processed on an emergency basis and may be inscribed simultaneously in the World Heritage List and on the List of World Heritage in Danger.

Management: An appropriate management plan or other management system is essential and shall be provided in the nomination. Assurances of the effective implementation of the management plan or other management system are also expected. Sustainable development principles should be integrated into the management system.

This part has been studied in board four:

1) Development of Al Maliha Neighborhood:

Regarding the museum plan and the re-use of the old heritage housing buildings as museum, each group has a different concept about the museum, which should be used to better reflect the heritage of Saudi Arabia.

The management plan provides the use of the same building materials like (mud, stone and wood). Replacement of the old wooden roof by the same material, re-building of collapsed walls. A technical solution should be implemented for the museum building in regard to electricity, drainage system, lighting, fire system, and HVAC system. The building envelop should be studied in roof, floor and ceiling. (See Figure 4).

In board four, we will start with the heritage museum. The good, old buildings form 10% of the total housing buildings and it is suggested to re-use them as Heritage Museum.

1. Redraw the site with scale 1/1000,

(The Location) showing the north, south, east and west side and streets' width from the four directions.

2. Demarcation of (the Boundaries) and the dimensions around each block in the museum area, 1/500scale

3. Description of the property

4. Justification of inspiration (Objectives)

5. Protection and management

a) Draw the Plan of the Museum (eight buildings), 1/200

b) Elevation A 1/200, elevation B 1/200

c) SECTION A 1/200, SECTION B 1/200

d) Museum story

e) Technical solution (minimum eight points) and building envelop

f) Accuracy in drawing and information

g) Board distribution



Figure 6. The old housing before (statement)

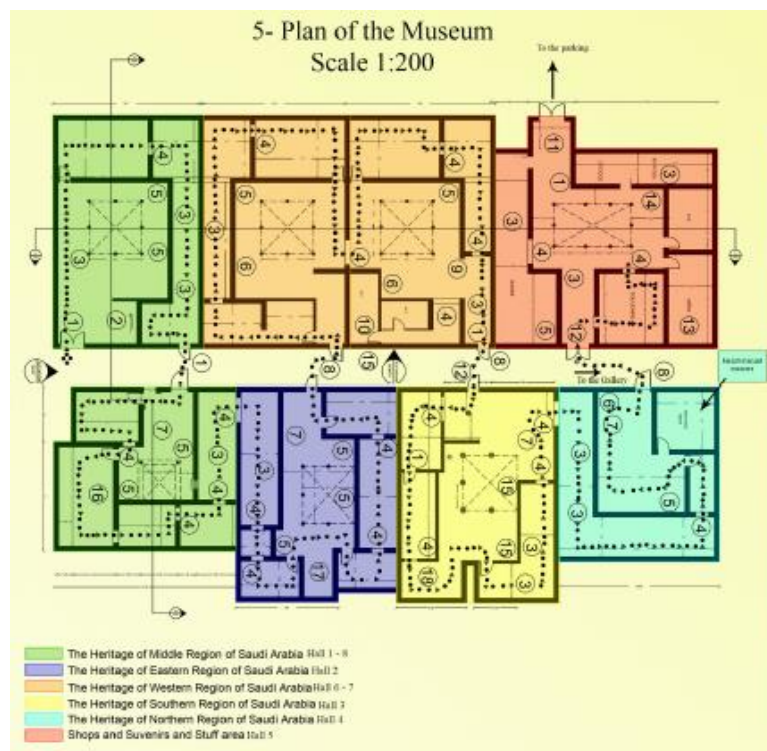


Figure 7. The old building after development and re-use them as Museum after rehabilitation

Table 1. The changes in the museum for rehabilitation

NUMBER	THE CHANGES
1	Demolishing of the wall and add the door of 90cm, the one removed before
2	Removing of the stairs, the walls, the door and re-use the door 90cm
3	Removing of the wall
4	Demolishing of the walls and placing of an arch
5	Building of a wall and remove the door 90cm
6	Building of a wall
7	Removing of the stair, demolish the walls, and remove one door of 85cm
8	Reversing of the door for emergency use
9	Removing of the door 90cm
10	reversing the door to built W.C.
11	Demolish the wall and fix a 2 line casement door 200cm
12	complete the wall to fix a door 90cm

- 13 the kitchen will be transferred to a coffee area cause of the existing supply
- 14 Removing of the two door 90cm and build the wall
- 15 Building of a wall and removing of the door 100cm
- 16 Demolish the wall and build the wall and fix the door removed from the same area and reverse it
- 17 Removing of the stair
- 18 Demolishing of the wall and remove the door 85cm



Figure 8. Shows Al Maliha Development, The Museum Some problems has been faced on this Stage

Some problems have been faced at this Stage

- 1) In this course, the students should learn how to design and conceptualise technical solutions. Therefore, I have started to explain the technical solutions to them, in HVAC, drainage, lighting fire alarm system, for application of the solutions to their projects.
- 2) The north direction should pass over the top of the site plan, and all plans have been made according to the northern direction.

The Technical Solutions:

- 1) The services should be from Al Madina Road, for the good axis to the HVAC control room and drainage room.
- 2) The students are offered two options for the AC; one option is to use HVAC system with distribution duct and exhaust, with the control room on the ground floor in the eastern direction.
- 3) The other option is to use split unit, with the outlet unit hanging on the outside wall or on the roof.
- 4) The drainage system shall be placed with a manhole in the courtyard area of 60x60 cm size for cleaning and washing, and the other manhole shall be placed near the bathroom 30x30 cm with the two connected to the outside drainage line. The drainage line will directly be connected to the drainage room. The bathroom will be provided with exhaust fans.
- 5) In addition, there will be a fire alarm system. A camera will be placed at the exit door, an extinguisher with hose reel and a fire alarm system.
- 6) For lighting, the use of spot lighting is suggested, LED type for sustainability and durability near all displaying areas. Homogenous lighting will be provided in the large rooms and outdoor lighting in the courtyard area and walkable streets.

The Building Envelope:

1. Ceiling: The same wooden ceiling structure will be saved, but the old ones will be replaced with new wooden rafters.
 2. Walls: The same building materials, the same mud building material will be used.
 3. Floors: There are several other options, such as: stones, marble and heavy duty ceramic
- For the drawings, see Figure 4.

2) The New Gallery Building (board 5)

The Gallery will display photos depicting the History of Riyadh City. There is also an additional hall for external use to add economic benefit to the project.

The main contents of board 5 are:

In the gallery show room, there are two rooms, one for external use and connected to Al Madinah Road and the other room for permanent exhibition, to display 2D photos about Riyadh History during the first and second Kingdom states and the modern kingdom.

Lighting study will be included and so also the study of the whole project concept, with sketches and drawings. The challenges facing the student at this stage would to connect the gallery to the museum and to the research center, providing for smooth movement and

connections from inside and outside by the landscape and walkways, besides studying the gallery lighting and structure.

1. Redraw the site with 1/2000 scale,
2. (The Location) showing the north, south, east and west sides and the width of the streets from the four directions, North direction, black color for the Galley.
3. The Gallery Boundaries
4. Development of the whole project concept with 3D shots, with more sketches for the landscape
5. Bubble diagram and zoning
6. Table of the Areas for the whole project including the museum, the gallery and the research centre, with details of the parking area and the landscape)
7. Sketches for the landscape, details of structure and details of lighting.
8. Photos showing what one should display in the gallery
9. Protection and management of the The Gallery)

Drawing of the Gallery Plan (Two Halls), 1/200

Elevation A 1/200, elevation B 1/200

SECTION A 1/200, SECTION B 1/200

Technical solution ((The Lighting)

10. Accuracy in drawing and information
11. Board distribution

*The concept of the project is the palm tree: the root, the trunk and the leaves shall be illustrated in the museum, the gallery and the research Centre. The museum represents the root of our heritage; the trunk is the connection between the museum and the research center. The research center is the source of Knowledge, like the palm leaves are the source of the dates.

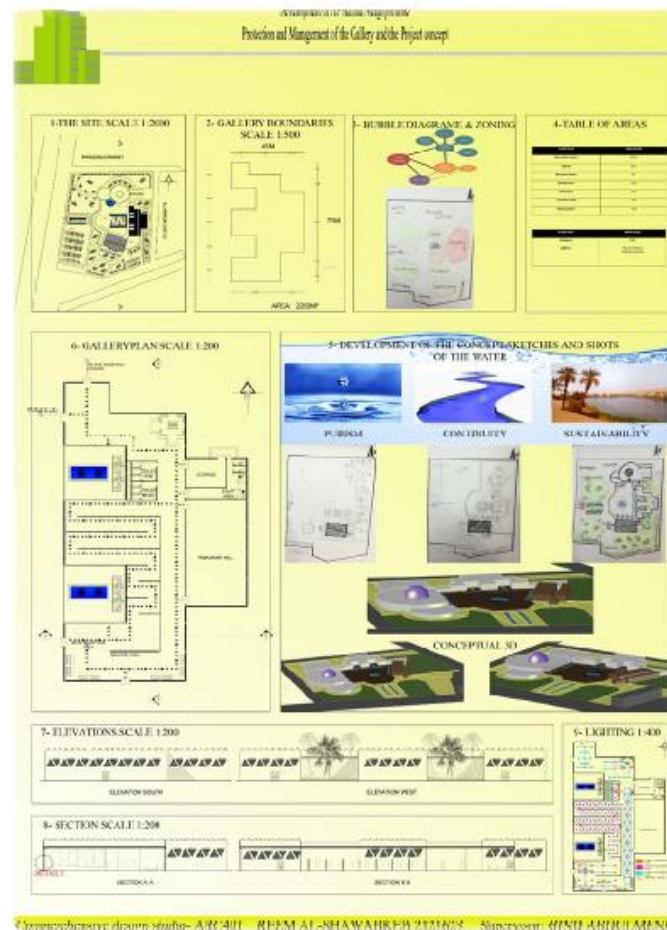


Figure 9. The Gallery and Design Concept, by Reem Al Shawbkeh, Dar Al Uloom University, supervised by Hind Abdel moneim

The Research Centre (board six)

The research center includes reception area, lecture rooms, seminar rooms, audiovisual rooms and library. It also provides search facility for the students and post postgraduate research workers.

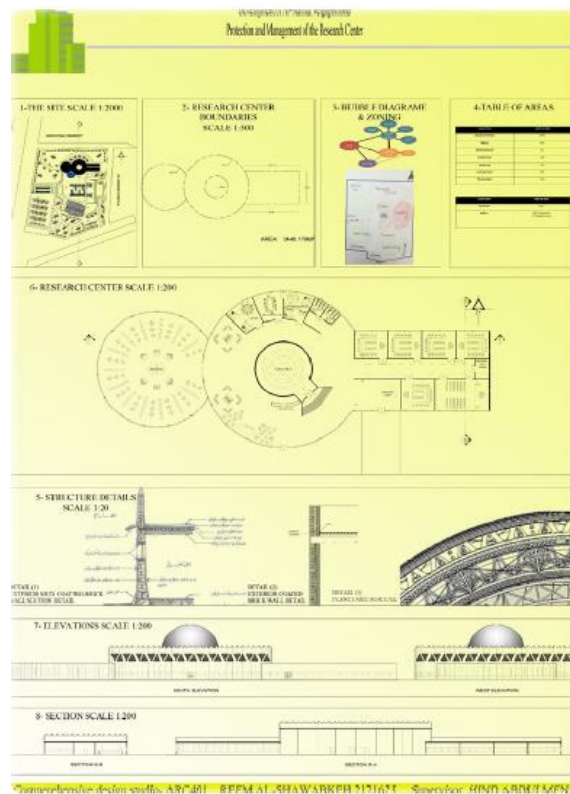


Figure 10. The research centre and structure details, by Reem Al Shawbkeh, Dar Al Uloom University- supervised by Hind Abdel moneim

The Site plan and Landscape

The site plan shows the 3 buildings-the museum, the gallery and the research centre- together, as connected by the landscape from outside, with paths, canopies, fountains, water features. It is also connected from inside the buildings.

3D Shot (board seven)

The students would be asked to provides 3D shots of the whole project, showing the heritage museum, the gallery and the heritage research center (The whole project drawings (Scale 1/500)).

Cultural Value (board eight)

The cultural value will be reflected by using the architectural element of Najd character, like using of triangular openings for ventilations, the courtyard system and Najd columns, with mud as the construction material.

Economic value

Beside cultural value, the project has an economic value in the external hall of the outside gallery, apart from the benefits of the research centre to post graduate students and research workers, as well as the economical use in finishings, lighting and HVAC system.

Sustainability Value

The project has sustainability value, by using the local building materials and applying the technical solutions in electricity, energy efficiency, water efficiency, solid waste management, managing the indoor environment in lighting, acoustics, HVAC system and innovation.

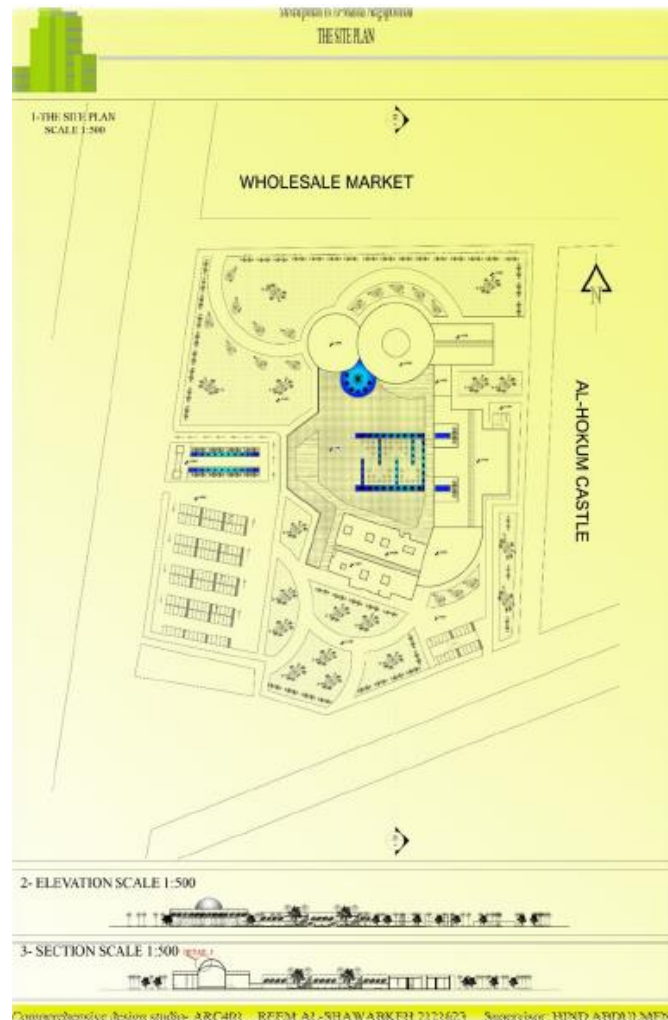


Figure 11. The Site Plan, 1/500 scale, by Reem Al Shawbkeh, Dar Al Uloom University-
Supervised by Hind Abdel moneim



Figure 12. The 3D shots and sustainability, economic, social and cultural aspects, designed by: Reem Al Shawbkeh, Dar Al Uloom University, Riyadh City. supervised by Hind Abdel moneim

6. Monitoring

States Parties shall put the key indicators in place and/or propose to measure and assess the conservation of the property state, the factors affecting it, conservation measures at the property, the periodicity of their examination, and the identity of the responsible authorities.

This part is covered in board two: the site analysis shows the key indicators as: Al Maliha neighbourhood is located in central Riyadh. Its boundaries are from the north AL Jomla Suq and market, Al Madena Road and Al Salam garden in the south, King Fahad Street in the west, and warehouses in east. There is a school in the south and there are old heritage houses towards the southeast of the plot.

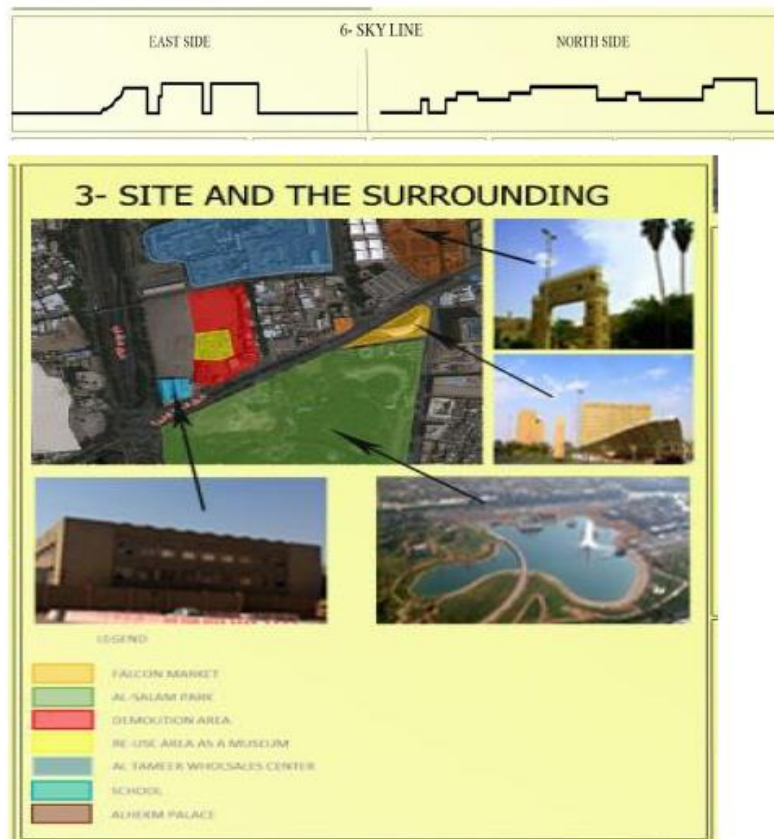


Figure 13. Presentation of key Indicators in Place

7. Documentation

All documentation necessary to substantiate the nomination shall be provided. In addition to what is indicated above, this shall include a) images of a quality suitable for printing (digital photographs at 300 dpi minimum, and, if possible, 35 mm slides) and if essential, supplementary film, video or other audio visual material; all these are provided in the project This part is covered in boards two and three by photos and sketches and part plans. See Figure 12.

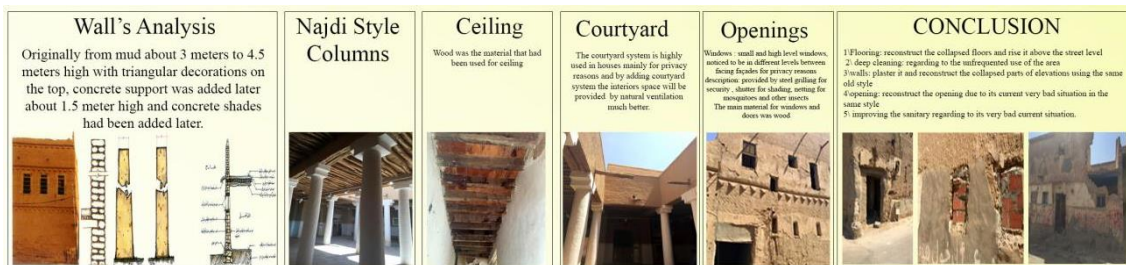


Figure 14. shows photos and documentation of Al Maliha Neighbourhood

8. Signature on behalf of the State Party

The nomination shall conclude with the original signature of the official empowered to sign on behalf of the State Party. (Dr. Abdel Mohsen Al Garni provides the project from Riyadh authority to students in level four)

9. Number of printed copies required

- Nominations of cultural properties (excluding cultural landscapes): two identical copies
- Nominations of natural properties and cultural landscapes: three identical copies
- Nominations of mixed properties: four identical copies

10. Paper and electronic format

Nominations shall be presented on A4-size paper (or "letter"); and in electronic format (Word and/or PDF format).

11. Sending

States Parties shall submit the nomination in English

Acknowledgement

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