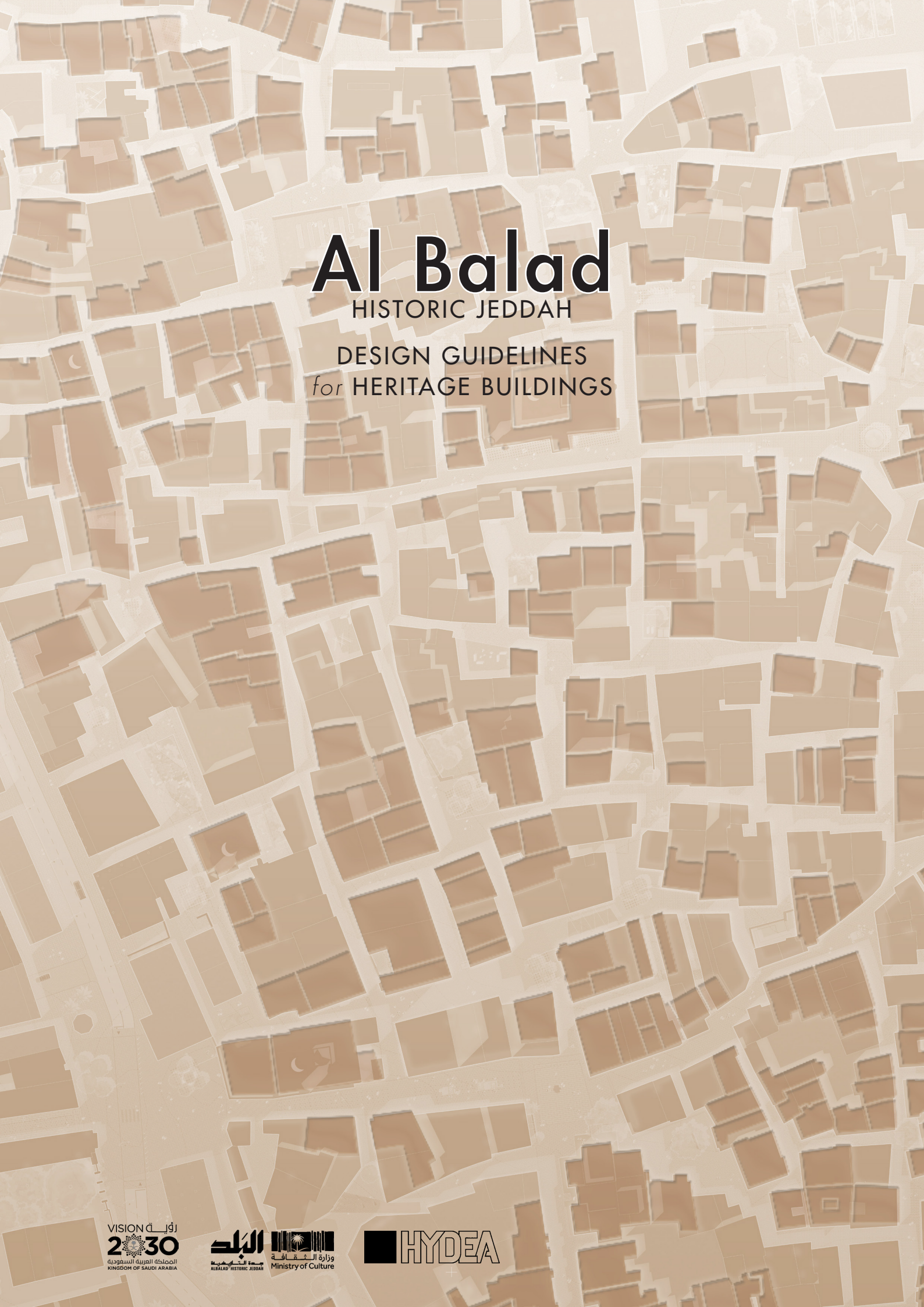
Al Balad
HISTORIC JEDDAH

DESIGN GUIDELINES *for* HERITAGE BUILDINGS

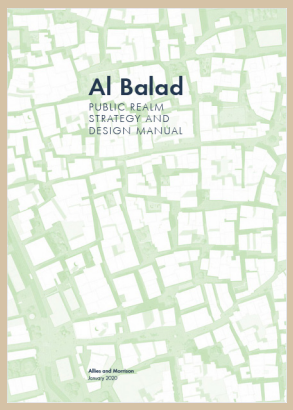


رؤية VISION 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

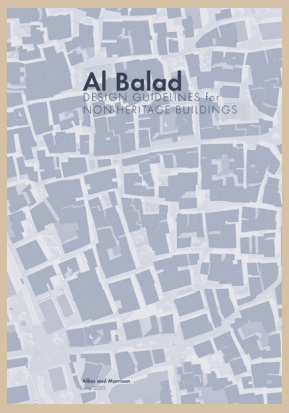
البلد
ALBALAD HISTORIC JEDDAH

وزارة الثقافة
Ministry of Culture

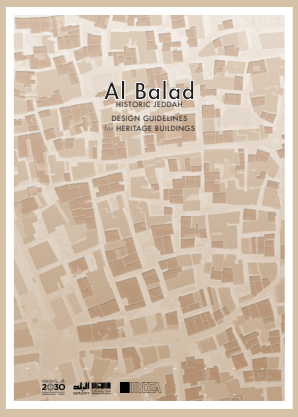
HYDEA



Al Balad Public Realm
Strategy and Design Manual



Al Balad Design Guidelines
for Non-Heritage Buildings



Al Balad Design Guidelines
for Heritage Buildings

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Draft 3	23.12.2021
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Draft 4

Al Balad
HISTORIC
JEDDAH

DESIGN GUIDELINES *for* HERITAGE BUILDINGS

رؤية 2030 المملكة العربية السعودية KINGDOM OF SAUDI ARABIA

البلد جدة التاريخية ALBALAD HISTORIC JEDDAH

وزارة الثقافة Ministry of Culture

HYDEA

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Introduction

Chapter

1.

Considering that the main objective of the Guidelines is to define the rules and lines of action for the rehabilitation and urban regeneration of Al Balad, this introductory chapter gives the main references for its correct use.

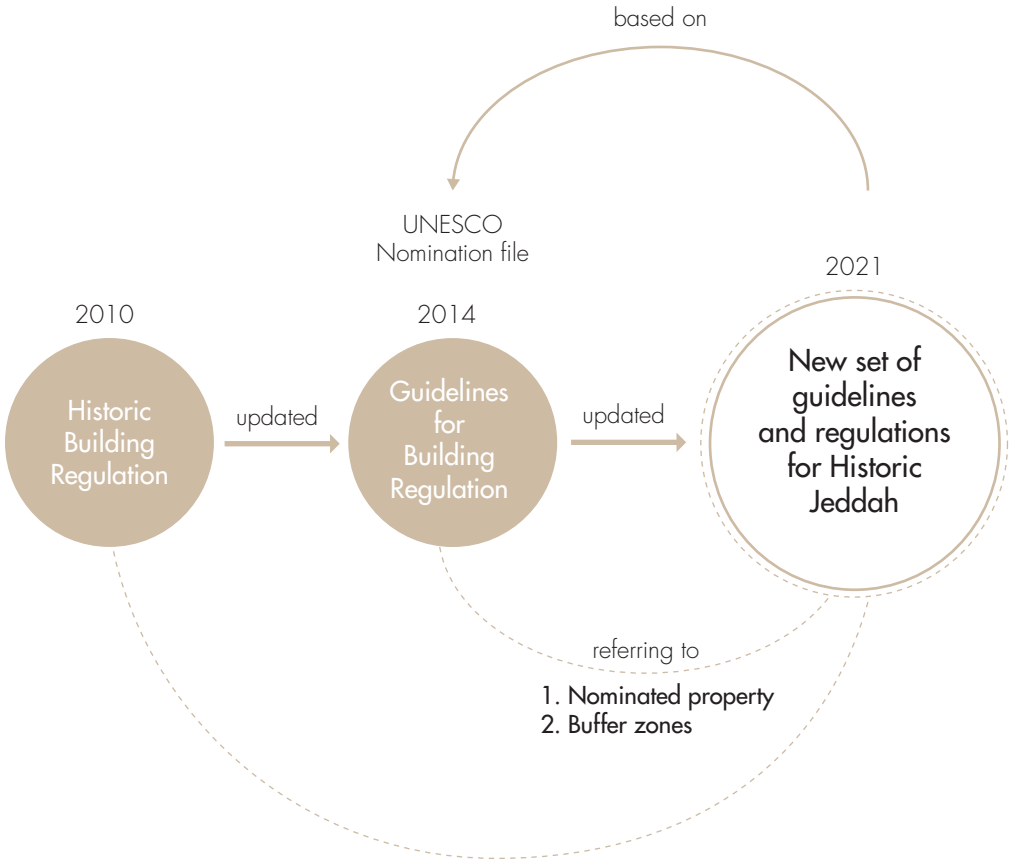
It is important to read this section before carrying out a project in the historic center of Jeddah, as following the procedures presented here can avoid last minute surprises and administrative difficulties in processing the files.

1

1.1
Purpose of the Guidelines

The Al Balad Design Guidelines for Heritage Buildings refer to and update the Historic District Building Regulation System, from 2010, and the Guidelines for the Building Regulation of Historic Jeddah: The Gate to Makkah, from 2014, both endorsed by Jeddah Municipality. The Guidelines are based upon the principles presented in the UNESCO Nomination File, and notably guarantee that all surviving historic buildings in the nominated property and the buffer zones will be preserved and restored according to internationally approved standards.

THE GUIDELINES UPDATE THE HISTORIC DISTRICT BUILDING REGULATION SYSTEM



THE GUIDELINES AIM AT SETTING A CLEAR AND RESTRICTIVE SET OF RULES

The Al Balad Design Guidelines for Heritage Buildings refer to and update the Historic District Building Regulation System, from 2010, and the Guidelines for the Building Regulation of Historic Jeddah: The Gate to Makkah, from 2014, both endorsed by Jeddah Municipality. The Guidelines are based upon the principles presented in the UNESCO Nomination File, and notably guarantee that all surviving historic buildings in the nominated property and the buffer zones will be preserved and restored according to internationally approved standards.
The Al Balad Design Guidelines for Heritage Buildings aim at setting a clear and restrictive set of rules upon which specific projects might be prepared.
They are therefore conceived with the objective to preserve the existing buildings and the traditional urban fabric of Historic Jeddah.

They will become the only valid reference and provide the technical and legal framework for the delivering of building permits in the historic city, helping designers and developers within the nominated property and its buffer zone to restore historical buildings, following the strategic master plan vision for Al Balad and helping to protect its UNESCO World Heritage Site status.

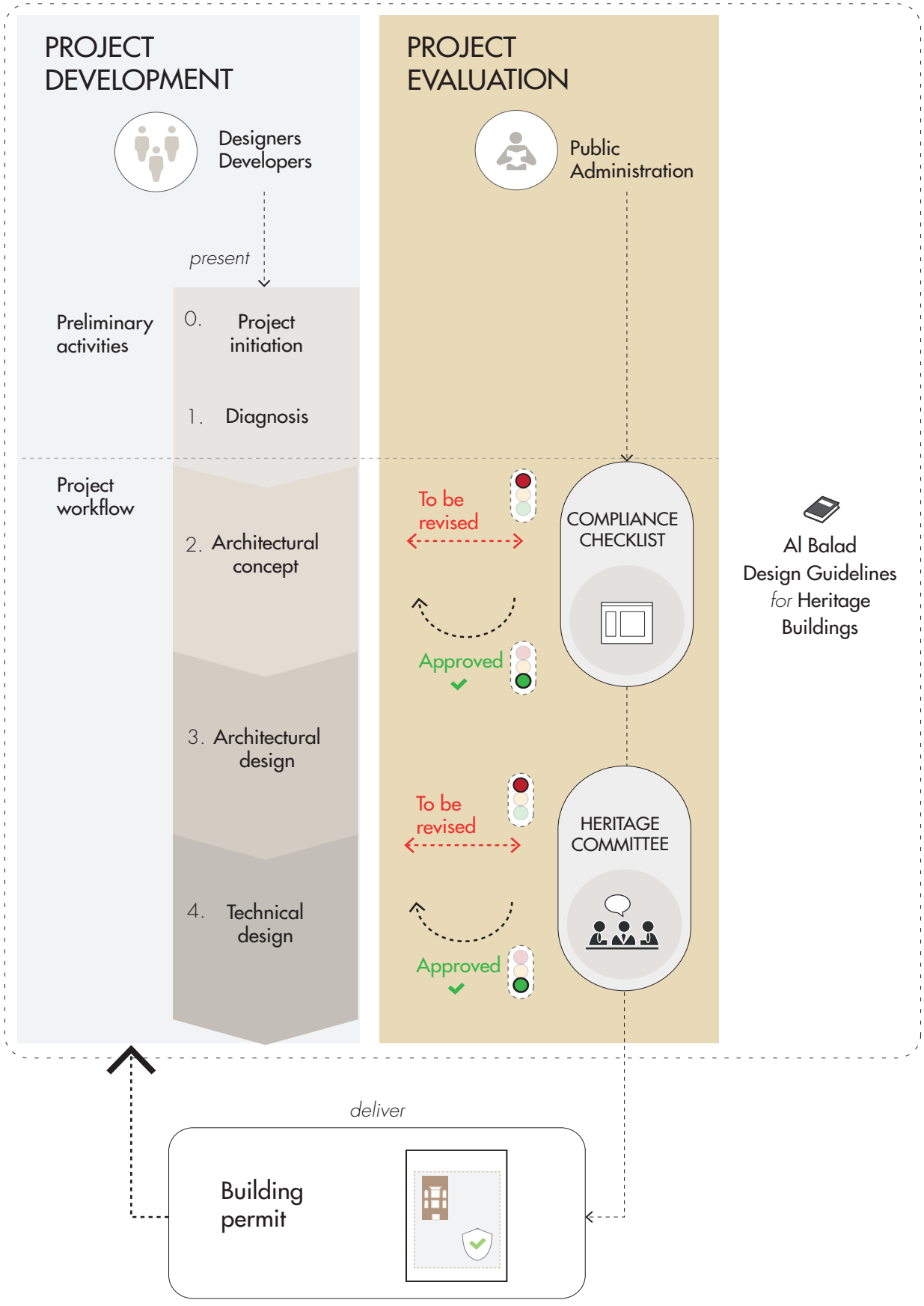
These Guidelines, produced by recognized international benchmarks and criteria, define a clear reference on the urban and environmental context and the principles directing all architectural intervention on Al Balad Heritage Buildings.

THE GUIDELINES SUPPORT ALL ARCHITECTURAL PROJECTS ON AL BALAD HERITAGE BUILDINGS

The Al Balad Design Guidelines for Heritage Buildings are made by creating a set of standards for all kinds of interventions as Maintenance and Monitoring, Restoration, Reconstruction or Adaptive Reuse of historic buildings inside the UNESCO inscribed perimeter and the Buffer zones. They constitute, therefore, a crucial element of the overall strategy and commitment for the revitalization, the preservation and sustainable development of Historic Jeddah, and will be used to take informed decisions for safeguarding the significance and integrity of the historic urban fabric of Al Balad.

As part of the Master Plan, they are directly associated on one hand with planning documents (design guidelines, public realm, etc) as reference guides, on the other hand with the revised practical and technical Handbook for Heritage Conservation.

BUILDING PERMIT PROCESS



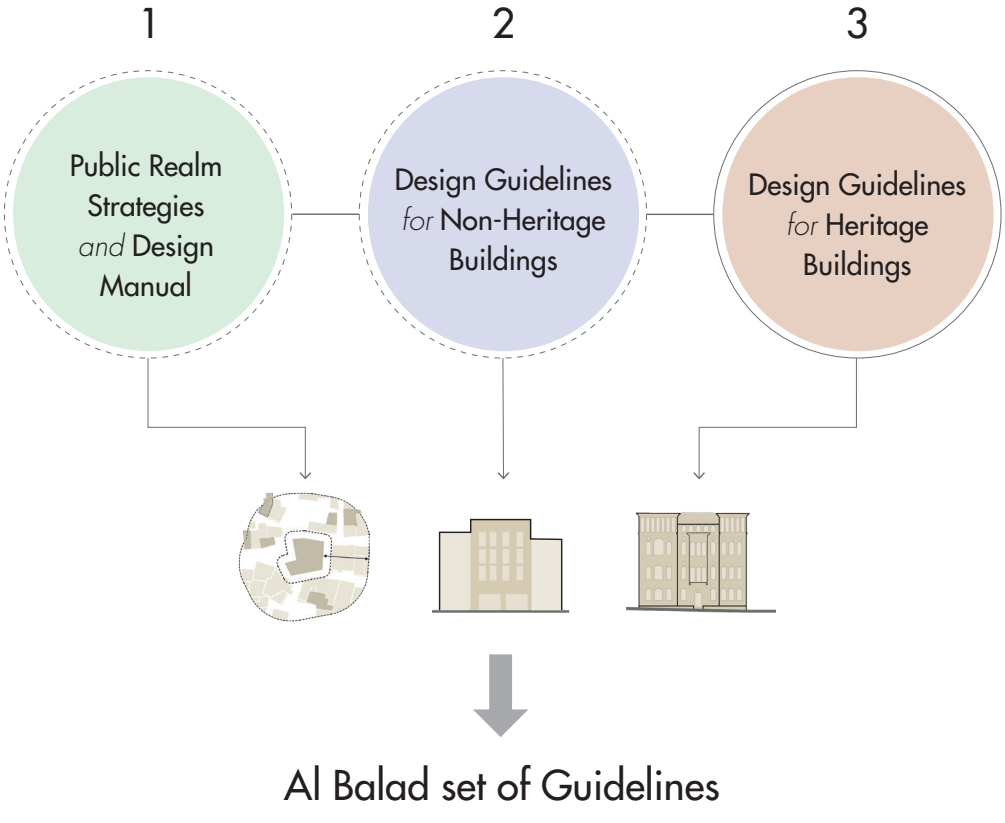
1.2
Structure of the Guidelines

THE GUIDELINES BELONG TO A SET OF DOCUMENTS

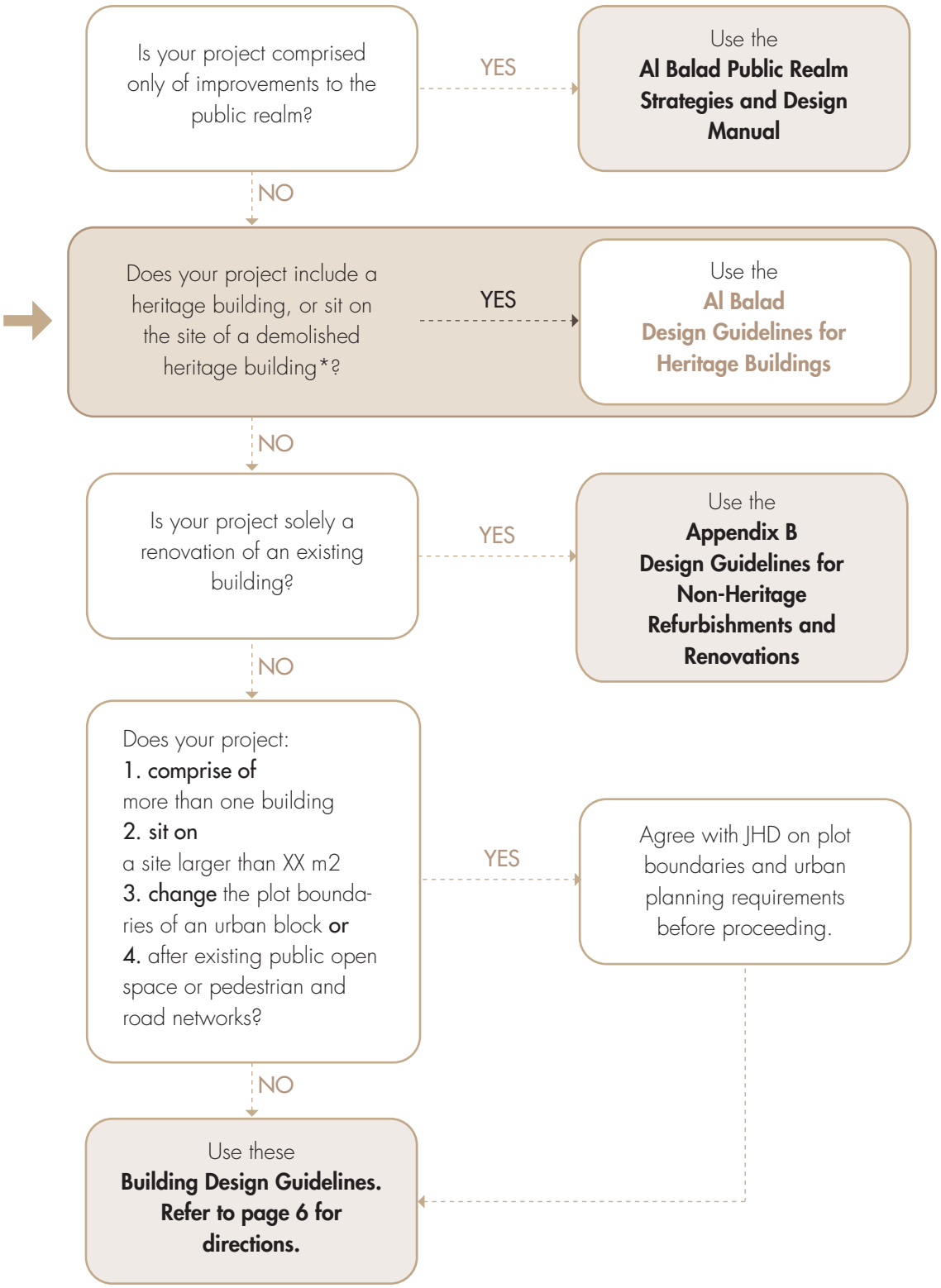
The two associated volumes are:

1. the **Al Balad Public Realm Strategies and Design Manual**, focusing on the design of streets, parks, squares and other spaces in the public domain, and
2. the **Al Balad Design Guidelines for Non-heritage Buildings**, focusing on the design to create nicely compatible new buildings for Al Balad.

The three documents work together to deliver the vision for Al Balad towards the harmonious co-existence of past, present and future developments in Historic Jeddah, protecting the legacy of this internationally significant place for generations to come.

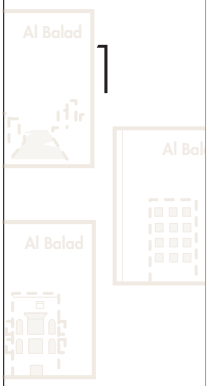


APPLICATION FLOW CHART



* Where on site of a demolished heritage building with **significant archaeological and photographic evidence**, please refer to Al Balad Design Guideliines for Heritage Buildings for full rules of applicability.

The Al Balad Design Guidelines for Heritage Buildings are organised into **8 sections**:



1

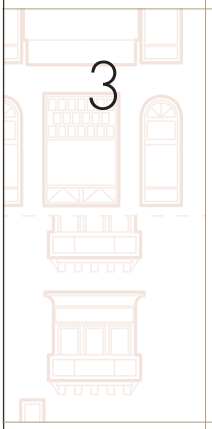
INTRODUCTION

Provides an overview of the purpose and the application of the guidelines.

2

GENERAL PRINCIPLES

Summarizes the core values and principles that must be supported by the restoration of buildings in Al Balad.



3

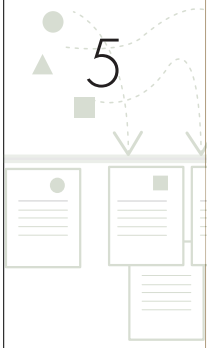
KNOWLEDGE OF AL BALAD HERITAGE

Specific focus and evaluation of the urban and architectural characteristics, and protected areas.

4

DEFINITIONS, CRITERIA & STUDIES

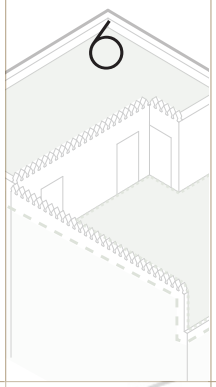
Presents a glossary of definitions, the international criteria, the policies and strategies for the protection of heritage.



5

PROJECT WORKFLOW AND PERMIT PROCESS

Defines the project steps and required documentation.



6

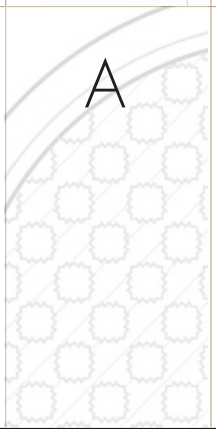
INTERVENTION GUIDELINES

Introduces the criteria for interventions on preventive consolidation; maintenance; restoration; reconstruction projects; adaptive reuse.

7

APPROPRIATE/ INAPPROPRIATE ELEMENTS & INTERVENTIONS

A visual presentation of desirable and undesirable interventions in Al Balad.



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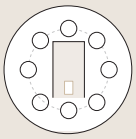
APPENDICES

Complementary documents supporting the guidelines, gathered for the applicant's use.

1.3
How to use the Guidelines

To help design teams use these Guidelines, please observe the following steps:

1

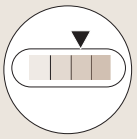


Review general principles and confirm the alignment of your project ethos and intentions with these guidelines. Compliance with all principles is mandatory.

2

Locate your project in the listed area or in the buffer zones. Review the parameters related to your area. Fitting within the established parameters is mandatory.

3



Evaluate the design according to the criteria and propose a Heritage Impact Assessment. These criteria are presented as a framework for JHD design review panel discussions. The JHD review of designs is mandatory.

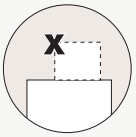
4

Respect the values, architectural character and traditional materials of the historic building. The design should comply with guidelines herein.

5

Consider the use of the Al Balad Handbook for Heritage Conservation and complementary documents, for the analysis of the building and in the proposal of solutions. Alternative solutions to those established will require a precise justification of their relevance.

6



The guidelines set a minimum threshold for design quality, prohibiting bad practice and inadequate design care. Compliance with these guidelines is mandatory.

7

Provide required documentation to the JHD planning authority and design review panel.

8

Respond to review comments with evidence of compliance and resubmit for approval. Satisfaction of all comments is mandatory before approval.

General Principles

Chapter

2.

The complexity of preserving and recovering the historic center of Jeddah, inscribed on the UNESCO World Heritage List, requires a set of principles to protect the heritage values of Al Balad.

In this chapter we summarize the essential aspects to be considered in any intervention, whether at the urban level or in unique buildings, and which must govern the approach of the different projects. The principles described here establish a basic attitude towards the recovery of Al Balad, to ensure its modernization, while safeguarding the values of the whole.


صالون الشهيد

2

2.1 Heritage principles,values and rules in Historic Jeddah (Al Balad)

2.1
Heritage principles, values and rules in Historic Jeddah (Al Balad)

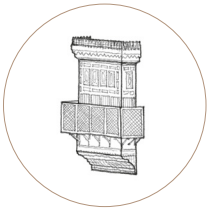
All interventions on Heritage Buildings in Al Balad (Historic Jeddah) should begin with the same core set of principles, values and rules,to promote the regeneration and the long-term flourishing of this unique and remarkable place.
The principles outlined here establish the basic attitude towards building and development, to ensure each individual part of Al Balad contributes to the greater whole.

A SET OF EIGHT PRINCIPLES, VALUES AND RULES WAS IDENTIFIED TO PROMOTE AND PROTECT THE HISTORIC CITY OF JEDDAH

1

Respect the original urban fabric

2



Respect the heritage values of each element

3

Respect the current volume and height

4

Identify original and restored elements

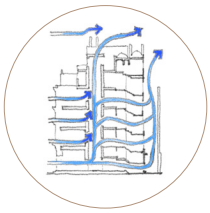
5

Respect the original characteristics and uses of buildings in adaptive reuse

6

Respect and use the traditional architectural language

7



Respect the bioclimatic and natural ventilation components

8

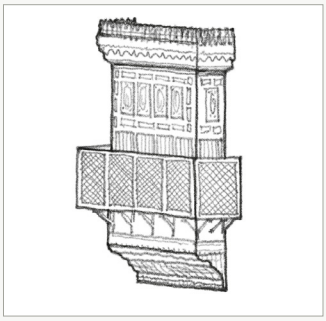
Use the traditional building materials and techniques

1.
Respect the original urban fabric

Al Balad, once surrounded by walls and a series of gates, presents a particularly dense and dynamic urban fabric, **with narrow streets framed by continuous strips of traditional façades, connecting public buildings and open spaces:**

- The **historic alignments, public and open spaces must be respected** as essential part of the Al Balad Heritage values: NO setbacks, NO dead-end streets, NO courtyards or inner square opening onto the public space;
- The organic **street pattern in Al Balad is respected**, developed in stages according to specific needs, establishing a hierarchy of streets adapted to residential, commercial and other functions;
- Where **valuable archaeological remnants** exist, do not undermine their structural integrity. Use historical maps and archaeological surveys to confirm original alignments.

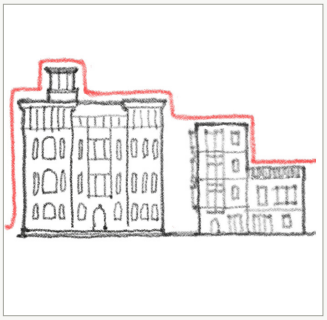
2.
Respect the heritage values of each element



The **heritage values in Al Balad, tangible and intangible, are numerous and diverse**; together, they give the town its uniqueness:

- The **streetscapes, public and open spaces must** be respected in all their characteristics and elements;
- **Public and private buildings, outward-oriented houses**, are the essential component of the Al Balad character;
- The **architectural language and typologies must be preserved** with their specific aesthetic and functional patterns, resulting from the interaction between building and planning principles and local traditions;
- **Many components of the buildings give them a heritage value** and all must be respected and restored, if needed: decorated Roshan façades, coral masonry construction, elaborate doorstep and interior/exterior decorative features, etc.

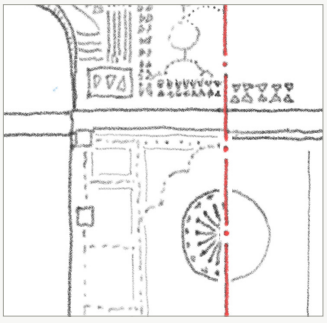
3.
Respect the current volume and height



The **volumes and heights of Al Balad are its urban essence**, result of the historic evolution, giving it **a specific and precious scale**:

- **No modification can be made to the volume or the height of the heritage buildings**, except to eliminate poorly integrated, out-of-context or threatening additions;
- The careful consideration, in a detailed study, of a wider area beyond a single building, can exceptionally justify **some limited adjustments** in heights or volumes to improve the urban landscape, but not to unify heights;
- Current volumes must be respected, avoiding the creation of new ancillary volumes, **accommodating inside the buildings new elevators or services** when needed. Exceptionally, a detailed study can justify a small increase in volume to accommodate elevators or new services, always in hidden spaces, invisible from the streets.

4.
Identify original and restored elements

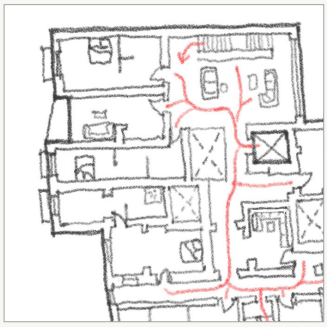


Authenticity and Integrity are essential parameters in the nomination of Al Balad as a UNESCO World Heritage Site, but not only. Preserving them is essential:

- **Partially or completely dismantling an original heritage building** is an attack on authenticity and integrity, and is **NOT acceptable** as a criterion for restoration. Once demolished, the heritage values of the building no longer exist;
- Restored buildings must be carefully documented, express the historical provenance of their components, and **clearly distinguish new elements from old**;
- When a historic approach to design is used, it should not seek to create literal/exact copies, even for missing parts. Likewise, within a favoured **contextual design approach**, ensure that new elements and buildings are clearly distinguishable from heritage ones.

5.

Respect the original characteristics and uses of buildings in adaptive reuse



The historic city experienced a mix of uses over time, making it especially rich and socially cohesive. **The introduction of new uses must be carefully managed**:

- **Adaptive reuse is essential** to revitalize Al Balad on a reasonable scale, if it is duly controlled and respectful to original buildings characteristics;
- Before considering a new use, one must assess whether the building allows for it without serious alterations : **new functions have to match with the building characteristics** and one must avoid any forced adaptive reuse that would damage the heritage value of the building - typological, architectural, constructive or structural;
- **Terraces are historically tidy open spaces**: kiosks, pergolas, canopies and other elements cannot represent more than 15% of the total area, while the eventual installations (water tanks, antennas, AC etc.), grouped, optimized and discretely positioned, must occupy a maximum of 10%.

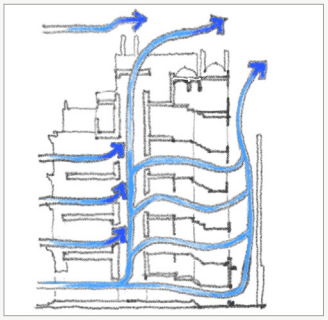
6.

Respect and use the traditional architectural language

The Al Balad **architectural language results from a crossroad of cultures**, exhibiting a vibrant diversity linked to the different periods and influences, Roshan tower houses standing as an outstanding typology unique within the Arab and Moslem world:

- For both restoration and reconstruction works, a **sound knowledge of the different traditional typologies** is required to apply the appropriate language to each project, in accordance with respective types and places;
- **Carefully consider traditional elements, proportions and massing** for both restoration and reconstruction projects;
- **Respectfully hide all installations inside the buildings, into discrete locations**: No AC block units on the façades or public spaces, no cables, pipes or counters on the façades;
- For contextual reconstruction projects, **a new vernacular architecture for Al Balad** in the XXIst century has to be elaborated, respectful and well- integrated into the existing urban fabric characteristics.

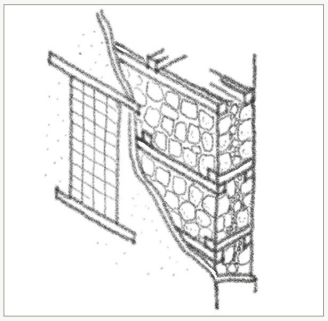
7.
Respect the bioclimatic and natural ventilation components



Al Balad has been able to **adapt its buildings and its urban fabric to the hot and humid climate of the Red Sea, specifically in Jeddah**. This knowledge should be put to good use:

- Prior to a restoration, it is necessary to **analyse the climatic functioning of the building** and the alterations it has suffered, in order to recover them in the restoration process;
- **Respect the original passive climatic design** of Al Balad traditional buildings, with maximized air circulation;
- **Prioritise the energy efficiency** of the buildings and the use of renewable energies through the re-use of fans, district cooling and heating plant;
- **Thermal insulation of the external openings** must be considered as an option and carefully designed, in a balanced approach between the preservation of architectural values and the improvement of the comfort.

8.
Use the traditional building materials and techniques



One of the most visible **values of Al Balad's traditional architecture is its materials and construction techniques**. Their preservation and recovery deserve specific efforts in the restoration process:

- In all restoration work, **the materials to be used must be the traditional ones**, improved if possible: coral masonry, wooden takalil, lime mortars, wooden roshans and other materials;
- **Original materials recuperated from previously collapsed buildings** should be reused in priority for repair works on historical buildings;
- Restoration and reconstruction are an **opportunity for traditional crafts revival** and the promotion of traditional construction methods;
- The **engagement and training of the new generations** on the knowledge and good practice of the traditional techniques is an opportunity for job creation in the coming years.

Knowledge of Al Balad Heritage

Chapter

3.

Only a precise understanding of the past and the context will allow for a proper setting within the historical fabric in a comprehensive manner with regards to traditional spaces and patterns, scale and dimensions, typological features, techniques and materials.

Indeed, one needs to know and comprehend a place, its past, its people, its direct and broader environment as well as the associated institutional context and legislative framework, before designing for any well-informed and sustainable future.

3

3.1
Historic Jeddah in the WH list
The Management context

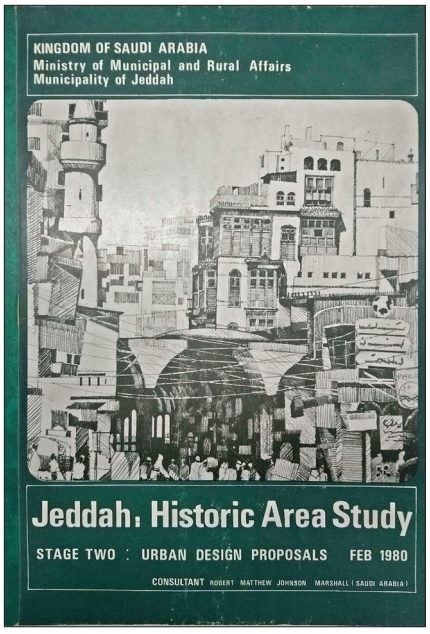
THE EVOLUTION OF THE BUILDINGS CLASSIFICATION

1970

The first efforts for the preservation of the Old City of Jeddah date from the end of the 1970s when, under the leadership of the late Mayor Mohammad Sa'id Farsi, Jeddah Municipality launched the first Saudi campaign for the preservation of historic heritage. The Municipality financed a series of studies of the old city in view of its preservation and upgrading.

1980

In the 1980s, the British architect **Robert Matthew established the first inventory of the historic city**, developed Mayor Farsi's vision and set up a first protective legislation with the Municipality. Matthew's survey showed that more than one thousand historic structures in old Jeddah had survived the ravages of time. About half of them were designated "buildings of architectural and historical significance" and recommended for preservation and protection. This study constituted the basis of the building regulation enforced in Al Balad district until 2010. It was **based upon a three-level classification of the traditional houses** according to their architectural and historic significance: Class A buildings were deemed of National significance, class B of Regional significance and class C of Local significance.



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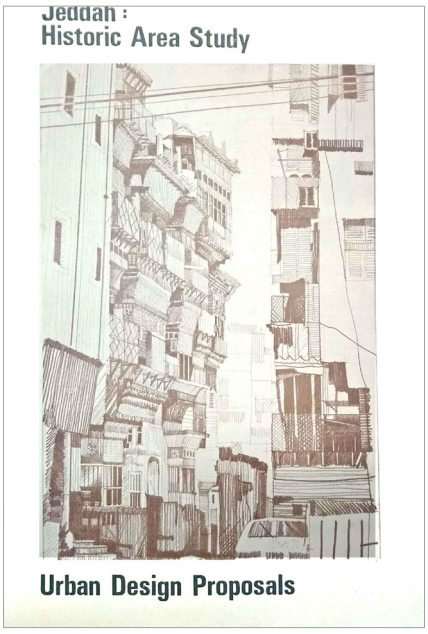

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FIG.1
R. Matthew, *Jeddah: Historic Area Study. Urban Design proposal.*

FIG.2
R. Matthew, *Jeddah: Historic Area Study.* Recommendation for the architectural design demonstration study, 1978.

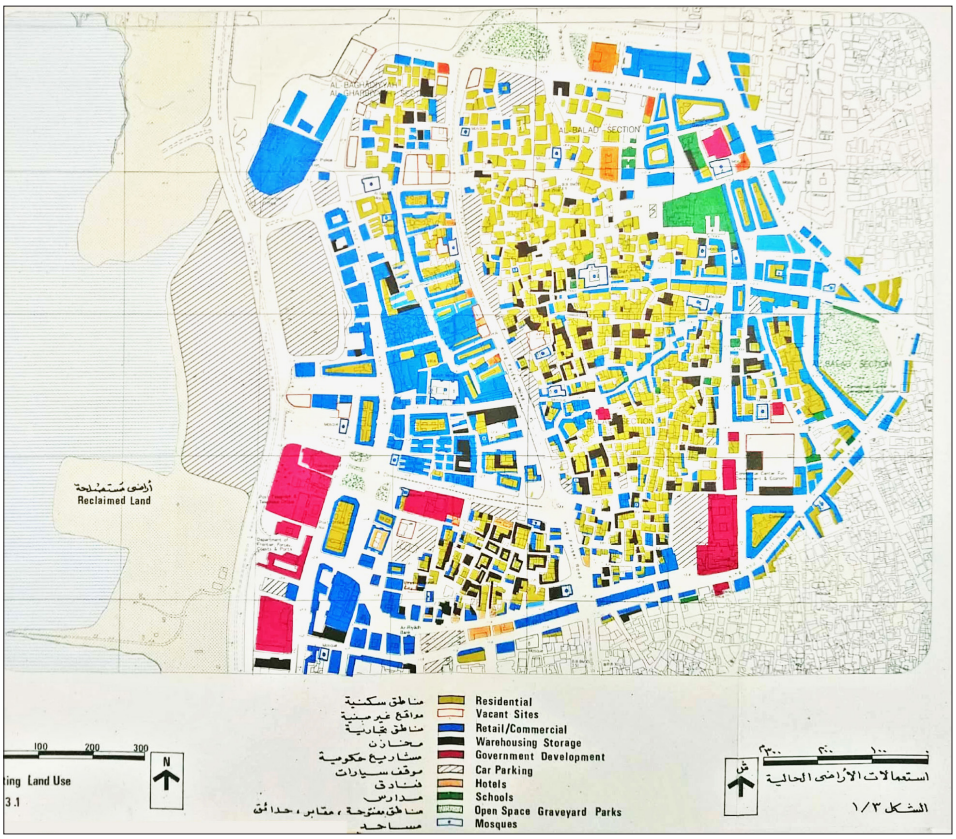

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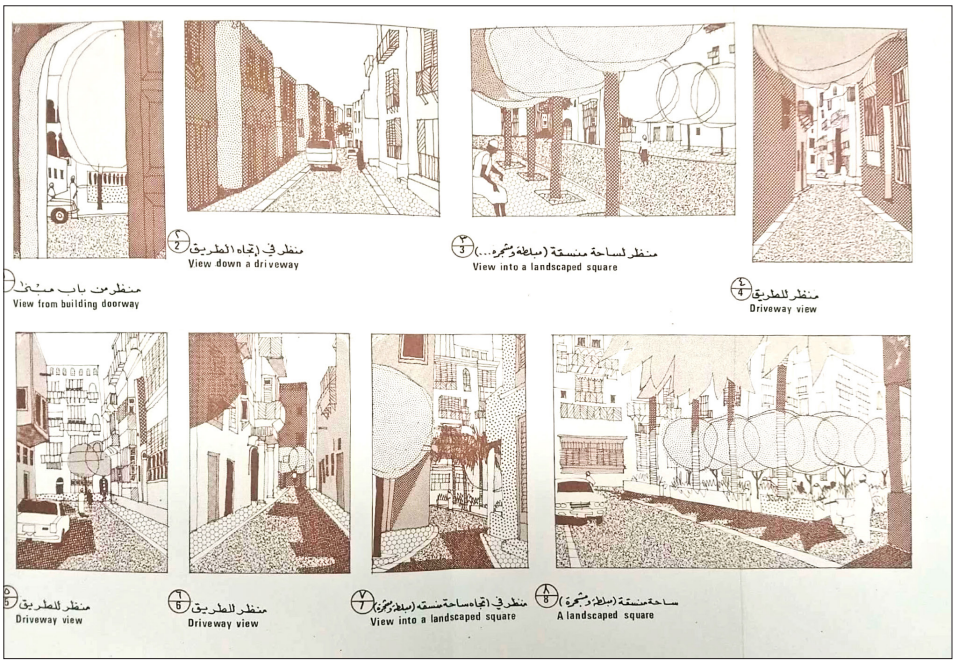
FIG.3-4
First inventory of the historic city, R. Matthew, *Jeddah: Historic Area Study. Urban Design proposal.*



4

5

2008

The **Historic Jeddah Management Plan** in view of the nomination as a World Heritage Site called for the old city to remain a residential area and the seat of commercial enterprises. Great attention was paid both to the treatment of public spaces and to landscaping projects, providing place for several variety of plants and trees to reduce negative visual effects of parking lots. Simple architectural regulations regarding spatial organization and building construction (the use of traditional technologies and materials was encouraged) accompanied the conservation and protection plans.

The efforts of the Municipality, however, couldn't overcome the complex ownership and privacy issues, and effectively influence the economic dynamics running the city and the country. In the thirty years elapsed between 1980 and 2010, hundreds of historic buildings have disappeared.

FIG.5
The Historic Jeddah Management Plan document.
The old city of Jeddah, Management plan in view of the nomination as a world heritage site, 2008.

2010

In 2010, following the recommendations of the 2008 Management Plan for Historic Jeddah, a new set of **Historic District Building Regulation System** were prepared by Jeddah Municipality in coordination with the SCTA. This document provided the first clear rules to be applied in the historical district of Jeddah since Robert Matthew's study in 1980. The 2010 building regulation was conceived to support the strategies of the 2008 Master Plan and to act as an integrative tool between the investors (developers) and the official public institutions. However, the strategy proposed in this Master Plan, that gave a major role to the private sector in the urban re-qualification project, did not materialize and the Municipality of Jeddah has since developed a new vision.

FIG.6
Al Balad Design Historic District Building Regulation System, 2010.

6

The 2010 regulation refers almost exactly to the same perimeter detailed in the 2014 Guidelines for the Building Regulation (see hereafter); but within this urban sector, the sub-zones and the regulations proposed are significantly different.

At this time, there is one Handbook for the Restoration of the Historic Centre of Jeddah, synthetic and operational, later associated with and endorsed by the Nomination File: ***Restoration Manual for Heritage Buildings in Historical Jeddah*** published in 2009 by the Ecole d'Avignon, with the Jeddah Municipality and Urban Development and Regeneration Jeddah. In 2014, the Jeddah Municipality issued another version contextualizing the approach: ***Restoration Manual for Historical Buildings in Historical Jeddah***.

FIG.7
Restoration Manual for Heritage Buildings in Historical Jeddah prepared by the Ecole d'Avignon in 2009. Jeddah Municipality and Urban Development and Regeneration.

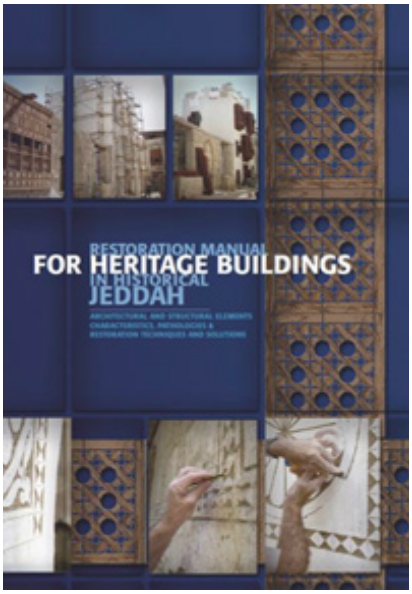


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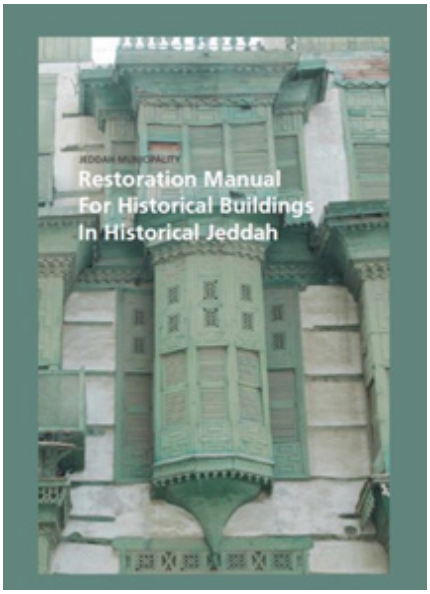
FIG.8
Restoration Manual for Historical Buildings in Historical Jeddah. Jeddah Municipality, 2014.



8

UNESCO NOMINATION FILE

Historic Jeddah, the Gate to Makkah (Saudi Arabia) (C 1361)

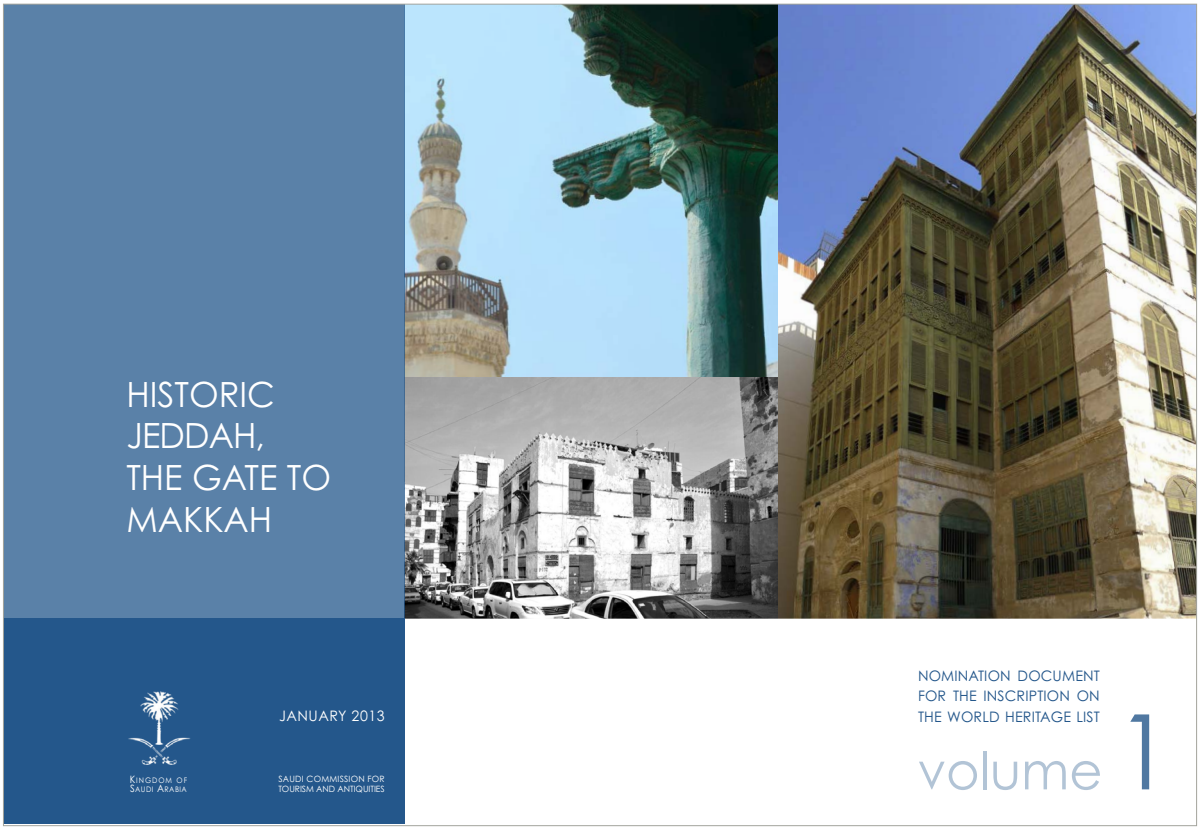
2014

The inscription of Al Balad on the UNESCO World Heritage List, as "Historic Jeddah, the Gate to Makkah", was a long and complex process, born of a determined commitment by the Municipality of Jeddah, with the support of the Saudi Commission for Tourism and Antiquities. As we have seen, the initiatives for the preservation of Al Balad date back to the late 1970s, and have been strengthened over time to reach the goal.

As starting point, the 'Historical City of Jeddah' was included in the Tentative List in November 2006 and a first nomination proposal was submitted to the World Heritage Committee in 2010 covering a larger area than the 2014 nomination. Following a negative evaluation by ICOMOS, with the Decision: 35 COM 8B.21, 2011, the nomination of the Historical City of Jeddah, Saudi Arabia was withdrawn at the request of the State Party.

The second and final nomination document dates back to February 2013, when the old city boundaries and its buffer zone were identified and a new comprehensive plan for the conservation and revitalization of the ensemble of the site, supported by technical guidelines, was launched. The nominated property extends over an area of 179.000 m^2, and comprises about one third of the area originally circled by the city walls. It extends over the central sector of the old city, and covers sectors of three historic quarters: Sham, Mazloum and Yemen. The nominated property includes the ensemble of the preserved urban fabric of the old city, East of Dahab Street, till the historic limits of the old city to the East. The nominated area develops along three main axis: the two historic West-East souks, and a North-South commercial spine linking Madinah Gate with the southern limit of the old city. It is entirely surrounded by a large buffer zone that extends over the remaining parts of the old city and the neighbouring residential and commercial areas. A Higher Committee for the Old city of Jeddah has been created and has already met several times, under the direction of H.R.H. Prince Khaled ibn Faisal ibn Abdulaziz, Governor of Makkah.

An ICOMOS technical evaluation mission visited the property in September 2013 and the ICOMOS conclusions recommends that the examination of Historic Jeddah, the Gate to Makkah, Kingdom of Saudi Arabia to the World Heritage List be "deferred" in order to allow the State Party to improve the nomination proposal with the advice of ICOMOS. Despite this ICOMOS proposal, WHC Decision: 38 COM 8B.21, 2014 del WHC was to Inscribe Historic Jeddah, the Gate to Makkah, Saudi Arabia, on the World Heritage List on the basis of criteria (ii), (iv) and (vi). On the same Decision one fundamental task was required by the World Heritage Committee to Saudi Arabia, which is the submission of a State of Conservation report, the first December 2015, to support all the daily activities on the field that marked a new phase for the safeguard of the urban heritage site.



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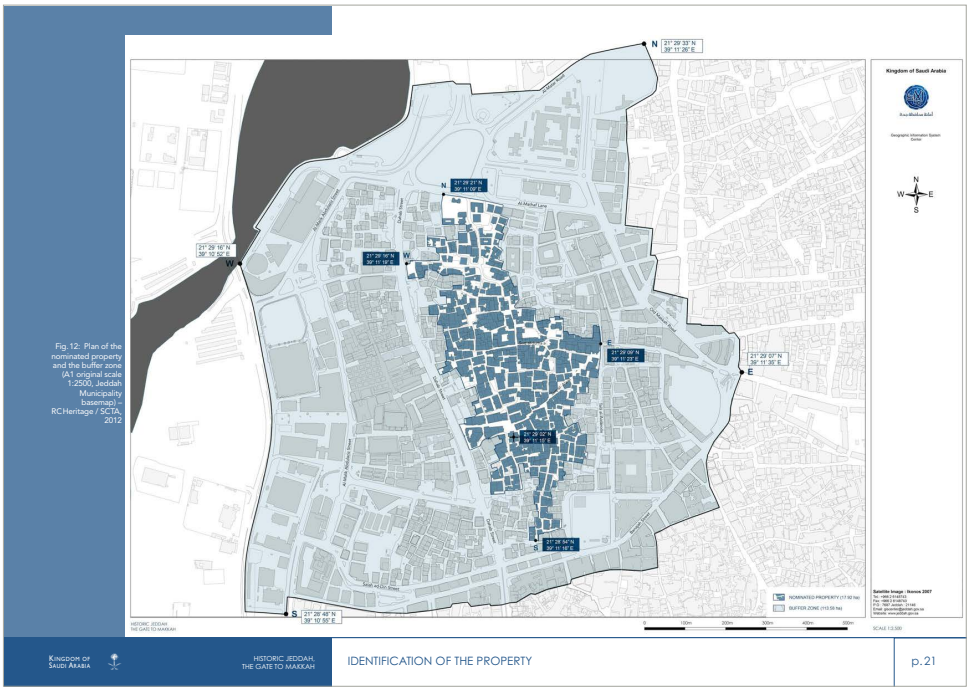

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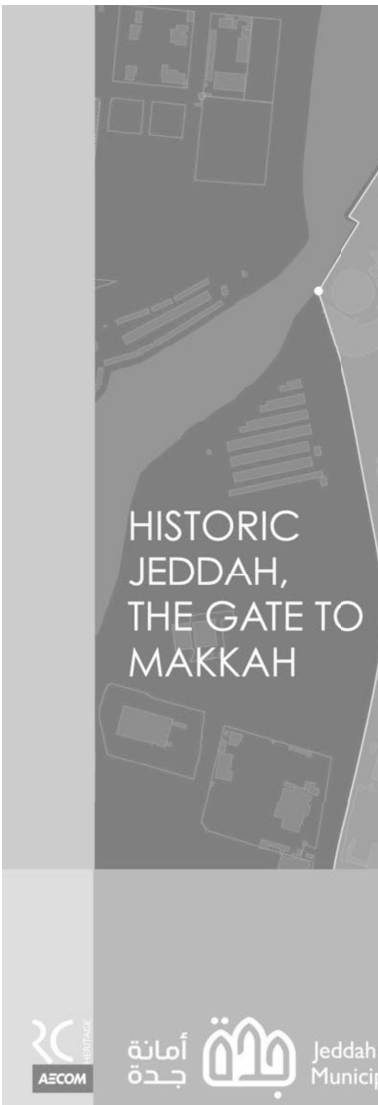
FIG.9
Historic Jeddah, the Gate to Makkah, Nomination document for the inscription on the World Heritage List, vol.1, January 2013.

FIG.10
Historic Jeddah, the Gate to Makkah. Map of the inscribed property, 2013.



11

GUIDELINES FOR BUILDING REGULATION OF HISTORIC JEDDAH

2014

The 2014 Guidelines for the Building Regulation of "Historic Jeddah: The Gate to Makkah", are additional data submitted to the Secretariat of the World Heritage Centre and ICOMOS at the end of February 2014, as a complementary documentation for the nomination. These Guidelines revise and update the municipal building regulation for Al Balad enforced since 2011. They set the principles to be applied within the nominated property and its buffer zone permitting the sustainable development of the historic city and the preservation of its unique architectural heritage within the framework of the UNESCO World Heritage nomination.

The Guidelines are based upon the principles presented in the UNESCO Nomination File, and notably guarantee that all surviving historic buildings in the nominated property and the buffer zone will be preserved and restored according to internationally approved standards. They define the principles directing all architectural intervention in the Old City: restoration of historic buildings, reconstruction of historic buildings and construction of new buildings inside the UNESCO perimeters. The Guidelines define the maximum height allowed, the building materials to be used and a series of design principles directing the construction of new buildings in Al Balad.

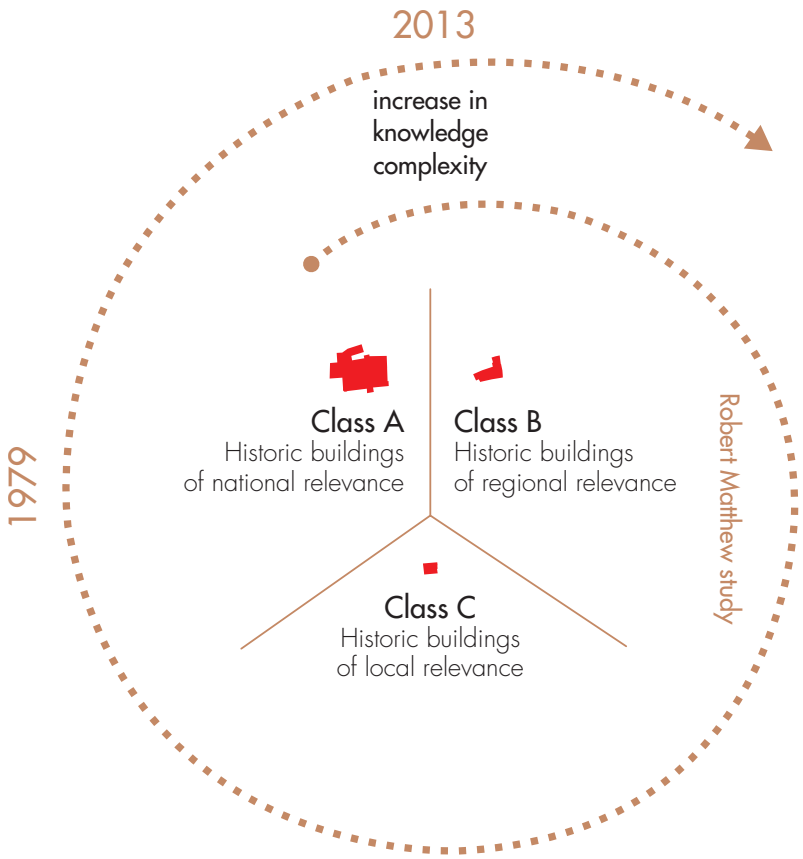
FIG.11
Guidelines for the Building Regulation of Historic Jeddah: The Gate to Makkah, Jeddah municipality, February 2014.

3.2
Urban approach

PREVIOUS IDENTIFICATION AND CLASSIFICATION

Robert Matthew's 1979 classification divided Jeddah's historical buildings in three classes according to their historical and architectural relevance. The decay of the city in the last thirty years, that has reduced the total number of historic buildings to less than 350, imposes to bypass this earlier subdivision and to consider all remaining historic buildings as worth of maximum protection. Matthew's Class A, Class B, and Class C are therefore gathered in a single category as "historic buildings".

Robert Matthew's survey, however, was not complete and did not include a certain number of historic buildings, notably in the southern and eastern parts of the old city. The new survey carried out by al-Turath Foundation in 2013/14 has permitted to identify these houses and to add them to the newly revised "list" of historic buildings. The new list also includes a new category of "historic buildings" previously overlooked: concrete structures built before 1950. The updated maps realized by al-Turath Foundation also point out half collapsed and totally collapsed historical buildings as well as historical buildings that have been demolished and replaced by new structures.



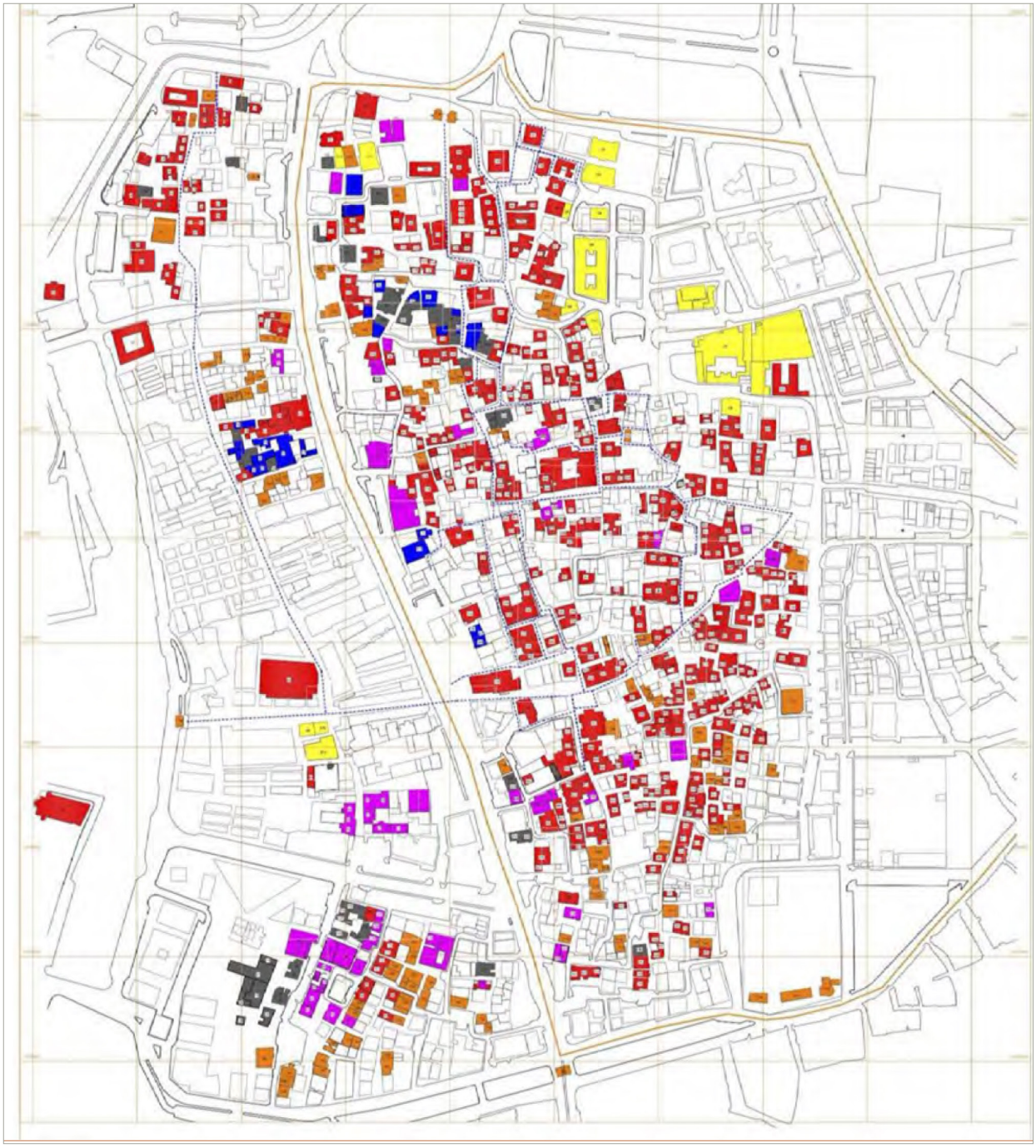


FIG. 12
Consolidated Building Classification Map
(Al Turath, with HAK input, 2019).

Al Balad is divided in **four traditional quarters:**

- **Al-Sham**, mainly a residential area, characterised by the "roshan tower houses", unique both for their style and size;
- **Al-Mazloum**, high density of historic houses and the largest historic mosque of the city, ash-Shafe`i;
- **Al-Yemen**, commercial spine, whose importance has grown in the last 40 years with the opening of many shops in the ground floors of former residential houses. It is composed of lower, simpler, traditional houses of 2/3 floors without major "palaces". Its smaller-scale urban fabric, divided into fragmented properties and densely aggregated;
- **Al-Bahr,** is the more altered quarter by the evolution of the area after 1947.

The old city of Jeddah has been shaped by different forces and agents, producing a visible spatial identity. The knowledge of the urban development of the historic city, in terms of economical, physical, social and cultural changes, is an essential guide for all those interested in preserving the urban heritage and its identity.

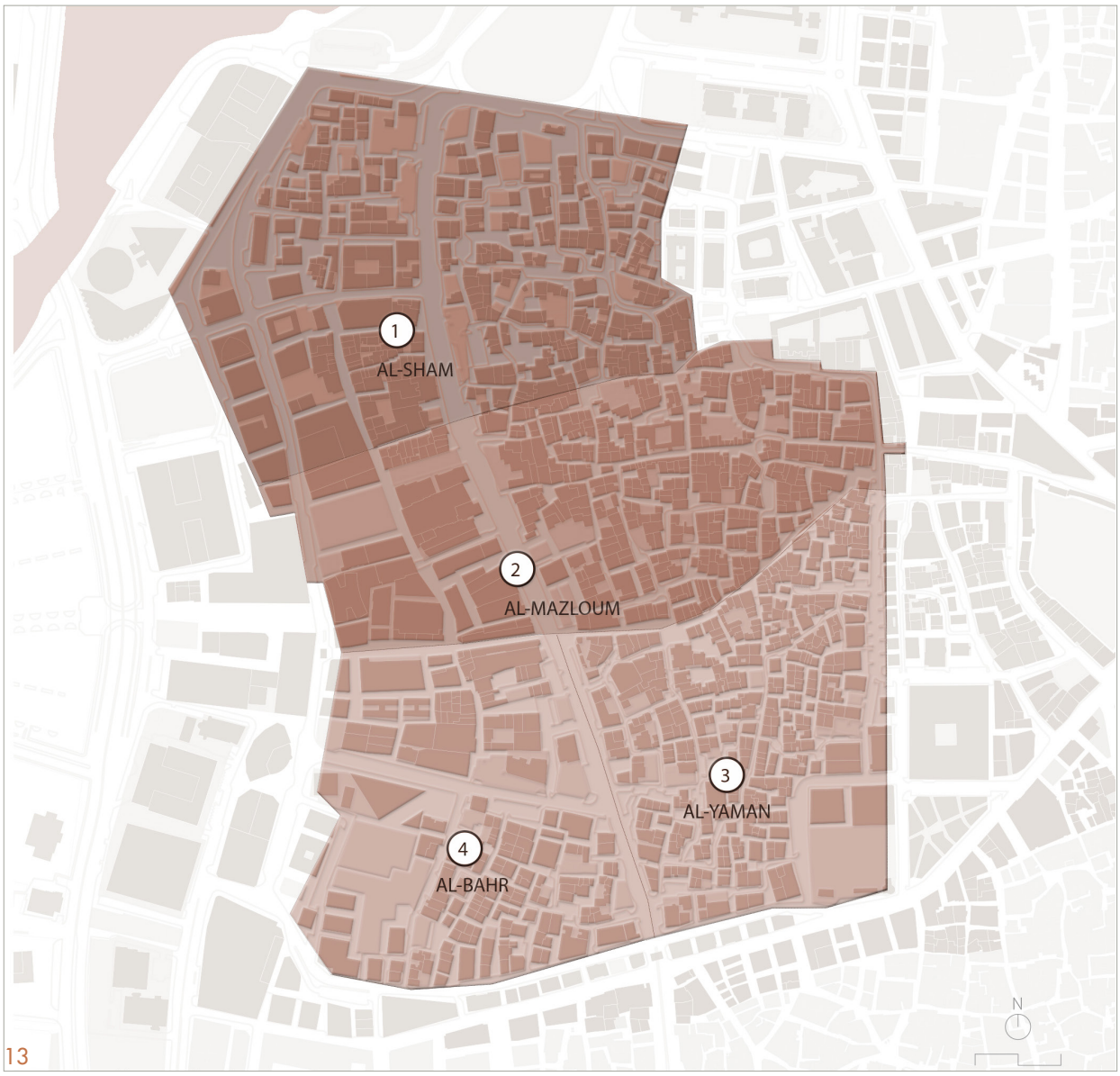
Most of the structures making up its dense urban fabric are 150-200 years old. They include late 19th century 6-7 floor high "roshan tower houses" belonging to the rich merchants' families, simpler but elegant three and four-storey houses, smaller two-level constructions, ribats, mosques and zawiyas. Though the main historic buildings date from the 19th century, the urban layout of the city, and the very architectural style of Jeddah's houses are much older and probably date from the 16th century, or earlier.

The combination of commercial and religious life is evident in the dialectic relationship between the souk orientation and the location of the main mosques, according to the Islamic urban tradition. The historic core is characterised by high building density, pedestrian scale streets and a micro-climate, created by the shadow provided by the tall Jeddah houses that makes the summer temperature more bearable. Streets are narrow and winding and occasionally open into small squares. The historic centre of Jeddah constitutes the most outstanding traditional urban centre in Saudi Arabia and on the Red Sea, however, Historic Jeddah residential fabric presents specific characteristics — partially common to other cities belonging to Red Sea cultural area — that set it apart from most Arab cities.

The nominated property, representing the best-preserved part of the old city, includes the ensemble of the urban and architectural characteristics typical of Historic Jeddah. It extends over three of the quarters, al-Bahr quarter is not included because has been altered by the evolution of the area after 1947. While the ensemble of the old city covers an area of about 60ha, the nominated property extends over just 18ha.

The perimeter of the nominated property has been drawn outward from the ancient souks that used to link the seafront to Makkah Gate and still cross the old city from the West to the East. The two historical West-East axes, and the more recent North-South commercial spine, structure the property. The nominated property perimeter has been drawn to include most of the historical buildings still standing and the best-preserved parts of the traditional urban fabric of the city, that maintain a coherent unity and a distinct urban character. Within this dense residential area, are found also some open spaces (barahas), usually located around local mosques (zawiyas) or prominent family houses.

The nominated property includes the majority (more than 250) of the remaining 350 historic buildings listed in the survey carried out by Robert Matthew in 1978 and 1979.



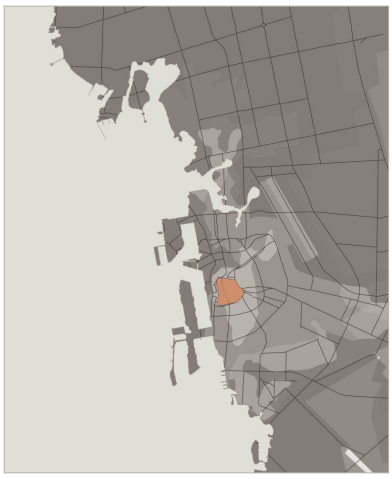


FIG.13
The four traditional quarters of Al Balad. Historic city quarters, JHD, Stage A3-Report v01, Historic Area Assessment Documentation, July 2019

3.3
Protection areas

In addition to the nominated property, the Area was subdivided into four buffer zones that will follow distinct urban regulations. The total Area of the buffer zones covers 113.58 hectares. After some adjustments and modifications, the buffer zones are:

1. BUFFER ZONE 1 (BZ1);

It includes the remaining parts of Historic Jeddah having preserved some original traditional buildings and part of the original urban fabric. Notably, the remaining portions of the Old City east of Dahab Street and three sectors West of Dahab Street, in the North, Centre and South respectively, where are still found clusters of historic buildings in a poor state of conservation.
This first buffer zone has morphological characteristics similar to the ones of the nominated property, but is unable to meet the standards requested for World Heritage properties because it presents a much lower degree of authenticity and integrity.

2. BUFFER ZONE 2 (BZ2);

The original area once surrounded by the city walls has been affected by the rapid transformation that occurred in the Kingdom after 1947. The first major transformation concerned the physical landscape of the site, which drastically changed in the 1950s and 1960s with the reclamation of large stretches of land and the construction of the Islamic Port. While originally open to the sea with pilgrims' boats downloading their passengers directly into the city, the old city is now severed from the water.
The second major alteration was the opening of a new large road, Dahab Street, cutting through the dense traditional urban fabric. The sector lying west of this road has since been largely re-developed with high-rise structures. Though preserving the traditional axis of Souk an-Nada, this part of the old city has preserved its traditional commercial role, but has lost most of its original buildings. Buffer Zone 2 includes some historic buildings, office buildings, hotels and shopping malls that date from the 1960s up to today and some high-rise buildings.

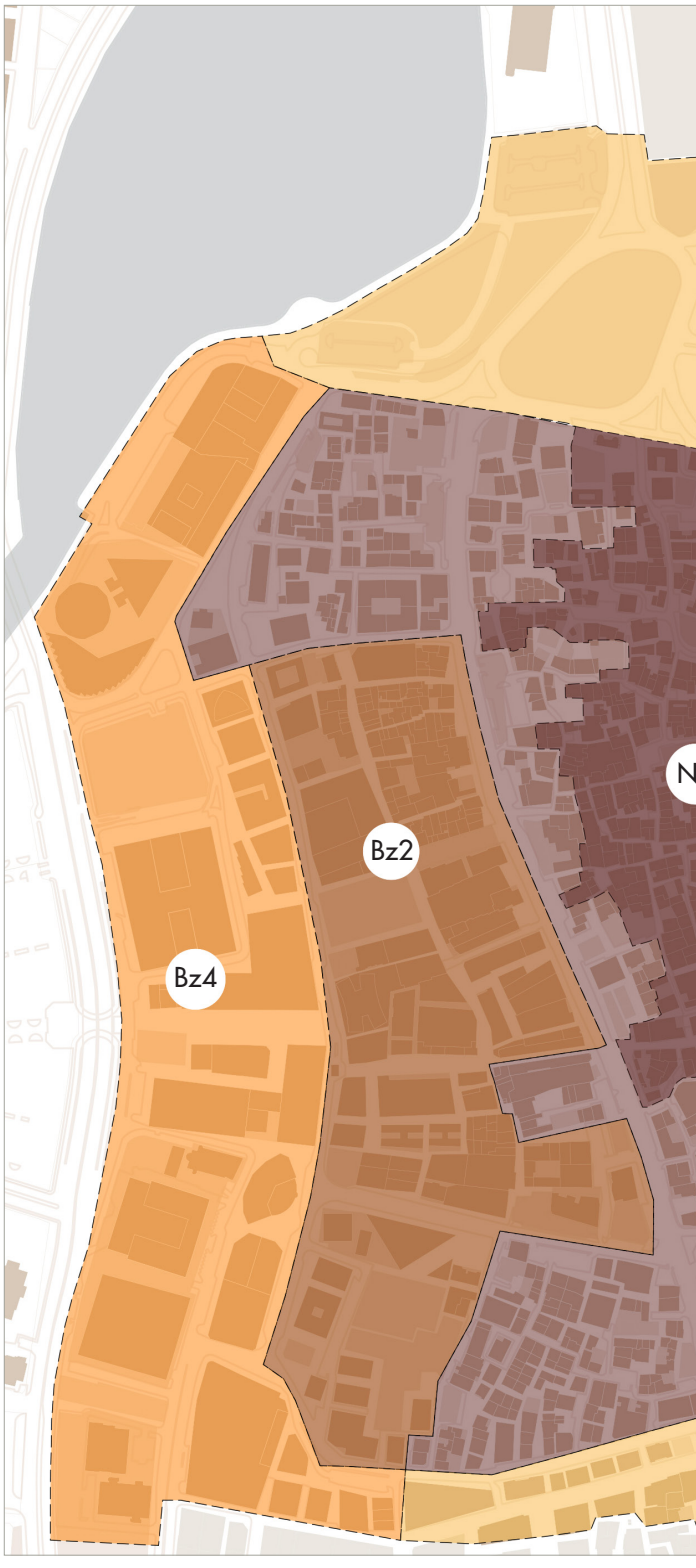
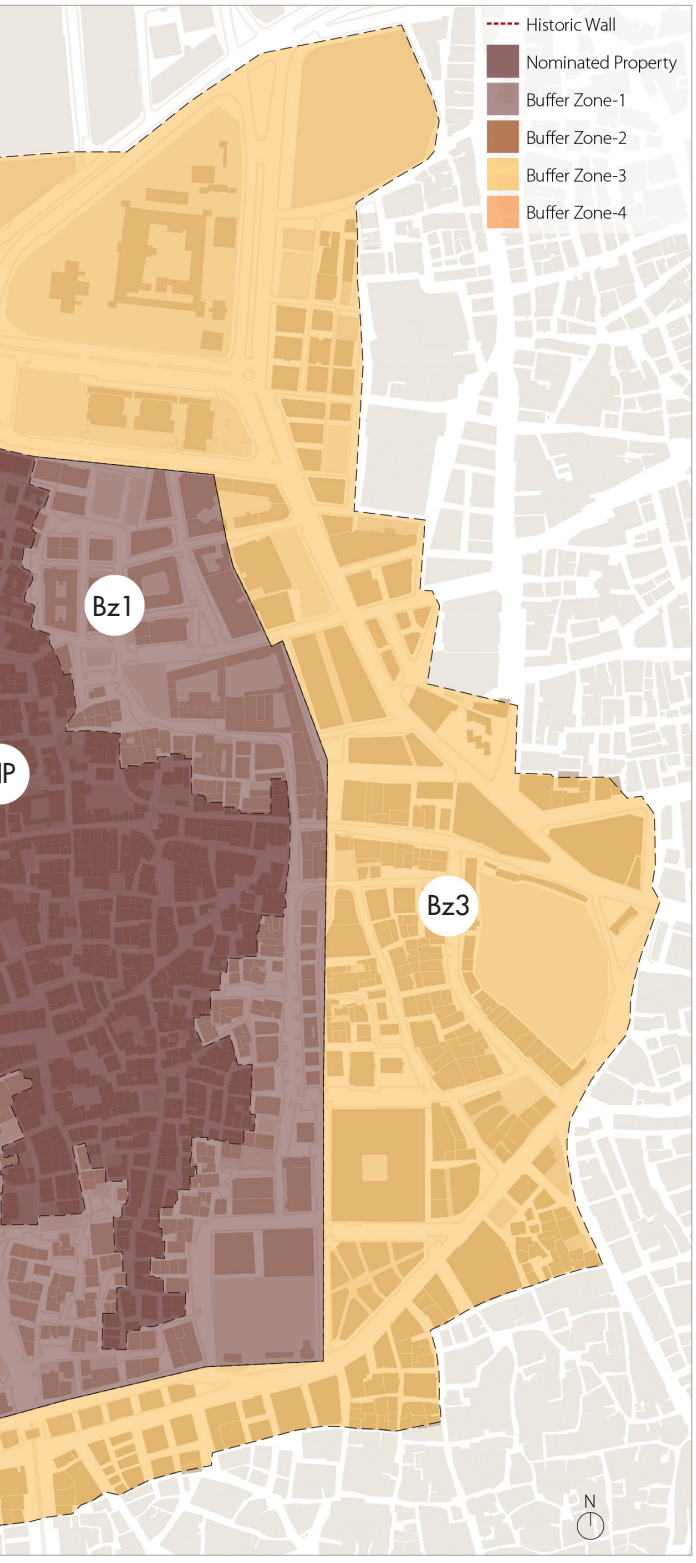


FIG.14
Nominated property and buffer zones. Jeddah Historic Development, 2019.



3. BUFFER ZONE 3 (BZ3);

This zone forms a first outer "ring" surrounding Historic Jeddah in the North, East and South. It is actually composed of different urban sectors:

- A triangular area, east of the old city, between the limit of the ancient city walls and the rebuilt Makkah Gate (that was moved some 200 meters East of its original location). This is a dense neighbourhood intimately connected with, and often perceived as part of, the old city. Small shops and a hardware souk characterize this sector, which includes the Assad Cemetery, surrounded by a modern ring road.
- An outer crown on the east, extending the protection perimeter to include blocks located beyond the roads ringing the area. This "external" sector is included in the buffer zone to control heights and development on both sides of the ring road.
- The northern part of buffer zone 3 is mainly composed of large public parcels: the area formerly occupied by a fortress where are now found large public compounds, an urban park, the historic Mother Eve Cemetery, road intersections with a large square/roundabout, and some large parcels hosting a parking lot and modern structures. The roads around al-Bay`ah Square, which functions like a roundabout, disrupt the original connection of the old city with the al-'Arbaeen lagoon, whose southern bank marks the limit of the buffer zone 3 perimeter.
- The southern part is composed of low-rise buildings on the two sides of the ring road surrounding the Old City.

4. BUFFER ZONE 4 (BZ4).

West of the Buffer Zone 2, it extends over the ancient seashore in front of the Old City on reclaimed land, a sector developed with high-rise buildings among which the famous NCB building and the Red Sea Hotel.

3.4
Architectural language of Al Balad Heritage buildings

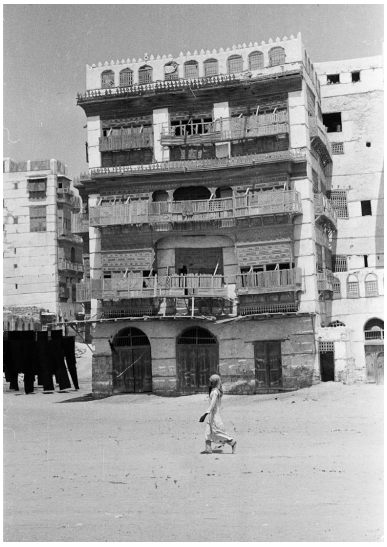
URBAN MORPHOLOGY AND ARCHITECTURAL TYPOLOGIES

The Jeddah traditional house should be considered as an urban unit playing an active role in the making of the city. It needs to be studied as a typo-morphological response to climate, material and socio-spatial practices. Indeed, the tall **roshan tower-house** of Jeddah stood as the basic and primary urban unit of the historic city, and played a critical role in shaping the urban fabric, which was composed of tightly-knit neighbourhoods integrating residential and commercial functions, organized around the main market and the social identity of the city. Through its programmatic, climatic, spatial and visual characteristics, it contributed to the shaping of the urban morphology, land use patterns and the overall character of the city of Jeddah.

Jeddah Historic house used to be a "mixed use" building hosting both residential and commercial activities, combining domestic private spaces with commercial semi-private spaces on the street level. Commercial spaces accommodated offices, warehouses and guest-house functions (as room were rented out during the hajj season). This internal distribution gave Jeddah traditional houses an urban character with the ground floor open to the urban public domain. Jeddah traditional houses do not have courtyards. They are vertically zoned, organized around a core circulation, and extroverted in planning and urban in character. Their façades are well-composed and articulated with fenestrations adorned with carved wooden frames and lattice screens.

Jeddah traditional houses provided solutions capable to cope with the climatic conditions that played a critical role in shaping the urban fabric and the morphology of the old city. The street network corresponds to the prevailing breezes, and is oriented north and north-west. Local airflow in alleyways is stimulated by the alternation of light and shade, warm and cool surfaces, and hot and cool spaces. The majority of the houses were detached or semi-detached units, to generate more streets and increase airflow and cross ventilation in the hot and humid climate of the Red Sea. Their proximity and their height were also important factors playing a positive shading role and protecting the streets from sun-rays and heat.

FIG.15-16-17
Images of the quarters, A.Thesinger's archive.



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16

BUILDING CONSTRUCTION AND MATERIALS

Jeddah's style of architecture was naturally related to the characteristics of available local building materials and to the constraining demands of the local climate.

Fossiliferous limestone "Shelly limestone" used in the multiple-leaf stone masonry wall whether used as masonry unit in the external layers or as stone fragment in the inner filling layer, is local limestone of marine-origin that is vernacularly named as "Mangabi".
Mangabi stone is a local coquina (seashell) limestone relatively easy to cut and work (especially if "freshly" excavated, as it tends to harden when exposed to the air), porous and relatively light (average 1.5 t/m3) with good insulation properties. To resist the aggressive salty air of the Red Sea coast, mangabi stonewalls need to be coated with a layer of plaster, as it was traditionally done in Historic Jeddah.

Coral blocks were also used. Coral has technical characteristics similar to Mangabi stone (as far as insulation and resistance area concerned), but it is lighter. More expensive to extract, it was not used as standard masonry material, though coral blocks are often found mixed with limestone masonry.

Dark-brown clay, dug from the shallow bottom of al-Manqabah lagoon, mixed with lime (as shown by the laboratory tests carried out in the in ash-shafe`i mosque), served as mortar binding the stone blocks. The structures were reinforced with **takalil**, tiered beams horizontally embedded in the walls and tied to the crossbeams making

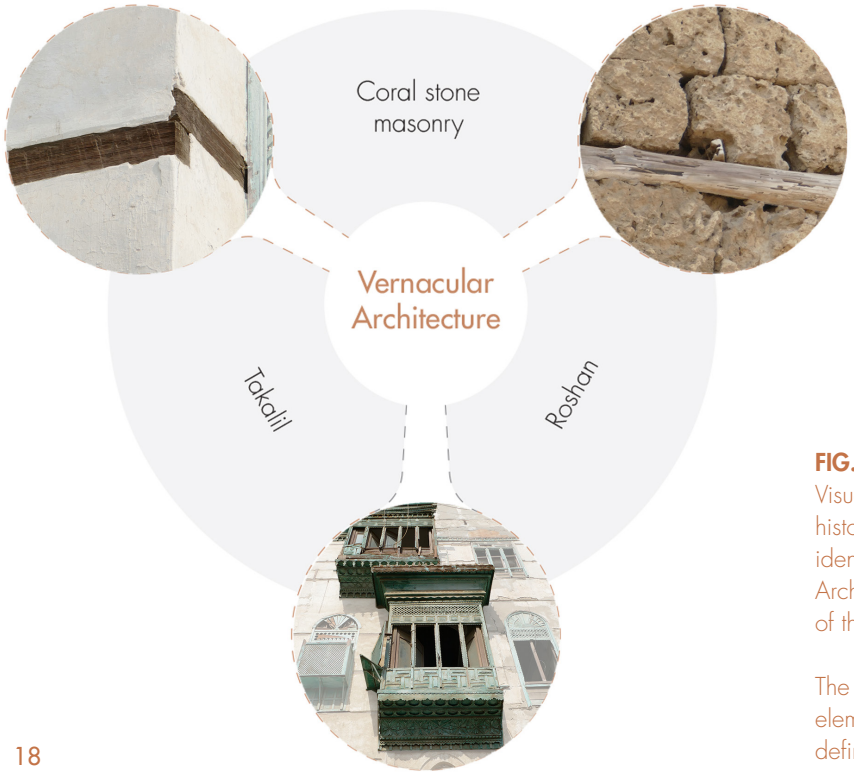


FIG.18
Visual aspects of historical buildings identifying the Architectural Character of the city.

The three building elements and systems define Al Balad unicity.

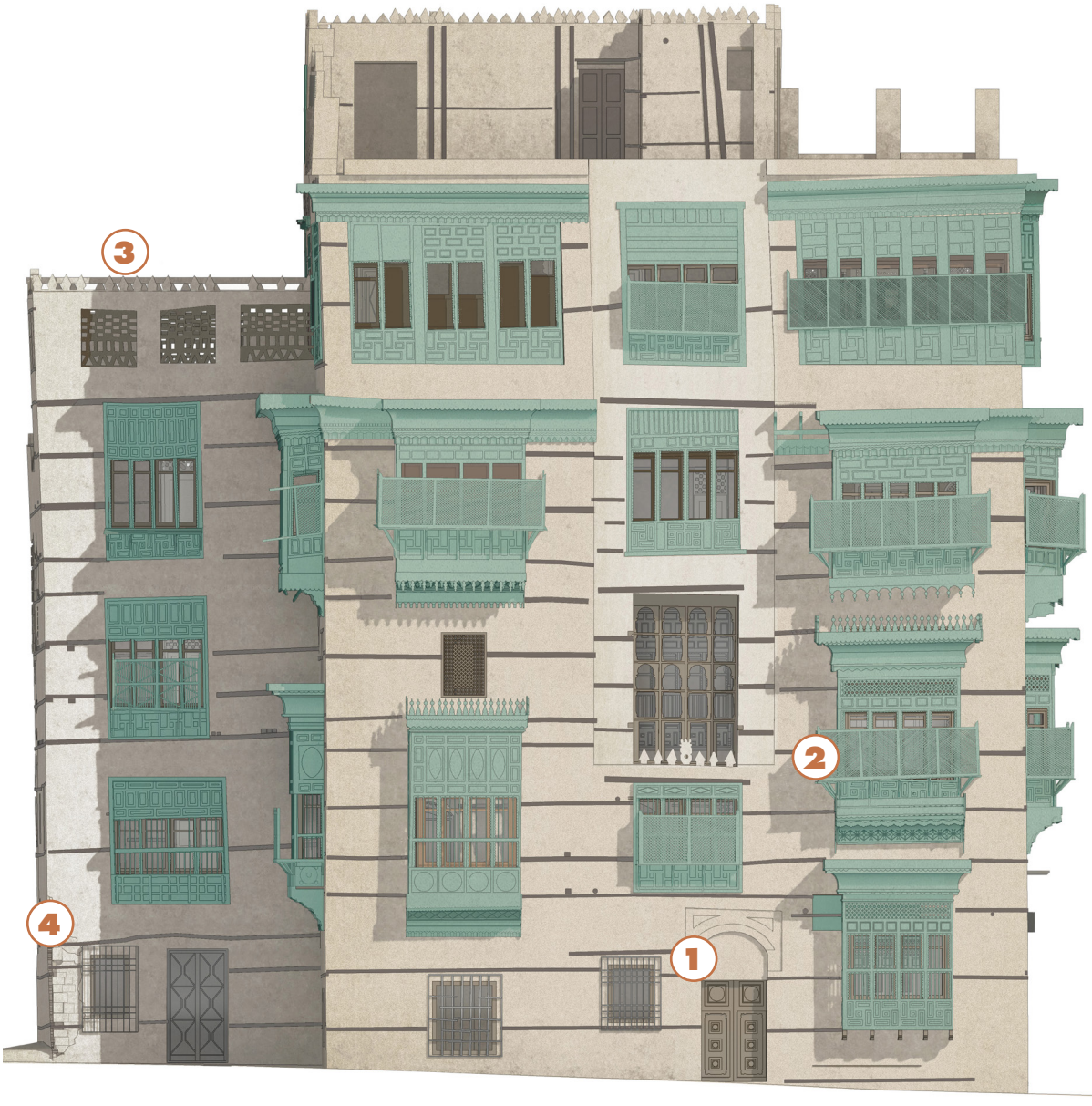
FIG.19
HBIM model of Bayt ash-Shafe`i, built in 1800 in the Mazloum Quarter of the old city.

Carved wooden elements

Roshans

Crenellated cornices

Stone masonry and wooden ties



up the floors. Houses were fragile and tended to collapse — also on account of poorly laid foundations and unstable soil — forming mounds of rubble that were a common component of the urban landscape.
The floors and roofs were constructed with wooden boards laid over wooden joists. The wood used for reinforcement and flooring was called "gandal" and was imported from India. Another type of wood of higher quality that was favoured by local craftsmen as a construction material was called jawi, a teak wood imported from Java. Though harder to work, it was much more resistant to insects and humidity. It was traditionally used for front doors, roshan-s and windows and was a source of pride for craftsmen and owners alike who displayed skill and wealth.

Houses were mostly whitewashed or painted with subdued colours: pastel shades of yellow, cream, blue, pink. Houses were tall so that the uppermost floors might catch the regular sea breezes and create upward draughts with their temperature differentials.

Architectural language is comprised of building elements and patterns arranged together to tell the story of a place. The collective story becomes even stronger when it connects with history and geography.

20

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22

FIG.20,21,22
The structural system of tower houses: wooden elements enriching walls and the staircase system. An overview of the building interiors, where wooden ties are combined along different arrangements.

FIG.23,24,25
Decorative patterns on plasters and carved wooden elements.

25

23

24

3.5
Architectural elements overview

CENSUS OPERATION FOR THE ARCHITECTURAL INTERPRETATION

The urban reality of the city of Jeddah defines a close coexistence between its resilient historical centre and the contemporary areas of expansion. The identification of remarkable features in the historical building construction in the stratification of the city, is a reason to consolidate cultural, social and human relationship, useful for mutual knowledge and architectural preservation. In order to improve urban management tools, a common language of architectural elements that encompasses the contents coming from the previous studies and publications, finds a direct reference to the Jeddah handbook document.
The idea is to create a shared vocabulary and a common structure of the elements between the Al Balad Guidelines for Heritage Buildings and its operating Manual.

The complex image of the city, as the last surviving evidence of a common construction knowledge in the Red Sea coasts, shows predominant characters determined by the historical period and the geographical area, that intersect, enhancing each other, in the richness of the cosmopolitan exchange of cultures in the region.

The Al Balad Design Guidelines gathers a vocabulary from the traditional architectural language of Al Balad. It is summarized by their predominant characters and presented as resources of reference for the designer from Vernacular architecture and Early Modern heritage.

ARCHITECTURAL ELEMENTS

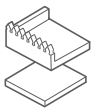
A
FOUNDATIONS/
SUBFOUNDATIONS

A1 – Subsoil
A2 – Masonry foundation

B
VERTICAL ELEMENTS
WALLS/PILLARS

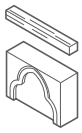
B1 – Main walls
B2 – Masonry pillars

C
HORIZONTAL
STRUCTURES



C1 – Floor slab
C2 – Terrace Roofing

D
LINTELS
AND
ARCHES



D1 – Wooden lintels
D2 – Stone lintels and arche
D3 – Niches and false win

E
STAIRCASES

E1 – Masonry staircase
E2 – Wooden staircase

DECORATIVE ELEMENTS

I
WALL FINISHES

I1 – Wall rendering

I2 - Decorations

FIG.25
Architectural and decorative elements classification reflecting the handbook criteria.

B1.2 Wall sub-elements
- B1.2.a: wooden chains (Takalil)
- B1.2.b: masonry type 1
- B1.2.c: masonry type 2
- B1.2.d: masonry type 3

C1.1 Floor slab sub elements
- C1.1.a - wooden beams
- C1.1.b - wooden boards
- C1.1.c - lime slabs

es
dows

F
WOODEN ELEMENTS

- F1 – Interior doors
- F2 – Windows and shutters
- F3 – Balconies, arcades
- F4 – Canopies, kiosks
- F5 – Roshans
- F6 – Moucharabiehs
- F7 – Painted ceilings
- F8 – Parapets and corniches
- F9 – Entrance doors

G
METAL WORKS

- G1 – Metal grids and railings
- G2 – Ironmonjery

H1
FUNCTIONAL ELEMENTS
ANCIENT/ TRADITIONAL

- H1.1 – Gutters
- H1.2 – Chimneys/Ventilation shafts

H2
FUNCTIONAL ELEMENTS
MODERN

- H2.1 – Air conditioning units
- H2.2 – Plumbing system
- H2.3 – Electrical installation
- H2.4 – Water tanks
- H2.5 – Parabolic antennas
- H2.6 – Lifts and elevators

- I1.1 – Limewash paint
- I1.2 – External plasters
- I1.3 – Internal plasters
- I1.4 – Sgraffito

- I2.1 – Masonry decorations
- I2.2 – Masonrydecorations

L
FLOOR FINISHES

- L1 – Lime renderings
- L2 – Floor tiles

Definitions, Criteria & Studies

Chapter

4.

When dealing with the safeguarding and management of historic towns and urban areas, it is necessary to face the international reflections came out of the last years debate on the role of the urban system. A growing awareness of the redefinition of objectives and the boundaries of historic heritage has been translated into official documents and International charters.

In order to control urban and architectural transformations, the first preliminary step to be carried out is the detailed assessment of the conditions of historical buildings within the nominated property.

4

4.1
Glossary of Definitions

The following glossary has been compiled to facilitate the understanding of specialized terms related to the deliverables and approaches contained in the Guidelines. In the aim to unify the terminology utilized throughout the documents, some definitions directing the delivering of building permits in Al Balad district. The list of technical terms presented below refers to international standard documents:

A

Adaptive Reuse
The conscious conversion of buildings, groups of buildings or parts of a city of intrinsic historical value to new public or private use, other than which it was originally built, allowing self- sustainable form of safeguarding.

Assessment
A qualitative inspection aimed to evaluate the existing buildings, concerning the general state of conservation and heritage values. There are different building assessment methods and each specific method such as rating method and multi-criteria, decision-making method has an evaluation mechanism in assistance with a group of assessment criteria.

B

Buffer zone
A buffer zone is a well defined zone outside the protected area whose role is to shield the cultural values of the protected zone from the impact of activities in its surroundings. This impact can be physical, visual or social.

Built environment
The built environment refers to human-made (versus natural) resources and infrastructure designed to support human activity, such as buildings, roads, parks, and other amenities.

C

Conservation
All those activities that are aimed at preserving tangible and intangible cultural heritage, through direct intervention or by adopting measures that contribute to the heritage protection. It includes preventive conservation, preservation, restoration (light and heavy) and reconstruction.

Consolidation
Preventive structural stabilization, with temporary, provisory or permanent measures, of degraded or weakened areas or single elements, in order to ensure their structural integrity.

Construction
In the context of these Guidelines, the term indicates all building activities to be carried out on non-historic buildings located within the nominated property or the buffer zone, including notably the transformation of an existing modern building and the construction of a new

edifice. Contemporary work on vernacular settlements should respect their cultural values and their traditional character.

Cultural significance
Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups.

D

Design Guidelines
Criteria developed to provide practical guidance in applying standards for restoration and new construction designs, and to ensure the respect of the character of historic properties such as buildings, sites, objects, districts and landscapes.

Diagnosis
A holistic process, prior to any restoration, aimed at data collection and analysis for the knowledge of the state of conservation of the buildings and each of its components, as well as their history and heritage values. To do this, various methods and techniques regarding inspection are available to measure the relevant parameters and also the documentary and archaeological studies. The end product of a diagnosis is a prediction of the likely causes of the damages found, the main values and suggestions for an appropriate intervention.

H

Heritage Impact Assessment (HIA)
A process of identifying, analysing, evaluating and predicting the probable effects of a current or proposed development policy or action on the cultural heritage, then integrating the findings and conclusions into the planning, projects and decision making process, with a view to mitigating adverse impacts and enhancing positive outcomes.

Historic Building
Buildings that are significant in the history of architecture (even if not officially designated or listed), which show relevant architectural features, or that play (or have played) an important role in local cultural and social development.

Historic town and urban area
Historic towns and urban areas are any groups of buildings, spatial structures and open spaces that express the evolution of a society and of its cultural identity. They are an integral partof a broader natural or man made context and the two must be considered inseparable. They are living evidence of the past that formed them, and they s are made up of tangible and intangible elements. Historic urban areas include cities, towns and historic centres or quarters, together with their natural and man-made environments.

Historic Urban Landscape
The urban area understood as the result of a historic layering of cultural and natural values and attributes, extending beyond the notion of "historic centre" or "ensemble" to include the broader urban context and its geographical setting.

I

Infill
Real estate development in historic areas, which aims to maintain the old character of the urban fabric by adding new buildings architecturally similar to the existing ones.

Invasive (non-invasive)
Aggressive or potentially disruptive intervention damaging to a surface or substrate.

Maintenance
The maintenance is the process of ensuring building premises and other assets continue to operate at maximum efficiency and retains an exceptional appearance. Maintenance of a building includes the structure, the facilities and all the building components.

Preservation
Measures carried out to maintain a cultural property in its existing situation and prevent further changes or deterioration. It aims to protect and preserve Cultural Heritage properties as close as possible through minimal, possibly reversible, interventions (e.g. light cleaning, consolidation, disinfection, etc.). to their original condition for as long as possible. Any physical intervention or change to the fabric must be kept to a minimum.

Preventive conservation
Indirect activities and actions that contribute to the protection of cultural heritage and can be defined as measures or actions that are applied to stop possible future causes of damages or to avoid further spread of the effect (e.g. environmental control, monitoring tools, etc.).

Reconstruction
The action aimed at the construction of buildings that are severely damaged or totally destroyed. The reconstruction involves the re- creation of a non-existent building anymore, on its original site. The reconstruction should be based upon historical, literary, graphic and pictorial as well as archaeological evidence. It could be a replica, reproducing the exact form, or the details of all, or part, of existing or vanished buildings as they were in a specific period of history or a reinterpretation of the original features.

Rehabilitation
The action usually carried out in order to extend a building's life span and to improve their viability. The rehabilitation aims at the refurbishment of a damaged building that is not able to full its performance.

Replacement
Removal of existing fabric and introduction of new fabric in its place. It could be a Replica (reproduce exactly, to make a duplicate of the original) and a "like-for-like" (use of identical material and design in any replacement work).

Restoration
A process aimed to maintain the original setting and fabric of a cultural property whilst also preventing any further deterioration, by preserving and increasing the aesthetic and historic values of buildings. It is based on respect for original built form, architectural elements, materials and facilitating their appreciation and use. Restoration interventions may include the substitution, renewal or reposition of decorative, non-structural and structural elements, in order to bring back the buildings former or original state. The process of restoration is a highly specialized operation that must be carried out by multidisciplinary expertise and must stop at the point where conjecture begins. In the context of these Guidelines, two types of restoration have been considered, depending on the state of conservation of the

building: **Light Restoration** (e.g. reassembly of broken parts) and **Heavy Restoration** (e.g. the permanent addition of new structural elements to consolidate the existing).

S

Setting
The setting of a heritage structure, site or area is defined as the immediate and extended environment that is part of, or contributes to, its significance and distinctive character.

Sustainability
Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

U

Urban conservation
Urban conservation is not limited to the preservation of single buildings. It views architecture as but one element of the overall urban setting, making it a complex and multifaceted discipline. By definition, then, urban conservation lies at the very heart of urban planning.

Urban heritage
Urban heritage comprises three main categories:

- Monumental heritage of exceptional cultural value;
- Non-exceptional heritage elements, but present in a coherent way with a relative abundance;
- New urban elements to be considered: the urban built form; the open space (streets, public open spaces); the urban infrastructures (material networks and equipment).

Urban regeneration
The urban regeneration is a careful trade-off between heritage and not heritage buildings in the urban context. The efficient utilization of historical patterns and introducing new buildings with sensibly approach. This process should allow changing dynamics of societies as a part of the changing life of the built environment.

W

World Heritage Groups of buildings
Area inscribed on the UNESCO World Heritage List. Created in 1972 as Convention Concerning the Protection of the World Cultural and Natural Heritage. The sites to be inscribed have to justify having "outstanding universal value (OUV)".

4.2
International Criteria and Charters

When dealing with the safeguarding and management of historic towns and urban areas, it is necessary to face the international reflections came out of the last years debate on the role of the urban system.

A growing awareness of the redefinition of objectives and the boundaries of historic heritage has been translated into official documents and International charters.

The main objective of these documents is to identify common principles and strategies applicable to every intervention in historic towns, from the building to a regional and environmental scale, that are meant to protect and integrate diverse tangible and intangible values.

This section is an overview and analysis of the aspects concerning Al Balad heritage, of the international criteria on heritage restoration, essentially the **UNESCO Regulations** and the **ICOMOS Recommendations** Charters.

INTERNATIONAL BENCHMARKS ARE PROVIDED
BY THE UNESCO REGULATIONS
AND THE
ICOMOS RECOMMENDATIONS CHARTERS

UNESCO REGULATIONS

1972 Convention Concerning the Protection of the World Cultural and Natural Heritage

2011 Recommendations on the Historic Urban Landscape

2019 Operational Guidelines for the Implementation of the World Heritage Convention

CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE

1972

THE DUTY OF HERITAGE PROTECTION

*Each State Party to this Convention recognizes that t**he duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage** referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State. It will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and co-operation, in particular, financial, artistic, scientific and technical, which it may be able to obtain. (**Art.4**)*

A GLOBAL POLICY FOR HERITAGE PRESERVATION

To ensure that effective and active measures are taken for the protection, conservation and presentation of the cultural and natural heritage situated on its territory, each State Party to this Convention shall endeavour, in so far as possible, and as appropriate for each country:

1. *to **adopt a general policy** which aims to give the cultural and natural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programmes;*
2. *to set up within its territories, where such services do not exist, one or more **services for the protection, conservation and presentation of the cultural and natural heritage** with an appropriate staff and possessing the means to discharge their functions;*
3. *to **develop scientific and technical studies and research** and to work out such operating methods as will make the State capable of counteracting the dangers that threaten its cultural or natural heritage;*
4. *to take the **appropriate legal, scientific, technical, administrative and financial measures** necessary for the identification, protection, conservation, presentation and rehabilitation of this heritage; and*
5. *to foster the establishment or **development of national or regional centres for training** in the protection, conservation and presentation of the cultural and natural heritage and to encourage scientific research in this field. (**Art.5**)*

RECOMMENDATIONS ON THE HISTORIC URBAN LANDSCAPE

2011

POLICY AND GOVERNANCE OF URBAN HERITAGE

This Recommendation addresses the need to ***better integrate and frame urban heritage conservation strategies within the larger goals of overall sustainable development****, in order to support public and private actions aimed at preserving and enhancing the quality of the human environment. It suggests* ***a landscape approach for identifying, conserving and managing historic areas within their broader urban contexts****, by considering the interrelationships of their physical forms, their spatial organization and connection, their natural features and settings, and their social, cultural and economic values. (**R.5**)*

The historic urban landscape approach considers cultural diversity and creativity as key assets for human, social and economic development, and provides tools to manage physical and social transformations and to ensure that ***contemporary interventions are harmoniously integrated with heritage*** *in a historic setting and take into account regional contexts. (**R.12**)*

TOOLS FOR A NEW URBAN APPROACH

Conservation of the ***urban heritage should be integrated into general policy planning and practices*** *and those related to the broader urban context. Policies should provide mechanisms for balancing conservation and sustainability in the short and long terms. Special emphasis should be placed on the* ***harmonious, integration of contemporary interventions into the historic urban fabric****.*

a. *Member States should* ***integrate urban heritage conservation strategies into national development policies and agendas according to the historic urban landscape approach****. Within this framework, local authorities should prepare urban development plans taking into account the area's values, including the landscape and other heritage values, and features associated therewith;*
b. ***Public and private stakeholders should cooperate****, inter alia, through partnerships to ensure the successful application of the historic urban landscape approach. (**R.22**)*

The approach based on the historic urban landscape implies the application of a range of ***traditional and innovative tools adapted to local contexts****. Some of these tools, which need to be developed as part of the process involving the different stakeholders, might include:*

- *Civic engagement tools*
- *Knowledge and planning tools*
- *Regulatory systems*
- *Financial tool (**R.24**)*

OPERATIONAL GUIDELINES FOR THE IMPLEMENTATION OF THE WORLD HERITAGE CONVENTION

2019

CRITERIA FOR OUTSTANDING UNIVERSAL VALUE

*The Committee considers a **property as having Outstanding Universal Value** if the property **meets one or more of the following criteria.** Nominated properties shall therefore (Jeddah case):*

*ii. exhibit an **important interchange of human values**, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

*iv. be an **outstanding example of a type of building**, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;*

*iv. be directly or **tangibly associated with events or living traditions**, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (77)*

AUTHENTICITY

***Properties nominated under criteria (i) to (vi) must meet the conditions of authenticity**. (79)*

*Depending on the type of cultural heritage, and its cultural context, **properties may be understood to meet the conditions of authenticity** if their cultural values (as recognized in the nomination criteria proposed) are truthfully and credibly expressed through a variety of attributes including:*

- *form and design;*
- *materials and substance;*
- *use and function;*
- *traditions, techniques and management systems;*
- *location and setting;*
- *language, and other forms of intangible heritage;*
- *spirit and feeling; and*
- *other internal and external factors. (82)*

In relation to authenticity, the reconstruction of archaeological remains or historic buildings or districts is justifiable only in exceptional circumstances. Reconstruction is acceptable only on the basis of complete and detailed documentation and to no extent on conjecture. (86)

INTEGRITY

*All **properties nominated for inscription on the World Heritage List shall satisfy the conditions of integrity**. (87)*

*Integrity is **a measure of the wholeness and intactness** of the natural and/or cultural heritage and its attributes. Examining the conditions of integrity, therefore requires assessing the extent to which the property:*

a. *includes all elements necessary to **express its Outstanding Universal Value**;*
b. *is of **adequate size** to ensure the complete representation of the features and processes which convey the property's significance;*
c. ***suffers from adverse effects** of development and/or neglect. (88)*

*For properties nominated under criteria (i) to (vi), **the physical fabric of the property and/or its significant features should be in good** condition, and the impact of deterioration processes controlled. A significant proportion of the elements necessary to convey the totality of the value conveyed by the property should be included. Relationships and dynamic functions present in cultural landscapes, historic towns or other living properties essential to their distinctive character should also be maintained. (89)*

HERITAGE IMPACT ASSESSMENT IMPLEMENTATION

*Notwithstanding Paragraphs 179 and 180 of the Operational Guidelines, States Parties shall ensure that Environmental Impact Assessments, **Heritage Impact Assessments, and/or Strategic Environmental Assessments be carried out as a pre-requisite for development projects and activities that are planned for implementation within or around a World Heritage property**. These assessments should serve to identify development alternatives, as well as both potential positive and negative impacts on the Outstanding Universal Value of the property and to recommend mitigation measures against degradation or other negative impacts on the cultural or natural heritage within the property or its wider setting. This will ensure the long-term safeguarding of the Outstanding Universal Value, and the strengthening of heritage resilience to disasters and climate change. (118 bis)*

*The World Heritage Committee invites the States Parties to the Convention **to inform the Committee**, through the Secretariat, **of their intention to undertake or to authorize in an area protected under the Convention major restorations or new constructions, which may affect the Outstanding Universal Value of the property**. Notice should be given as soon as possible (for instance, before drafting basic documents for specific projects) and before making any decisions that would be difficult to reverse, so that the Committee may assist in seeking appropriate solutions to ensure that the Outstanding Universal Value of the property is fully preserved. (172)*

ICOMOS
international council on monuments and sites

ICOMOS RECOMMENDATIONS

1964 — International Charter for the Conservation and Restoration of Monuments and Sites (Venice Charter)

1987 — Charter for the Conservation of Historic Towns and Urban Areas (Washington Charter)

1999 — Charter on the Built Vernacular Heritage

2003 — Principles for the Analysis, Conservation and Structural Restoration of Architectural Heritage

2011 — Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas (Valletta principles)

2017 — Principles for the conservation of wooden built heritage

2021 — International Cultural Tourism Charter: Managing Tourism at Places of Heritage Significance

2022 — Guidance on Heritage Impact Assessments (HIA) for World Heritage Properties (ICOMOS draft to be published in 2022)

INTERNATIONAL CHARTER FOR THE CONSERVATION AND RESTORATION OF MONUMENTS AND SITES (VENICE CHARTER)

1964

DEFINITIONS

The concept of a historic monument embraces not only the single architectural work but also the urban or rural setting *in which is found the evidence of a particular civilization, a significant development or a historic event. This applies not only to great works of art but also to more modest works of the past which have acquired cultural significance with the passing of time. (Art.1)*

INTEGRITY AND AUTHENTICITY

The conservation of a monument implies preserving a setting which is not out of scale. Wherever the traditional setting exists, it must be kept. ***No new construction, demolition or modification which would alter the relations*** *of mass and colour must be allowed. (Art.6)*

The sites of monuments must be the object of ***special care in order to safeguard their integrity*** *and ensure that they are cleared and presented in a seemly manner. The work of conservation and restoration carried out in such places should beinspired by the principles set forth in the foregoing articles. (Art.14)*

RESTORATION METHODOLOGY AND CRITERIA

The process of restoration is a highly specialized operation*. Its aim is to preserve and reveal the aesthetic and historic value of the monument and is based on* ***respect for original material and authentic documents****. It must stop at the point where conjecture begins, and in this case moreover any extra work which is indispensable must be distinct from the architectural composition and must bear a contemporary stamp.* ***The restoration in any case must be preceded and followed by an archaeological and historical study of the monument****. (Art.9)*

Where traditional techniques prove inadequate, the consolidation of a monument can be achieved by the use of any modern technique *for conservation and construction, the efficacy of which has been shown by scientific data and proved by experience. (Art.10)*

Replacements of ***missing parts must integrate harmoniously with the whole, but at the same time must be distinguishable*** *from the original so that restoration does not falsify the artistic or historic evidence.* ***(Art.12)***

DOCUMENTATION

*In all works of preservation, restoration or excavation, there should always b**e precise documentation in the form of analytical and critical reports**, illustrated with drawings and photographs. Every stage of the work of clearing, consolidation, rearrangement and integration, as well as technical and formal features identified during the course of the work, should be included. **This record should be placed in the archives of a public institution** and made available to research workers. It is recommended that the report should be published. (Art.16)*

ADAPTIVE REUSE

***The conservation of monuments is always facilitated by making use of them** for some socially useful purpose. Such use is therefore desirable but it must not change the lay-out or decoration of the building. It is within these limits only that modifications demanded by a change of function should be envisaged and may be permitted. (Art.5)*

CHARTER FOR THE CONSERVATION OF HISTORIC TOWNS AND URBAN AREAS (WASHINGTON CHARTER)

1987

POLICY AND GOVERNANCE OF URBAN HERITAGE

*In order to be most effective, the **conservation of historic towns and other historic urban areas should be an integral part of coherent policies** of economic and social development and of urban and regional planning at every level. (Art.1)*

***The participation and the involvement of the residents are essential** for the success of the conservation programme and should be encouraged. The conservation of historic towns and urban areas concerns their residents first of all. (Art.3)*

***Conservation** in a historic town or urban area **demands prudence, a systematic approach and discipline**. Rigidity should be avoided since individual cases may present specific problems. (Art.4)*

*The **improvement of housing should be one of the basic objectives** of conservation. (Art.9)*

***Specialized training should be provided** for all those professions concerned with conservation. (Art.16)*

INTEGRITY AND AUTHENTICITY

Qualities to be preserved include the historic character of the town or urban area and all those material and spiritual elements *that express this character, especially:*

a. *Urban patterns as defined by lots and streets;*
b. *Relationships between buildings and green and open spaces;*
c. *The formal appearance, interior and exterior, of buildings as defined by scale, size, style, construction, materials, colour and decoration;*
d. *The relationship between the town or urban area and its surrounding setting, both natural and man-made; and*
e. *The various functions that the town or urban area has acquired over time.*

Any threat to these qualities would compromise the authenticity of the historic town *or urban area. (Art.2)*

CONSERVATION PLANS

Planning for the conservation of historic towns and urban areas ***should be preceded by multidisciplinary studies****.*
Conservation plans must address all relevant factors including ***archaeology, history, architecture, techniques, sociology and economics****.*
The principal objectives of the conservation plan should be clearly stated as should the ***legal, administrative and financial measures*** *necessary to attain them.*
The conservation plan should aim at ensuring a ***harmonious relationship between the historic urban areas and the town as a whole****.*
The conservation plan should ***determine which buildings must be preserved****, which should be preserved under certain circumstances and which, under quite exceptional circumstances, might be expendable.*
Before any intervention, ***existing conditions in the area should be thoroughly documented****.*
The conservation plan should be ***supported by the residents of the historic area****. (Art.5)*

ADAPTIVE REUSE

New functions and activities should be compatible *with the character of the historic town or urban area.*
Adaptation of these areas to contemporary life requires the ***careful installation or improvement of public service facilities****. (Art.8)*

When it is necessary to construct new buildings or adapt existing ones, the ***existing spatial layout should be respected****, especially in terms of scale and lot size. (Art.10)*

CHARTER ON THE BUILT VERNACULAR HERITAGE

1999

DEFINITIONS

*The **built vernacular heritage is an integral part of the cultural landscape** and this relationship must be taken into consideration in the development of conservation approaches. (**Pr. 4**)*

*The **vernacular embraces** not only the **physical form** and fabric of buildings, structures and spaces, but the ways in which **they are used and understood**, and the **traditions** and the **intangible associations** which attach to them. (**Pr.5**)*

RESTORATION METHODOLOGY AND CRITERIA

*The conservation of the built vernacular heritage must be **carried out by multidisciplinary expertise** while recognising the inevitability of change and development, and the need to respect the community's established cultural identity. (**Pr.1**)*

***Contemporary work** on vernacular buildings, groups and settlements **should respect their cultural values** and their traditional character. (**Pr.2**)*

GUIDELINES IN PRACTICE

***Any physical work** on a vernacular structure **should be cautious and should be preceded by a full analysis** of its form and structure. This document should be lodged in a publicly accessible archive. (**Gl 1**)*

*Siting, landscape and groups of buildings: Interventions to vernacular structures should be carried out in a manner which will **respect and maintain the integrity of the siting, the relationship to the physical and cultural landscape**, and of one structure to another. (**Gl 2**)*

***The continuity of traditional building systems and craft skills** associated with the vernacular is fundamental for vernacular expression, and **essential for the repair and restoration** of these structures. Such skills should be retained, recorded and passed on to new generations of craftsmen and builders in education and training. (**Gl 3**)*

***Alterations** which legitimately respond to the demands of contemporary use should be affected **by the introduction of materials which maintain a consistency of expression, appearance, texture and form** throughout the structure and a consistency of building materials. (**Gl 4**)*

***Adaptation and reuse** of vernacular structures should be carried out in a manner which **will respect the integrity of the structure, its character and form** while being compatible with acceptable standards of living. (**Gl 5**)*

***Changes over time should be appreciated and understood** as important aspects of vernacular architecture. (**Gl 6**)*

PRINCIPLES FOR THE ANALYSIS, CONSERVATION AND STRUCTURAL RESTORATION OF ARCHITECTURAL HERITAGE

2003

INTEGRITY AND AUTHENTICITY

The value of architectural heritage is not only in its appearance, but also in the integrity of all its components as a unique product of the specific building technology of its time. In particular ***the removal of the inner structures maintaining only the façades does not fit the conservation criteria*** *(Pr.1.3)*

The ***choice between "traditional" and "innovative" techniques should be weighed up on a case-by-case*** *basis and preference given to those that are least invasive and most compatible with heritage values, bearing in mind safety and durability requirements. (Pr.3.7)*

The characteristics of materials used in restoration work (in particular new materials) ***and their compatibility with existing materials should be fully established****. This must include long- term impacts, so that undesirable side- effects are avoided. (Pr.3.10)*

DIAGNOSIS

Usually a ***multidisciplinary team****, to be determined in relation to the type and the scale of the problem,* ***should work together from the first steps*** *of a study as in the initial survey of the site and the preparation of the investigation programme. (Pr.2.1)*

A full understanding of the structural and material characteristics is required *in conservation practice. Information is essential on the structure in its original and earlier states, on the techniques that were used in the construction, on the alterations and their effects, on the phenomena that have occurred, and, finally, on its present state. (Pr.2.3)*

Diagnosis is based on historical, qualitative and quantitative approaches*; the qualitative approach being mainly based on direct observation of the structural damage and material decay as well as historical and archaeological research, and the quantitative approach mainly on material and structural tests, monitoring and structural analysis. (Pr.2.5)*

RESTORATION METHODOLOGY AND CRITERIA

The best therapy is preventive maintenance*. (Pr.3.2)*

Each intervention should be in proportion to the safety objectives set, thus ***keeping intervention to the minimum to guarantee safety and durability*** *with the least harm to heritage values. (Pr.3.5)*

The design of intervention should be based on a clear understanding of the kinds of actions that were the cause of the damage and decay *as well as those that are taken into account for the analysis of the structure after intervention; because the design will be dependent upon them. (Pr.3.6)*

Where possible, any measures adopted should be "reversible" *so that they can be removed and replaced with more suitable measures when new knowledge is acquired. (Pr.3.9)*

Deteriorated structures *whenever possible* ***should be repaired rather than replaced****. (Pr.3.15)*

Dismantling and reassembly *should only be undertaken as* ***an optional measure required by the very nature of the materials and structure*** *when conservation by other means impossible, or harmful. (Pr.3.17)*

ADAPTIVE REUSE

When any change of use or function is proposed, ***all the conservation requirements and safety conditions have to be carefully taken into account****. (Pr.1.4)*

Often the application of the ***same safety levels as in the design of new buildings requires excessive, if not impossible, measures****. In these cases, specific analyses and appropriate considerations may justify different approaches to safety. (Pr.2.8)*

PRINCIPLES FOR THE SAFEGUARDING AND MANAGEMENT OF HISTORIC CITIES, TOWNS AND URBAN AREAS (VALETTA PRINCIPLES)

2011

POLICY AND GOVERNANCE OF URBAN HERITAGE

*The **introduction of contemporary architectural elements must respect the values** of the site and its setting. It can contribute to the enrichment of the town, bringing alive the value of urban continuity.*
***Architects and urban planners must be encouraged to acquire a deep understanding of the historic urban context**. (Pr.2b)*

*All interventions in historic towns and urban areas must **respect and refer to their tangible and intangible cultural values**. (Pr. 3a)*

***Major quantitative and qualitative changes should be avoided**, unless they will clearly result in the improvement of the urban environment and its cultural values. (Pr. 3c)*

*Participation by the residents can be facilitated through distributing information, awareness raising and training. The traditional systems of **urban governance should examine all aspects of cultural and social diversity**, so as to establish new democratic institutions to suit the new reality. (Pr. 3h)*

*All interventions in historic towns and urban areas, while respecting historic heritage characteristics, should aim to **improve energy efficiency** and to reduce pollutants.*
*The **use of renewable energy resources** should be enhanced. (Pr. 4i)*

INTEGRITY AND AUTHENTICITY

***Conserving a historic town** requires efforts to maintain traditional practices and to **protect the indigenous population**.*
*It is also **important to control the gentrification process** arising from rent increases and the deterioration of the town or area's housing and public space.*
*Historic towns and urban areas run the risk of **becoming a consumer product for mass tourism, which may result in the loss of their authenticity and heritage value**. (Pr.2c)*

*The **authenticity and integrity** of historic towns, whose essential character **is expressed by the nature and coherence of all their tangible and intangible elements**, notably:*

a. ***Urban patterns** as defined by the street grid, the lots, the green spaces and the relationships between buildings and green and open spaces;*
b. ***The form and appearance, interior and exterior, of buildings** as defined by their structure, volume, style, scale, materials, colour and decoration;*
c. ***The various functions** that the town or urban area has acquired over time;*
d. ***Cultural traditions**, traditional techniques, spirit of place and everything that contribute to **the identity of a place**. (Pr.4a1)*

CONSERVATION PLANS

The safeguarding and ***management of a historic town or urban area must be guided by prudence, a systematic approach and discipline****, in accordance with the principles of sustainable development. (**Pr.3g**)*

When it is necessary to construct new buildings or to adapt existing ones, ***contemporary architecture must be coherent with the existing spatial layout*** *in historic towns as in the rest of the urban environment. (**Pr.4c**)*

A management plan is based on the knowledge, conservation and enhancement of tangible and intangible resources*. (Pr.4l)*

PRINCIPLES FOR THE CONSERVATION OF WOODEN BUILT HERITAGE

2017

INTEGRITY AND AUTHENTICITY

The primary aim of conservation is to maintain the authenticity *of the historic fabric. This includes its configuration, materials, assembly, integrity, architectural and cultural heritage values, respecting changes through history. To do so one should retain as far as possible all its character-defining features. (**Pr.5**)*

DIAGNOSIS

A thorough and accurate diagnosis should precede any intervention*. This should be accompanied by an understanding and analysis of the construction and structural system, of its condition and the causes of any decay damage or structural failure as well as mistakes in conception, sizing or assembly.*
The diagnosis must be based on documentary evidence, physical inspection and analysis *and, if necessary, measurements of physical conditions using non-destructive testing (NDT), and if necessary on laboratory testing. This does not preclude carrying out minor interventions and emergency measures where these are necessary. (**Pr.2**)*

RESTORATION METHODOLOGY AND CRITERIA

Interventions should preferably:

a. *be the* ***minimum necessary*** *to ensure the physical and structural stability and the long-term survival of the structure or site as well as its cultural significance;*
b. ***follow traditional practices****;*
c. ***be reversible****, if technically possible;*
d. ***not prejudice or impede future conservation work*** *should this become necessary;*
e. ***not hinder the possibility of later access to evidence*** *exposed and incorporated in the construction;*
f. ***take environmental conditions into account.*** *(Pr.11)*

Interventions should follow the ***criteria of the minimal intervention*** *capable of ensuring the survival of the construction, saving as much as possible of its authenticity and integrity, and allowing it to continue to perform its function safely. (Pr.12)*

Any replacement timber *should preferably:*

a. *be of the* ***same species*** *as the original;*
b. *match the original in* ***moisture content****;*
c. *have* ***similar characteristics*** *of grain where it will be visible;*
d. *be* ***worked using similar craft methods and tools*** *as the original. (Pr.14)*

Present-day materials and technologies should be chosen and used with the greatest caution *and only in cases where the durability and structural behaviour of the materials and construction techniques have been satisfactorily proven over a sufficiently long period of time. (Pr.23)*

A ***coherent strategy of regular monitoring and day-to-day maintenance must be established*** *in order to delay the need for larger interventions and ensure the continuing protection of wooden built heritage and its cultural significance. (Pr.29)*

POLICY AND GOVERNANCE

Educational programmes are an essential part of raising awareness *of wooden heritage by encouraging recognition and understanding of values and cultural significance. (Pr.35)*

INTERNATIONAL CULTURAL TOURISM CHARTER - MANAGING TOURISM AT PLACES OF HERITAGE SIGNIFICANCE

2021

TOURISM IMPACT AND MANAGEMENT

*Place **cultural heritage protection and conservation at the centre of responsible cultural tourism** planning and management. (**Pr.1**)*

*Manage tourism at cultural heritage places through **management plans informed by monitoring, carrying capacity** and other planning instruments; (**Pr. 2**)*

***Raise awareness** of cultural heritage and **reinforce cooperation for heritage conservation** among all stakeholders involved in tourism; (**Pr. 5**)*

*Integrate climate action and **sustainability measures in the management of cultural tourism** and cultural heritage (**P. 7**)*

COMMUNITY AND TOURISM INVOLVEMENT

***Enhance public awareness and visitor experience** through sensitive interpretation and presentation of cultural heritage. (**P. 3**)*

***Recognize and reinforce the rights of communities**, Indigenous Peoples and traditional owners by including access and engagement in participatory; governance of the cultural and natural heritage commons used in tourism. (**P. 4**)*

***Increase the resilience of communities and cultural heritage** through capacity development, risk assessment, strategic planning and adaptive management. (**P. 6**)*

GUIDANCE ON HERITAGE IMPACT ASSESSMENTS (HIA) FOR WORLD HERITAGE PROPERTIES

(ICOMOS draft to be published in 2022)

2022

***This Guidance document is intended to help to States Parties**, heritage managers, decision-makers, communities or others in managing World Heritage properties in circumstances **where some form of change in particular development, resource extraction and mass tourism – may affect the Outstanding Universal Value** of those heritage places.*

*The impact assessment **may have been requested by the World Heritage Committee or it may be a heritage chapter** within an impact assessment carried out within national statutory requirements. In both cases it is expected that this Guidance will usefully illustrate how impacts on World Heritage and its Outstanding Universal Value might be considered.*

***The Guidance can assist with project design, impact mitigation and good decision-making through**:*

- *relating values to attributes in a systematic and detailed manner;*
- *reassessing the role of attributes in relation to values and to Outstanding Universal Value when these are threatened;*
- *identifying the documentation and sources needed to establish a baseline and to assess values and threats;*
- *documenting the logic of the decision-making process and its internal consistency;*
- *separating impact identification from impact evaluation; and*
- *avoiding, reducing or compensating for adverse impact on Outstanding Universal Value.*

The intended audience for the Guidance includes:

- *managers;*
- *developers;*
- *consultants;*
- *government agencies;*
- *decision-makers;*
- *the World Heritage Committee;*
- *Advisory Bodies to the World Heritage Convention (ICOMOS, ICCROM, IUCN); and*
- *States Parties.*

Note: For more details, **see the chapter 5.2** The Heritage Impact Assessment (HIA) as preventive approach.

4.3
Policies and Strategies for Heritage Protection in Al Balad

INSCRIPTION OF "HISTORIC JEDDAH, THE GATE TO MAKKAH" ON THE WORLD HERITAGE LIST

United Nations
Educational, Scientific and
Cultural Organization

World Heritage **38 COM**

WHC-14/38.COM/16
Doha, 7 July 2014

2014

Criterion (II)

The cityscape of Historic Jeddah is the result of an important exchange of human values, technical know-how, and building materials and techniques across the Red Sea region and along the Indian Ocean routes between the 16th and the early 20th centuries. It represents a cultural world that thrived, thanks to international sea trade; possessed a shared geographical, cultural and religious background; and built settlements with specific and innovative technical and aesthetic solutions to cope with the extreme climatic conditions of the region (humidity and heat).

Jeddah was, for centuries, the most important, largest and richest among these settlements and today, Historic Jeddah is the last surviving urban site along the Red Sea coast that still preserves the ensemble of the attributes of this culture: commercial-based economy, multi-cultural environment, isolated outward-oriented houses, coral masonry construction, precious woodwork decorating the facades, and specific technical devices to aid internal ventilation.

Criterion (IV)

Historic Jeddah is the only surviving urban ensemble of the Red Sea cultural world. Jeddah's Roshan tower houses are an outstanding example of a typology of buildings unique within the Arab and Moslem world. Their specific aesthetic and functional patterns –absence of courtyard, decorated Roshan façades, ground floor room used for offices and commerce, rooms rented for pilgrims– reflect their adaptation to both the hot and humid climate of the Red Sea and to the specificity of Jeddah, the Gate to the Holy City of Makkah for the pilgrims arriving by sea, and an important international commercial pole. The development of the Roshan tower houses in the second half

of 19th century illustrates the evolution of the patterns of trade and pilgrimages in the Arabian Peninsula and in Asia following the opening of the Suez Canal in (1869) and the development of steamboat navigation routes linking Europe with India and East Asia. The extraordinary relevance of Jeddah's tower houses is further increased by the fact that they are not only unique within the Red Sea culture region, but they are also the sole remnants of an architectural typology born in Jeddah that, at the end of the 19th century, spread to the nearby Hejaz cities of Al-Madinah, Makkah and Taif from where it has since completely disappeared under the pressure of modern development.

Criterion (VI)

Historic Jeddah is directly associated, both at the symbolic intangible level and at the architectural and urban level with the Hajj, the yearly Muslim pilgrimage to the Holy City of Makkah.
Jeddah was the landing harbour for all the pilgrims that reached Arabia by sea, and for centuries, up to the present, the city lived in function of the pilgrimages .The goods the pilgrimage brought with them from Asia and Africa and sold in the city, the religious debates with Ulama(s) from Java and India, the spices, the food, and the intangible heritage of the city were all related to the pilgrimage that has immensely contributed to defining the identity of Jeddah. The association with Hajj is also very evident in the urban structure of the nominated property and is found in the traditional souks running East –West from the sea to Makkah Gate, the Ribat(s) and the Wakala(s) that used to host the pilgrims; in the architecture, notably in the facades and internal structure of the hoses; and in the very social fabric of the city, where Muslims from all over the world mingled, lived, and worked together. The ensemble of these elements, tangible and intangible, demonstrates the intimate and long-lasting connection between the pilgrimage and the nominated property and is an example of the very rich cultural diversity resulting from this religious event unique in the whole Islamic World.

Integrity

The nominated property covers about one-third of the original walled-in city and contains the ensemble of the attributes that convey its Outstanding Universal Value, such as the main examples of Jeddah`s Roshan tower houses, outward-oriented houses, coral masonry construction, precious woodwork decorating the facades, and specific technical devices for internal ventilation. Furthermore, Historic Jeddah, the Gate to Makkah is an urban environment boasting a strong trade-based economy intimately associated, both at the symbolic intangible level and at the architectural and urban level, with the Hajj, and a multi-cultural social framework where Muslims from all over the world live and work together. Its complete representation of the features and processes conveying its significance.

Notwithstanding the inevitable decay of the historic structures and the overall evolution of its urban surroundings, the nominated property still possesses all the necessary attributes complying with the concept of "intactness", including the commercial processes, the social relationships and the dynamic functions essential to define its distinctive character.

Authenticity

Historic Jeddah, the Gate to Makkah is a living urban environment primarily hosting residential and commercial activities, with mosques and charitable structures. The nominated property represents an authentic and traditional urban environment where the headquarters of century old economic enterprises, retail shops, traditional souks, small cafes, popular restaurants, and street food vendors are still concentrated. A surprisingly rich human environment where Yemeni, Sudanese, Somali, Pakistani and Indian migrant workers purchase and market their products

to Saudi and non- Saudi clients in crowded traditional souks. Far from a frozen and dead tourist attraction, the nominated property is an authentic sector of the city that still fully conveys the image of what this Red Sea commercial and pilgrimage city used to be. Its historic houses have not been substantially altered by modern additions and in-depth transformations, and the high "Roshan tower houses" from the second half of the 19th century are mostly well preserved. Historic mosques have preserved their function and role for the community and most of their original features. Buildings have only been subject to minor maintenance that has rarely reached the original masonries and their embedded wooden beams, preserving the overall authenticity of the site.

Recommends the State Party in managing the property following inscription to:

- Establish the management system proposed in the nomination file;
- Ensure effective presentation of the property to provide high quality visitor experience;
- Paying particular attention to the conservation of the authenticity with regard to the ongoing projects and development work;
- Reinforce the monitoring system for the building in place where they are tending to deteriorate;
- Continue strong processes of local community engagement in the property.

Recommends that the State Party, in cooperation with the World Heritage Centre and ICOMOS launch a programme in order to develop a comprehensive strategy for the conservation of the property based on the historic urban landscape approach.

United Nations
Educational, Scientific and
Cultural Organization

World Heritage **40 COM**

WHC/16/40.COM/19
Paris, 15 November 2016

Also **recommends** that the urban and spatial dimension of the property be fully reflected in the policies, measures and tools adopted to ensure the conservation of the latter; using if necessary the approach carried by the Recommendation on the Historic Urban Landscape (2011);
Further recommends that the State Party incorporate a Heritage Impact Assessment (HIA) approach into the regulatory and management framework and to carry out specific HIAs for all projects that may impact on the Outstanding Universal Value of the property, in accordance with the ICOMOS Guidance on HIAs for Cultural World Heritage properties.

2016

United Nations
Educational, Scientific and
Cultural Organization

World Heritage **42 COM**

WHC/18/42.COM/18
Manama, 4 July 2018

2018

Also **encourages** the State Party to further develop an integrated conservation strategy for the property including systematic Heritage Impact Assessment (HIA) studies, prepared in accordance with the ICOMOS Guidance on HIAs for Cultural World Heritage properties to be applied to significant projects within the property;
Also **requests** the State Party to submit to the World Heritage Centre, for review by the Advisory Bodies:
b) The Heritage Impact Assessment (HIA) which has been prepared for the property,
c) The integrated conservation strategy for the property including the HIA framework for specific projects.

United Nations
Educational, Scientific and
Cultural Organization

World Heritage **44 COM**

WHC/21/44.COM/7B
Paris, 4 June 2021

2021

Requests the State Party to submit to the World Heritage Centre, for review by the Advisory Bodies, the complete version of the documents provided in the report, particularly:

- a) The Regeneration and Development Plan (Masterplan),
- b) Complete technical information on conservation/restoration projects,
- c) The Heritage Impact Assessment (HIA) framework for the Masterplan,
- d) The complete integrated conservation strategy, design guidelines, and restoration manual,
- e) The risk management and prevention plan for the property.

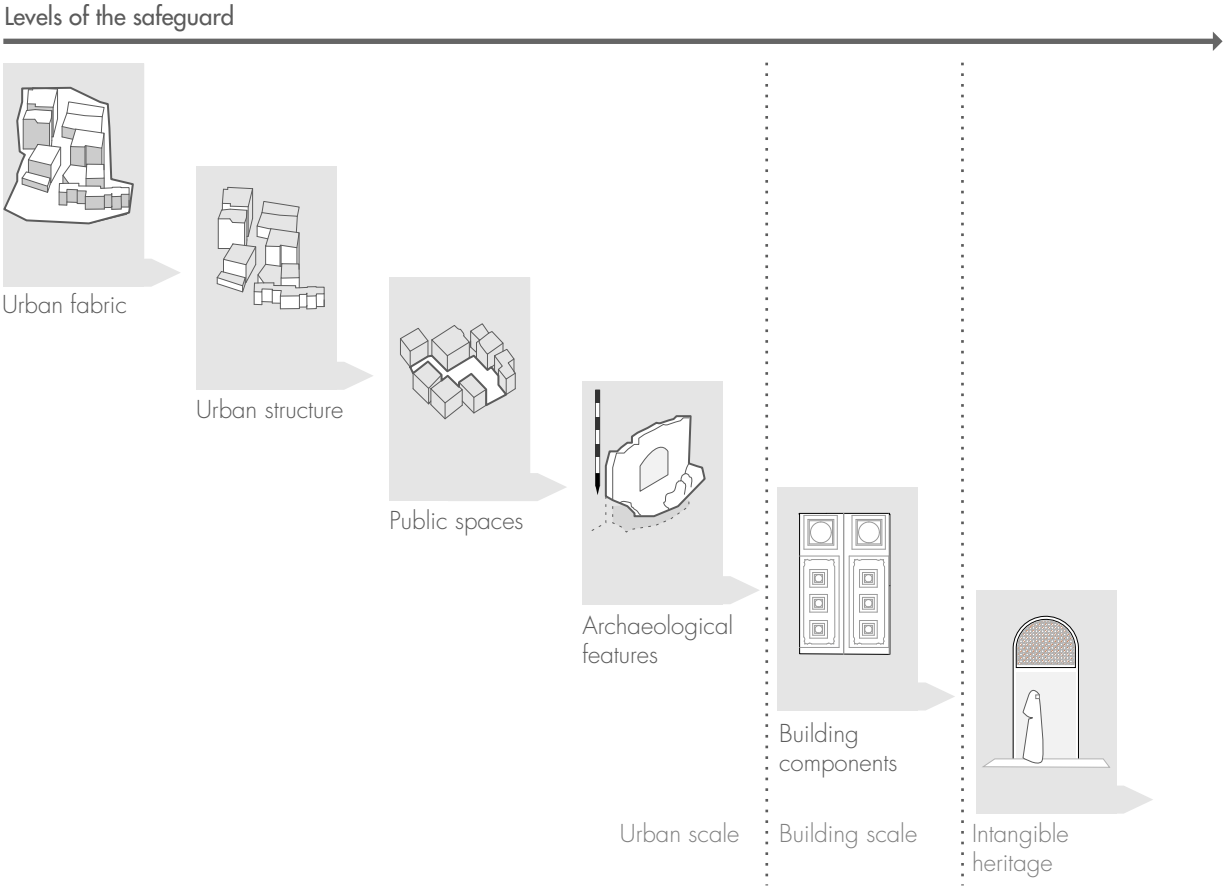
Reminds the State Party of the need to inform the World Heritage Centre in due course about any major development project that may negatively impact the OUV of the property, before any irreversible decisions are made, in line with Paragraph 172 of the Operational Guidelines.

4.4
Different scales of Protection

FROM COLLECTION TO CONNECTION

Moving from the buildings as units to the whole city heritage and applying the concept of historical stratification arising from the recommendations of the UNESCO: Urban Historic Landscape (UHL), we must consider different levels of the objectives of the safeguard:

* Urban fabric;
* Urban structures;
* Public spaces;
* Archaeological features;
* Building components;
* Intangible heritage.



TO KNOW TO PROTECT

A good knowledge of the place is essential to give legitimacy to the protection and objectify it, avoiding all possible arbitrariness. In the face of the same values and state of conservation, the same degree of protection is required.

It is therefore necessary to start from a good inventory and list of the elements to be protected, elaborated in sheets with multidisciplinary criteria and that provide detailed information, both of the values and of the state of the different components.

VALUES AND ELEMENTS TO BE PROTECTED

Determining the heritage values of an urban fabric, a building or a part of a building, obeys the consideration of multiple factors that can contribute to give this value. Keeping in mind the Outstanding Universal Value (OUV) that allowed the inscription of Jeddah on the UNESCO World Heritage List, the factors to consider and evaluate in each case are:

PREVIOUS REGISTRATION & CLASSIFICATION

Consider the classification in previous heritage assessments made for Al Balad by Robert Matthew and Al Turath. This does not exclude giving value to buildings that were not considered previously, especially 20th century buildings, which a serious and comprehensive values assessment could identify.

HISTORICAL AND INTANGIBLE VALUE

Historical value derives from the ways in which past people, events and aspects of life can be connected through a place to the present and give consistency to the urban heritage. It tends to be illustrative or associative.

Illustrative value has the power to aid interpretation of the past through making connections with, and providing insights into, past communities and their activities through shared experience of a place. Association with a notable family, person, event, or movement gives historical value a particular resonance. Being at the place where something momentous happened can increase and intensify understanding through linking historical accounts of events with the place where they happened.

URBAN FABRIC AND SOCIAL VALUES

An essential value for any building is its integration into its urban morphology and the role it plays as a reference for the space it contributes to shaping. Social value derives from the meanings the people who relate to a place attribute to it, or the significance it has in their collective experience or memory. It is associated with places that people perceive as a source of identity, distinctiveness, social interaction and coherence.

ARCHITECTURAL CHARACTER

Among the historic buildings of Al Balad, several architectural typologies can be identified with important qualities of configuration, composition and construction materials. Physical remains of past human activity are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them. These remains are part of a record of the past and their evidential value is proportionate to their potential to contribute to people's understanding of the past.

DECORATIVE AND AESTHETIC CHARACTER

Some of the buildings in Jeddah contain decorative elements of great value that give them a unique character, product of the local tradition and handcrafts, and not necessarily of high artistic or stylistic value.
Aesthetic value derives from the ways in which people draw sensory and intellectual stimulation from a place; they can be the result of the conscious design or the seemingly fortuitous outcome of the way in which a place has evolved and been used over time. Aesthetic values tend to be specific to a time and cultural context, but appreciation of them is not culturally exclusive.

INTEGRITY & AUTHENTICITY

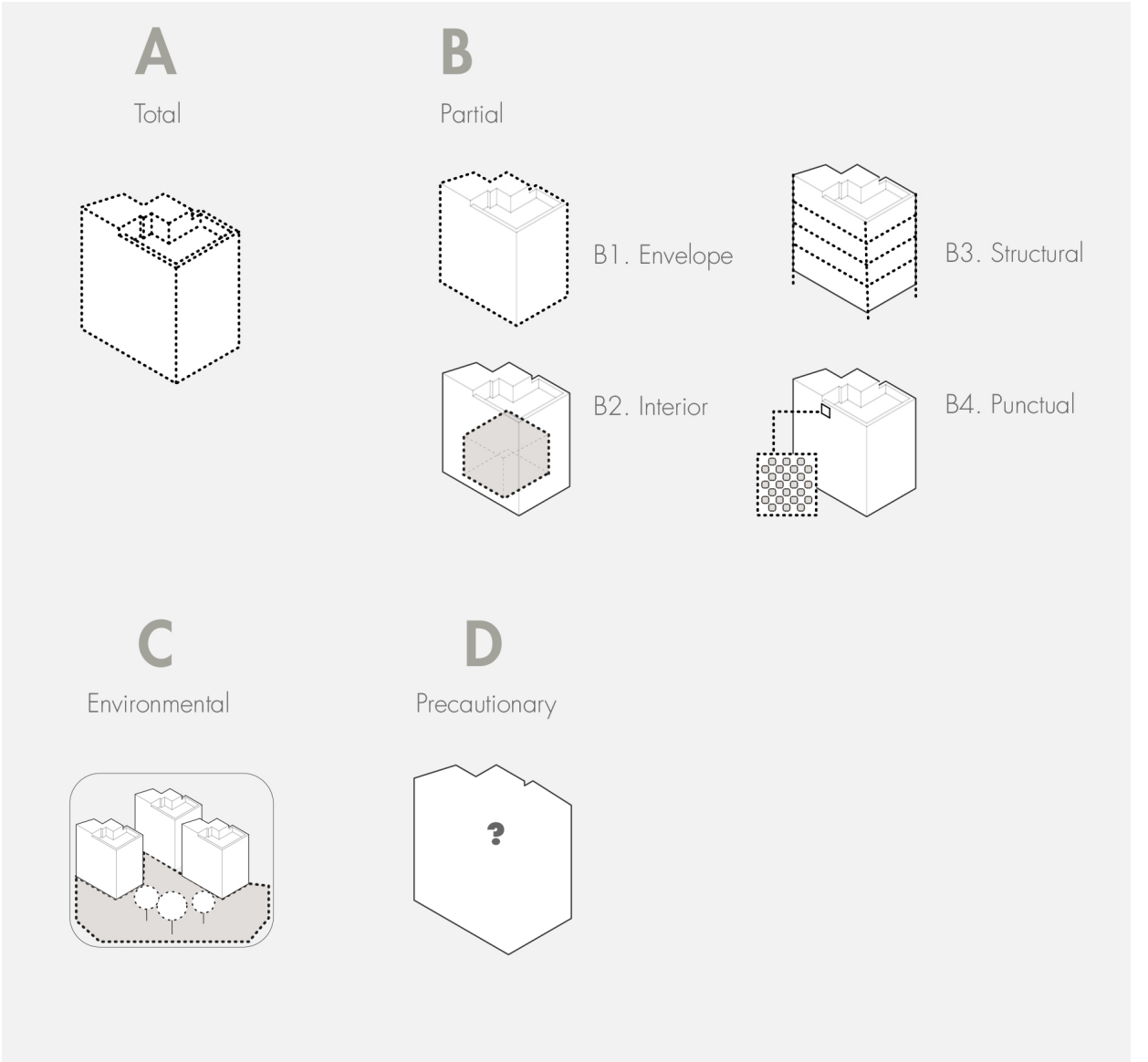
The level of integrity and authenticity represents the core of the Outstanding Universal Value (OUV) related to the inscription of the historic centre of Jeddah on the UNESCO World Heritage List. Integrity is illustrated by the Roshan tower houses - their coral masonry construction, the woodwork decorating the façades, etc. which illustrate an urban environment with a strong commercial activity associated to it. Their integrity operates at the intangible as well as the urban and architectural levels, with the Hajj and a multi-cultural social experience at the core of their distinctive character. Authenticity is suggested through Al Balad's capacity to convey the image of what this commercial and pilgrimage city used to be. Its historic houses have not been substantially altered and the Roshan tower houses are mostly well preserved. Buildings maintain the original masonries and their embedded wooden beams, preserving the overall authenticity of the site.

Relating these heritage values to the constructed reality of Al Balad, should help determine which elements have value and, consequently, to establish the elements to be preserved and the scope of protection needed.

4.5
Different scopes of Protection

Result of the acquired knowledge of Al Balad heritage, with the aim to regulate the conservation, A study of Al Balad heritage should provide the knowledge that will inform the conservation, valuation, restoration and protection of the artistic, historical, archaeological and traditional values of the architectural heritage of Al Balad and its urban elements of interest.

Different scopes of protection should be considered, as follows:



A
TOTAL
(MASTERPIECES)

All is protected (indoor and outdoor).

Total level of protection, applicable to those buildings that must be maintained in their entirety, with special respect for their characteristics and constituting elements. Only maintenance and restoration interventions that do not damage, harm or impair the property will be allowed. Any intervention must be preceded by explorations and archaeological reports that justify the projected work. Restrictions for adaptative re-use apply for this category of essential buildings.

B
PARTIAL
B1. ENVELOPE

Protection of buildings that necessitate preserving and revaluing some of their envelope elements. This protection is applicable when the values to be preserved reside mainly in the typological structure, volume, height, façades, etc., which would be the protected parts. The rest of the building may be affected by rehabilitation actions, as long as they maintain, restore or revalue the aforementioned common elements. Interventions are allowed as long as the values of the elements that necessitated the protection are not lost.

B2. INTERIOR

Protection of interior spaces. Protection of the organization and spatial configuration.

This level protects unique and significant spaces and elements of a building that maintain their own entity such as lobbies, stairwells, decorated rooms, structured spaces, etc. In this case, the interventions must respect and preserve these elements, despite the transformations that may occur in the building.

B3. STRUCTURAL

Protection of construction systems, techniques and materials.

This protection is aimed at the traditional construction elements of the building, which, due to their uniqueness, constitute a historical landmark on the whole, such as walls, ceilings, decorative elements, carpentry, etc. In this case, the interventions must respect and preserve these elements, if possible "in situ", or preserve them as museum pieces.

B4. PUNCTUAL

Protection of specific elements, which can remain in the building, integrated to the new design, or become museum objects.

C
ENVIRONMENTAL

Level of protection for buildings, the value of which lies mainly in the configuration of the urban landscape of notable environmental value.

This level protects fundamentally the façades, to form part of a context of buildings of the same typology that defines a certain environment or urban landscape. In this case, regardless of the work to be carried out, even if it involves the total or partial replacement of the building, it will be necessary to adapt the environment, maintain the typological features of the façades, crowning lines.

D
PRECAUTIONARY

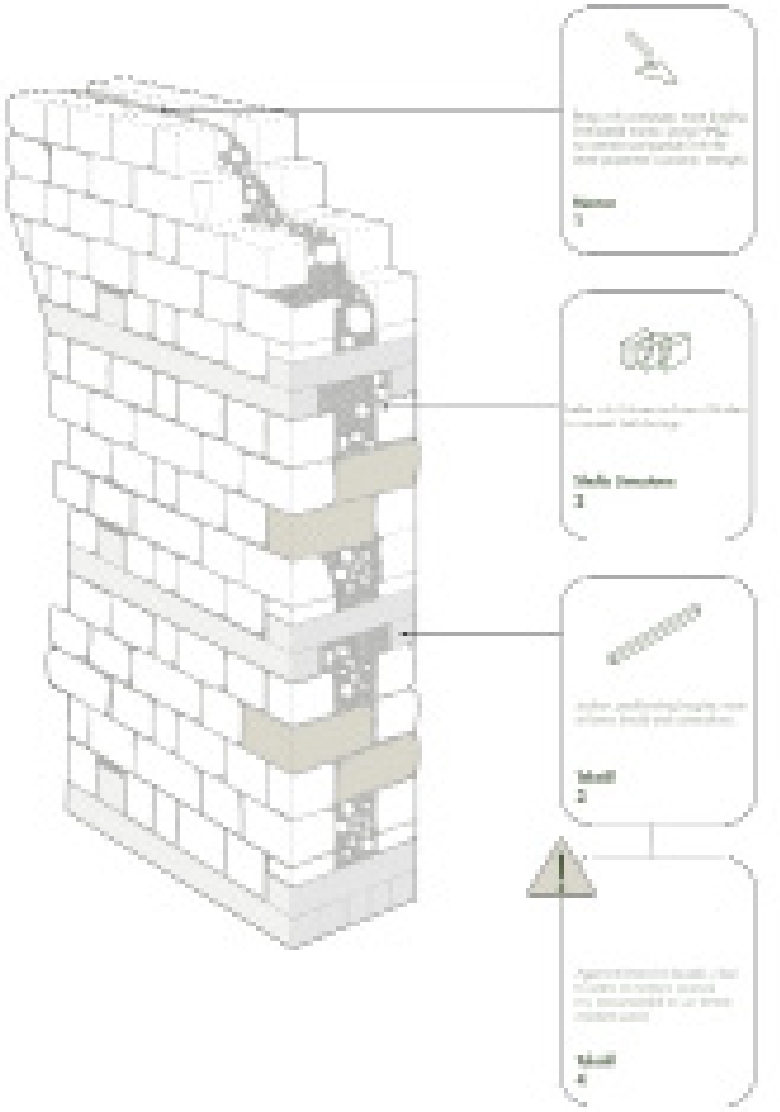
"Integral" protection of buildings or parts of the building that could not be assessed or are not well known, because of limits on the inspection, and that could potentially contain valuable components.

IMPACT OF TECHNICAL REGULATIONS AND TRADITIONAL MATERIALS

Historic buildings come from a time when there technical regulations did not exist or were much looser than current regulations. The rehabilitation and restoration of historic buildings often cannot meet the new demands of today in many ways.

A balance must be struck between compliance with regulations and heritage preservation. With new technologies, improvements can be introduced in terms of structure, accessibility, energy performance and many other issues; these improvements must respect the intrinsic values by which the building has been protected.

The use of traditional construction materials and techniques is a basic premise in all restoration and rehabilitation of protected buildings in Al Balad. The introduction of improvements in its characteristics and behaviour is highly recommended, as long as the original material is not distorted. In this respect, it must be borne in mind that in recent decades there has been a total loss of crafts and craftsmanship, and public structures necessary for thei revival should be created to be able to recover them.

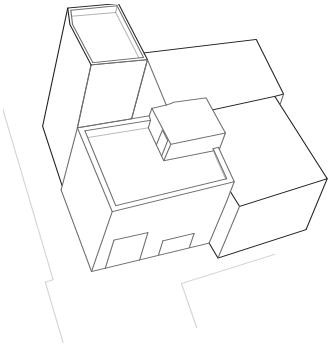


4.6
Assessment, multidisciplinary studies and diagnosis

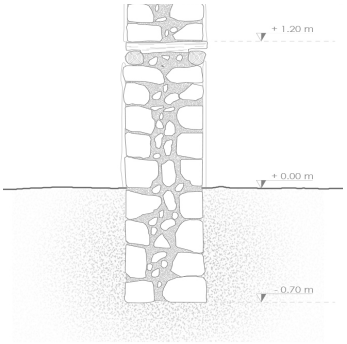
All restoration projects should be preceded by multidisciplinary studies and diagnosis, carried out by experts in architectural and structural conservation approved by JHD.

Each assessment consists of a "report", i.e. an in-depth diagnosis, which has to consider the conditions of:

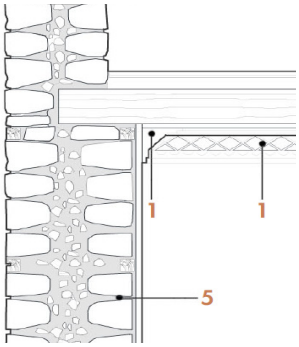
SURROUNDING STRUCTURES



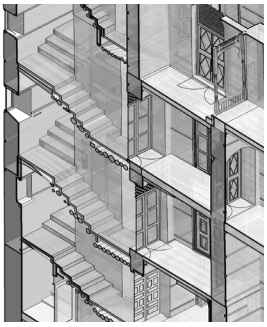
BUILDING FOUNDATIONS & SOILS



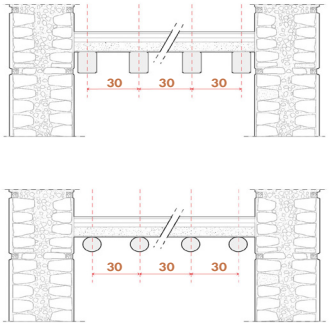
BEARING WALLS



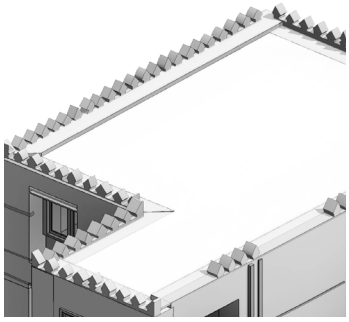
STAIRS & STAIRCASES



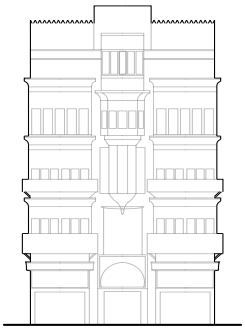
FLOORS & TIMBER BEAMS



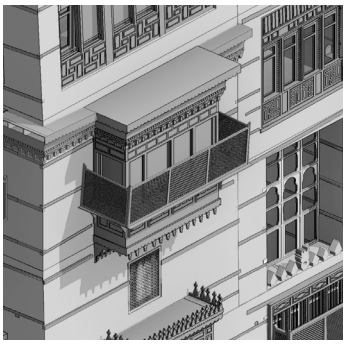
ROOFING



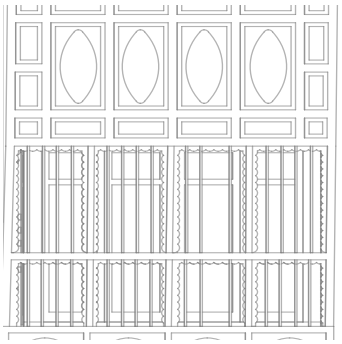
FAÇADES & PLASTERS



JOINERIES



DECORATIVE ELEMENTS




43.0

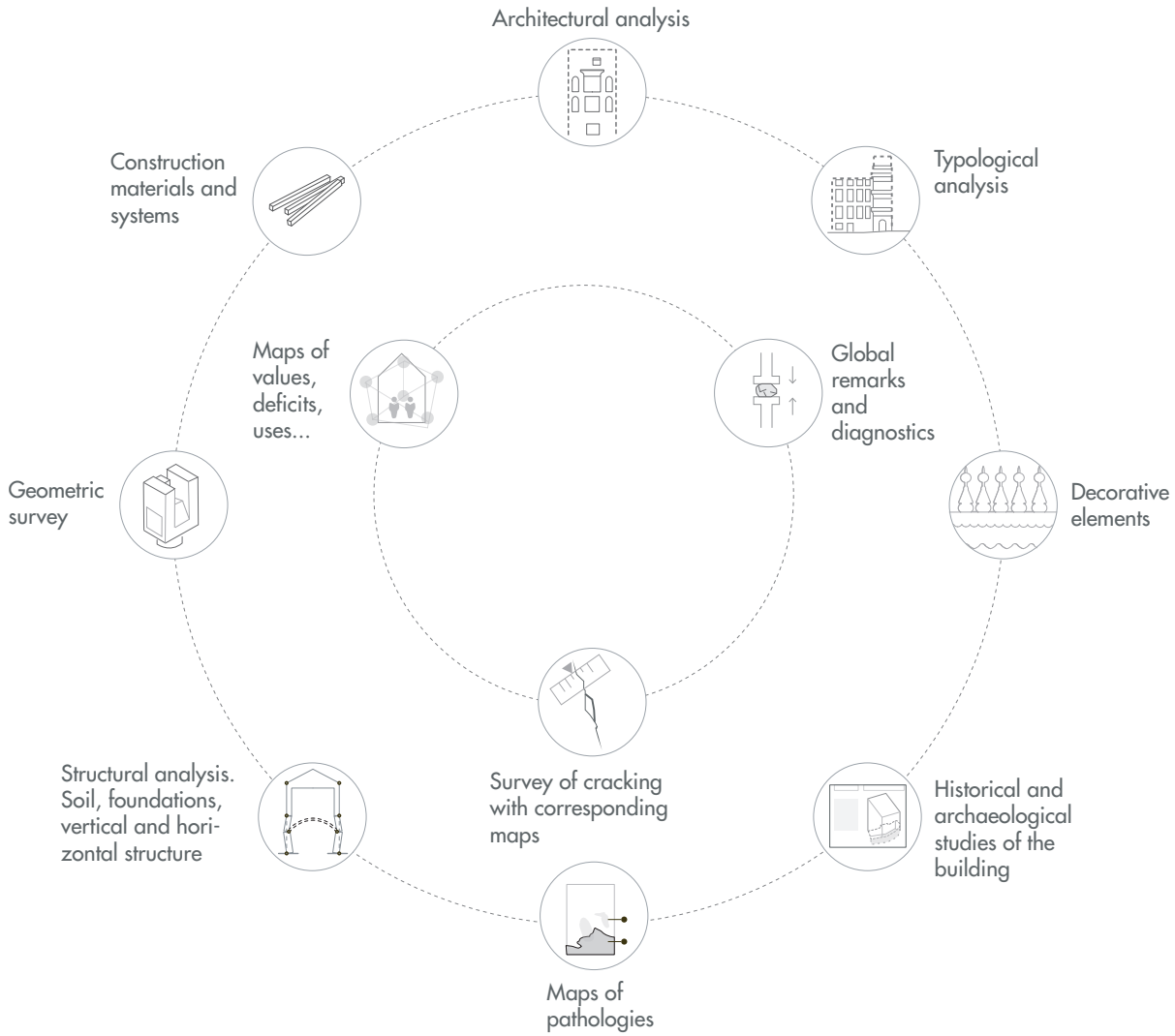
The architectural survey should detail all building elements, their dimensions, their state of conservation and their values, in order to appreciate the building structure, the construction techniques and the valuables components. It constitutes the basis of all conservation projects. An architectural survey and study for restoration purposes should permit to:

- Comprehend the original features and the values associated with the place;
- Document the present condition of the building.

To evaluate the general condition of the building and its stability, the above-listed elements composing the building structure should be considered within a ranking scale, ranging from the most important to the least important.

Only a precise understanding of the current condition of the historic buildings in the nominated property permits to link localized interventions on single houses to a broader enhancing strategy for the historic city. In order to control urban and architectural transformations, the first preliminary step to be carried out is the detailed assessment of the conditions of historical buildings within the nominated property.

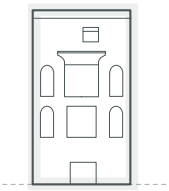
The general criteria and requirements for the multidisciplinary studies and diagnosis of the Heritage Buildings are:



Each diagnosis report must include a detailed survey of the whole building and its elements. This report will allow ascribing each building to a specific category depending on the compared conditions of the above-listed elements.

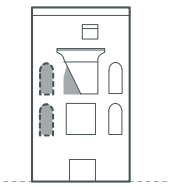
The **FOUR CATEGORIES** in terms of **CONDITION** are:

0. **No damage or superficial damage.** Impose Maintenance



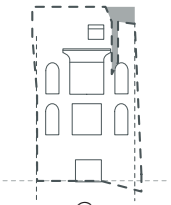
A
Maintenance

1. **Stable or partial damage.** Impose Light Restoration (Conservation)



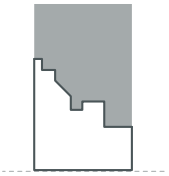
B
Restoration

2. **Unstable, heavy damage or partially collapsed.** Impose Heavy Restoration (Restoration)

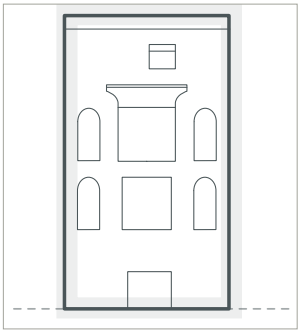


C
Reconstruction

3. **Irreversible damage, totally collapsed or empty Plot.** Impose Reconstruction (Reconstruction)



D
Adaptive reuse



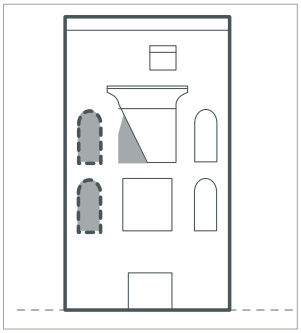
1.

NO DAMAGE OR SLIGHT DAMAGE MAINTENANCE

Buildings can be ascribed to category "0. Good" if they do not have significant damages.

The following "checklist" details the required condition of each element for a building categorized under "0. Good":

- The soil is adequately resistant and capable to support dead loads and live loads; and/or
- Building foundations are stable and vertical direction of the building is not at risk; and/or
- Bearing walls do not have structural problems and cracks; no termites attacks identified; and/or
- Roofing could be affected by slight problems of drainage or seepage; and/or
- Timber beams and floors are in working order or slightly or locally damaged, and they can support security charges; and/or
- Non-structural and partition walls are intact, slightly or partially damaged or affected by minor damages (as superficial cracks); and/or
- Windows and window-frames are intact or partially damaged; and/or
- Plasters are intact or superficially cracked, not affecting the interior of the walls and waterproofing; and/or
- Decorative elements and finishing are intact or partially damaged; and/or
- Surrounding buildings are in good condition or have no interconnection with adjacent structures.



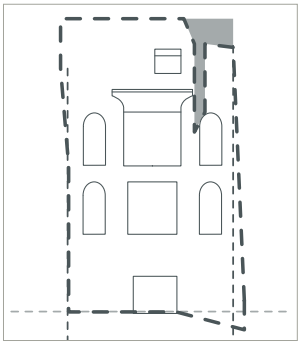
2.

STABLE OR PARTIAL DAMAGE
LIGHT RESTORATION

Buildings can be ascribed to category "1 Acceptable" if they present local structural and non-structural damages but could be considered as overall stable.

The following checklist details the required condition of each element for a building categorized under "1 Acceptable":

- The soil is adequately resistant and capable to support dead loads and live loads; and/or
- Building foundations are stable and vertical direction of the building is not at risk; and/or
- Bearing walls present medium-depth and vertical localized cracks. Minor termite attacks identified; and/or
- Roofing can be affected by important problems of drainage or seepage; and/or
- Timber beams and floors are locally damaged and collapsed (beams are cracked, broken or absent), slightly detached from the bearing walls and do not contribute to stabilize the building structure; and/or
- Non-structural and partition walls are locally slightly bended, with medium- depth fissures and slightly detached from the timber intermediate beams, caused by the bending of intermediate timber floors.
- Windows and window-frames are partially or totally damaged by the bending and cracking of the façades;
- Plasters are extensively cracked, detached or absent, affecting wall stability and waterproofing;
- Decorative elements and finishing are partially or totally damaged;
- Surrounding buildings show stable damages or light interconnection exist with adjacent structures.



3.

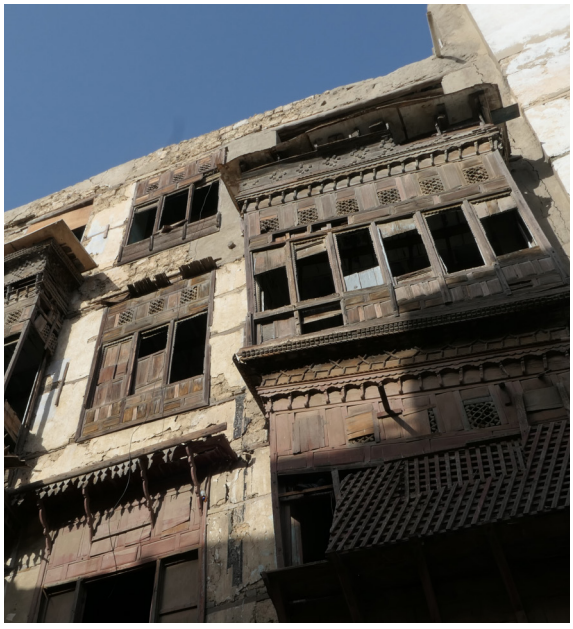
UNSTABLE, HEAVY DAMAGE OR PARTIALLY COLLAPSED RESTORATION

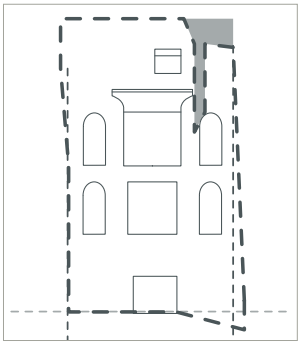
Buildings can be ascribed to category "2 Poor" if they present substantial parts of their structural and non-structural elements with serious damages, and cannot be considered as overall stable, or also is partially collapsed.

The extensive damages or alterations suffered by the historic building make it difficult to recognize and analyse its original plan and features. However, ruins and collapses are such that they do not prevent its restoration.

The following checklist details the required condition of each element for a building categorized under "2. Poor" and first actions to be undertaken:

- Safety measures and consolidation works should be urgently undertaken to avoid collapse;
- Metric survey and architectural analysis to identify all traces of the original features and characteristics of the original construction at collapsed areas;
- Screening and sorting out of original collapsed elements (stones, wood, decorative elements, etc.) that provide information concerning the original features of the building and can be reused in the restoration;
- The soil presents local subsidence which can endanger part of the foundation; and/or
- Building foundations are locally damaged by soils subsidence, affecting the vertical stability of the walls; and/

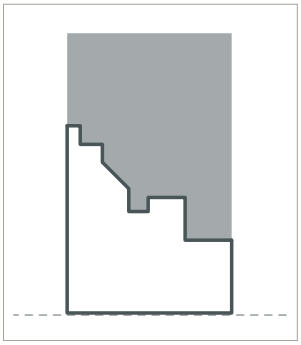




or

- Bearing walls present full-depth cracks caused by soil movements, internal timber floor collapses or extensive termite attacks, affecting building integrity; and/or
- Roofs show serious problems of drainage and seepage, further affecting the structural stability of the building; and/or
- Timber beams and floors are extensively damaged and locally collapsed (beams are cracked, broken or absent), detached from the bearing walls and heavily affecting the building stability; and/or
- Non-structural and partition walls are severely damaged with full-depth fissures, detached from the timber intermediate beams, caused by the bending of intermediate timber floors; and/or
- Roshan, windows and doors are largely or totally damaged by loss of material, termite attacks and by bending and deformation of the wood elements; and/or
- Plasters are extensively detached or absent, affecting wall stability and waterproofing. Most of the original plasters have been replaced by cement ones; and/or
- Decorative elements and finishing are largely or totally damaged or missing; and/or
- Surrounding buildings present unstable damages and a heavy interconnection exist with adjacent structures
- Plasters are extensively cracked, detached or absent, affecting wall stability and waterproofing;
- Decorative elements and finishing are partially or totally damaged;
- Surrounding buildings show stable damages or light interconnection exist with adjacent structures.


Carrier



4.

IRREVERSIBLE DAMAGE, TOTALLY COLLAPSED OR EMPTY PLOT. RECONSTRUCTION

Buildings can be ascribed to category "**3 Very Poor or ruin**" if the historic building are almost totally collapsed and ruins occupy the plot or have already been removed. Only some architectural and structural elements are distinguishable or recognisable and some of the original building materials can be reused.

The following actions must be undertaken for a building categorized under "3 Very Poor or ruin":

- Metric survey and architectural analysis to identify remaining traces of the original features and characteristics of the original construction;
- Screening and sorting out of original collapsed elements (stones, wood, decorative elements, etc.) that provide information concerning the original features of the building and can be reused in the restoration;
- Complete removal of debris and rubbish occupying the plot;
- Archaeological survey to identify the plan of the original building and earlier constructions on the site;
- Diagnosis of the remaining elements and analysis of the possibilities to integrate them on the reconstruction project;
- Reconstruction of a new building according to the specifications provided in the Urban Regulations.

Project workflow and permit process

Chapter

5.

The World Heritage Committee decisions 40 COM 7B.27 (2016) and 42 COM 7B.58 (2018) recommended, to the Saudi Ministry of Culture, the development of an integrated conservation strategy including systematic Heritage Impact Assessment (HIA) studies into the regulatory and management framework. It should be carrying out specific HIAs for all Al Balad projects that may impact on the Outstanding Universal Value (OUV) of the property, in accordance with the ICOMOS Guidance on HIAs.

5

5.1
Intervention project steps and required documentation

A PLAN OF WORK

In order to ensure a striking distinction between different projects, conservation activities should be designed to achieve long lasting solutions following a flexible approach. The definition of criteria and clear outputs as a guide of the entire project workflow is key to achieve a successful plan. From small to big-sized projects, a common understanding and a clear statement of objectives should be achieved by all people involved.

The presented project cycle is a group of connected activities and results that refers to the RIBA plan of work 2020 with a close-up on Conservation design practice. Regardless of the size of the project and its complexity, the following workflow is intended to maintain a flexible but comprehensive approach that covers all the fundamental steps and allows future insights and developments without affecting the general structure of the conservation project.

The RIBA plan of work keeps pursuing its first goal to bring greater clarity in the process, and after continuous updates, it is still efficiently adopted by architects as a working tool. This document is a useful reference that describes what outcomes the project team should achieve at each stage.

DEFINITION OF THE ROAD MAP

The road map summarizes the 8 Project Stages and the associated Project outcomes codified by RIBA in order to highlight the importance of a linear connection among the different tasks and the potential impact on the outcomes when each step acts independently. Regardless of the source plan goals, addressed to new construction, particular emphasis is paid to decline and adapt principles and strategies towards the conservation field.
The following contents, regarding documents, activities and drawings, are required for all applicants pursuing Built Heritage projects within the context of Al Balad.

Before deepening with the project steps, it is important to mention a few core tasks that are extended to all the phases:

- Project **stakeholders**' identification: it includes the project team, client team, local community, researchers and specialists involved since the earliest stage, building control teams and urban departments.
- **Documenting** each decision and work schedule development.
- **Cost plan** strategy development and update: in all cases, to develop, implement, and monitor each phase will require financial resources.
- **Sustainable goals** development: verify local sustainability requirements and outcomes for internal environmental conditions including comfort issues; consider intangible sustainable values to support the community involvement; determine responsible sourcing targets for the building life cycle connected to the building systems.

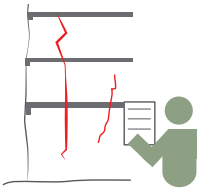
STAGE 0:
THE PROJECT INITIATION

This first phase involves understanding the situation in which the project will take place and clearly defining the issue that is to be solved and the reasons that move each action. The initiation of the project explores objectives, problems and opportunities, and finally the stakeholders' identification in a strategic plan. It involves undertaking a wide appraisal of the site and its context concerning as-found conditions, different designations, historical background, pre-existing structures, tangible and intangible values and last but not least, reviewing the existence of archival documents.

Stage 0 outcomes:

* Identification of the area and its physical and cultural boundaries;
* Identification of current plans within the covered area;
* Identification of data of cultural heritage assets in the selected area;
* Assessment of state of the heritage;
* Identification of protection measures;
* Review of Building regulation;
* Review of Former drawings, historical and legislative situation maps.
* Identify a working team;
* Demonstrate the historical character of the area of analysis (collect information about the site's origin and development/ changes);
* Identify internal and external stakeholders;
* Set up a first draft of the project schedule;
* Allocate preliminary financial resources;
* Articulate specific objectives for each conservation target.

STAGE 1:
THE DIAGNOSIS

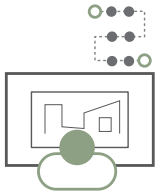


This phase comes before the design phase. It requires the preparation of the project strategies and its impact. It involves the evaluation of the building's condition, to assist in determining to what extent the physical phenomena effectively represent and express its historical significance. It recommends the use of feasibility studies to test the preliminary programme and its costs. The final result is usually captured in the form of a report or a management plan of the site that supports informed conservation decisions.

Stage 1 outcomes

* Document the site: image-based and range-based surveys;
* Conduct building analyses concerning structural and architectural elements (tests on samples included);
* Verify existing management in place;
* Correlate analysis-interpretation overlapping different data;
* Prepare structural reports;
* Prepare evaluation reports of physical assets/management plan of the site;
* Define urgent or long-term conservation measures;
* Prepare cost estimates for various conservation options;
* Prepare physical condition drawings;
* Provide photographic documentation (as found and ongoing).

STAGE 2:
THE ARCHITECTURAL CONCEPT

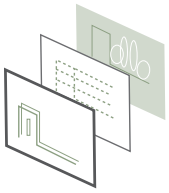


Corresponds to a first Architectural Concept that should outline the objectives and requirements contained in the project initiation, aligned to the project budget (a first cost plan). The development of drawings at different scales based on accurate surveys, to be used for further building analyses, provides a general overview on the site and the proposed concept.

Stage 2 outcomes:

* First cost plan: define initial parameters;
* Prepare stage Design program: low to high scenarios;
* Prepare proposal reports;
* Undertake design reviews with client and other stakeholders;
* Building regulations compliance;
* Prepare Intervention/proposal drawings:
  * Location plan;
  * Site plan;
  * Floor plans, elevations, sections 1:200;
  * 2D, 3D views of architectural concept.

STAGE 3:
THE ARCHITECTURAL DESIGN

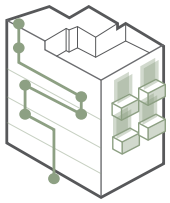


Regards the Architectural design more in detail and engineering analyses in order to verify the project impact and minimize harm to the historic fabric. It involves the integration of conservation principles and spatial design requirements and the submission of a project schedule, in order to assign different tasks to the team specialists. Cost plan has to be updated, parallel to the design development.

Stage 3 outcomes

* Update Project schedule;
* Update Cost plan after cost exercises based on the architectural concept;
* Prepare design studies and engineering analyses to test technical solutions for building conservation and reduce any risks to health and safety;
* Prepare First fire safety strategy;
* Prepare Risk management design;
* Submit Planning application;
* Prepare project drawings:
  * Site plan;
  * Floor plans, elevations, sections 1:100/1:50;
  * 2D, 3D views of the project.

STAGE 4:
THE TECHNICAL DESIGN

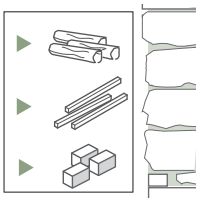


Concerns the Technical Design and it includes all the project information from the final design to manufacture and construction, including final specifications and material sourcing for building conservation. The approach that the project team can take when dealing with historic buildings, is to adopt an attitude for the past based on the variety of opportunities and problems that will be encountered. For this reason, it is necessary to evaluate alternative proposals and prepare different cost scenarios. Cost plan with items unit cost schedules and a full bill of quantities, has to be updated.

Stage 4 outcomes:

* Update project schedule;
* Submit Building regulations;
* Updated Cost plan: bill of quantities;
* Update Fire safety strategy aligned to the building regulation;
* Prepare project reports;
* Prepare a Construction phase plan: manufacturing and construction information (e.g. materials sourcing);
* Prepare technical drawings 1:20 -1:1 scale.

STAGE 5:
THE CONSTRUCTION

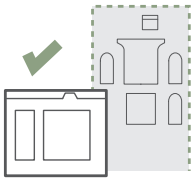


This stage goes into the detail of Manufacturing and Construction. The main tasks regarding the site queries, work inspection, monitoring progress and regular reports on construction quality are defined in the construction team. It envisages any additional actions for protecting the building during the construction process including temporary solutions. Before undertaking building, conservation works, the working team has to be informed of the building values. The workflow process can be refined through the use of samples and any variations have to be monitored and reported in the contract and the cost plan.

Stage 5 outcomes:

* Prepare reports;
* Respect and monitor the construction program;
* Provide construction quality inspection;
* Finalize site logistics;
* Update Technical drawings related to the building systems and the construction;
* Document each intervention.

STAGE 6:
MONITORING AND MAINTENANCE

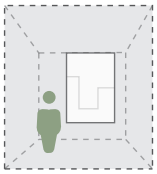


This stage corresponds to the building contract conclusion. It ensures the final result with a view to the future building performance standards and certifies the practical completion. Monitoring and evaluation strategies are delivered in the Maintenance program.

Stage 6 outcomes:

* Verify project outcomes;
* Evaluate Post occupancy;
* Prepare a Maintenance program;
* Submint final certificates;
* Produce final reports.

STAGE 7:
USE



Produces ongoing occupancy feedback and determines a post use evaluation. Derived lessons learned are fed back to all stakeholders in order to layer recommendations for future conservation projects. It is necessary to schedule future inspections and carry out maintenance, reporting any repairs. Knowledge shared and performance outcomes should be published where possible.

NOTES

[1] *RIBA Plan of work 2020*. The RIBA Plan of Work organises the process of briefing, designing, delivering, and maintaining, into eight stages. It is a framework for all disciplines on construction projects and should be used solely as guidance for the preparation of detailed professional services and building contracts.

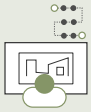
Plan of work
Road map

Project development

0 Project initiation

1 Diagnosis
Evaluation and interpretation

2 Architectural Concept



	0 Project initiation	1 Diagnosis Evaluation and interpretation	2 Architectural Concept
Definition and objectives	The initiation of the project explores objectives, problems and opportunities, and finally the stakeholders' identification in a strategic plan. It involves undertaking a wide appraisal of the site and its context concerning as-found conditions, different designations, historical background, pre-existing structures, tangible and intangible values and last but not least, reviewing the existence of archival documents.	This phase involves the evaluation of the building's condition, to assist in determining to what extent the physical phenomena effectively represent and express its historical significance. It recommends the use of feasibility studies to test the preliminary programme and its costs. The final result is usually captured in the form of a report or a management plan of the site that supports informed conservation decisions.	Corresponds to a first Architectural Concept that should outline the objectives and requirements contained in the project initiation, aligned to the project budget (a first cost plan). The development of drawings at different scales based on accurate surveys, to be used for further building analyses, provides a general overview on the site and the proposed concept.
Main core tasks	Evaluate existing documentation: -Define the site and its physical and cultural boundaries; - Review the presence of previous projects; - Review the Building regulations; - Collect data of cultural heritage assets in the selected area; - Identify historical values and constraints. - Formation of the working team; - Identify internal and external stakeholders; - Draft a first schedule of goals; - Allocate preliminary financial resources; - Define protection measures.	Document the site: image-based and range-based surveys; Conduct building analyses concerning structural and architectural elements; Verify existing management in place; Correlate analysis-interpretation overlapping different data; Structural reports; Evaluation reports of physical assets/management plan of the site; Define urgent or long-term conservation measures to be put in place or tested; Prepare cost estimates for various conservation options.	First cost plan: identify initial parameters; Prepare stage Design program: low to high scenarios; Prepare proposal reports; Undertake design reviews with client and other stakeholders; Building regulations compliance.
Graphic outputs	Collect former drawings, historical and legislative situation maps.	Prepare: - as-found detailed drawings; - physical condition drawings. Produce a photographical documentation (as found and ongoing).	Intervention/proposal drawings: - Location plan; - Site plan; - Floor plans, elevations, section 1:200; - 2D, 3D views of the concept.

PRE-EMPTIVE GUIDANCE

- Building inventory (values and condition)
- Guidelines
- Handbook

BUILDING PERMITS FOLLOW UP

Checklist compliance

Checklist compliance

3 Architectural design

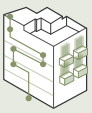
Regards the Architectural design more in detail and engineering analyses in order to verify the project impact and minimize harm to the historic fabric. It involves the integration of conservation principles and spatial design requirements and the submission of a project schedule, in order to assign different tasks to the team specialists.

Update Project schedule;
Update Cost plan after cost exercises based on the architectural concept;
Prepare design studies and engineering analyses to test technical solutions for building conservation and reduce any risks to health and safety;
Prepare a first Fire Safety strategy;
Identify a Risk management design;
Submit Planning application.

Project drawings:
- Location plan;
- Site plan;
- Floor plans, elevations, section 1:100/1:50;
- 2D, 3D views of the project.

Checklist compliance

4 Technical Design



The Technical Design includes all the project information from the final design to manufacture and construction, including final specifications and material sourcing for building conservation. The approach that the project team can take when dealing with historic buildings, is to adopt an attitude for the past based on the variety of opportunities and problems that will be encountered.

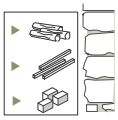
Building regulations submission;
Material sourcing - technical sheets;
Updated Cost plan: bill of quantities;
Fire safety strategy aligned to the building regulation;
Project reports;
Building regulations submission;
Construction phase plan: manufacturing and construction information.

Technical drawings related to building systems and construction,1:20 - 1:1.

Checklist compliance

HERITAGE COMMITTEE

5 Construction

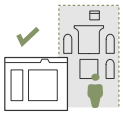


This stage envisages any additional actions for protecting the building during the construction process including temporary solutions. Before undertaking building, conservation works, the working team has to be informed of the building values. The workflow process can be refined through the use of samples and any variations have to be monitored and reported in the contract and the cost plan.

Reports on progress;
Monitoring of construction program;
Construction quality inspection;
Finalized Site logistics.

On going documentation for each intervention (pictures, drawings).

6-7 Monitoring and Maintenance Use



This stage corresponds to the building contract conclusion. It ensures the final result with a view to the future building performance standards and certifies the practical completion. Monitoring and evaluation strategies are delivered in the Maintenance program.
Derived lessons learned are fed back to all stakeholders in order to layer recommendations for future conservation projects.

Project outcomes verification;
Post occupancy evaluation;
Maintenance program;
Certificates of submission;
Final reports;
Users' feedbacks.

WORKS FOLLOW UP

5.2
The Heritage Impact Assessment (HIA) as preventive approach

Heritage impact assessment is a structured process that ensures taking into account the significance of the historic asset when developing or designing proposals for change exists. It is a core part of the design process, which tests whether the proposals for change in Al Balad are appropriate by assessing their impact on its Outstanding Universal Values (OUVs) significance. It helps to ensure that any changes use the principles of good design to sustain or enhance the values of the historic centre. Responding to the recommendations of the World Heritage Committee, whenever an intervention will be made that may affect the OUVs recognized by UNESCO, considering the Criteria, the Authenticity and the Integrity of Al Balad, preventive action must be taken, conducted by a Heritage Impact Assessment study. HIA is a prevention tool to identify possible problems in the loss of heritage value that will then be irreversible.

The results of the HIA should be summarised in a Heritage Impact Statement that will give decision makers the information they need to understand the reasons for the proposal and to weigh up the risks and benefits. Robust information, available from the outset, can speed up decisions, reduce costs and lead to better overall design. The elaboration of a Heritage Impact Assessment requires appropriate and qualified experts with experience (accredited by the JHD or Jeddah Municipality) to carry out screening, scoping and the assessment that informs the Heritage Impact Statement.

The Applicant/Potential Developer must employ and pay for the accredited experts in Heritage Impact Assessment. JHD has suitably qualified personnel to act as experts and to give screening and scoping opinions, and ultimately to review the Heritage Impact Statement and decide on whether the development can proceed.

WHEN IS THE HIA NEEDED ?

The HIA should begin before starting planning proposals for change to the historic asset. Change can include repair, renewal, restoration and reconstruction, new work or alteration, and demolition.

The assessment process shall help in the development of proposals, identify alternative approaches and lead to improvements in the planning and design. This means having a clear plan from the outset. Once the objective is identified, it is a good idea to begin with the HIA before starting planning a proposal. The assessment process can be used to help in the understanding the significance of the historic asset and identify the most appropriate way to meet the objective using good design principles to sustain or enhance the historic asset. The earlier the assessment process starts, the more useful it is likely to be.

In general, all projects and interventions within the core zone and buffer zones require the implementation of an HIA, at the relevant scale as appropriate. In this sense, we must consider one or more of the options below:

- Restorations. Modifying the appearance of the building (invasive or not);
- Reconstructions;
- Adaptive reuse;
- New constructions;
- Urban development proposals;
- Actions in the environment that may alter the image of the historic area.

WHAT SHOULD BE INCLUDED IN A HIA ?

The HIA should consider sufficient information to enable both the significance of the asset and the impact of change to be understood. It should be proportionate both to the significance of the historic asset and to the degree of change proposed.

In the event of a small change that is likely to have only minimal impact, a short assessment that focuses on the part of the historic asset that will be affected, with a brief explanation of how it relates to the asset as a whole, will be sufficient.

If a more extensive change is proposed or the historic asset is especially important, a more detailed assessment should be done. This will need to include detailed information about the significance of the asset as a whole and a thorough explanation of the impact of the proposed changes. In cases which propose potentially invasive changes, especially to complex historic assets of high significance, the HIA will need to be more comprehensive and may need additional reports, such as an archaeological evaluation, a structural survey or others.

It is advisable to engage a qualified and competent expert to conduct the HIA and to write the Heritage Impact Statement.

The JHD authority will be able to advice on the scope of the HIA for an application for Al Balad. Early discussions will help to identify whether further investigation is needed to establish the significance of the historic asset and understand the impact of change, for example, through:

- Detailed historical research, recording or archaeological investigation;
- Surveys on condition, structural and environmental performance;
- A method statement for repairs or demolition;
- Details of protection to be given to special features during work.

It is also important to remember that when considering any changes to a historic asset the proposals should encourage a culture of inclusion and provide access to the widest possible range of people. This means that it is good practice to think about access issues early in the HIA and consider what may be necessary to achieve an acceptable level of access, especially people with reduced mobility.

HIA METHODOLOGY

ICOMOS and UNESCO published Guidance on Impact Assessments for World Heritage Properties with the purpose to offer guidance on the process of commissioning HIAs for World Heritage properties, in order to evaluate effectively the impact of potential development on the Outstanding Universal Value (OUV) of properties.

The Methodology should be clear, simple, versatile, objective and systematic, which avoids any subjectivity. The implementation of a HIA should be based on a permanent monitoring of the different stages of drafting the project and carrying out the work, if applicable. This means that there will be an interaction between the developer, the designer and the JHD office, from the outset, which will clearly establish the limits that the preservation of OUVs requires in each case, and avoid unnecessary costs and irreversible damage.

The basic stages of Heritage Impact Assessment, whatever the size and scope of the project, are:

1

EXPLAINING THE OBJECTIVES AND WHY CHANGES ARE DESIRABLE OR NECESSARY

The HIA should explain what the proposed works are intended to achieve and why they are desirable or necessary.

2

UNDERSTANDING THE SIGNIFICANCE OF THE HISTORIC ASSET

The HIA should show that the significance of the asset has been taken into account by including a statement of the OUV. This should refer to the values of the asset as a whole and to the specific part that will be affected by the changes.

3

IDENTIFYING THE PROPOSED CHANGES

The HIA should describe the proposals, including the design principles and concepts, which gives enough information about the proposed work. Drawings will provide useful supporting information, illustrating the existing and ongoing situation.

4

ASSESSING THE IMPACT OF THE PROPOSALS

The HIA should demonstrate that the potential impact has been considered showing how the proposed work will sustain or enhance the OUV of the historic asset, including benefits and any harm.

5

SETTING OUT THE REASONING BEHIND THE PROPOSED OPTION,

including the design concepts and principles using the principles of good design and management.
The HIA should support the best solutions with the minimum necessary intervention.

6

IDENTIFYING MITIGATION MEASURES

The HIA should identify the mitigation measures, which requires first avoiding potential negative impacts and secondly reducing unavoidable residual impacts through mitigation measures.

Once the stages 1 and 2 are clear, stages 3, 4, 5 and 6 may be repeated until find the best proposal that meets the objective and has the maximum benefit for the historic asset.

ASSESSING POSITIVE AND NEGATIVE IMPACTS

The magnitude of impacts should be judged considering their direct and indirect effects and whether they are temporary or permanent, reversible or irreversible. The cumulative effect of separate impacts should also be considered.

The magnitude of impact, either positive or negative, can be ranked as:

- No change;
- Negligible change;
- Minor change;
- Moderate change;
- Major change.

As change or impacts may be adverse or beneficial, there is a nine-point scale with "neutral" as its centre point:

- Major beneficial;
- Moderate beneficial;
- Minor beneficial;
- Negligible beneficial;
- **Neutral;**
- Negligible adverse;
- Minor adverse;
- Moderate adverse;
- Major adverse.

The impact of a proposed project will need to be assessed specifically for the attributes, which embody the Outstanding Universal Value (OUV) of a World Heritage property in order to meet the requirements of the World Heritage Committee.

ANALYSIS TOPICS

The HIA drafting team must be multidisciplinary, with experts (accredited by the JHD or Jeddah Municipality) in all issues to be dealt with independently to achieve maximum objectivity. It is a matter of making a holistic assessment of all possible impacts:

- Analysis of the need for the proposal. Objectives and reasons that have led to the project;
- Analysis of the technical feasibility of the proposal. Assessment of use, needs and requests to assess whether the building can meet them. Not all buildings are used for everything and have intrinsic limitations, which would otherwise lead to the destruction of values;
- Detailed historical analysis;
- Analysis of the values of the archaeological heritage;
- Analysis of the risk of destruction architectural elements characteristic of traditional Jeddah architecture;
- Analysis of applicable legislation and regulations;
- Analysis of the state of conservation of the asset and the benefits that the intervention will bring;
- Analysis of the impact on the morphology of the City;
- Analysis of the visual impact of the restoration or new construction;
- Analysis of the visual impact of outdoor facilities;
- Environmental impact analysis;
- Analysis of the impact on nearby heritage elements;
- Analysis of social perception;
- Analysis of the impact on symbolic, intangible values…);
- Analysis of indirect impacts;
- Reflection on what happens if the project is not done. Is it better or worse, for the preservation of OUVs?.

The result of the HIA must be constructive and provide reasonable and reasoned recommendations.
See this summary table, as an example:

Proposed work	Objectives	Significance of affected fabric	Beneficial impact	Harmful impact	Proposed solution
Building extension to a listed vernacular building.	To make the building more suitable for XXI century, creating needed additional space.	The building retains original layout and detail as local traditional architecture.	Enables the building to have a viable use.	Design of extension increase the global volume of the building. The use of contemporary materials is visually intrusive and compromises the original values.	Considering the limits established by the Guidelines, the extension could be rear of the building, on a neighbouring building or in the roof, keeping new roofline lower, so that extension is not visible from the street.
Installing solar panels on the roof of a listed building.	To improve energy efficiency.	The building survives substantially as local traditional architecture.	Enhances the sustainability of the property.	Solar panels will be an intrusive element in the overall design.	Place solar panels not visible from the street.

Summary of the Heritage Impact Assessments (Example).
These summaries give an overview of the proposed work, but they are not sufficient for getting approval for applications.

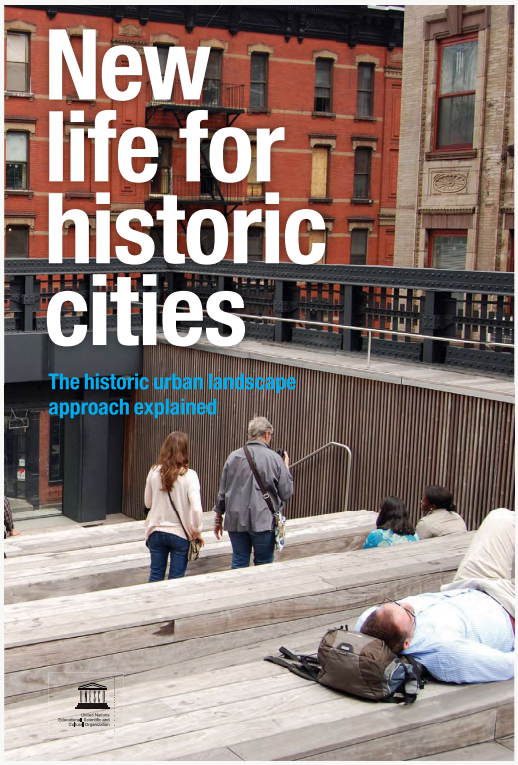
5.3
The Historic Urban Landscape (HUL) as innovative approach

The UNESCO 2011 Recommendation on the Historic Urban Landscape (HUL) proposes a new perspective on cities urban development and heritage conservation. The multi-layered urban landscape (history, culture, nature, heritage, etc.) is a major economic and social factor to create a liveable, viable, human-centred city. Consequently, the urban heritage conservation strategies have to support public and private actions aimed at preserving and enhancing the quality of the human environment, by considering the interrelationships of their physical forms, their spatial organization and connection, their natural features and settings, and their social, cultural and economic values.

The Historic Urban Landscape approach addresses the policy, governance and management concerns involving a variety of stakeholders, including local, national, regional, international, public and private actors in the urban development process. Mechanisms and tools are needed to manage physical and social transformations, balancing conservation and sustainability in the short and long terms, and to ensure that contemporary interventions are harmoniously integrated with heritage in a historic urban fabric.

The Historic Urban Landscape approach implies the application of a range of traditional and innovative tools, involving the different stakeholders, might include:

- Civic engagement tools;
- Knowledge and planning tools;
- Regulatory systems;
- Financial tool.



New life for historic cities: The historic urban landscape approach explained, World Heritage Centre, 2 July 2013.

Intervention Guidelines

Chapter

6.

It introduces the criteria for interventions on Preventive Consolidation, Maintenance, Restoration and Reconstruction projects, and Adaptive Reuse.

6

6.1
Different Types of Interventions

All architectural projects in Historic Jeddah will fall into one of the following categories:

Temporary consolidation measures	PREVENTIVE CONSOLIDATION	
Permanent intervention projects	0. MAINTENANCE	1. LIGHT RESTORATION
	2. RESTORATION	3. RECONSTRUCTION

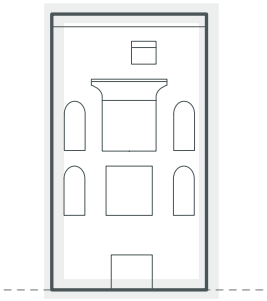
TEMPORARY CONSOLIDATION MEASURES

Urgent and preventive consolidation measures

These measures could be implemented for stable or unstable damage when assessment visits or other reasons detect problems or dangerous situations in a building, acting as:

- Need of an urgent and immediate implementation of safety measures and consolidation works that should be urgently undertaken to avoid collapse;
- When restoration cannot be undertaken immediately, temporary measures must be implemented in a way that does not hamper or prevent subsequent permanent works;
- Interventions that aim to prevent falls, stabilizing evolutions, without modifying the original structure and components - provisional or temporary measures such as shoring - should be reversible or embedded within the future restoration works.;
- In such cases it can be useful to temporarily 'freeze' all building and reconstruction activities, or to allow only provisional emergency measures, such as repairs to safeguard building structures;
- For consolidation works, the wooden horizontal connections (taklila), at all levels, must be maintained as essential structural elements for overall stability.

PERMANENT INTERVENTION PROJECTS

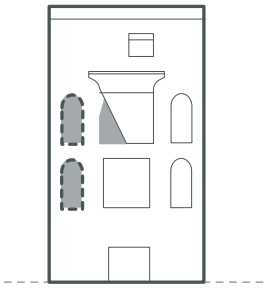


0. **Maintenance**

No damage or slight damage

Interventions that aim to maintain a building in correct conditions of health and decoration, without altering its structure and distribution, or hiding or modifying constructive or morphological values. Buildings in use and without change of use after works.

- All buildings need maintenance after rehabilitation, restoration or reconstruction works;
- Be careful in the use of the buildings; monitoring pathologies, degradation of materials, moisture, cracks and other problems are part of the maintenance;
- Once dysfunctions are detected, preventive action must be taken to prevent them from degrading the building and its functions;
- Maintenance must be made by the use of compatible materials and respectful of original qualities and properties of buildings;
- Think about the interest of a building maintenance team at the scale of Al Balad.

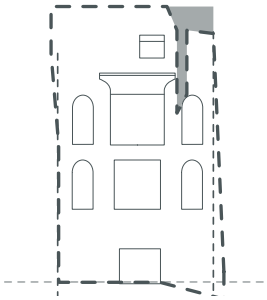


1. **Light Restoration**

Stable or partial damage

Interventions aimed at adapting, improving or updating living conditions or use, while maintaining morphological characteristics. It includes concepts of modernization, adaptation or reuse. Buildings in use or abandoned ready to be restored for same or new use after works.

- Local structural and non-structural damages but the building could be considered as overall stable;
- Restoration projects should be preceded by multidisciplinary studies and diagnosis, carried out by experts in architectural and structural conservation;
- Restoration must be carried out following the diagnosis results and the needs for the use of the historic building;
- The detailed sequence and criteria for restoration works are outlined in the **chapter 6.4 Guidelines for restoration projects**.

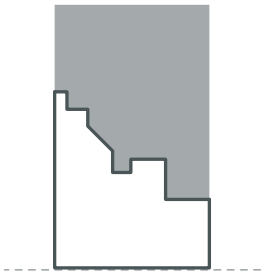


2. **Restoration** (Heavy)

Unstable, heavy damage or partially collapsed

Interventions that aim to prolong the existence of an asset, improving its physical condition, restoring it or any of its parts to their original condition, including works of consolidation or partial demolition, justified by the restoration. In parallel, make a historical reading of the various stages of the element. Buildings abandoned ready to be restored for initial or new use after works.

- Substantial parts of the building, structural and non-structural elements, have serious damages and the building cannot be considered as overall stable;
- The building is partially collapsed;
- Metric survey and architectural analysis to identify all traces of the original features and characteristics of the original construction;
- Screening and sorting out of original collapsed elements (stones, wood, decorative elements, etc.) that provide information concerning the original features of the building and can be reused in the restoration.
- Restoration projects should be preceded by multidisciplinary studies and diagnosis, carried out by experts in architectural and structural conservation;
- Restoration must be carried out following the diagnosis results and the identification of needs for the use of the historic building.



3. **Reconstruction**

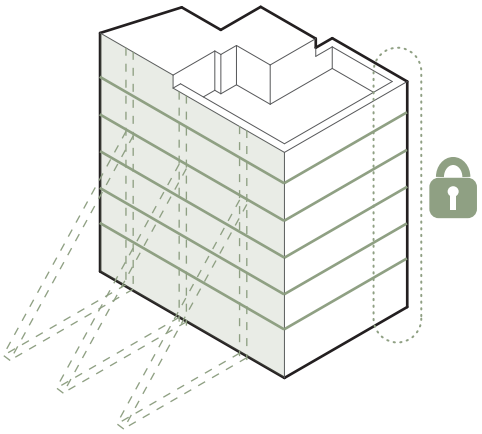
Irreversible damage, totally collapsed or empty plot

Interventions aimed at the total or partial replacement of a pre-existing building in the same place, reproducing its morphological characteristics through the reproduction of the original property. Buildings abandoned, collapsed or empty plot, to be reconstructed following the original typology.

- Based on the assessment, reconstruction can be carried out only when, following the assessment, the historic buildings cannot be restored;
- When the collapse of the historic building is partial, a partial reconstruction must be considered;
- Total or partial reconstruction can be done using traditional and new materials but always avoiding false historic;
- Before any (total or partial) reconstruction, an archaeological survey of the site is mandatory. Recognised archaeologists must be in charge of this work to be carried out according to international standards;
- If the archaeological survey identifies previously unknown major vestiges, an archaeological excavation will be planned and the reconstruction project halted until its completion;
- Reconstruction has to follow strict regulations at both urban and architectural levels.

6.2
Guidelines for urgent and preventive Consolidation Measures

Interventions to prevent falls, stabilizing evolutions, without modifying the original structure and components; these could be provisional or temporary measures to prevent collapse, such as shoring and propping in a way that can be reversible or embedded within the future restoration works.



MORE SPECIFICALLY:

- Follow-up cracks, signs of decay, etc;
- Be carefully not to modify the original structure;
- Be sure about the reversibility of the preventive intervention;
- Maintain wooden connections at all levels – essential for overall stability.


AL-MIRA

6.3
Guidelines for Building Maintenance

The general criteria for the maintenance are the permanent action of monitoring and controlling the building to ensure its proper functioning and performance. Of course, there are elements, such as facilities that require more continuous care and others, such as structural elements that have greater durability. Although it may seem like a very simple task, good maintenance requires prepared and experienced people with a good knowledge of the buildings, the requirements of the users and its architectural and constructive characteristics.

Given the uniqueness and value of the site, Al Balad, the JHD could consider creating a team of experts responsible for maintaining the building complex, as they have been restored or reconstructed. Whether it is an internal or outsourced team, at the scale of Al Balad, they would take the responsibility to prevent the process of decay of a building, maintain structural stability and safety as well as ensuring continued building compliance against statutory requirements. However, a poorly maintained building can create big problems such as degradation, reduce performance and affect the health and safety of individuals around the area.

We can consider two different types of Maintenance of the buildings and all of them usually coexist in a consistent maintenance strategy:

- Planned and preventive Maintenance;
- Reactive Maintenance.

MORE SPECIFICALLY:

- Buildings in use and without change of use after works;
- Intervention without altering the structure of the building or modifying constructive or morphological elements;
- Monitoring pathologies, degradation of materials, moisture, cracks and others issues;
- Use of traditional materials and respectful of original qualities and properties of building;
- Regular checking and maintenance of all installations and protective layers.


المخزن المتقدم

6.4
Guidelines for Restoration Projects

DEFINITION OF RESTORATION

According to international standards, **Restoration concerns** all the actions directed to facilitate the appreciation, the understanding and the use of a single stable item that has lost its significance or function because of past alterations or deterioration.

The Heritage Impact Assessment permits to evaluate each building, understand its current physical condition and identify the risks for the values. It should be the first step for each intervention and should always be conceived as a case-by-case study leading to a purposely-designed restoration project. This chapter explains rules on repair, restoration, replacement, and re-creation work, helping to submit a fully completed permit application conforms to Rules.

RESTORATION APPROACH IN AL BALAD

The buildings of Jeddah, historically, have had of 2 or 3 levels. During the later ninetieth and twentieth century there was a densification of the city "intramuros" and many buildings grew to 5 or 6 floors. Likewise, open courtyards were often closed, significantly reducing the quality of internal natural ventilation systems in Al Balad's vernacular architecture. This is one of the values for criteria ii and integrity pointed out as an argument for the city's inscription on the UNESCO World Heritage List. Consequently, the rehabilitation and restoration interventions must avoid a greater densification of the buildings and, if possible, recover the open ventilation courtyards occupied in the newly built space.

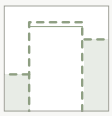
The interventions of restoration, rehabilitation, extension, and in a very special way, the demolitions and reconstructions will be conditioned to elaborate a documentary evidence of historical and present situation (drawings and photographic) in order to guarantee the permanence of its historical memory.

At a larger scale, the accurate restorations of buildings should contribute to the preservation of the whole urban fabric. Each action of restoration aims to maintain and safeguard the Historic Urban Landscape of Jeddah considered as a living cultural environment.

To this aim, the interventions should consider the following:

Restoration projects and works should be preceded by multidisciplinary studies and diagnosis, accompanied by an archaeological and historical study, taking into consideration the results and the needs for the new uses.

Restoring a building can never lead to its demolition / dismantling, in whole or in part, to rebuild it as it was. This should be considered a reconstruction and would be an unacceptable attack on the authenticity of the building. Current restoration techniques allow the preservation of all the valuable components of a building without the need for its demolition. Only disassembly of localized structural elements, carpentry and other removable parts could be accepted.



Interventions may not alter the appearance of buildings or increase the volume built in terms of volume, height, depth or width.
In particular, it is forbidden:
- To add flats, although the alignment recedes in relation to that of the street or the inner courtyard between the block of houses.
- To modify the openings of the façade, unless the works comply with a reasoned restoration to return the building to its original state.
- To add external volumes for the elevators, which must be placed in the interior of the building.
- To use glazed or reflective elements on the facades or railings.
- To install air-conditioning equipments on the façade or in public spaces. It must be preferably collective, grouped and hidden behind parapets on the roof or at urban level (district cooling and heating).

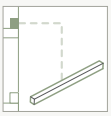
The roof must maintain its original configuration and introduce only the necessary changes to adapt it to the intended use. Not more than 20% of the roofs surface could be occupied by kiosks, air-conditioning or equipment or other facilities, etc.

In the case of preserving only the façade, it will also be necessary to preserve the first bay roof (when the beams are perpendicular to the façade) or of a depth equal to the free height of the floor. The provision for roofs will not apply in the event that the existing ones are not original.

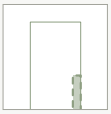
Interventions may be carried out with the aim of removing later architectural elements - which have damaged the building - and returning it to its original state, except when these later works are in themselves worthy of conservation.

Modifications that alter or damage essential parts such as walls, ceilings, patios, stairs or other architectural and decorative elements for which the building has been listed, may not be made.

Interventions must respect and safeguard the values of the building, **using the traditional techniques and materials, without prejudice to the use of contemporary techniques and materials for a better adaptation to their use**, or to assess certain elements or periods.



When repairing damaged elements, to restore structural stability, or when replacing them with new ones, **they must be similar to existing ones** in terms of size, scale, quality and design. Especially with regard to seismic behaviour which could be guaranteed by reviewing and improving the good condition of the global takalil system.

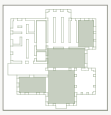


Only parts can be removed, in the event that they lead to the degradation of the building, are improper, or that the removal leads to a better historical interpretation. In this case, the parts to be removed should be documented.

The most remarkable features of the building should be preserved, maintaining the original elements whenever possible, and overall criteria, such as n**eighbouring buildings and surrounding urban spaces, should be considered**.

Original materials and carpentry must be preserved and repaired whenever possible. If not, replace it with new ones with similar characteristics as possible and the elements that replace the damaged elements must be integrated harmoniously. In any case, only traditional materials and techniques can be used, but improvements to them are recommended. It is also necessary to preserve the oldest original textures and colours of the surface treatments.

Interventions on buildings that **make their uses compatible** with their characteristics and that tend to facilitate their conservation, can be carried out. These interventions should be executed without implying demerit for the building or introducing alteration to elements of interest.

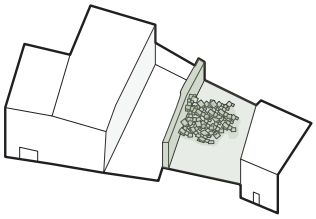


As far as possible, **the spatial distribution of the original building should be recovered** in terms of services, stairs, rooms and others, as well as the original relationships between the pieces.

The addition of panels, the placement of supports or, in general, **any manifestation of advertising activity will not be allowed**; nor the installation of supports for electrical cables and telephone or any element for the provision of public services. Nor is the installation of non-traditional exterior ornaments, blinds, awnings, canopies, refrigeration appliances, visible from the street and, in general, any element, even if it is mobile, that alters or detracts from its architectural configuration.

All interventions, both at the urban level and in buildings, **must contribute to overall sustainability and to the prevention of climate change and global warming**. In this sense, the 2030 Agenda and the Sustainable Development Goals (SDGs) adopted by United Nations must be addressed.

6.4.1 DEMOLITIONS



Demolitions on any building of the core zone and buffer zone will not be authorized, except in case of imminent ruin; it will require prior application of a license for the new construction and should respect the general style of the area or, at least, that the projected façade of the new structure is in harmony with the general character of the heritage.

The protected buildings as Integral, may not be demolished or dismantled, in whole or in part, nor may renovation work be carried out despite them not damaging their values. They must be subjected to the necessary preventive consolidation, maintenance or restoration works to safeguard their values.

The protected buildings (Partial, Environmental, Interior, Structural, Punctual, in Use or Documentary) may not be demolished, and only partially if needed. They must be the subject of the preventive consolidation, maintenance or restoration works to safeguard the protected values, in each case.

In the event of ruin, fire or total or partial demolition of a listed building, when there is a fraudulent act or negligence, the owner must rebuild it. It will be understood that there is fraud when acts aiming at the total or partial demolition of a building take place, and negligence when works necessary for the conservation or consolidation of a building are not executed. In any case of destruction or demolition of the property, due to fraud or negligence, building permits will not be granted except for its reconstruction as was.

In cases of ruin or demolition of a listed property, the remains may not be removed and the protection it had may not be removed. The elements of value that can be recovered will either be integrated into the reconstruction or will become the property of the Ministry of Culture.

MORE SPECIFICALLY:

- Demolitions on any building of the core zone and buffer zone will not be authorized, except in case of imminent ruin;
- The protected buildings as Integral, may not be demolished or dismantled, in whole or in part, nor may renovation work be carried out despite them not damaging their values;
- The elements of value that can be recovered will either be integrated into the reconstruction or will become the property of the Ministry of Culture.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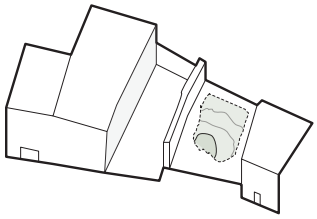
6.4.2 EXCAVATIONS



Al Balad is a historic centre that has had a long presence over time. The urban fabric as well as the buildings have undergone many modifications. For this reason, any excavation or alteration of the subsoil must be done with the utmost caution and always under the supervision of archaeologists authorized by the JHD or the Municipality of Jeddah. Accurate documentation of all the footprints found is essential, whether they are objects or remains of old buildings. These precautions must be followed both in public spaces, inside buildings or in empty plots, before any restoration or reconstruction.

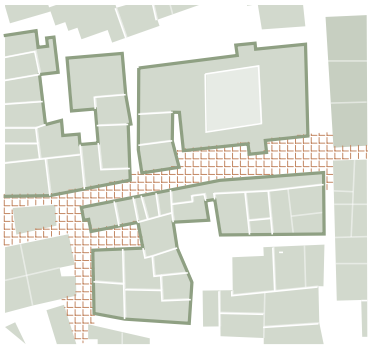
Prior to any excavation in streets, public spaces, inside the buildings or in empty plots, it will be necessary to verify the depth of the foundations. We must not forget that the buildings of Al Balad have a type of superficial foundations and the excavation below their level could lead to serious damage to the adjacent buildings.

MORE SPECIFICALLY:

- The data gathered from the archaeological, historical and architectural survey concerning the shape and the height of the original building are the reference for the restoration and cannot be increased or reduced;
- Any excavation or alteration of the subsoil must be done with the utmost caution and always under the supervision of archaeologists authorized by the JHD;
- Prior to any excavation in streets, public spaces, inside the buildings or in empty plots, it will be necessary to verify the depth of the foundations.

6.4.3
ON URBAN FABRIC AND ARCHITECTURAL TYPOLOGY

Restoration aims to reconstruct and recompose the original features of the building. Beside the architectural survey, any other record concerning the original building must be taken into consideration (historic photos, and drawings, interviews, etc.). The urban fabric and architectural typology must be respected as much as possible.



MORE SPECIFICALLY:

- The data gathered from the archaeological, historical and architectural survey concerning the shape and the height of the original building are the reference for the restoration and cannot be increased or reduced.
- Façade design and pattern of the original building cannot be altered. Any intervention shall follow existing rules and characters deduced from the archaeological, historical and architectural survey of the historic building.
- Decayed decorative elements must be carefully reproduced employing high quality materials and craft trades.

6.4.4
ON STREET PATTERN, FAÇADE ALIGNMENT AND SETBACKS

The street pattern represents the most relevant vestige of the 16th century historic city. Indeed, while the historic buildings of Jeddah mainly date form the 19th century "renaissance" favoured by the opening of Suez Canal, the urban fabric has likely preserved the earlier, 16th century layout.

MORE SPECIFICALLY:

- The preservation of the street pattern is one of the main goals of the urban regulations. In case of "historic building reconstruction", records showing the original footprint must be the main reference. In case of new construction, the building cannot exceed the limit of the parcel, and cannot occupy, neither partially nor totally, the roadbed and the main façade; it should face the main street defining the parcel, respecting the street alignments in order to assure the continuity in urban elevations.

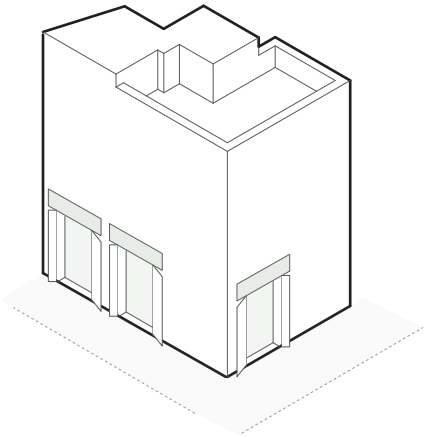
- Setbacks are not allowed, and (except specific cases to be demonstrated by drawings and plans) the main façades cannot be totally detached from the adjacent ones. Street porches are not admitted in the historic area.

- No ground floor setback is admitted. Moreover, no part of the building can exceed the ground floor built-up area with cantilevered elements. Bow windows, adequately screened, and roshams are the only cantilevered parts allowed in new buildings. No other part of the building can be cantilevered.

6.4.5
ON SHOPFRONTS

The carpentry and enclosures of the commercial premises are part of the general composition of a building façade. For this reason, if a store modifies them without considering the overall composition of the façade, it alters the overview.

For a good integration of the commercial premises, the carpentry must harmonize with the chromatism and the composition of the façade of the building.



MORE SPECIFICALLY:

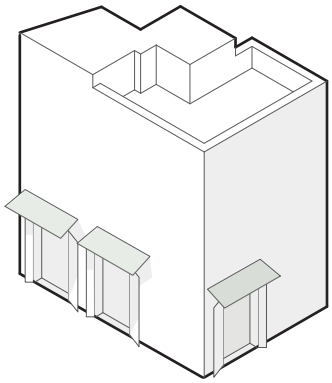
- The carpentry must be placed on the plane of the façade.
- The composition of the carpentry must harmonize with the rest of the carpentry present in the building façade.
- The colour of the carpentry should harmonize with the existing colours in the building carpentry.
- It is recommended that sideways folding shutters (metal or timber) be installed as a protection system. Rolling shutters are not allowed.


ركن الريان للعود والعطور
Al Rayyan Corner for Oud & Perfumes

6.4.6
ON AWNINGS AND CANOPIES

The awnings are new elements to be incorporated into existing buildings and that can affect perception of the general composition of the façade. The awnings act as sun protection and it is a necessary addition in some establishments due to their orientation. Premises that do not need sun protection due to their orientation should do without awnings in.

Canopies are not allowed.



MORE SPECIFICALLY:

- The awnings should be designed in harmony with the characteristics and colours of the façade.
- They should be located inside or above the architectural void.
- They must not hide the decorative elements of the façade and must be homogeneous for oneself establishment.
- They must leave a minimum clear height of 2.2 m from the street level cantilever.
- The maximum flight of awnings should be of about 1.5 m.
- They should be concealed within the façade when in storage position.
- They must be foldable and must be composed of a canvas or similar fabric with the minimum substructure possible.


Ba Eshen Fish
Restaurant
باعشن للأسماك

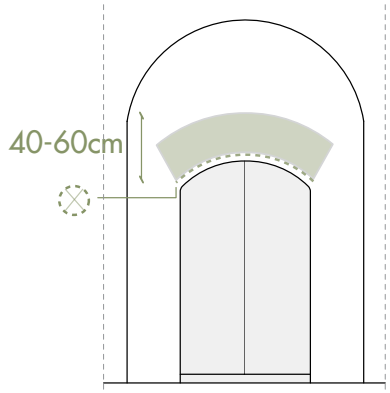

عطارة سوق البدو
عطارة سوق البدو
مغلق

6.4.7
ON INTEGRATION OF THE SIGNAGE ON THE FAÇADES

The signs identifying shops and commercial activities must follow strict rules to integrate correctly into the façade of the building, without altering its architectural composition, and into their urban environment. Two possible types of commercial signs to be used in Al Balad buildings are considered:

A. Identification signs inside the architectural void or openings.
B. Identification signs on the façade.

Flag signs, placed perpendicularly and protruding from the plane of the façade, are not allowed.



A.
CHARACTERISTICS OF THE IDENTIFICATION SIGNS INSIDE THE ARCHITECTURAL VOID OR OPENINGS

MORE SPECIFICALLY:

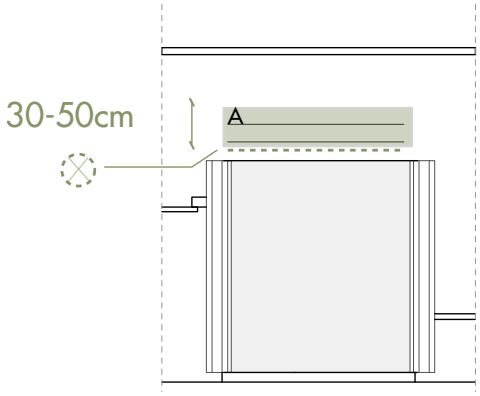
- The sign must be placed at the top of the architectural voids or openings.
- The decorative elements of the composition of the façade must not be hidden.
- The sign must be attached to the plan of the carpentry.
- The shape of the sign must respect the morphological language of the architectural void or opening.
- The dimensions of the sign must be in proportion to the height of the architectural void.
- The sign must have some dimensions between 40 and 60 cm in height, depending on the proportion of openings.
- The signs must be homogeneous in size, design and shape for the entire establishment. Excessive repetition should be avoided.
- The lighting of the signs must be designed in such a way that they form a single element.


متجر الجدرانية
GALLERY SHOP


بلدية جدة التاريخية


مؤسسة بتوا للالكترونيات


WARNING



B.

CHARACTERISTICS OF THE IDENTIFICATION SIGNS ON THE FAÇADE

MORE SPECIFICALLY:

- The sign must not detract from the architectural composition of the façade.
- Only the sign is allowed for a commercial façade.
- The location of these signs must be in the following places: on the architectural void or access, without longitudinally exceeding its projection, or on the side of the architectural void, at eye level.
- The decorative elements of the composition of the façade must not be hidden.
- The sign must be on cropped lettering, to obtain a light appearance.
- The dimensions of the sign must be proportionate to the height at which it is located.
- The sign be must be written between 30 and 50 cm in height, depending on the proportion with the façade.
- Its thickness must be a maximum of about 12 cm.
- It must display only one or two lines of text.
- The lighting of the signs must be designed in such a way that they form a single element.


مؤسسة التمام
بيع جميع انواع الساعات


فول فتاح
fool fattah


مؤسسة باحفي التجارية
فسلتق ولوز

6.4.8
ON BUILDING STRUCTURES

The structure of Jeddah's historic buildings is an intrinsic part of its heritage values and a testament to the authenticity of this protected heritage. In restoration works, the integrity of the existing structural elements must be respected, both in terms of each of its components and in the functions entrusted to them to ensure the stability of the building as a whole.

The structure of the buildings of Al Balad, like most traditional constructions and unlike modern buildings, has a unitary behaviour. The foundations, the load-bearing walls, and the different floors, constructed incrementally, have been adapted to the others forming a unitary block, in which the alteration of a piece causes an adaptation of the set takes place. A very special case of Al Balad buildings is the wooden beams embedded in the masonry ("takalil") that help to link all the elements and is one of the key pieces for global stability that must be respected for structural reasons.

The maximum seismicity assessed in the Jeddah region was in 1967, with no consequences in Al Balad, and this phenomenon does not appear to be at the root of the deformations and pathologies identified in the Jeddah buildings. Consequently, beyond the kinematic analysis of the global seismic behaviour and possible local failure mechanisms, it is necessary to ensure that the operation of the horizontal links that bring the takalil to the whole structure are in good condition and respond to their lock function, which will deal with possible earthquakes in the area.

MORE SPECIFICALLY:

- All interventions in the structure of the building must be preceded by an accurate diagnosis regarding its overall behaviour and the state of conservation of the different components.
- Consolidation and restoration aim to preserve and reuse, as far as possible, original building elements and materials, on the basis of a preliminary evaluation of their quality and condition;
- Interventions must respect the existing building structure. Integration to fill in "discontinuities" in the original structure should be carefully designed and pondered;
- Traditional construction techniques and materials should be used for restoration and completing missing parts (partial/complete reconstruction of damaged or demolished buildings), according to the details shown in the archaeological, historical and architectural survey;
- If a major restoration and integration of new structural elements is necessary, it should always preserve the original structural and architectural features of the building;
- A building consolidation project can utilize the most advanced techniques and materials only if they are compatible with the existing structure in order to assure safety and stability; structural consolidation usually precedes restoration;
- When structural failures threaten the stability of the building, restoration should be associated with a consolidation project designed by a qualified technician approved by JHD.

6.4.9
ON TAKALIL

As mentioned in the structure section, Jeddah's historic buildings present a complex structural system, essential to their overall behaviour and relative resistance. One of the most unique elements, derived from the Ottoman tradition, is the "takalil" or set of wooden beams embedded horizontally in the masonry, every certain height (most often regularly, intervals between layers ranging between 50 and 150 cm). This element of paramount importance provides an essential horizontal link to lock in the high and fragile vertical structures composed with large openings and built with irregular stones, efficiently distributing the loads and absorbing lateral movements if any, in case of earthquakes.

However, these wooden elements have often suffered attacks of moisture, termites and fungi over time, which degraded them to the point of disabling them in their function. Their progressive degradation causes small successive settlements in the load-bearing walls, which may add-up and result in the deformations that some buildings present, progressively losing their function of horizontal locking and bonding of the whole set.

Today, and for a long time now, many buildings in Al Balad display the "takalil", visible on the outside and inside, and the horizontal lines of the "takalil" have become one of the defining elements of the personality of the vernacular architecture of Al Balad, endorsing an aesthetic role in the historic city's outlook. Originally, the pieces of wood were probably protected by a coating of lime mortar. Over time, the compression of the wood and its degradation have led to the breakage and expulsion of the protective coating of the wood and successive repairs have aimed at the removal of the coating, as this avoids problems in the future.

MORE SPECIFICALLY:

- The rehabilitation of the buildings of Al Balad requires both the restoration of the mechanical behaviour of the "takalil" and their heritage recovery as a prominent element of the local identity;
- All intervention on the "takalil" elements must be preceded by an accurate diagnosis, analysing the global structural behaviour as well as the state of conservation of the wood;
- In building restoration work, where the cross-connection and the continuity of the "takalil" have been lost, recovering this continuity will be a priority task;
- Consolidation and restoration of "takalil" should be done with similar material and dimensions as the original ones, always as an element with a structural function and never only as a simple decorative element;
- In some justified cases, consolidation project can adopt advanced techniques and materials to reinforce the "takalil" function, only if they are compatible with the existing structure;
- The "takalil", constructively, should be protected with a lime mortar, but its visible presence has become a characteristic feature of Al Balad's architecture. The study of each building should guide the designer on whether to display or cover the different "takalil" of the building, seeking a balance between aesthetics and construction tradition;
- When structural failures appear in the "takalil" elements, the restoration project must be designed by a qualified expert approved by JHD.

6.4.10
ON BUILDING MATERIALS

Traditional construction has relied on the use of a few materials close to the construction site, to meet all the demands of the buildings. This fact, very often, has been limiting, at the same time, however, it has shaped the constructive and typological characteristics of the architecture of a specific place and defined its identity. It is for this reason that the authenticity of Al Balad's architecture, justified in its inscription on the World Heritage List, can only be respected by maintaining and using mostly traditional materials and techniques.

The essential materials that make up the historic buildings of Jeddah are: stone, wood, earth, lime and sand. However, the state of conservation of many buildings and the demands of use and comfort of the 21st century, in many restoration interventions, may require the incorporation of new materials and innovative technologies to ensure structural safety and contemporary performance. Finding the balance between respect for the required authenticity and the innovation needed to improve the structural, thermal, waterproofing or other behaviour of buildings requires qualified and experienced architects and engineers, approved by JHD, in project decision making.

MORE SPECIFICALLY:

- Conservation and restoration aim to preserve and reuse, as far as possible, original building elements and materials, on the basis of a preliminary evaluation of their quality and condition;

- The interventions should respect the existing traditional building materials. Integration, to fill in "discontinuities" in the different elements, should be carefully designed and pondered, according to the details shown in the historical and architectural survey;

- If a major restoration and integration of walls, structural elements and building materials is needed, it should always preserve as much as possible the original materials and the architectural characteristics of the building;

- The use of traditional techniques and materials is essential to preserve and transmit traditional building know-how. However, provenance and quality of building materials must be adequately certified and verified by adequate tests;

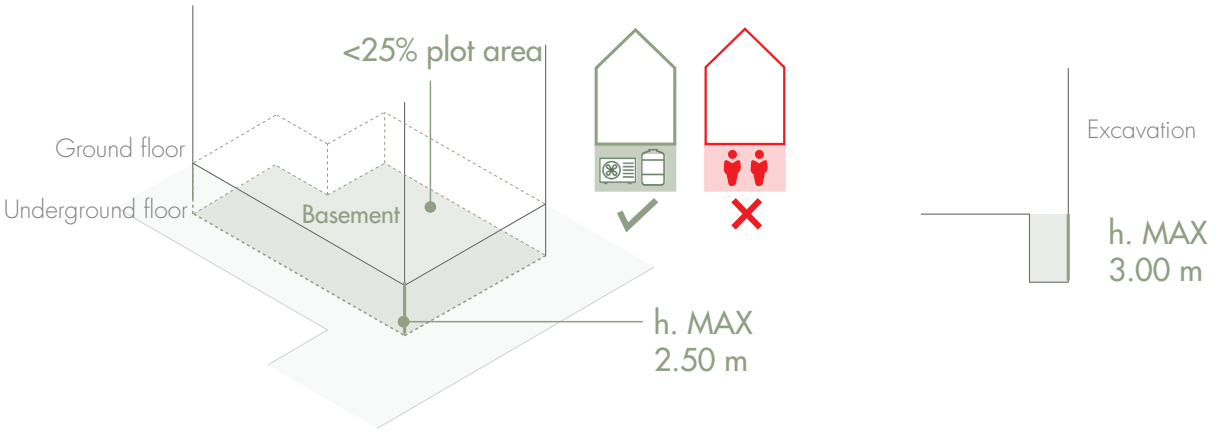
- The recovery and reuse of existing materials in the building or from the demolition of other nearby buildings, is strongly recommended, both for the authenticity of the material and to promote the circular economy and sustainability;

- Building consolidation or restoration project can use the most advanced techniques and materials, to assure safety and stability of the building, only if the compatibility with the existing ones can be justified. For this reason, the project should be designed by a qualified technician approved by JHD.

6.4.11
ON BASEMENTS

The term "basement" defines any underground level. In the case of some historic buildings in Al Balad, we find some buried structures, basically intended to store water (cistern) for use in the building and some other facilities.

Given the value and historical testimony of these elements, their preservation within the integrity of each building is required. Considering the widespread structural fragility of the city's historic buildings, their expansion must be avoided.



MORE SPECIFICALLY:

- Basement historic structures must be preserved in their original dimensions and characteristics, but they cannot be enlarged or built;
- For any restoration and reconstruction project, all foundation and basement excavation work should be carried out under archaeological supervision, provided by JHD Historic City office.

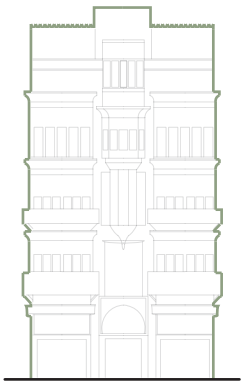
If the characteristics of the project require the construction of basement structures, these must conform to the following conditions:

- The underground level cannot be an inhabitable space. It only can host technical equipment as cisterns, central heating, air-conditioning systems, etc. Its height cannot exceed 2.50m;
- No excavation deeper than 3.00 m below the ground level is admitted;
- The surface of the basement cannot exceed 25% of the plot area. Basement design must respect all national standards concerning safety, insulation and waterproofing.

6.4.12
ON FAÇADES

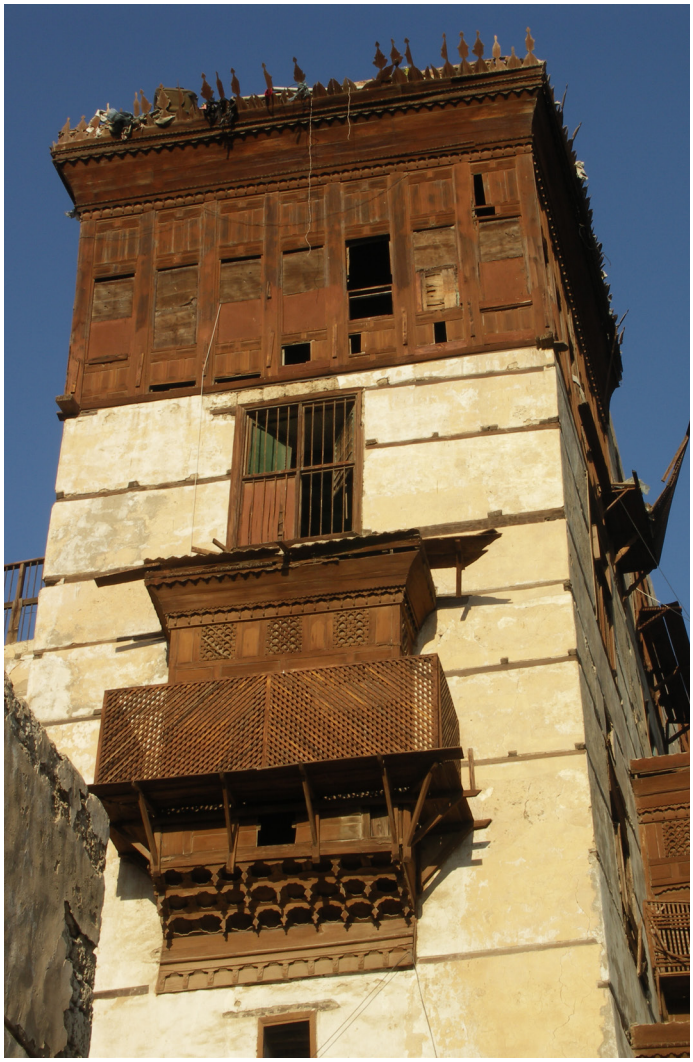
Façades are the most expressive elements in a building. While they are an essential component of the building, they also offer a public image, as they help to articulate the city's historic urban landscape.

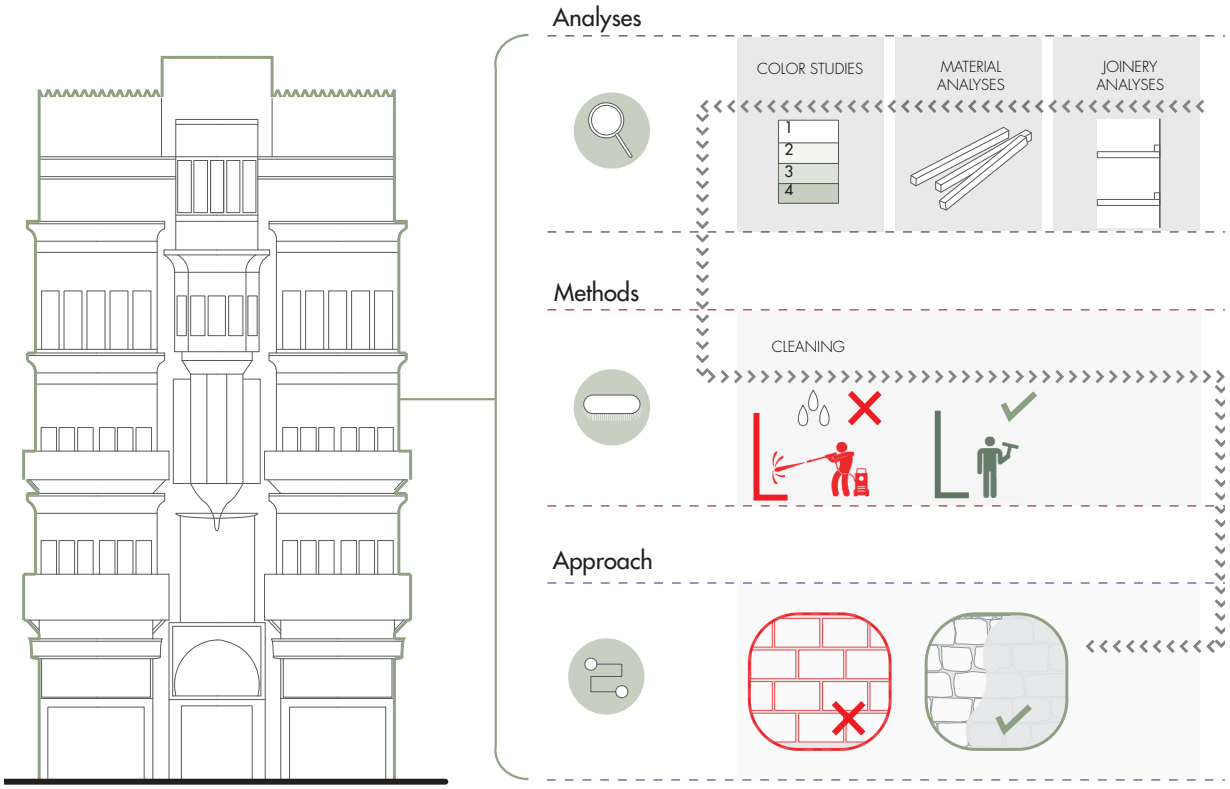
Despite being treated as an individual element, façades are made up of several components with very different characteristics: coatings (plaster, stucco, sgraffito…), joineries (roshams, windows and doors), gallery-balconies, railings, grilles, gargoyles, decorative elements and other components.



MORE SPECIFICALLY:

- Conservation and restoration aim to preserve, as far as possible, original façade composition, elements and materials, on the basis of a preliminary evaluation of their characteristics, quality and condition;
- Integration, to fill in "discontinuities" in the façade elements, should be carefully designed and pondered, according to the details shown in the historical and architectural survey;
- The wall coatings protect them against weather conditions and surface degradation. It is therefore necessary to maintain them, be it a simple plaster, a stucco or a sgraffito; leaving the stone bare or with pointing is not allowed;
- The surface of the façades must be cleaned with methods suitable for the characteristics of the existing materials and with a very limited use of water;
- One of the most powerful elements that define and characterize the architecture of Jeddah and its façades is the joinery, especially the large roshams. They are also the most vulnerable and require careful and regular maintenance. In the case of the degradation of significant parts of wood, it is necessary to proceed with their restoration, taking advantage of all the components that remain in good condition;





- The characteristics of roshans and windows make them open elements that protect from the sun, but which hardly prevent the infiltration of hot air in summer and cold in winter. In its restoration, it is necessary to keep this in mind and look for ways to achieve a good seal to the air infiltrations, thus improving the comfort conditions and avoiding thermal leaks;
- The building's main doors and some other wooden features are richly decorated. Their careful preservation and restoration are essential to maintain the character of the façade;
- The historic buildings of the early twentieth century are characterized by large wooden galleries in the façade, instead of the roshans. Maintaining this element also requires careful maintenance, and in its restoration, it is necessary to recover as many original components as possible;
- The study of the original colours of the walls, joineries and other elements of the façade is essential, prior to any restoration proposal;
- Considering that the façade is one of the elements most exposed to inclement weather, it is necessary to consider the need to improve the thermal behaviour of the wall, either externally or internally, without altering the heritage values;
- The complexity in the treatment of the different components of the façade, respecting their heritage values, requires that the project be designed by a qualified technician approved by JHD.

6.4.13 ON HISTORIC URBAN LANDSCAPE THE COLOR

The Historic Urban Landscape is made up of many different elements that, together, shape the image of the city, its social, economic and cultural identity. The landscape of a historic city, in a broad sense, reflects a way of life of a community in which the physical form of public space and its components have evolved over time. Consequently, a historical analysis of the city will always provide us with a sample of its evolution and the changes in colours that have defined it over time.

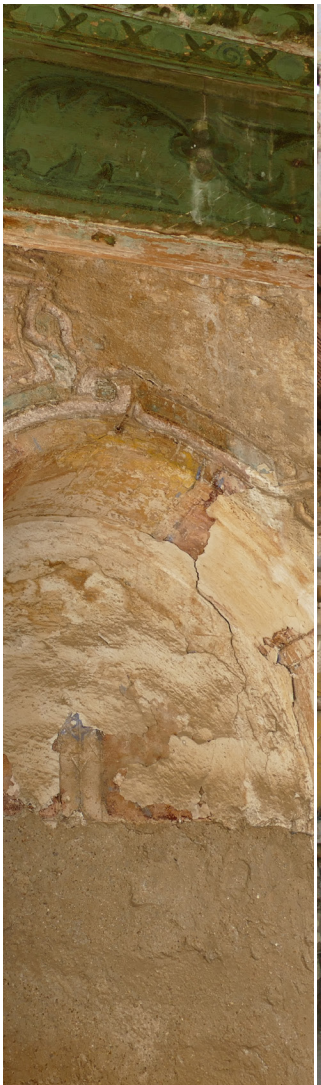
A historic city is not a finished object, but a living reality, whose landscape is transformed by the society that drives it. Colour is an integral part of our living environment and is one of the fundamental aspects in the definition of the urban scene; it is for this reason that the concern for the colour of the city is as old as the architecture itself, and has been present in all historical periods. In proposing strategies for the recovery of this collective urban heritage, we understand its complexity and importance. In historic Jeddah, we stand in a cultural palimpsest, challenging to harmonize, and a systematic approach needs to be implemented to respect the heritage character.

MORE SPECIFICALLY:

- When considering urban landscape and colour, and even though the facades of buildings play a greater role, we must consider all the associated components: street furniture and utilities networks, signage, advertising, decorative elements, pavement etc.;
- Given the ease of applying colours in a building, there is a need to raise awareness among professionals involved in Al Balad and the public about the importance of treating colour as a heritage element, both inside and outside the buildings;
- The availability of a Colour Chart, for the different components of Al Balad, will help to present an overview of the set, allowing to group the colours by historical periods, typologies, compositions, etc. In any case, this will not exempt from the in-depth study of each building to be rehabilitated;
- Any intervention in the urban landscape must be preceded by an accurate colour study and the analysis of all elements concerned by chromatism issues, searching for archives (photos and paintings of the period) and taking stratigraphic data in situ;
- The use of the most relevant colours for each element or part of the building must be done using the materials, pigments and traditional techniques that correspond to each case;
- The introduction of new techniques and contemporary materials must be done considering their compatibility with existing materials and their durability;
- The treatment of the colour of the different components of the building, requires that the project be designed by a qualified technician approved by JHD.


IGUALADA


مسجد الشافعي
Al Shaf'i Mosque



6.4.14 ON TERRACES

The terrace is the main protection of the building against rain and sun, and an element highly exposed to the aggressions of atmospheric agents. For this reason, it requires regular maintenance to keep it in good condition permanently. Also, the terrace has always been an accessible space in the upper part of the building, which traditionally allowed a variety of activities by the inhabitants; recently, it is used to locate some facilities incorporated into the building (air-conditioning equipment, water tanks, antennas…). As we can see, Its new function as a repository puts pressure on an element that contributes to define the image of the city; it must therefore be well organised, in order to prevent a chaotic occupation, which makes the city's sky line a cluttered space.

In the case of the terrace, traditional construction materials and techniques have shown their limitations to offer a good and durable solution. It is for this reason that the incorporation of new bituminous materials is essential, as it greatly improves the life span of the terrace and does not involve any visual alteration that harms the patrimonial values.

MORE SPECIFICALLY:

- The use of the terraces by the inhabitants, through small kiosks or pergolas (≤15% of the total area), is a traditional activity that must be maintained and encouraged, but always respecting the original volumes of the building.

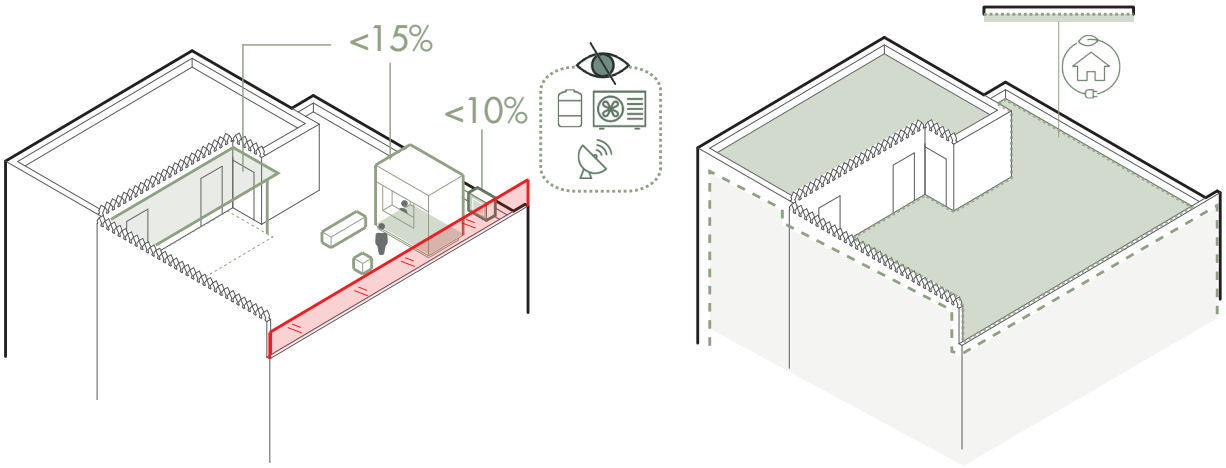
- The full occupation of terraces with pergolas and the construction of railings or other elements on the roof with contemporary materials (steel, plastic, glass…) is not acceptable;

- Terraces must be perfectly tidy spaces. To do this, it is necessary to completely eliminate or reduce to a minimum the presence of air-conditioning equipment, water tanks, parabolic antennas, etc. These elements can't occupy more than 10% of the surface of the terrace and must be placed in an orderly manner, covered by removable structures and placed away from view from the public spaces. They cannot exceed the maximum height allowed for each parcel;

- The roofs must guarantee the waterproofing of the building. For this reason, contemporary materials of recognized quality must be incorporated into their restoration. However, the surface and visible finish will always be with traditional materials;

- The restoration works have to consider that the roof is exposed to inclement weather and to improve the thermal insulation, adding contemporary insulation materials under the traditional finishing of the terrace;

- The treatment of the different components of the roof, respecting their heritage values, requires that the project be designed by a qualified technician approved by JHD.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6.4.15 ON HISTORIC URBAN LANDSCAPE BUILDINGS CROWNING

The historical images of Al Balad show, one hundred years ago, a skyline of the city with a strong presence of refined small crenelations forming a crown course at the top of the walls. It is a continuous line of ornamental elements of carved and rendered stone with geometric shapes, quite simple and forming a refined sawtooth that crowns the facades at the level of the terrace, or located on top of terrace parapets.

Certainly, not all buildings present these crowning elements today, or even had them at the time of their construction. In some cases, the top of the wall simply ends with a horizontal masonry line, while in others some railings are formed by vertical wooden boards, often cut triangularly at the top, hence imitating the stone crenelations. More recently, the upper crowning of the façades and the railings of the terraces have been built with materials that stand very far from the tradition, significantly altering the image of the urban landscape in Historic Jeddah.

From the 1950s onward, with the advent of prefabrication and artificial stone, attempts were made to imitate the traditional stone pieces and patterns through cheaper means. Unfortunately, these new elements are usually very thin, with variable proportions, shapes and additional decorative features in some cases, producing a very different visual effect from the original carved stone pieces.

MORE SPECIFICALLY:

- The preservation of the traditional crowning is very important for the Historic Urban Landscape. In the building restoration, it is necessary to guarantee the use of the same materials, techniques, forms and dimensions as those of the original pieces;

- The diagnosis, and particularly the historical studies of the building to be rehabilitated, must include the analysis of the crowning of the walls in order to determine the original characteristics and the alterations which might have taken place;

- The introduction of conflicting new materials in the crowning of buildings, such as steel, glass, plastic, etc. is not allowed, as it would cause a serious alteration of the Historic Urban Landscape of the City;

- In the event that both the appearance, the shapes, proportions and dimensions of the crowning elements are respected, the introduction of compatible alternative materials could be positively evaluated, although it must always be carefully justified.

6.4.16
ON GENERAL SERVICES AND FACILITIES

Traditional architecture has a great shortcoming; it was built at a time when both the facilities and the comfort requirements were very slim. Accepting that these buildings and this heritage can only be preserved by keeping it alive and in use, as is the case for Al Balad, implies they must be adapted to the comfort, uses and security requirements of an advanced society of the 21st century. This involves the sound and careful incorporation of new technological services and facilities where these are not available today.

The correct and appropriate integration of these new services and facilities is often one of the most difficult challenges faced in any rehabilitation or restoration, and it is in such issues that qualified and experienced technicians must demonstrate their skills and find the most technically appropriate solutions, compatible with the original materials and respectful of the heritage values of the buildings of Al Balad.

A large number of services and facilities are required for each building today, and the multiplicity of cases one may encounter makes it impossible to go into the details for each of the new services and facilities to be incorporated. One must consider the following services:
- Electrical installations;
- Water supply and distribution;
- Drainage and sewage system;
- Sanitary installations;
- Communication, security, and control systems;
- Ventilation and other mechanical equipment;
- Waste management.

WE MUST ALSO CONSIDER THE FOLLOWING LIMITATIONS:

- **None of the facilities or their components can be placed on the facades or in a visible way.** Only in essential and exceptional cases will the location of any element on the façade be allowed, which must then be duly justified, and must be completed in a tidy and protected manner;

- Each one of the facilities of the buildings must comply with current regulations corresponding with the national level, looking for the best way to adapt them to the specific requirements of a heritage building, respecting original elements and valuable surfaces;

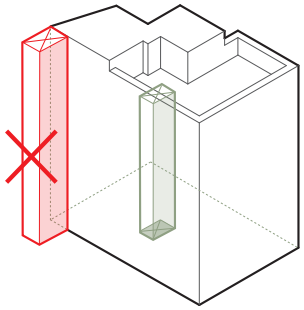
- In general, indoor installations should be reversible, ideally concentrated within ducts enabled for this purpose or exposed on the surface, but never embedded in trenches made in the load-bearing walls, given the structural fragility of these buildings;

- The meters of the electrical or water installations must be located inside, in the entrance hall of the building, facilitating reading by the company.

- Water supply and distribution should be done essentially by gravity from the urban network. Water tanks should be removed or located in the basement;

- The evacuation of the sanitary water must be done by gravity directly to the urban sewage system, avoiding the septic tanks of the buildings, for sanitary reasons and against the risk of underground leaks and foundations issues.

6.4.17 ON UNIVERSAL ACCESSIBILITY



One of the key aspects of any 21st century rehabilitation is universal accessibility, both at the urban level and in buildings. The social inclusion of people with disabilities, reduced mobility, or just the elderly, is a contemporary challenge, to meet their needs for interaction and communication. To make this possible, all rehabilitation must consider reasonable accessibility adjustments to buildings and ensure that people with disabilities can use them under the same conditions as other people, giving autonomy and full participation to people with physical disabilities and other groups whose mobility has decreased.

The historic buildings of Jeddah are a clear example of this lack of universal accessibility, as they are all high-rise buildings with no alternative to access by stairs, such as elevators or other mobility equipment. However, not only do we need to think about the difficulties of people with reduced mobility, but we must also take steps forward to make it easier to access for people with visual, hearing or sensory disabilities.

MORE SPECIFICALLY:

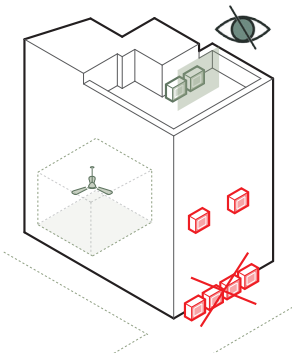
- All rehabilitation projects must carry out the task of identifying existing obstacles and barriers to accessibility and making proposals for their elimination or minimization;
- A Lift / Elevator is a device that moves up and down inside a building and carries people from one floor to another. A Lift can also refer to a simple form of elevator to be installed such as, for example, a "chair lift" or a "stair lift" for lifting people up and down some of the stairs;
- The lifts must be installed inside the building under specific conditions, respectful of all valuable elements and structural constraints. Whenever possible, an accessible itinerary should be sought along the entire route, removing all existing architectural barriers;
- The lifts are strictly forbidden outside, on the facades, anywhere they would be visible from public areas. Exceptionally, a lift could be carefully designed and installed outside on some courtyards, if and only if it is not visible from public space, streets and squares;
- The design of the bathrooms with accessibility parameters is essential for all people to be able to use them independently;
- Acoustic and light signals, the dimensions of the doors, the measurements of the interior of the cabin or the height of the buttons, in the elevators, the use of braille writing, etc. are complementary measures to keep in mind;
- The complexity of responding to universal accessibility in buildings, respecting their heritage values, requires that the project be designed by a qualified technician approved by JHD.


NO UTILIZAR EN CASO DE INCENDIO

6.4.18 ON AC COOLING AND HEATING

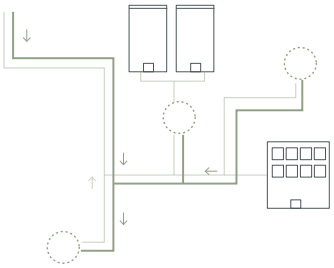
Jeddah's climatic conditions and current comfort requirements make it virtually essential to equip buildings with a mechanical air conditioning system, beyond the benefit that can be derived from the bioclimatic qualities of the building. To do this, two possible options could be considered, although only the first one, based on individual solutions, is now applicable:

LOCAL COOLING AND HEATING



Air-conditioning and heating exterior units equipment should preferably be centrally located in marginal spaces of the buildings (terraces, basements, etc.). In this case, the ducts to the different rooms of the building must be integrated into the architectural elements or service galleries. If the thermal conditioning is only to be done in a few rooms of the building, individual equipment may be used, which must always be strategically located, neither visible on the façades nor stationing on elements of heritage value.

DISTRICT COOLING AND HEATING



The refrigeration and heating solution that best suits historic centres is the creation of one or more production plants that offer this service to all buildings in the city, centrally. Of course, this option requires a pipeline buried throughout the city (preferably through accessible service galleries) and a perfectly organized distribution within the buildings to prevent alterations in heritage values. This alternative cannot be done on an individual basis and requires a commitment from the public administrations in order to make it possible and offer it to the entire population.

MORE SPECIFICALLY:

- Every rehabilitation project must incorporate the design and calculations necessary for the air conditioning required by the uses of the building, defining the location and architecturally integrating all the equipment and ducts necessary for its operation;
- Outdoor units should be concentrated together in the most hidden and remote parts of the building, preferably on the terraces, but never visible from the public space and surrounding streets. In the case of an individual equipment, it must also be hidden;
- The interior units must be discretely positioned and carefully integrated into the building elements or furniture;
- Once the city has a district cooling and heating system in place, the buildings will have to gradually adapt to the new system and remove the individual ones.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6.4.19 ON EMERGENCIES, FIRE PROTECTION AND SECURITY

The protection in the face of potential emergencies such as fire, explosion and others, is a mandatory element that must be incorporated into every building, in accordance with current regulations. Its integration into any heritage building must be done from a comprehensive and integrated approach to fire regulations and risk management, as it has a dual purpose: first and foremost, it is meant to protect the lives of people, while at the same time, it want to minimize the damage that a fire can cause to a heritage building.

Given the dimensions of traditional Al Balad buildings and their heritage values, emergencies protection measures must be reasonably proportionate and respectful of those values. Two types of measures must be considered:

- **Passive measures** are those intended to facilitate the evacuation of users through the sectorization of fire zones, fire escapes, evacuation routes maps and emergency exits, application of flame retardants and high-fire resistance materials, and others.
- **Active measures** are those installations or tools intended for the detection and extinction of the fire such as: Smoke detectors, fire alarms, warning signs, emergency lighting, fire extinguishers, fire hydrants and sprinklers, etc.

Within the same approach, one can also consider all the security-related facilities in the building such as: access control, CCTV (Closed Circuit Television), intrusion prevention and alarms, etc., as all involve the installation of various appliances in many parts of the building.

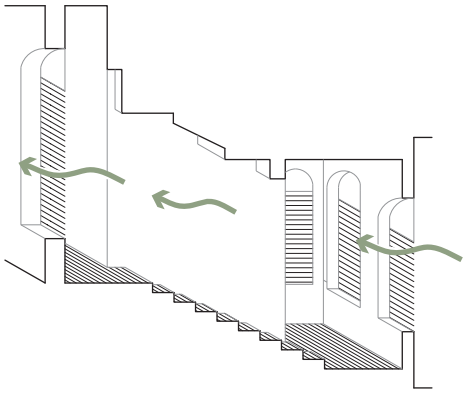
MORE SPECIFICALLY:

- Every rehabilitation project must define the location and architectural integration of all the equipments linked to the protection and the security of the building users and the building itself;
- All the measures to be implemented must respect current regulations and result from a precise adaptation of the local Civil Protection experience to each specific building;
- At the end of the restoration, and before the building is put into use, a Building Evacuation Plan must be drawn up, including all the measures to be considered in the management of security;
- The evacuation route must be very clear and evacuation plans have to be posted on every floor of the building;
- Devices, instruments and signage linked to prevention and safety must be easily visible. However, an effort must be made to integrate them carefully into the building without disturbing the heritage values.


EXIT

6.4.20
ON EFFICIENCY, CLEAN ENERGY AND BIOCLIMATIC RESOURCES

Sustainability is a significant aspect for a historic centre inscribed on the UNESCO World Heritage List, especially if we keep in mind the sustainable development goals of the 2030 United Nations Agenda. Tackling Global Warming and Climate Change, it calls for a series of measures that can be grouped into three key aspects: improving energy efficiency, incorporating renewable energy, and using traditional bioclimatic resources.



Improving energy efficiency

The fundamental aspects of improving the energy efficiency of buildings are the quality of the thermal insulation of their external envelope (facades and roofs) and the airtightness (carpentry). To refer to this topic, consult the sections facades and terraces.

Renewable energies

The use of clean energy reduces the consumption of fossil resources and avoids emissions into the atmosphere. Although there is a great diversity of renewable energies, not all of them can be adapted to the uniqueness of the buildings of Al Balat. One respectful integration of thermal and photovoltaic solar panels and/or geothermal energy applications is mandatory.

To the extent that we significantly improve energy efficiency, one should look into reducing the building's energy demand and making supply more viable through renewable energies that can be incorporated into the building. In any case, the incorporation of renewable energies will be easier when the group of buildings to be served is larger, up to the district cooling and heating formula discussed in previous sections.

Bioclimatic resources

Traditional architecture has always looked for the construction materials and solutions that give the best response and offer the best behaviour in the face of the local climatic conditions and environment. Al Balad has been able to adapt its buildings to the climatic characteristics of the area by optimizing its bioclimatic resources.

All rehabilitation or restoration works must take advantage of this traditional knowledge and experience, to reduce the energy demand and become more sustainable.

MORE SPECIFICALLY:

- Improve the energy efficiency of the building by better insulation and correct airtightness at all levels;
- Prioritisethe use of removable energies, produced in the building itself or from a district cooling and heating plant;
- Cooperate with the renewable energy industry in designing solutions adapted to Al Balad architectural heritage without negative impact;
- Take advantage of traditional building designs and techniques, particularly refined in terms of natural ventilation and air flow, hence perfectly adapted to local climate;
- Prior to any restoration, an analysis of all bioclimatic parameters existing in the building must be done, considering the primary climatic way of functioning of the building and the alterations it has suffered;
- Respect and restore the original passive climatic design and natural ventilation components of Al Balad traditional buildings.

6.5
Guidelines for Reconstruction Projects

One of the principal tasks when planning culturally sensitive reconstruction is to agree on an overall vision of the area for rebuilding and restoring the urban heritage. A qualitative and comprehensive vision accessible to a broad spectrum of stakeholders and actors and based on consensus is the norm. A desirable vision for the recovery of urban heritage is neither one of a museum city, nor a wholesale modern redevelopment, but a living city that is able to conserve, adapt and re-interpret its traditional morphology. Necessary new construction should be seen as an opportunity to respond sensitively to contemporary needs.

On the other hand, respect for the historical authenticity and ethics behind cultural heritage is essential for a historical centre. Replicas or fake 'heritage' must be avoided at all cost.

The buildings or building parts concerned by this Guidelines for reconstruction projects are:

- All Heritage buildings listed at the Al Balad Heritage List (Protection A. Integral and B. Partial), either on the ground (completely or partially, following accidental collapse, fires etc.)
- All buildings with environmental value only (Protection C. Environmental), with lesser historical and architectural values, but where position, alignment, volume, shape as well as traditional features, techniques and materials contribute to the historical fabric in Al Balad.
- All empty plots that have had historic buildings at the moment of the World Heritage Registration. These reconstructions should be based on historical documentation about volume, shape as well as traditional features, techniques and materials. The urban approach should be based on historical documentation and archaeological studies, however allowing for some flexibility regarding the detailed position. An updated planning interpretation of needs and spaces is also necessary, notably concerning the alignment and circulation, which might lead to some justifiable cases where the buildings are not strictly standing on the original alignment.

With the view to preserve the urban cultural heritage and "Historic Urban Landscape", in Al Balad, general guidelines for intervention should be:

- Consider the specific characteristics of the Al Balad traditional urban fabric.
- Reconstructed buildings must follow the original building lines, but replicas or the false historic must be avoided.
- Reconstructed buildings and new buildings on vacated plots must fit into the structural context defined by the type and size of adjacent buildings, and must not impair any future adjacent reconstruction.
- The height of buildings must reflect the traditional forms of local architecture and not disturb the privacy of neighbouring buildings.
- The most significant buildings reconstruction should be based on reliable documentary evidence.
- The adopted rules should also apply to buildings which, before they are destroyed, did not comply with their provisions.

Further guidelines complying with the overall objectives of protecting and recovering the sensitive urban fabric are needed for individual buildings reconstruction measures and projects. These include the following provisions:

- Before any (total or partial) reconstruction, an archaeological survey of the site is mandatory. Approved archaeologists by JHD or Jeddah Municipality, must oversee the work to be carried out according to international standards. If the archaeological survey identifies major vestiges, an archaeological excavation will be planned, and the reconstruction project halted until its completion.
- The protection of partially destroyed buildings takes priority, and repair takes precedence over demolition and new construction.
- Reconstructed historic buildings will have the same volume and height of the original structures they replace, reflected by reliable documentary evidence.
- Total or partial reconstruction can be done using traditional and new materials but always avoiding false historic. For reconstruction works, selective re-use of dismantled elements (from falling or unstable parts, where poor condition and low historical/decorative value command dismantling) and/or re-collected material from the same plot (on the ground or from previous cleaning works…) Mostly for visible elements, to complete partially collapsed masonry walls, floors, parapets…
- If historic documentation is not available, the projects must follow the volume, height, structure and design of the adjacent buildings or other buildings that are typical of the area. Contemporary architecture is allowed as long as these criteria are met.
- Reconstruction projects of destroyed historic buildings must use traditional materials related to each type of building, but the use of contemporary materials and techniques for reconstruction works could be accepted if there harmoniously integrated to the urban fabric; concrete floors, staircases, new wood technologies (Glued Laminated Beams-Glulam; Cross Laminated timber-CLT…), etc
- The colours and materials of new buildings must harmonise with those of adjacent buildings or other buildings typical of the area.
- The composition of the exterior openings (roshans, windows, etc.) must be predominantly vertical. Façades that display horizontality with solid bands along their entire length, as well as blind or fully glazed façades (curtain walls) are prohibited.
- The technical projects must include the nature, quality and colour of the materials proposed by the façade. Those that do not adapt to the environment of the area will be rejected.
- Changes to the parcel structure, typically the merging of land plots, are permitted only if they avoid any adverse effect on scale in relation to adjacent buildings or other buildings that are characteristic of the quarter.

Exceptions to the guideline's rules are to be permitted only for special construction projects. In such cases, a Heritage Impact Assessment (HIA) procedure for the development, evaluation and approval of new building projects should be applied to JHD.

6.6
Guidelines for Adaptive Reuse

This section presents the general criteria for the adaptive reuse that could be made by the restoration and reconstruction projects of the Heritage Buildings.

The conservation of monuments is always facilitated by making use of them for some socially useful purpose. Such use is therefore desirable, but it must not change the original characteristics of the building. It is within these limits only that modifications demanded by a change of function should be envisaged, and may be permitted. In the framework of the revitalization plan of the living urban environment of Historic Jeddah, activities linked to the economic and touristic development are encouraged; however, the functional strategies must not jeopardize the preservation of historic buildings and their architectural features.

The general re-use strategy for the historic buildings is defined in the Land Use plan for the area, and concerns the balanced uses of the heritage buildings between residential and public, such as commercial, business, hospitality, museums and many other.

TRANSFORMATIONS CONCERNING HISTORIC BUILDINGS

All transformation concerning historic buildings, (including half collapsed and totally collapsed ones) both in the nominated property and in the buffer zone, shall follow the procedures defined in the next paragraphs.

General approach:

- Preserve, repair, restore and adapt (when needed) all original historic elements of value: existing/standing buildings, both façades, interiors and decorative features.
- The intrinsic limitations of Jeddah buildings must be considered, given their constructive and structural characteristics. New features must respect these limitations and not increase the fragility of the building.
- When documentation exists and justify the reconstruction (authenticity), complete or reconstruct main missing elements, partially or even entirely, to bring back the general atmosphere and aim towards urban integrity: mostly façades, volumes and terraces, but not create a replica.
- Archaeological survey, research, cleaning and preservation of original materials onsite (for reuse, completion of partially dismantled walls etc.)
- Identify clearly ahead the future use, in accordance with original potentialities of site and volume; address the safety and security concerns and requirements ahead of the project design.
- Elements to be respected by the intervention. Visibility of the intervention with historical and typological references.
- Full documentation of the project must be available and preserved in archives within JHD/MoC & Jeddah Municipality.
- A signage with dating and context for restoration, a brief history on the building, original family, damages, change of use, etc should be visible on a panel, positioned on the building façade, or accessible through a QR code directing to a Historic Jeddah website, with interactive map and associated information.

Documented by the owner after a historical analysis. If the proposal doesn't respect it, the municipality can change the proposal by adding and referring to historical documents.

MORE SPECIFICALLY:

- Re-use function should always respect the original building character and the original architectural typology.
- New functions must be defined starting from the evaluation and the archaeological, historical, architectural, structural and decorative survey.
- New functions must consider the constructive and structural characteristics of the building that set limits to the possible new uses, limiting them to their real possibilities and thus avoiding interventions that may distort the original building and its values.
- Functions that require the transformation of the original structure of the building are not allowed.
- Functional coherence must guide each restoration project.

6.7
General guidelines for the Buffer Zones

GUIDELINES FOR BZ1 (BUFFER ZONE 1)

Buffer Zone 1 is composed of the largest part of the historic city outside of the nominated property and includes a significant number of historic buildings. BZ1 notably includes the remaining parts of the old city east of Dahab Street, and the ensemble of the remaining historic areas west of the road, in the north, the centre and the south of the old city.

The Dahab street area (boundary between BZ1 and BZ2), opened in the 1970s, led to the demolition of a large number of historic buildings and has created a major wound in the urban fabric of this area of Al Balad. Beyond the regulation of restoration or reconstruction interventions, in this case an important intervention at urban level is required to recover the wound through urban microsurgery operations at the micro level. Given the situation, reconstruction interventions will play a major role.

To preserve the unity of the historic city and guarantee the conservation of all remaining historic buildings and of the original street pattern, the urban regulations to be applied in this sector are the same ones described for the nominated property as far as historic buildings are concerned.

GUIDELINES FOR BZ2 (BUFFER ZONE 2)

Buffer Zone 2 is composed of the sector of the historic city of Jeddah located West of Dahab street, which has been largely renewed since the opening of the road in the late 1970s. In this sector are located many high-rise buildings that have altered both the overall image of the historic city and its urban fabric.

West of Dahab street (boundary between BZ1 and BZ2), the area represents a major wound in the urban fabric. An important intervention at urban level is required through urban micro interventions. Given the situation, reconstruction interventions will play a major role.

However, clusters of historic buildings — often in a poor state of conservation — and the historic commercial axis of souk an-Nada, oriented north south, should be preserved. The urban fabric of this sector, its street network and the existing building footprint should not be further modified.

The preliminary urban regulations for this sector control the maximum height allowed for new constructions, while guaranteeing the preservation of the remaining historic elements. Architectural interventions concerning historic building in BZ2 should follow a preliminary technical assessment of the actual characteristics and conditions of the structure, determining whether the building will need to be "restored" or "reconstructed". The overall physical condition of historic buildings in BZ2, however, is considerably worse than the one within the nominated property.

Reconstruction of historic buildings will have the same volume and height of the original structure they replace, according to the same regulations described for the nominated property and BZ1.

GUIDELINES FOR BZ3 (BUFFER ZONE 3)

Buffer zone 3 includes the built areas immediately surrounding the historic city. It comprises the area immediately east of the old city, which is often perceived as an integral part of the historic core, though it used to be situated outside the city walls. This sector extends eastward to the Asad cemetery to reach the first circular road surrounding the old city and beyond, and southward and northward to protect the old city in every direction from the modern development of the rest of the city. It includes notably large parcels of un-built areas (public spaces, Eve cemetery, etc.).

Within BZ3 some historic buildings are identified, but this area is very rich with interesting and high-quality concrete structures pre-dating 1950, showing the XX century architecture of Al Balad, as an essential component of their historic urban landscape. Maintenance and restoration of these buildings are required and their demolition forbidden. Concerning the historic buildings identified in BZ3, they will be subject to the same rules of the historic buildings located within the historic city.

GUIDELINES FOR BZ4 (BUFFER ZONE 4)

Buffer zone 4 is composed of the urban sector built on the ancient shoreline and reclaimed land West of the historic city, in contiguity with the BZ1 and BZ2. It includes the "external" side of Dahab street in order to avoid uneven developments on the opposite sides of the street. This urban sector is characterized by high-rise structures and includes some interesting contemporary architectural elements.

Appropriate/ Inappropriate elements and Interventions

Chapter

7.

In this chapter, Appropriate and Inappropriate elements and interventions are illustrated with some real examples, following the regulations established in the previous chapters.

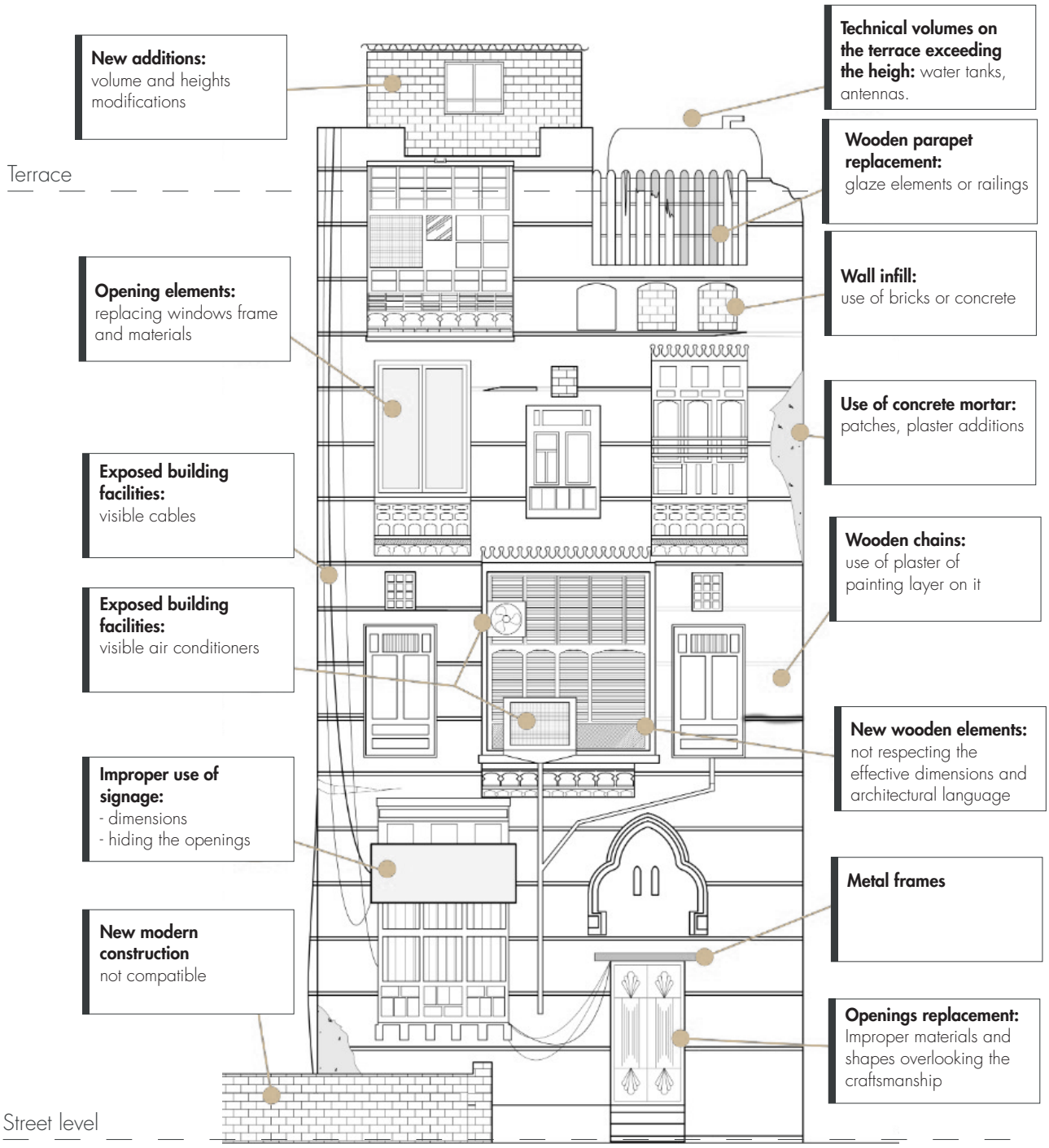
The use of a visual vocabulary of elements and construction examples compares improper and reasonable solutions, to be avoided or encouraged on the interventions


الشلبي للعطارة

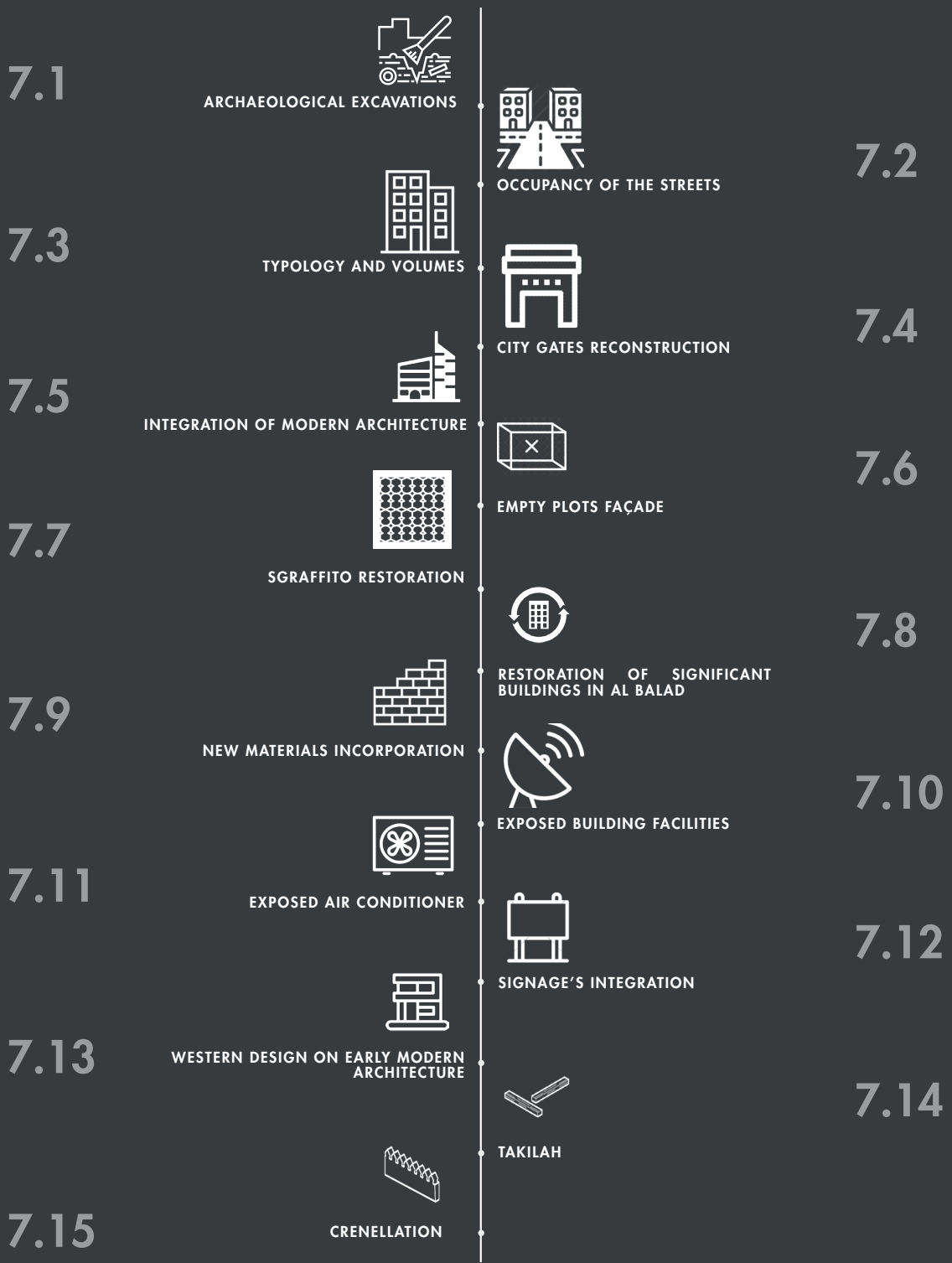
7

7.1 Introduction

INAPPROPRIATE ELEMENTS ON THE FAÇADE



7.2
Appropriate/Inappropriate elements index



7.2.1

Archaeological excavation

An ancient city like Jeddah hides in its basement a palimpsest of valuable information. Under the buildings and public spaces is written its history with a material testimony of incalculable value.
As the buildings will be restored, prior to any reconstruction, and whenever it is necessary to intervene in the soil of the public spaces, it is necessary to make a careful archaeological excavation, document the findings and integrate them, as best as possibile, in the city.

7.2.2

Occupancy of the street

It is very important that the different buildings (public and private) in the city be self-sufficient in terms of meeting their needs (of all kinds), without infringing upon the streets and public space. Public space is essential for citizen life and cannot be reduced, as historic cities are sorely lacking, the case of Jeddah is no exception. This argument stands on top of the legal restrictions imposed by law on public space.

7.2.3

Respect the existing typology and volumes

For the preservation of Al Balad, its traditional atmosphere and its heritage values, it is essential to respect the current volume, the architectural typology and use traditional materials that harmonize with the heritage context.
The occupation of the terraces with pergolas spread over their entire surface is very far from the small kiosks present in some traditional buildings; Glass railings, despite giving transparency, produce uncontrolled reflections; Façade materials of new constructions, as long as they are acceptable by these regulations, should not generate great contrasts with traditional architecture.

7.2.4

City gates reconstruction

A city like Jeddah, inscribed on the World Heritage List, cannot allow the reconstruction of significant elements that characterize the history of the city without a rigorous respect for its location and its original characteristics, justified by historical documents and careful archaeological excavations.

7.2.5

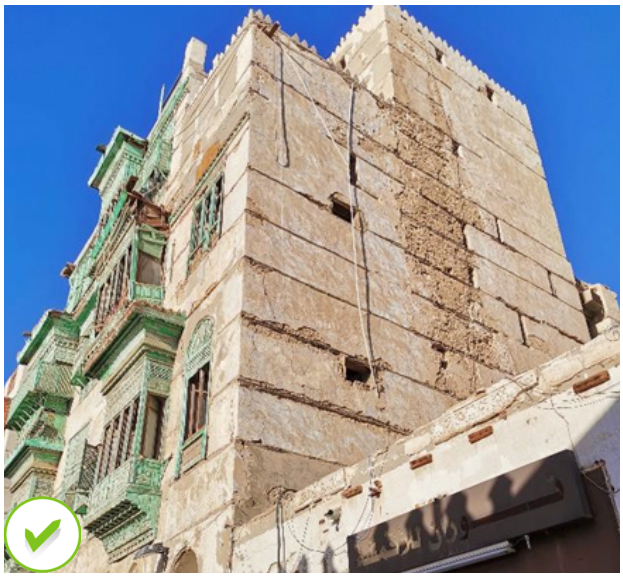
Integration of modern architecture

Al Balad has an important stock of traditional architecture to preserve; it also has some buildings of early modern value and worthless buildings or empty plots in which it will be necessary to build contemporary buildings of high architectural quality.
The difference between an architecture integrated into the traditional environment and the "pastiche" is very weak and great care must be taken to avoid the construction of buildings completely out of context.

7.2.6

Empty plots and side façades

Empty plots generate an unstructured area, an alteration of the environment and a loss of the intrinsic value of the urban landscape. In short, the heritage values of the city. It is necessary to work on solutions that keep both the urban fabric and the image of the side façades of the buildings in these areas intact.
Neglect in the design of side façades can create disorderly alleyways between buildings that may deteriorate the quality of the public realm and encourage littering and vandalism. Buildings should design their side façades with care, with consideration for neighbouring buildings and should contribute to a better public realm.
A similar problem, but of lesser impact, are the sections of side walls of buildings that have different heights. Given that this is a value to be preserved in Al Balad, solutions must be found to reduce the impact of these bare facings.



7.2.7

Restoration of sgraffito

One of the most interesting decorative elements of Al Balad's buildings is the monochrome sgraffito with a wide range of geometric compositions.
Its preservation is very important and, in the restoration, it is necessary to guarantee the use of the same materials and the same techniques as those of the original ones.

7.2.8

Restoration of significant buildings in Al Balad

The restoration of the most significant buildings in Al Balad requires full respect for its various components, whether structural or decorative. The incorporation of exposed stone cladding and the imitation of structural reinforcements such as takalil do not fit well with the established restoration principles.
There have been level changes in the streets throughout history, some of the doors of buildings have been raised or sunk. Giving a good answer to this problem requires a detailed case-by-case study.

7.2.9

Incorporation of new construction materials

Both in the restoration and in the reconstruction, the incorporation of new materials becomes essential, as they allow to significantly improve the behaviour of the buildings. However, new materials must be incorporated very carefully and based on relevant studies to justify that their incorporation will not lead to changes in the construction systems or alterations in the values of the building.

7.2.10

Exposed building facilities

The façades and roofs cannot be a repository for all the facilities of the building, which must find their place inside the building, in the best conditions, as has been done historically.
In cases where it is really difficult to place an installation inside the building, its position on the façade must be done in a very clean and tidy way, adjusted to the general design of each façade.

7.2.11

Exposed air conditioners

The air conditioners, located on the facades of the buildings and in the roshans, represent a serious alteration of the urban landscape as a whole and of the buildings themselves in particular.
Likewise, placing them in the interior of the noble rooms, entails a serious loss of value in the interior quality of the buildings.

7.2.12

Signage's integration

The signs identifying shops and commercial activities must be integrated correctly into the architectural composition of the façade of the buildings.
Integration in the composition of the facades is essential, but the diversity in the design, colours and lighting of each sign is an enriching element of the commercial space, which must escape the extreme uniformity and monotony.

7.2.13

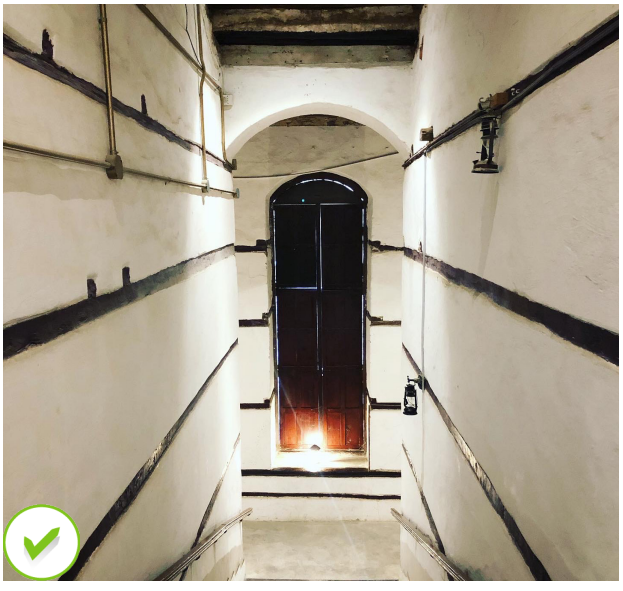
Western design in early modern architecture

Early modern architecture represents a component of great value in the historical urban landscape of Al Balad, as it was the architecture linked to the country's independence.
This architecture departs from traditional parameters and incorporates Western standards of modernity. This fact leads to contradictions between a strong respect for privacy and open balconies on the street. Resolving this contradiction has led to significant architectural alterations.

7.2.14

Takilah

The Takilah is not only a crucial element in the building structure, conceived to improve the tensile performance of the walls and prevent cracking, but also one of the main elements of vernacular architecture in Al Balad. The preservation and restoration of these elements demand a total respect of the original geometry, arrangement and the global connections inside the walls.



7.2.15

Crenellation

A recurrent building pattern of Al Balad is the use of decorative elements on top of terrace parapets. Various shapes can be found at the roof levels with a wide range of three-dimensional geometric compositions.
Its preservation is very important and, in the restoration, it is necessary to guarantee the use of the same materials and the same techniques as those of the original ones.

Appendices

A

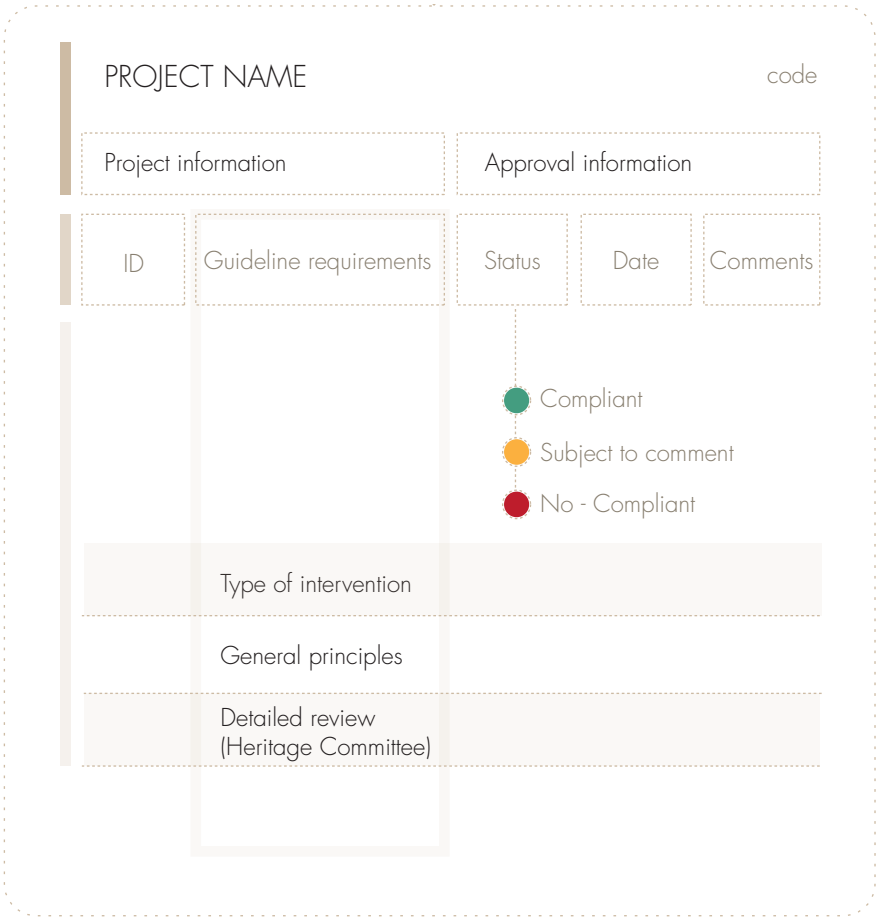
Complementary documents supporting the guidelines, gathered for the applicant's use.

A

Compliance checklist
Poster
Selected bibliography

Compliance checklist

To improve the usefulness and transparency of the JHD review and approvals process, all applications will be assessed according to a checklist, with two levels/steps/layers (.xls format), and a compatible screening approach with HIA process. An annotated sample of the checklist is provided for your reference.



Compliance checklist

Al Balad
Design Guidelines for Heritage Buildings

Compliance Checklist

Beit Nassif

Elevator Shaft	Approvals Information *(filled by JHD officer)*	
Project Address: Cluster around Beit Nassif	Application no:	00000
Latitude:	Status:	
Longitude:	Submission Date:	
Architect:	Review Date 1:	22/11/2021 (CG)
Applicant: OBMI	Review Date 2:	
Geographic Area:	Review Date 3:	
Arch. Character:	Approval Date:	

ID	Guideline Requirement	Status	Date	Comment
1.	Type of Intervention	8 0		Non-compliant
1.1	Urgent and preventive consolidation measures	Status		
1.2	Building maintenance and minor work	Status		
1.3	Demolitions	Status		
1.4	Excavations			
1.5	Restoration (Light) c nservatio	Non-compliant	22/11/2021 (CG)	Heavy modification (volume, height, plan) and no restoration of the original heritage bldgs, simply not considered in the proposal
0	Structural elemen	compliant	22/11/2021 (CG)	Not respectful to traditional techniques and aesthetics, despite the use of the roshans as a referential element. Volumes, heights, depths and masses are fare too imposing, especially next to such an important building (Nassif). No use, respect or mention of existing facades.
	Façades	Non-compliant	22/11/2021 (CG)	
	Not structural elements	Non-compliant	22/11/2021 (CG)	
	Decorative elements	Non-compliant	22/11/2021 (CG)	
	Others	Status		
1.6	Restoration (Heavy). All the building	Non-compliant	22/11/2021 (CG)	Heavy modification (volume, height, plan) and no restoration of the heritage bldgs. The overarching new structure will necessarily impact the original elements, notably at the foundations level.
1.7	Reconstruction	Status		
1.8	Adaptive reuse	Non-compliant	22/11/2021 (CG)	Poor use and optimization of the existing volumes and spaces. Out-of-scale overarching structure is shadowing and heavily impacting on Nassif.
	Minor changes	Status		
	Important changes	Non-compliant	22/11/2021 (CG)	Heavy change of Volumes and heights, new setbacks, new materials & techniques - a whole new language (visually more "Rajasthan" than Jeddah)
1.9	Urban Infrastructures	Status		

General comment : On several criteria, **the project is not (and by far) compliant with Unesco criteria and building standards required for Al Balad today**, NOT respecting the authenticity and integrity requirements (notably with regard to existing buildings' restoration, general volummetry and planning, but also on the perverted use of traditional techniques and materials - wooden panels vs mangabi/takilah masonries). Despite a reasonable reference to traditional ventilation systems, the overall approach is very contrasting, overimposing itself, damageing significance and values at the core of Historic Jeddah, righ next to its most emblematic "monument", Beit Nassif, which it largely conflicts with in a direct manner (volume and height, shadows, distances ; NB: CGI on p. 4/5 is not at scale, giving a wrong idea about the overall volume of the projected elements, even if it represents the lower part). Moreover, the distribution is poorly related any traditional configurations : the plan multiplies spaces and volumes, resulting in a far too dense cluster, with exagerated depth for some of the structures, vi-à-vis issues and narrow shadowy courtyards.

Compliance checklist

Al Balad
Design Guidelines for Heritage Buildings

Compliance Checklist

Beit Nassif -

ID	Guideline Requirement	Status	Date	Comment
2.	General Principles	7 0		**Non-compliant**
2.1	 Respect to the original urban fabric	Non-compliant	22/11/2021	Change of alignments, with some setbacks and a semi-public courtyard (overshadowed by neighbouring buildings). Cf. Guidelines.
2.2	 Respect to the current volume and heights	Non-compliant	22/11/2021	Extensive change of volumes (far too much), Heights (to a unreasonable exten: reaching Beit Nassif's level, the structure would be visible from a wide area, severly impacting on the traditional fabric) and façades. Extensive terrasse structures, massive and impacting.
2.3	 Respect to the heritage values of each element	Non-compliant	22/11/2021	Cf. Guidelines (use , function and design of Roshans largely reinterpreted)
2.4	 Identify the original and restored eleme	Non-compliant	22/11/2021	The distinction is clear, via a hardline contrasting approach, not fit to the position. No mention of the restoration means and approach for the existing structures, not really considered nor integrated in the project. Cf. Guidelines
2.5	 Respect to the original characteristics uses	Non-compliant	22/11/2021	Heavy change of use and organization. The attempt to optimize the available space leads to a dense cluster of small units with multiple uses. Cf. Guidelines
2.6	 Respect to the bioclimatic and natural ventilation components	Status	22/11/2021	This is well taken into consideration theoratically, but the density and heights raise questions. Would need clarifications (if there weren't other major conflicting pts).
2.7	 Respect and use of the traditional architectural language	Non-compliant	22/11/2021	New architectural language is far too contrasting in colours, textures and volumes, and imposing in the compositions. Incompatible (new, "Rajasthan" like) aesthetics, contrasting techniques and materials (wood panelling...). Cf. Guidelines
2.8	 Use of the traditional building materials and techniques	Non-compliant	22/11/2021	Incompatible techniques and materials (wood panelling stand miles away from the traditional mangabi/takilah masonries; not to mention the metal pilars and associated foundations)

Poster

Heritage principles, values and rules in Hist

All interventions on Heritage Buildings in Al Balad (Historic Jeddah) should begin with the same core set of PRINCIPLES, VALUES and R
this unique and remarkable place. The principles outlined here establish the basic attitude towards building and development, to ensur

1.

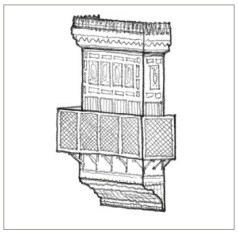
Respect the original urban fabric

Al Balad, once surrounded by walls and a series of gates, presents a particularly dense and dynamic urban fabric, **with narrow streets framed by continuous strips of traditional façades, connecting public buildings and open spaces:**

- The **historic alignments, public and open spaces must be respected** as essential part of the Al Balad Heritage values: NO setbacks, NO dead-end streets, NO courtyards or inner square opening onto the public space;
- The organic **street pattern in Al Balad is respected**, developed in stages according to specific needs, establishing a hierarchy of streets adapted to residential, commercial and other functions;
- Where **valuable archaeological remnants** exist, do not undermine their structural integrity. Use historical maps and archaeological surveys to confirm original alignments.

2.

Respect the heritage values of each element

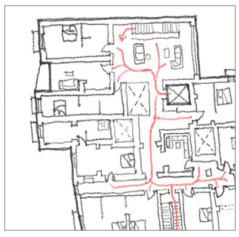


The **heritage values in Al Balad, tangible and intangible, are numerous and diverse**; together, they give the town its uniqueness:

- The **streetscapes, public and open spaces must** be respected in all their characteristics and elements;
- **Public and private buildings, outward-oriented houses,** are the essential component of the Al Balad character;
- The **architectural language and typologies must be preserved** with their specific aesthetic and functional patterns, resulting from the interaction between building and planning principles and local traditions;
- **Many components of the buildings give them a heritage value** and all must be respected and restored, if needed: decorated Roshan façades, coral masonry construction, elaborate doorstep and interior/exterior decorative features, etc.

5.

Respect the original characteristics and uses of buildings in adaptive reuse



The historic city experienced a mix of uses over time, making it especially rich and socially cohesive. **The introduction of new uses must be carefully managed**:

- **Adaptive reuse is essential** to revitalize Al Balad on a reasonable scale, if it is duly controlled and respectful to original buildings characteristics;
- Before considering a new use, one must assess whether the building allows for it without serious alterations : **new functions have to match with the building characteristics** and one must avoid any forced adaptive reuse that would damage the heritage value of the building - typological, architectural, constructive or structural;
- **Terraces are historically tidy open spaces**: kiosks, pergolas, canopies and other elements cannot represent more than 15% of the total area, while the eventual installations (water tanks, antennas, AC etc.), grouped, optimized and discretely positioned, must occupy a maximum of 10%.

6.

Respect and use the traditional architectural language

The Al Balad **architectural language results from a crossroad of cultures**, exhibiting a vibrant diversity linked to the different periods and influences, Roshan tower houses standing as an outstanding typology unique within the Arab and Moslem world:

- For both restoration and reconstruction works, a **sound knowledge of the different traditional typologies** is required to apply the appropriate language to each project, in accordance with respective types and places;
- **Carefully consider traditional elements, proportions and massing** for both restoration and reconstruction projects;
- **Respectfully hide all installations inside the buildings, into discrete locations**: No AC block units on the façades or public spaces, no cables, pipes or counters on the façades;
- For contextual reconstruction projects, **a new vernacular architecture for Al Balad** in the XXIst century has to be elaborated, respectful and well- integrated into the existing urban fabric characteristics.

oric Jeddah (Al Balad)

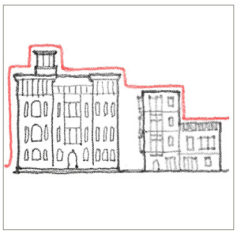
RULES, to promote the regeneration and the long-term flourishing of
e each individual part of Al Balad contributes to the greater whole.

ALBALAD HISTORIC JEDDAH

وزارة الثقافة
Ministry of Culture

3.

Respect the current volume and height

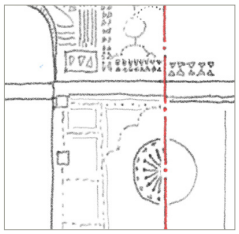


The **volumes and heights of Al Balad are its urban essence**, result of the historic evolution, giving it **a specific and precious scale**:

- **No modification can be made to the volume or the height of the heritage buildings**, except to eliminate poorly integrated, out-of-context or threatening additions;
- The careful consideration, in a detailed study, of a wider area beyond a single building, can exceptionally justify **some limited adjustments** in heights or volumes to improve the urban landscape, but not to unify heights;
- Current volumes must be respected, avoiding the creation of new ancillary volumes, **accommodating inside the buildings new elevators or services** when needed. Exceptionally, a detailed study can justify a small increase in volume to accommodate elevators or new services, always in hidden spaces, invisible from the streets.

4.

Identify original and restored elements

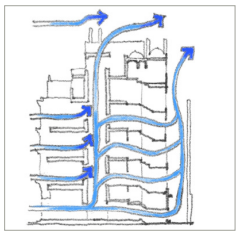


Authenticity and Integrity are essential parameters in the nomination of Al Balad as a UNESCO World Heritage Site, but not only. Preserving them is essential:

- **Partially or completely dismantling an original heritage building** is an attack on authenticity and integrity, and is **NOT acceptable** as a criterion for restoration. Once demolished, the heritage values of the building no longer exist;
- Restored buildings must be carefully documented, express the historical provenance of their components, and **clearly distinguish new elements from old**;
- When a historic approach to design is used, it should not seek to create literal/exact copies, even for missing parts. Likewise, within a favoured **contextual design approach**, ensure that new elements and buildings are clearly distinguishable from heritage ones.

7.

Respect the bioclimatic and natural ventilation components

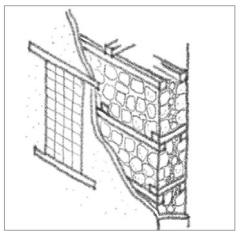


Al Balad has been able to **adapt its buildings and its urban fabric to the hot and humid climate of the Red Sea, specifically in Jeddah**. This knowledge should be put to good use:

- Prior to a restoration, it is necessary to **analyse the climatic functioning of the building** and the alterations it has suffered, in order to recover them in the restoration process;
- **Respect the original passive climatic design** of Al Balad traditional buildings, with maximized air circulation;
- **Prioritise the energy efficiency** of the buildings and the use of renewable energies through the re-use of fans, district cooling and heating plant;
- **Thermal insulation of the external openings** must be considered as an option and carefully designed, in a balanced approach between the preservation of architectural values and the improvement of the comfort.

8.

Use the traditional building materials and techniques



One of the most visible **values of Al Balad's traditional architecture is its materials and construction techniques**. Their preservation and recovery deserve specific efforts in the restoration process:

- In all restoration work, **the materials to be used must be the traditional ones**, improved if possible: coral masonry, wooden takalil, lime mortars, wooden roshans and other materials;
- **Original materials recuperated from previously collapsed buildings** should be reused in priority for repair works on historical buildings;
- Restoration and reconstruction are an **opportunity for traditional crafts revival** and the promotion of traditional construction methods;
- The **engagement and training of the new generations** on the knowledge and good practice of the traditional techniques is an opportunity for job creation in the coming years.

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