رؤية VISION 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

العمارة السعودية
SAUDI ARCHITECTURE

Al Qatif Oasis

Architectural Design Guidelines

وزارة البلديات والإسكان
Ministry of Municipalities and Housing

مركز دعم هيئات التطوير
DEVELOPMENT AUTHORITIES SUPPORT CENTER

برنامج جودة الحياة
QUALITY OF LIFE PROGRAM

VERSION 1.0

FIG.1 **AL QATIF OASIS ARCHITECTURAL CHARACTER AREA**

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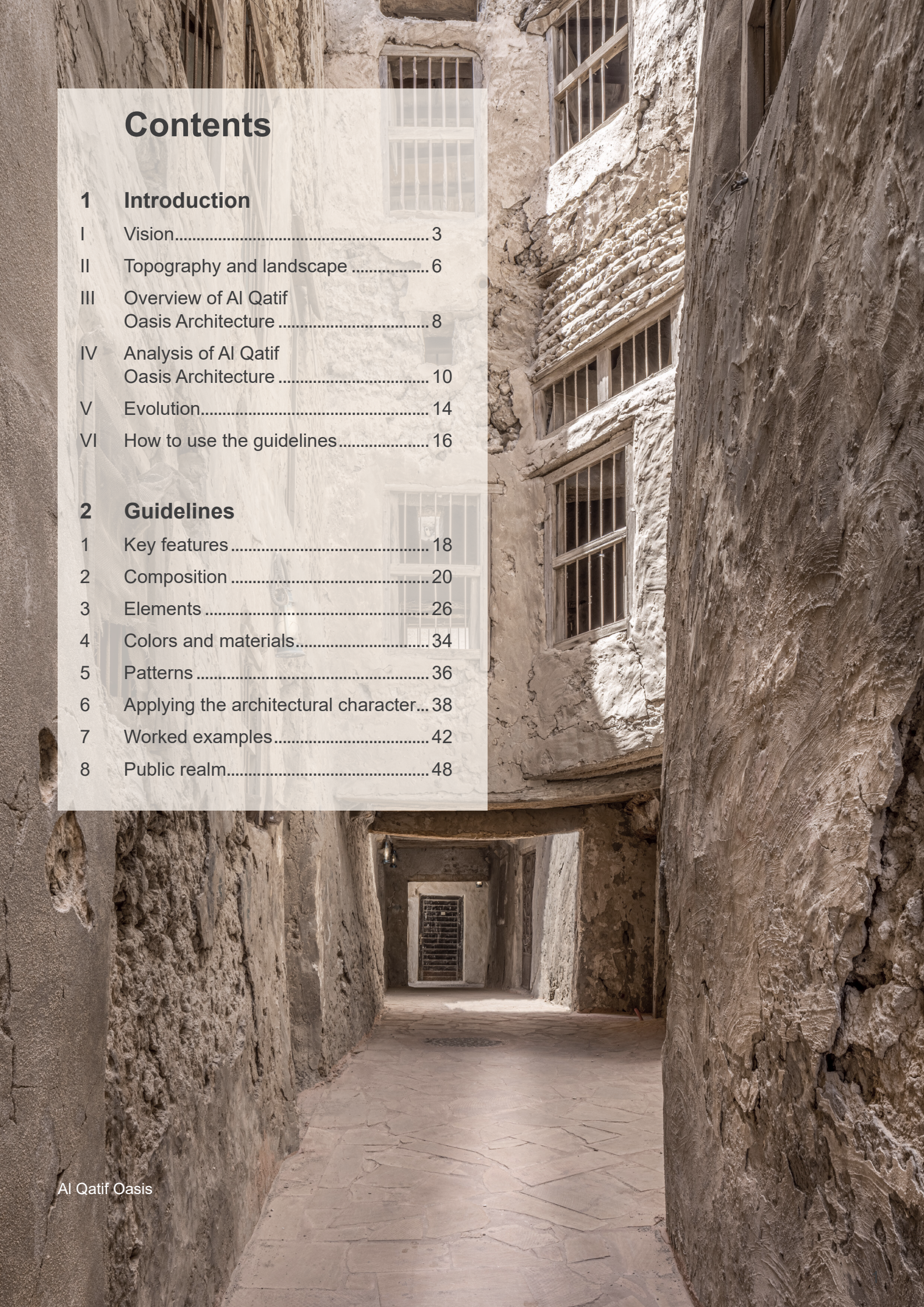


Al Qatif Oasis

FIG.2 **ARCHITECTURAL CHARACTERS MAP OF KSA**

INTRODUCTION

I Vision

Celebrate and preserve Saudi Arabia's rich architectural legacy inspired by culture, heritage and nature.

I.1 Guidelines philosophy

The Architectural Design Guidelines (hence referred to as ADG) aim to foster progressive contemporary design that is rooted in the diverse geographic and cultural contexts of the Kingdom.

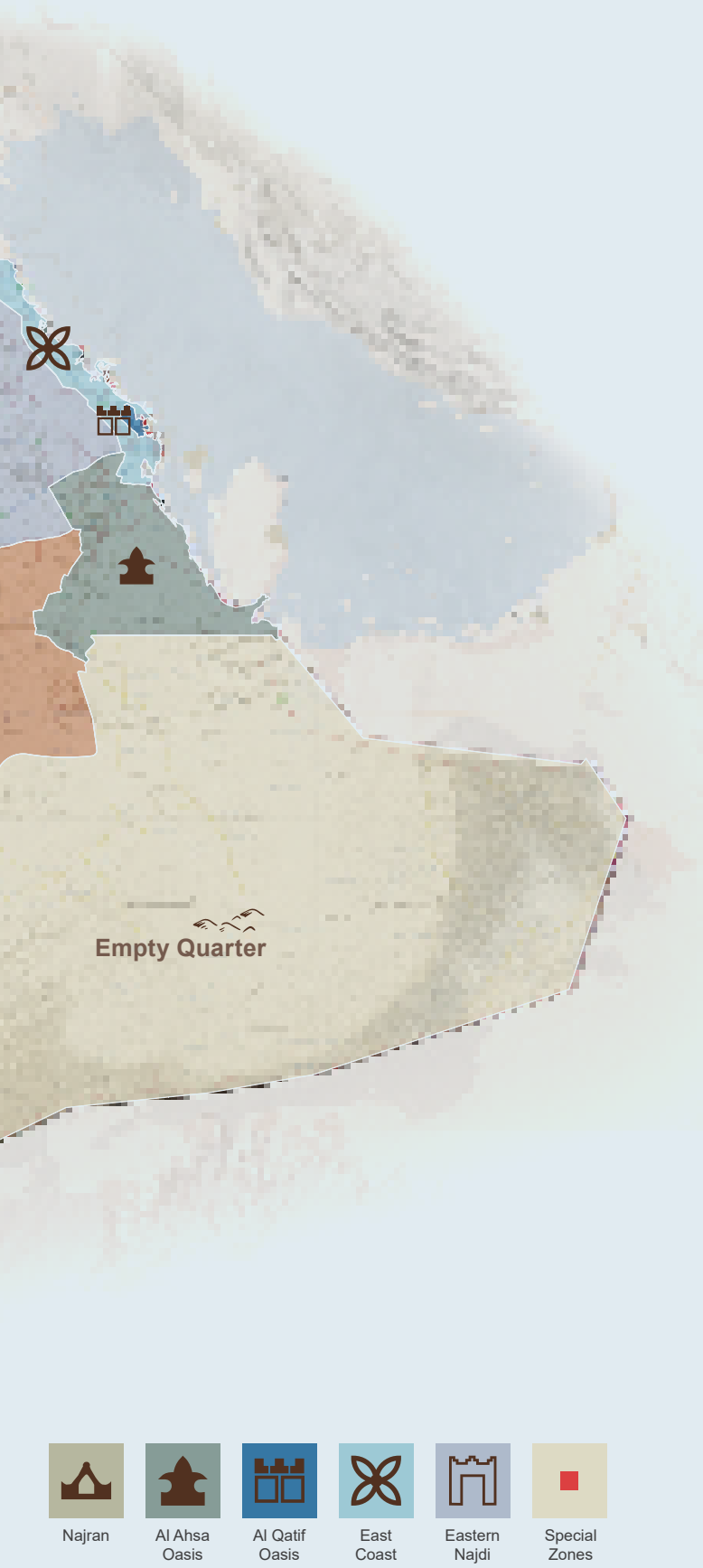
Its propositions are based on the study of historical precedent, taking inspiration from vernacular forms and the embedded knowledge shaped by generations of practice and experience.

The guidelines are forward-looking, intended for a wide range of contemporary development and suited for different levels of prescription. They aim to be succinct, well organized and useful: a positive resource for designers and easy to implement by planning authorities.

I.2 National context

This volume belongs to a suite of 19 documents, each exploring a different geographic context and describing a distinct architectural character within the Kingdom. Together they form a comprehensive portrait of the architectural heritage of the country.

Though application boundaries for the architectural character have been defined (fig. 2), influences may extend across boundaries. Designers are advised to consult adjacent architectural guidelines documents and confirm the status of their building context with facts on the ground.



I.3 Al Qatif Oasis

The focus of this publication is Al Qatif Oasis area, located on the Arabian Gulf coastline and surrounded inland by the East Coast region. The region mainly includes the governorates of Al Qatif, covering other cities such as Saihat.

The activities that make up the region's heritage, dating to the late Bronze Age, are the product of slow, patient adaptation over millennia to the hostile climate and a lack of available resources. Al Qatif's richness in natural groundwater, oil reserves, and coastal location shaped the region's natural and urban landscapes throughout history.

The land's fertility historically attracted settlements and agricultural activities while the oil reserves rendered Al Qatif a vital trade port city from the 1970s onwards.

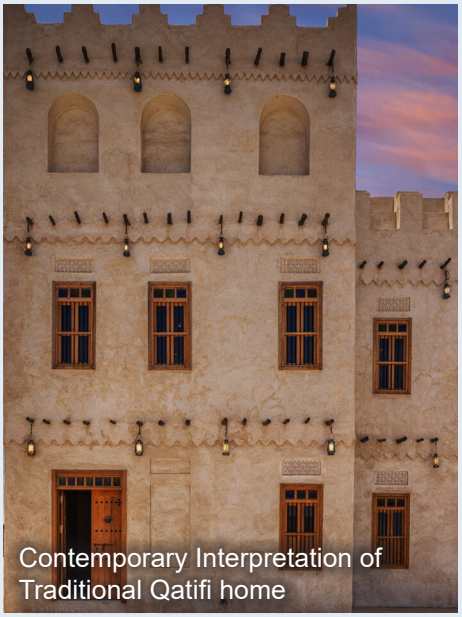
The vernacular Al Qatif architectural style is reflected in buildings with ornamented façades and strongly characterized by semi-circular and pointed arched geometry.


Qal'at al-Qatif in Al Qatif

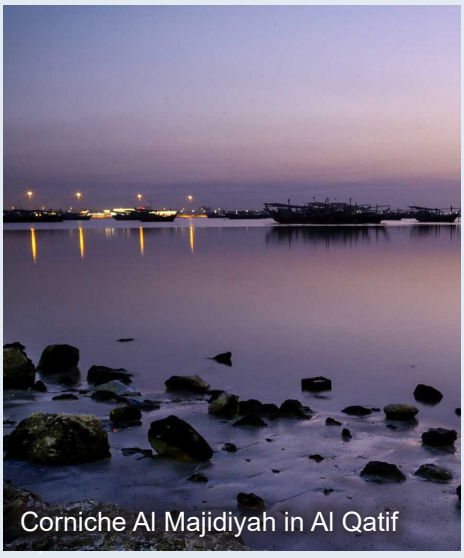

Qal'at al-Qatif - 20th century (Al Qatif)


Arcades in Qatif fortress


Tarut Castle remains in Tarut Island


Contemporary Interpretation of Traditional Qatifi home


Shaded walkway in Al Qatif


Corniche Al Majidiyah in Al Qatif


Wall engravings in Al Qatif


Qatif fortress in Al Qatif)

FIG.3 **AL QATIF OASIS**

II Topography and landscape

Observations on the links between landscape, climate, culture and the architectural character of Al Qatif Oasis.

II.1 Landscape

The landscape of the area stretches about 120 kilometers wide and drops in elevation from around 400 meters in the west to about 240 meters. It then meets the Arabian Gulf at the East Coast region. The coastline itself is somewhat irregular, blending sand plains, marshes, and salt flats with the sea almost invisibly. The result is an unstable land surface, shallow sea, and far-offshore shoals and reefs. It is on this coastal surface that Al Qatif Oasis area is located, over a petroleum field 20 km north of the city of Dammam. Al Qatif has been proposed as a protected area with special guidelines, due to its unique character and heritage.

A lush oasis characterizes the region with settlements such as Al Qatif city, surrounded by palm tree jungles. The oasis, with its high level of fertility, contains numerous types of plants that can be categorized into two main categories. The first entails plants that are naturally occurring in the oasis landscape. The second category includes plantations, mainly consisting of date palms, as well as other fruits and vegetables.

In the desert areas, plant growth is largely confined to depressions or dry wadis, though some plants with deep rooting systems grow elsewhere.

II.2 Climate

The Arabian Gulf shore's proximity to the sea cools down the desert temperatures.

Only seldom do temperatures go beyond 38° Celsius, but relative humidity is routinely higher than 85% and can even reach 100% for extended periods of time. This mixture results in a warm fog at night and a heated mist during the day. Coastal locations become tolerable in the summer. When there is a southerly wind, there is always an increase in warmth and humidity. A strong north-westerly wind blows in late spring and early summer and lasts for almost three months, causing dust and sandstorms capable of reducing visibility to a few meters.

II.3 Culture

The settlement of Al Qatif, known as the gate to the Arabian Gulf, for its ancient history, is the heart of the oasis. The presence of water along with the topography of these locations has shaped the landscape and its subsequent use as agricultural areas; agricultural areas currently comprise around 5,584 hectares. Water for the agricultural area is provided by 1200 artesian wells and more than 70 hand-dug wells. Due to the salinization of the shallow aquifers, deeper aquifers are used to collect irrigation water.

II.4 Architectural influence

The region's topography and landscape influenced its architecture in terms of building design and materials used. The built environment of Al Qatif particularly relies on topographically-specific materials that are native to the region such as salt rocks, mud, sand, and palm trees. The tendency of the materials used in construction in Al Qatif is to erode if not maintained, given the harsh climatic conditions.

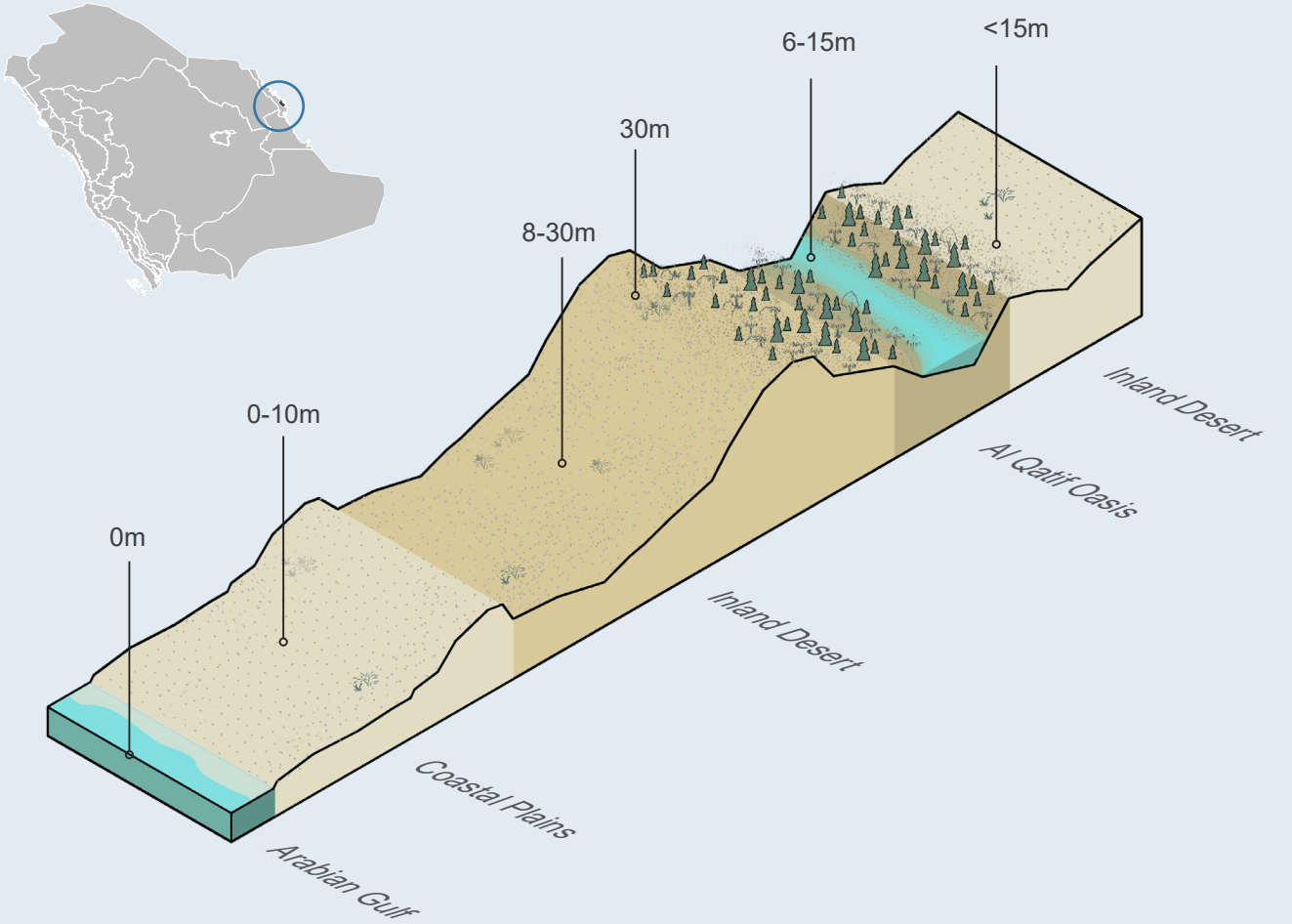


FIG.4 **AL QATIF OASIS TOPOGRAPHY**

III Overview of Al Qatif Oasis Architecture

A summary of the existing character of traditional architecture and settlements in Al Qatif Oasis.

III.1 Architectural character

Due to the hot and humid climate of the area, the architecture of Al Qatif provides shade, ventilation and indirect light in interior spaces. The light is brought in using a particular type of opening, Al Darisha, a glass window with wooden framing. In terms of architectural elements, various kinds of arches were used in traditional Al Qatif architecture, from circular to point arches. Given that the area is exposed to sandstorms, windows were built high and narrow. Many of the houses consisted of one floor with a space at the entrance, half of which was roofed, and the other half was open. The floor of this space was covered in palm fronds and used as a summer seating area.

Gypsum ornamentations were used on arches, columns, and walls. Ornaments are often specific to each region;

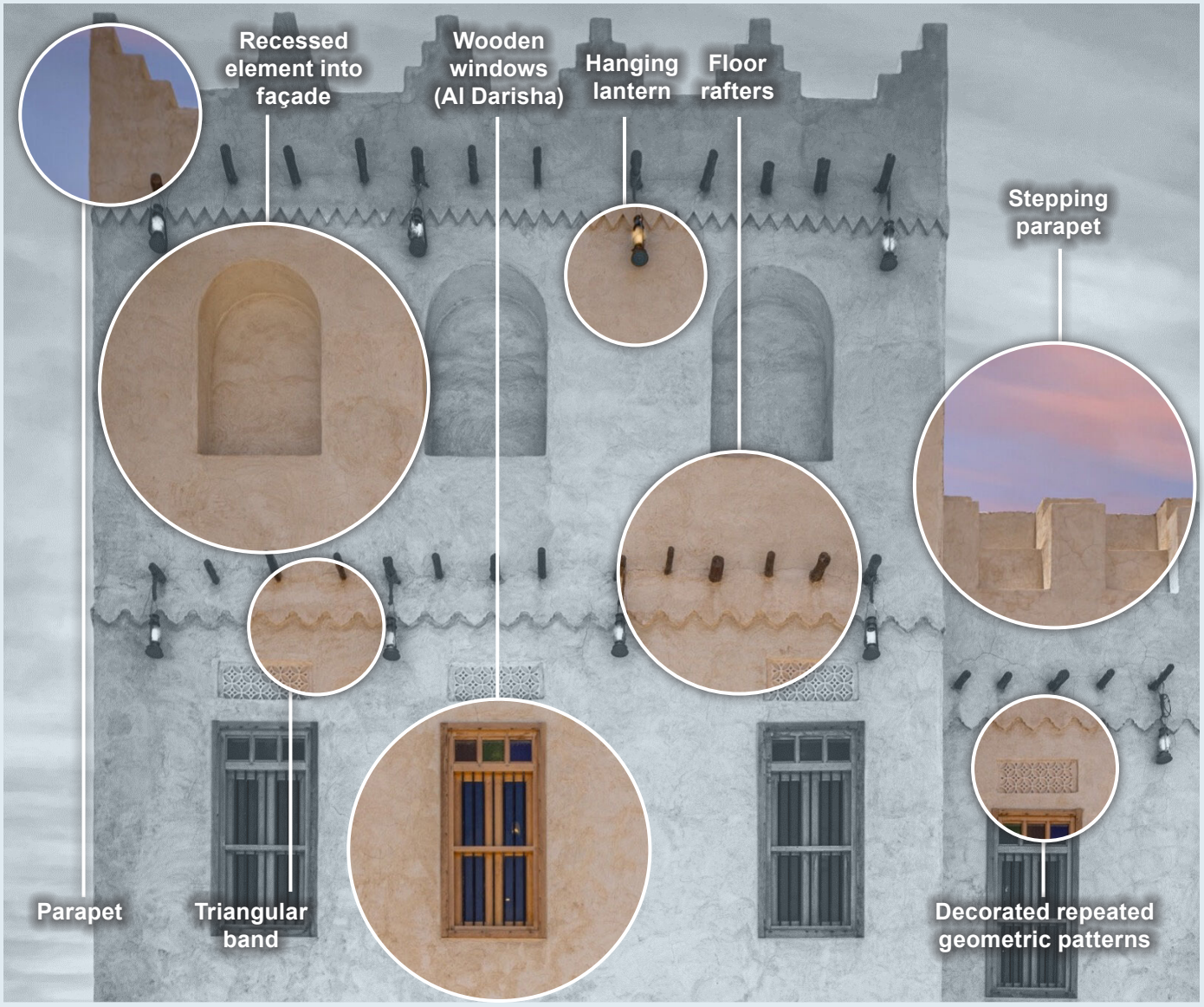


FIG.5 TYPICAL BUILDING FORM, TRADITIONAL QATIFI HOME, AL QATIF

however, in Al Qatif we witness a variety of ornaments from one space to another in the same house. Similarly, wooden entrance doors were decorated with patterns and letters specific to each owner.

III.2 Settlement character

Before the 20th century, the urban fabric consisted mainly of settlements in the oasis close to water sources or on the coast due to fishing, farming, and pearl hunting activities.

The architectural building tradition responded to resource limitations imposed by economic or natural factors.

Alluvial mud was used in building construction and was brought from the sea or from pits that were specially dug in swampy lands for that purpose. The mud was usually mixed with hay in order to strengthen it and increase its cohesion.

Gypsum was also extracted locally to both plaster the walls of the buildings from the inside, as well as to plaster the reeds used in the roof construction. Similar to other areas of the Kingdom, traditional architecture in Al Qatif entails the use of palm trunks to build roofs, floors, windows, and doors.

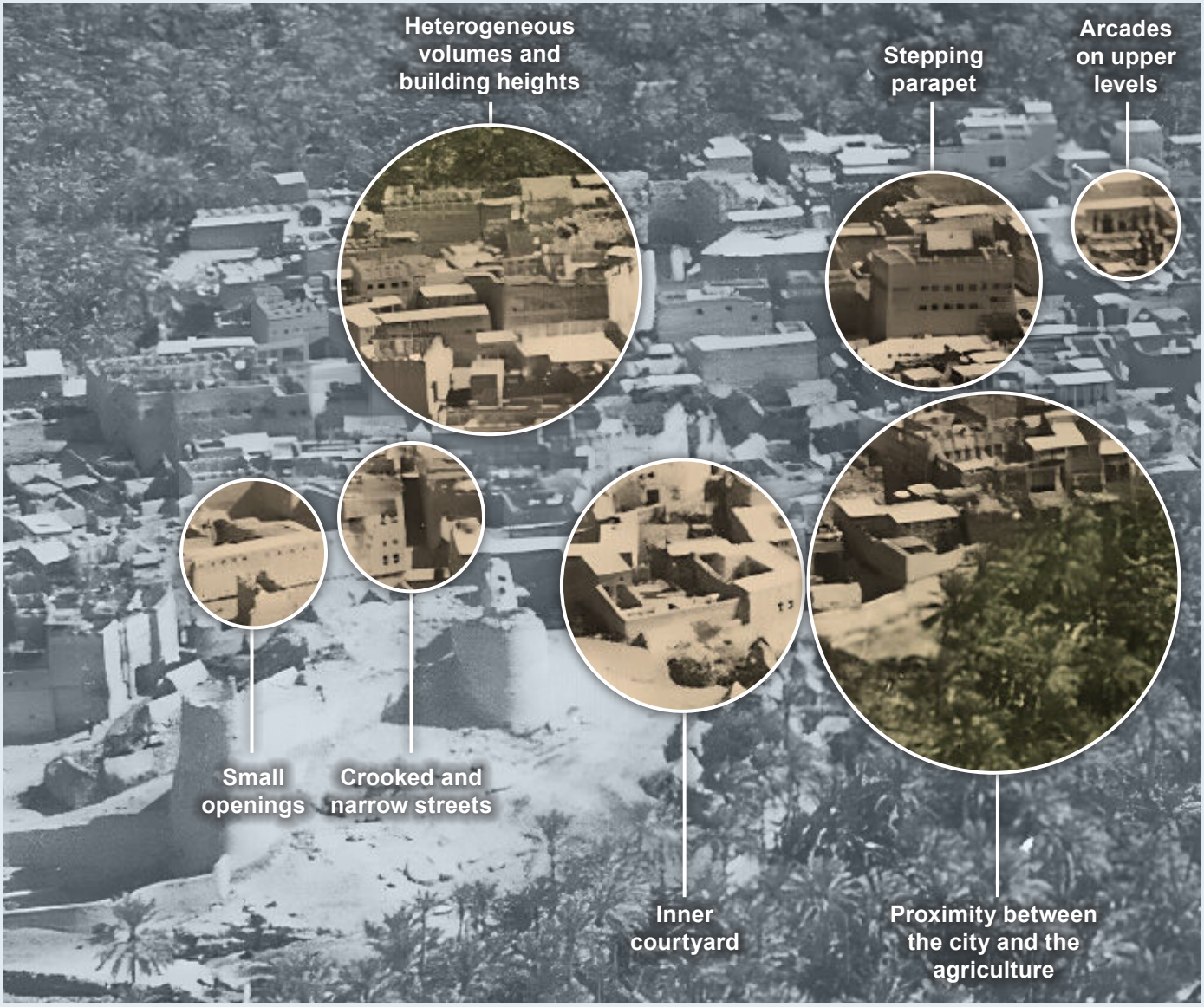


FIG.6 **SETTLEMENT FORM, AL QATIF**

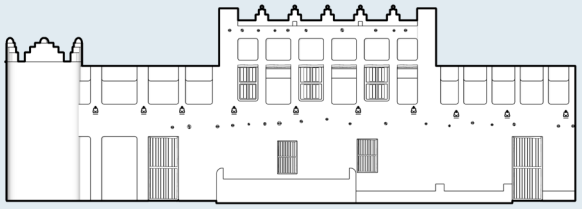
IV Analysis of Al Qatif Oasis Architecture

The evidence and formal analysis upon which the guidelines are based.

IV.1 General typology

Traditional buildings in Al Qatif Oasis are characterized by the use of timber and mud. Buildings can be uniform in shape but could also be more dynamic with vertical subdivisions and height variations.

Buildings



Al Qatif traditional building 01

IV.2 Aspect ratio

Some buildings are marked by strong horizontal proportions, indicated by a width-to-height ratio of 3:1. Another vernacular type of building, also presenting a robust horizontal proportion, with a width-to-height ratio of 2.1:1.

Traditional Al Qatifi homes are more square-shaped, with a width-to-height proportion of 1:1.

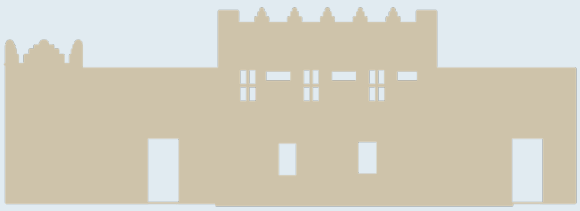
Width to Height Ratio

3:1

IV.3 Solid-to-void ratio

The buildings are punctuated with same-sized openings repeated across the façade. The façades vary from mostly closed, with very few small-sized openings constituting a total void percentage of only 9%, to moderately open, with a void percentage ranging between 17% and 23%.

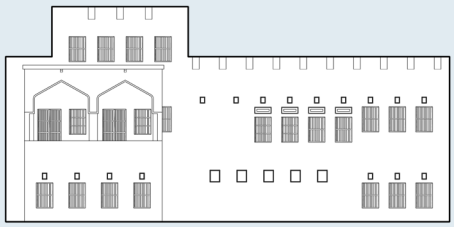
Façade analysis



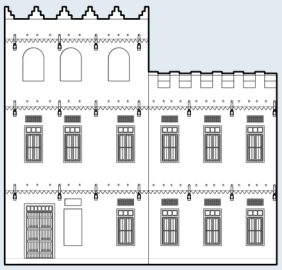
Façade area – 386 sqm
9% void

Vernacular façade studies

Al Qatif traditional building 02



Al Qatif traditional building 03



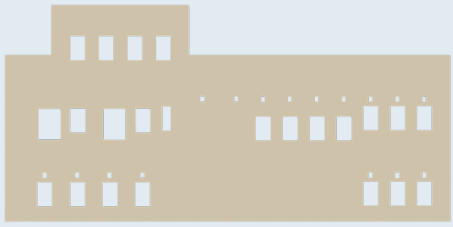
Al Qatif traditional building 04

2.1:1

2.1:1

1:1

Façade area – 162 sqm
23% void



Façade area – 277 sqm
21%

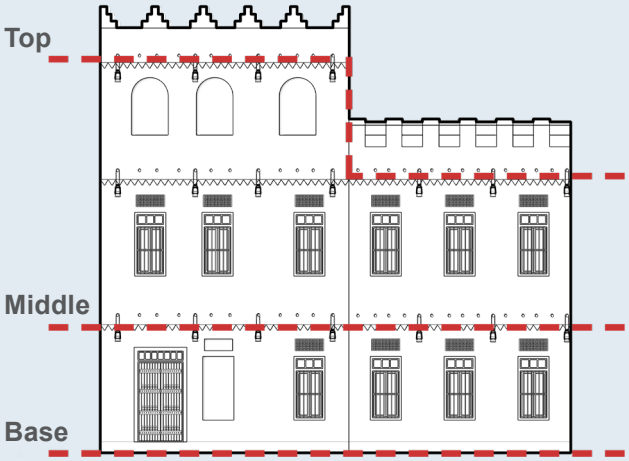
Façade area – 128 sqm
16% void

IV.4 Tripartite articulation

Tripartite articulation is a typical feature of Al Qatifi buildings. Façades are typically divided into three separate tiers with their own distinct character: base, middle, and top.

- base - main entrance, arcades.
- middle - windows and projecting elements.
- top - crenelation, vent holes and roofscape.

Decorative horizontal bandings are sometimes used to accentuate the tripartite articulation of buildings and highlight their functional hierarchy.



Tripartite articulation

Façades are typically split into three separate tiers base, middle, and top.

IV.5 Façade depth

Façades are usually split into planes of different depths. Typical façades are characterized by repeating and alternating elements. In traditional Al Qatif architecture, both the lower and upper levels of the front façade have larger openings.

Façade depth

Al Qatif façades are usually split into planes of different depths.

IV.6 Vertical bays

The façade's approach constitutes legible vertical bays which, in addition to repeated same-size openings, give the façade a consistent rhythm.

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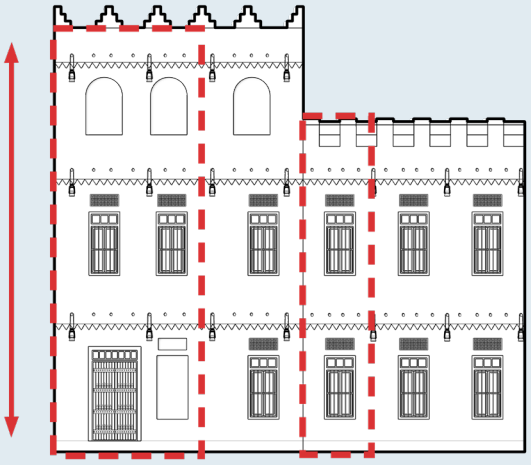
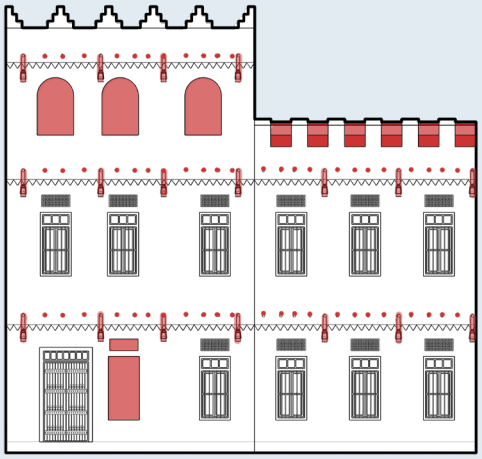


Legible vertical bays

Most façades have repeating and alternating vertical elements.

IV.7 Projections and recesses

In traditional Al Qatif architecture, projections and recessions are very characteristic of the built architecture. On the façade, projections accompany the numerous windows and openings often as blind panels of similar proportions to implement a rhythm on the facade. Lined lanterns on every tier alongside floor rafters as well as repeated geometric patterns, contribute to the building's overall dimensionality.



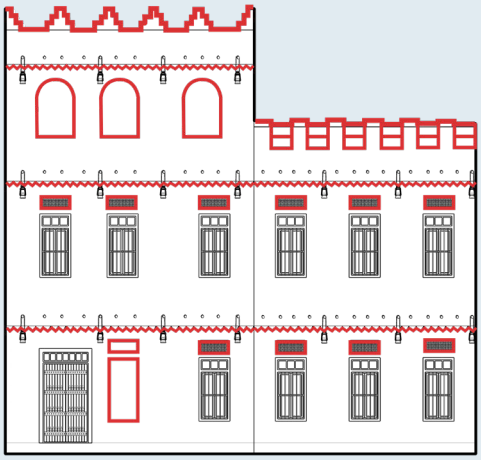
Projections and recesses

Projected and recessed elements seen on the facade.

IV.8 Ornamentation

The whole façade is characterized by triangular banding, crenelations, decorative parapets at the top or other architectural elements that contribute to the building's unique character.

Fine ornamentations can be found above doors and windows or used as frames imitating the shapes of openings to maintain the façade's rhythm.

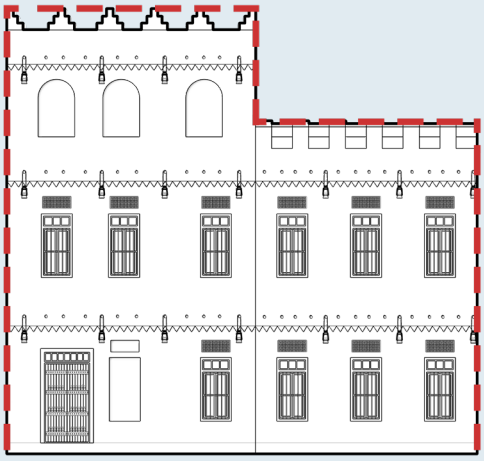


Ornamentation

Most façades have finely detailed repeating and alternating elements of details.

IV.9 Variation in heights

Traditional buildings in Al Qatif only show variation in heights depending on the needs & functions of the habitable space below.



Variation in heights

Façades typically demonstrate a variation in height based on habitable spaces.

V Evolution

The connection of contemporary design with traditional forms to strengthen the architectural character of a place.

V.1 Connecting past to future

The guidelines aim to provide architectural roots for contemporary buildings so that they connect to their historical context, draw upon their local culture and reflect the spirit of a place.

At the same time, a balance between continuity and innovation is needed. Advances in construction technology, material science, patterns of development and specifications for new building uses require buildings that can accommodate these changes while preserving the essence of local architecture.

V.2 Connecting environment to form

The guidelines also aspire to connect buildings to their geography. Physical context has traditionally influenced the materials available, the patterns of development and the climate response required from architecture.

These environmental constraints have created a matrix of related, regional building typologies. The guidelines aim to provide a layer of stylistic influence to accentuate these regional building types into distinct characters that can be gathered into a diverse yet related national ‘family portrait’ of architectural character across the Kingdom.

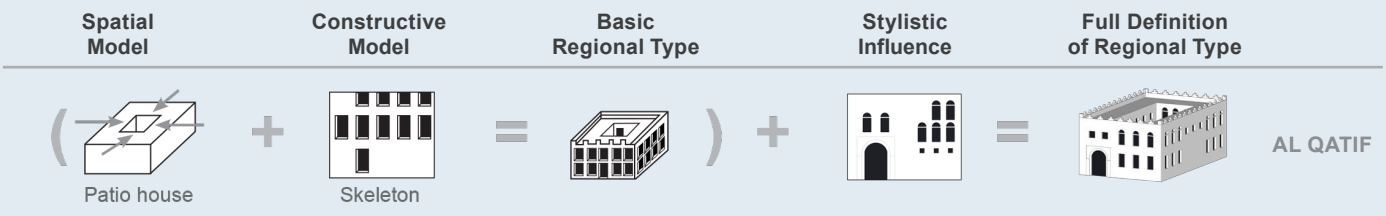
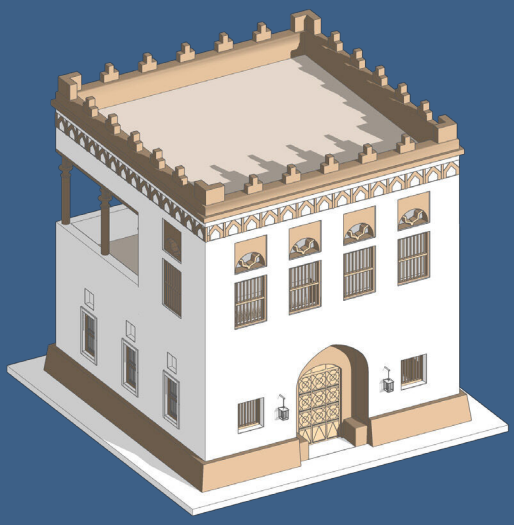


FIG. 7 Character equation for Al Qatif Oasis

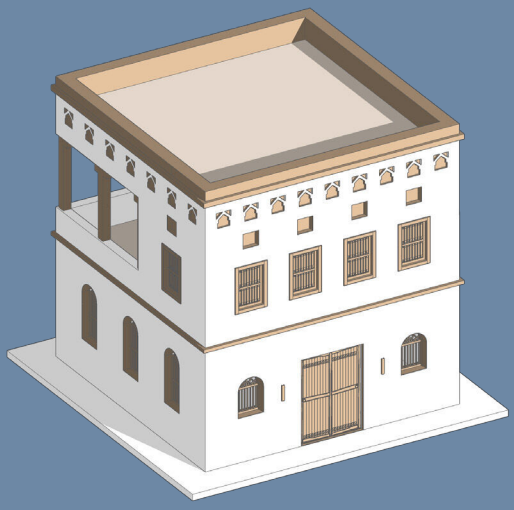


Traditional Style

TRADITIONAL

Thick earth or stone walls, and a symmetrical, geometric profile.

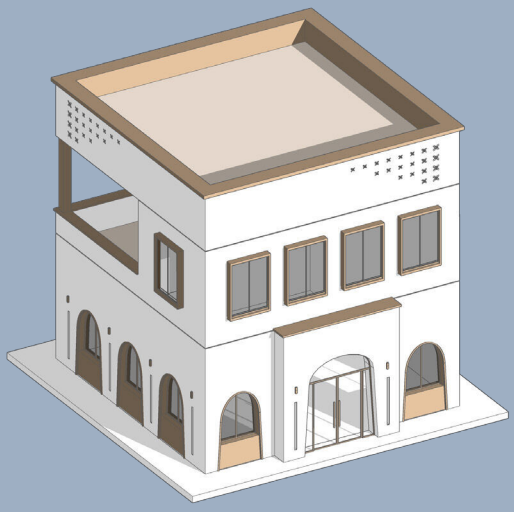
Defined entrances with recessed arches, plaster ornamentation, small openings, and crenelated parapets.



Transitional Style

TRANSITIONAL

Smooth white facade with openings featuring screens. Windows are larger, both arched and rectangular. Main entrance is almost flush with rest of building line. Openings feature wooden frames and shutters.



Contemporary Style

CONTEMPORARY

More openings overall, featuring more glass. The main entrance is in a protrudcing section from the main building line. Abstracted geometric ornamentation along roofscape.

All styles include a covered balcony/veranda section.

VI How to use the guidelines

The guidelines have been organized to present the rules of architectural character in a clear, efficient and useful way.

VI.1 Chapter organization

The first chapters sort the guidelines into different dimensions that help define architectural character:

1 **Key features -** The most essential characteristics for the architectural character.

2 **Composition -** The rules by which buildings are shaped and elements are related to one another.

3 **Elements -** The individual parts that are the building blocks of the architectural character.

4 **Material and color -** The prevalent materials used and color range found within the architectural character.

5 **Pattern -** Common motifs and patterns used in the traditional craftsmanship and material culture of the local character.

These chapters are followed by two sections focused on guideline implementation:

6 **Applying the architectural character -** Guidance for the proper interpretation and use of architectural style in new buildings.

7 **Worked examples -** Design studies that illustrate the use of architectural character at different scales and strengths.

The document concludes with:

8 **Public Realm -** An overview of public realm character in Al Qatif Oasis.

VI.2 Guideline formatting

Individual guidelines are formatted graphically to make them more useful:

1 **Chapter number and heading -** Guidelines are gathered into major categories for ease of reference.

2 **Guideline number and heading -** Guidelines are given a unique 2-digit decimal number and heading for ease of reference and to provide precision in enforcement.

3 **General description -** Descriptive text to introduce the guideline topic.

4 **Guideline actions -** Instructions clearly identifying the actions to be taken by designers. Each action is numbered for ease of reference and to provide precision in enforcement.

5 **Rationale -** Set in colored text and highlighted by a side bar are the objectives and reasons for the guideline. This gives the applicant an opportunity to propose designs that meet the rationale through alternative ways. Alternatives require the approval of the relevant local authority.

6 **Illustrations -** Illustrations, photos and diagrams that help explain the guidelines. They are examples only: where contradictions arise between illustrations and guideline text, the text shall overrule the illustration.

The items above correspond to the figure on the facing page.

Link to the Contents page

1 Chapter number and heading

2 Guideline number and heading

3 General description

4 Guideline actions

5 Rationale

6 Illustrations

2 **Composition**

The rules by which buildings are shaped and elements are related to one another.

The aesthetic rhythm of a building is guided by the relationship between its different design elements. These can be calibrated by implementing the following guidelines

2.1 **Asymmetry of the façade**

Symmetry is a key feature of the design in buildings across Al Qatif, thus:

1 Building façade should express a multistone look, composed of a varied and many kinds of stones.

2 Asymmetry should be followed in the arrangement of elements.

To ensure that the façade corresponds and is in dialogue with the architectural traditions of the region.

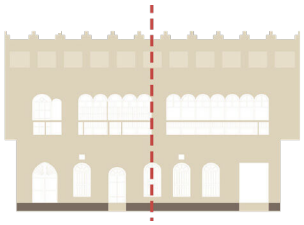


FIG. 12 Asymmetry of façade

2.2 **Grouping of elements**

Grouping sections of openings together to clearly delineate the differences along the facade is characteristic of Al Qatif.

1 Windows, rectilinear or arched should be grouped on the upper levels.

2 Niches should be centrally aligned between crenellation pieces.

To sustain the consistency of the visual banding style across traditional and contemporary development.

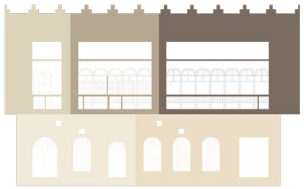


FIG. 13 Legible group of elements

FIG. 8 Typical guideline structure

GUIDELINES

1 Key features

The most important attributes essential for conveying the architectural character of Al Qatif Oasis.

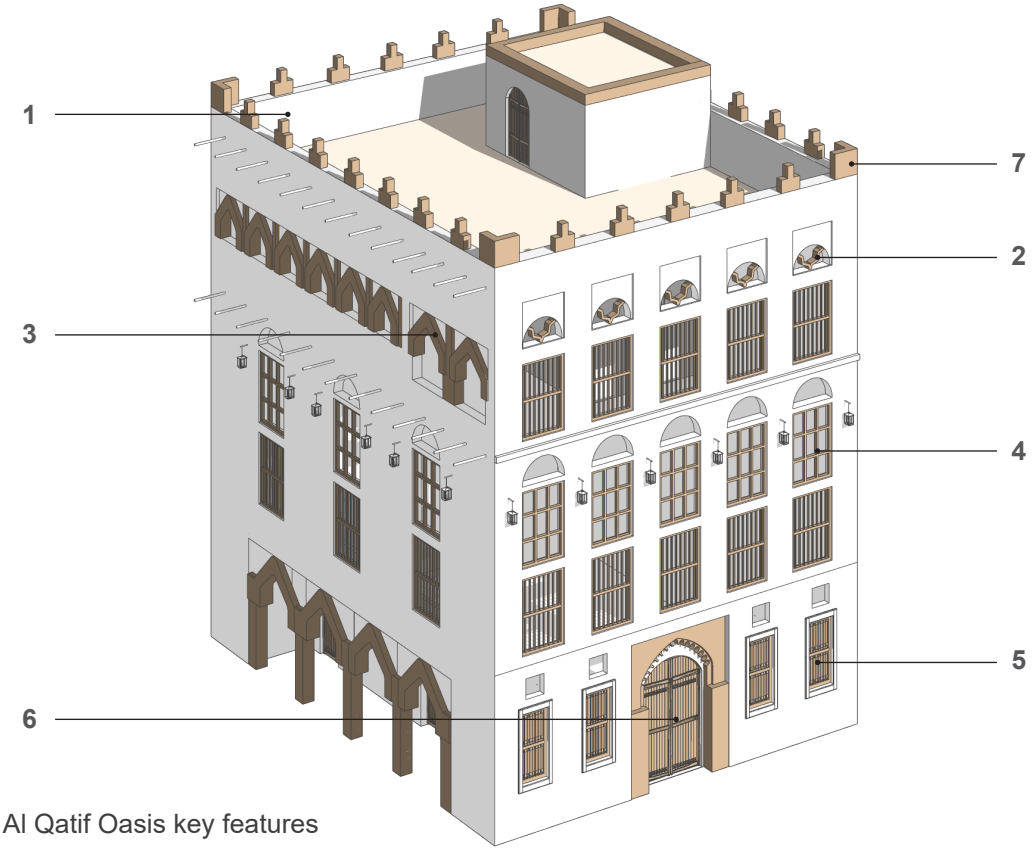


FIG. 9 Al Qatif Oasis key features

Key features:

1 High parapets: usually located on the top of the dwelling as a shading screen of the roof areas and often punctured to facilitate air circulation.

2 Fenestrations: usually located on the upper floors and give rhythm to the façade.

3 Open arcade: located in the upper levels usually consist of styled cul-de-four arches within frames, and supported by short circular columns that allow air to circulate indoors.

4 Main windows: located on the upper floors while the ones at the ground level are smaller in size in order to avoid any external gaze inwards.

5 Windows: generally simple in design, rectangular, and with iron bars as well as shutters. There are also al darisha openings. At times, they include semicircular arches above.

6 Main door: consists of either an arch, a semicircle arch, or a square-shaped extension area on top of the door for decoration with elaborate frames. It may be recessed within a frame.

7 Crenelations occur at every vertical bay of the building.

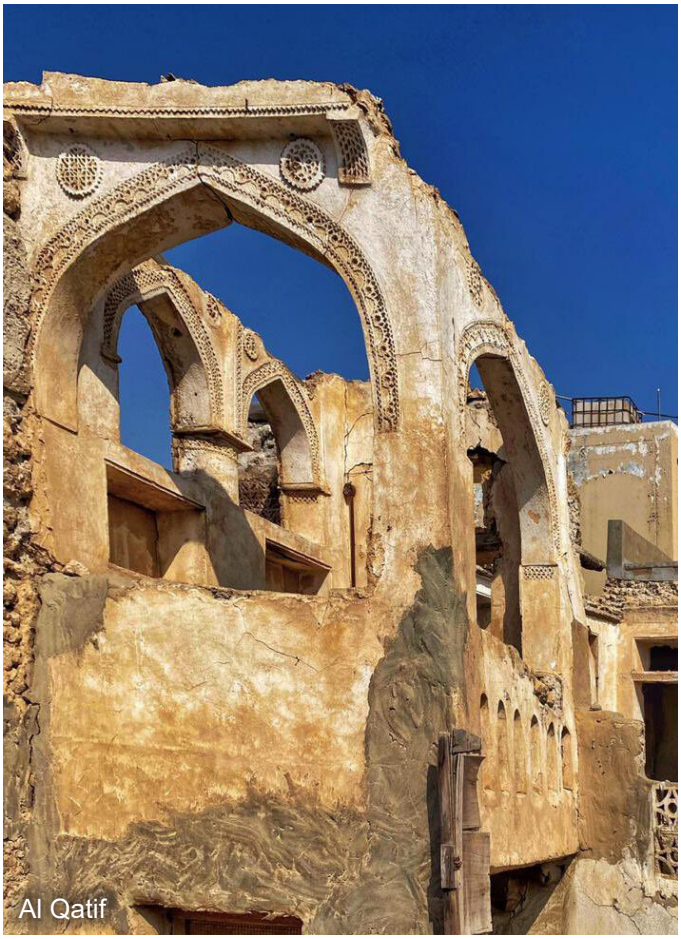


FIG. 10 Qatif House

FIG. 11 Examples of Al Qatif architecture

1.1

Character summary

Given the climate, openings into the dwelling are narrow - smaller than the ones in Al Ahsa and bigger than the ones in the Najdi region - to ensure privacy, and protection from sunlight and sandstorms.

Arches are a main architectural element, and serve both aesthetic and structural functions; they are used to create openings walls or to form entrance colonnades. Al Qatif is home to a diverse range of arch shapes and types, from semi-circular, to pointed, and multi-lobed.

A unique characteristic of Al Qatifi architecture is shared ownership of space between buildings highlighted through the use of materials.

The materials used are the same vernacular materials found across the Eastern Region: salt rocks, mud, sand, and palm trees among others.

The exteriors of all dwellings in Al Qatif were, traditionally, not decorated. However, some ornamentation has recently been integrated within Al Qatifi vernacular architecture as the result of new construction materials, such as plaster, wood, and metal.

Given Al Qatif's coastal location across the eastern Gulf, and the oil boom of the 1970s, it became a key point of trade in the Arabian Gulf and became a wealthy settlement. As a result, architectural and decorative arts flourished, especially the use of decorative plaster in particular.

Similar to decorative seen across the region, the patterns used are both geometric and repeated. Another decorative and functional element includes niches, also known as Al Rawazn (a niche/hole in the wall for storing collectibles), also made of plaster.

2 Composition

The rules by which buildings are shaped and elements are related to one another.

The aesthetic rhythm of a building is guided by the relationship between its different design elements. These can be calibrated by implementing the following guidelines

2.1 Asymmetry of the façade

Symmetry is a key feature of the design in buildings across Al Qatif, thus:

1 Building façade should express a multistone look, composed of a varied and many kinds of stones.

2 Asymmetry should be followed in the arrangement of elements.

To ensure that the façade corresponds and is in dialogue with the architectural traditions of the area.

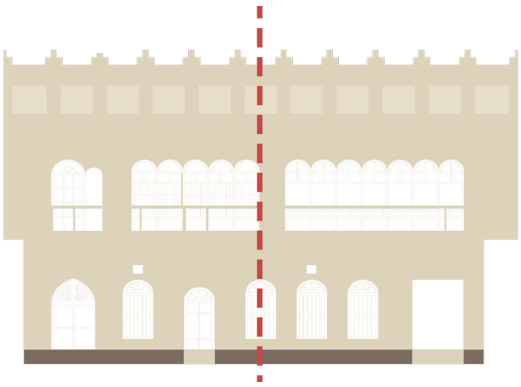


FIG. 12 Asymmetry of façade

2.2 Grouping of elements

Grouping sections of openings together to clearly delineate the differences along the facade is characteristic of Al Qatif.

1 Windows, rectilinear or arched should be grouped on the upper levels.

2 Niches should be centrally aligned between crenellation pieces.

To sustain the consistency of the visual banding style across traditional and contemporary development.

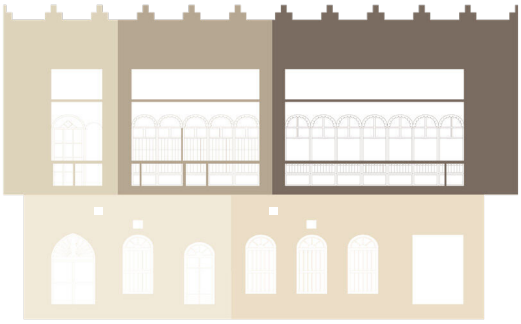


FIG. 13 Legible group of elements

2.3 Entrances and articulation

Main entrances are typically differentiated by some element.

1 Semi-circular arched doorways should be adopted for main entrances.

2 The main entrance should be decorated with patterns and Arabic letters.

3 Wood can be used as the material for the main entrance.

4 The main door should include a heavily decorated central post.

To articulate the transiton from public to interior private spheres.

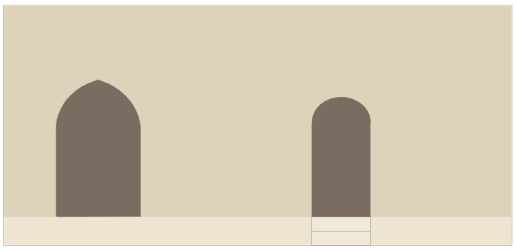


FIG. 14 Arched entrances

2.4 Width-to-height ratio

Employ the prescribed proportions to maintain a cohesive understanding of traditional structures.

1 The overall proportion of the building should be wider than it is high.

2 The width-to-height ratio of the whole building should be around 1.1:1 to 3:1.

3 The proportions of the secondary groups can be followed to assemble the final width-to-height ratio of the overall structure.

To ensure that proportions of the building embody the essence of traditional sources.

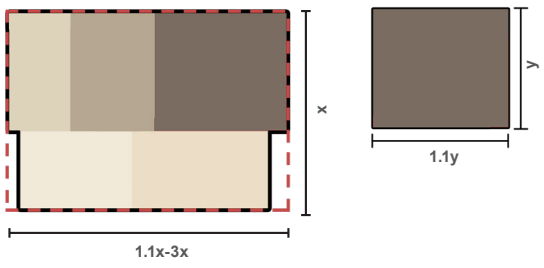


FIG. 15 Width-to-height ratio of of whole structure is 1:1 to 3:1

2.5 Ornamentation

Use regional specific ornamentation. Avoid distorting the typical character of Al Qatif buildings, as this could undermine their local architecture.

1 Buildings should adopt decorated horizontal banding.

2 Façades should include Mizabs (rainwater overflow).

3 All decorations and motifs on arches, columns, and walls should be made from white gypsum.

4 Lanterns can be adopted where they are functionally needed.

5 Square fenestration above windows should be adopted in the lower levels of the building for ventilation and lighting purposes.

To ensure that the ornamentations reflect the style of Al Qatifi architecture.

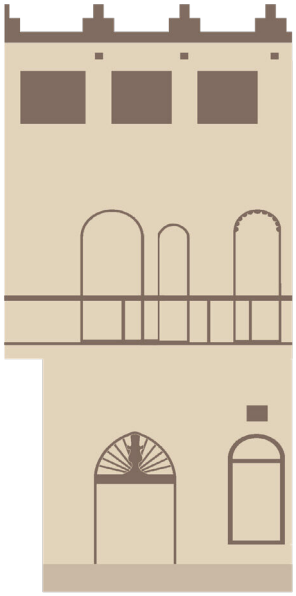


FIG. 16 Highly ornamental façade

2.6 Projections and recesses

To add dimensionality to the facade, ensure to employ projections and recesses:

1 Recessed elements should be part of the façade, especially above the windows in upper levels.

2 Niches can also be decorated.

To ensure that the projected and recessed elements reflect the style of Al Qatifi architecture.

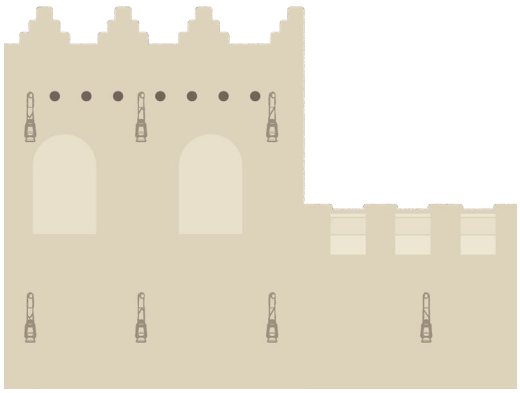


FIG. 17 Projections and recesses

2.7 Geometry of the components

Organize side facades, openings, and decorations with cohesive use of various geometric shapes.

1 The geometry of doors and windows can be either orthogonal or arch-shaped.

2 The façade should be characterized by variations of rectangular fenestrations articulating its rear-facing walls.

3 Semi-circular arches should be adopted on exterior façades.

4 Double-centered pointed arches should be used in internal courtyards.

To ensure that the geometries of the opening show solid façades which harmonize with the character of the area.

FIG. 18 Wall articulations

2.8 Façades

Per traditional architecture, facades feature more openings, proportionally less to the wall.

1 Openings should be placed in pairs.

2 The building should be punctured with same-sized openings that are repeated across the façade.

3 Approximately 35% of the façade should be allocated for openings and fenestrations.

To design the openings of façades building upon the region's traditional architecture.

FIG. 19 65% solid

2.9 Roofscape and rooftop elements

The roofscape, including crenelations, form a distinctive component in Al Qatif. The design of new buildings should:

1 Crenelation should be a part of the roofscape.

2 Three-stepped crenelation with spacing should be adopted.

To ensure that roofscape and skyline follow historically-sensitive designs.

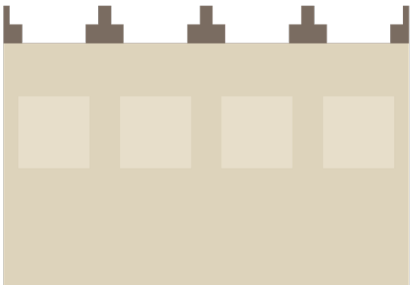


FIG. 20 Three step spaced crenelations

2.10 Secondary frontage

With protected openings, all facades should ensure to maintain privacy.

1 The openings should not have visual access to the private interior spaces.

2 Façades should have small-scale openings.

3 The main windows of the house should be located on the upper levels while fewer windows should be at the ground level to enhance a sense of domestic privacy.

To design for domestic privacy following a traditional architectural approach.

FIG. 21 Secondary frontage

2.11 Narrow streets

Clustering buildings together in accordance with traditional building habits is important to maintain the organic integrity of the neighbourhood.

1 Buildings should be tightly positioned, leaving narrow passages between them.

2 A wider open space should be included at the intersection of two or more walkways.

To design a city grid which builds upon historical urban traditions.

FIG. 22 Narrow streets

2.12 Building cluster and courtyards

While maintaining areas for privacy, sharing a courtyard between new buildings facilitates interconnectedness and socialization.

1 Building typology should follow an inward-looking layout that is centered around courtyards.

2 Public plazas should be considerably larger in size than private courtyards.

3 Single dwellings should emphasize the main interior courtyard as a shared space, while also defining the private spaces of the same dwelling.

To distinguish clearly between private and public spaces by observing existing spatial arrangements.

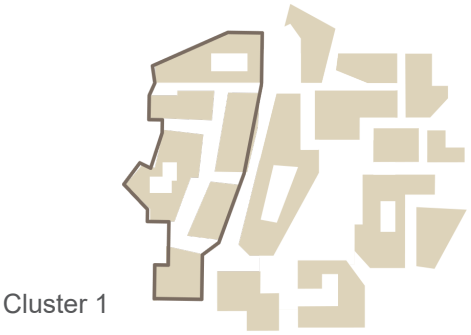


FIG. 23 Building Cluster

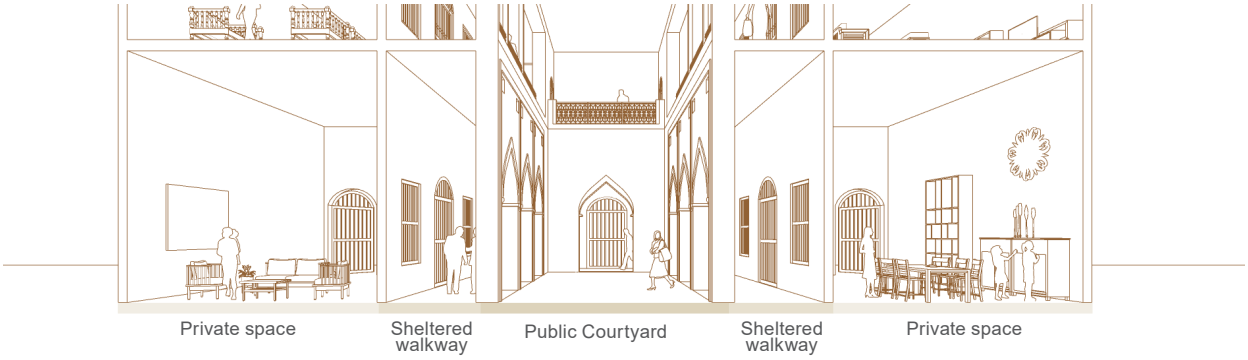
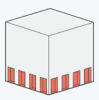
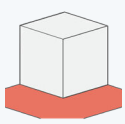


FIG. 24 Public courtyards

3 Elements

The individual parts that are the building blocks of Al Qatif Oasis architecture.

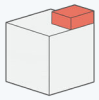
TAB. 1 Al Qatif Oasis architectural elements

	GENERAL ELEMENTS	
	**Key characteristics**	Refer to “1 Key features” on page 18
	**Façade proportion**	Al Qatif buildings should be defined by marked horizontal proportions indicated by a width-to-height ratio between 2.1:1 and 3:1. There are examples of a squared proportion of around 1:1 in some cases.
	**Window-to-wall %**	The permeability of Al Qatif façades are usually higher than in the Najdi regions. Some buildings can be opaque still with a 9% opening ratio while others might have more open façades with up to 35% of the façade’s surface consisting of windows or doors. The apertures on the ground floor should generally be limited and narrow compared to the ones on the upper floors.
	**Opening proportions**	The façade’s composition should be asymmetrical without a clear vertical order. Openings should be generally vertical with width-to-height ratios ranging between 1:2 to 1:5 for doors, 1:2 to 1:5 for windows, and a horizontal proportion between 1:1 to 2:1 for attic windows.
	**Composition**	Typical façades should be characterized by repeating and alternating elements; this approach constitutes legible vertical bays which, in addition to repeated same-size openings, give the façade a consistent rhythm.
	BASE ELEMENTS	
	**Entrances**	Main entrances should consist of semi-circular arched doorways; traditional wooden doors usually topped with a semicircular arch. See expanded guidelines “3.2 Doorways and entrances” on page 31
	**Shop fronts**	Retail or commercial façades should typically be located at the ground level and should only include rolling shutters when carefully integrated with the architecture (e.g., they are recessed, co-ordinated).
	**Arcades**	Colonnades and arcades should run along the ground floor and upper levels. Semi-circular arches should be adopted on exterior façades while double-centered pointed arches should be used in internal courtyards.
	**Curtilage**	Urban furniture, lighting, green areas, and water features should be integrated into the surrounding areas of the building. These elements should emphasize the Al Qatif style by using locally sourced materials, native plants, or locally-inspired architectural features and details that merge into the main façade.

MIDDLE ELEMENTS

	**Wall articulation**	Tripartite articulation entailing a base, middle, and top, a typical feature of Al Qatif buildings, should be adopted. Decorative horizontal bandings can sometimes be used to accentuate the tripartite articulation of buildings and highlight their functional hierarchy. See expanded guidelines “3.1 Tripartite articulation” on page 30
	**Windows and Openings**	See expanded guideline “3.3 Windows and openings” on page 32.
	**Projecting elements**	The entrance bays can project in front of the main façade and arcades can be added outside the building plot. However, this should not adversely affect circulation or safety in the public realm.
	**Recessed elements**	Recessed entrances, arcades, or overhangs should be set inwards from the building façade, extending the access or perception of the public realm inside the plot boundary.
	**Shutters and shading**	Shutters should follow the vernacular language as illustrated within this section, which are generally smaller than those in Al Ahsa and frequently built into the walls to facilitate the airflow between the exterior and the dwelling.
	**Corner features**	On narrow or busy street intersections, corners should be chamfered and rounded at the junction of two exterior walls at the base to improve pedestrian flow.

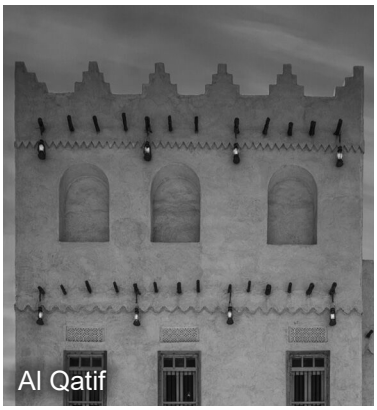
TOP ELEMENTS

	**Roofscape**	All rooftops should generally be flat and, unlike some Najdi regions, they should not be accessible nor used as amenity space. See expanded guidelines “3.4 Roofscape perimeter & parapet detail” on page 33
	**Rooftop Elements**	Rooftop pavilions should not usually be found in Al Qatif.
	**Parapets**	High parapets should usually feature on the top of the dwelling and should often be punctured to facilitate air circulation.

OTHER ELEMENTS AND ORNAMENTATION

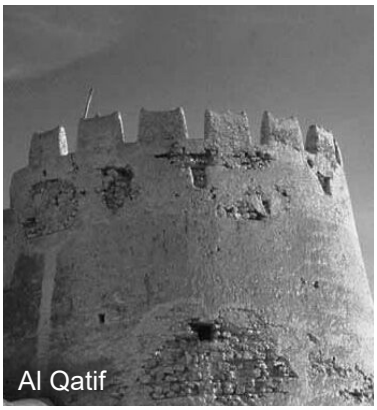
	**Materiality**	See expanded guideline “4 Colors and materials” on page 34.
	**Colour**	See expanded guideline “4 Colors and materials” on page 34.
	**Pattern**	See expanded guideline “5 Patterns” on page 36

Top

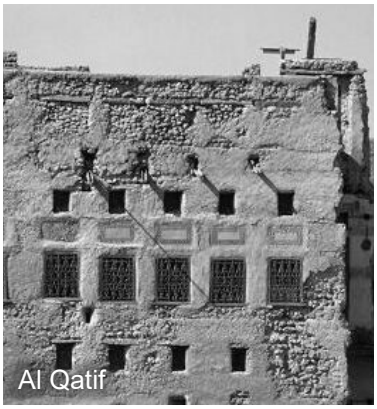


Typical crenelated parapet

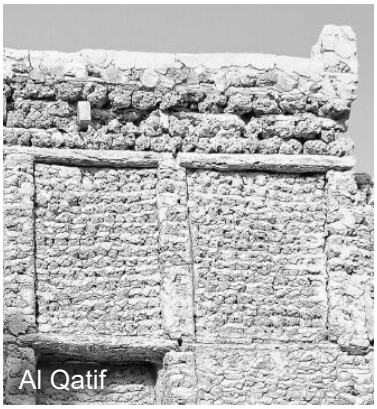
Simple parapet



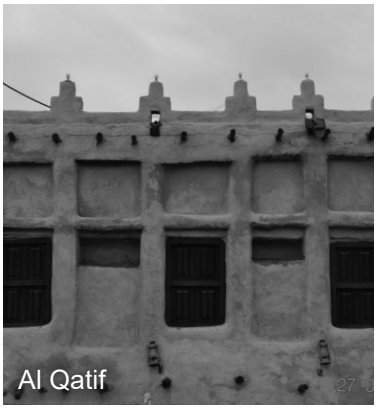
Simple fort parapet



Traditional rooftop elements

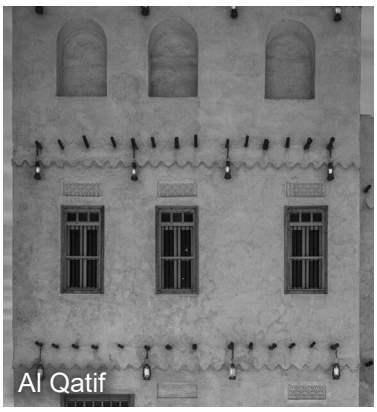


Traditional rooftop elements

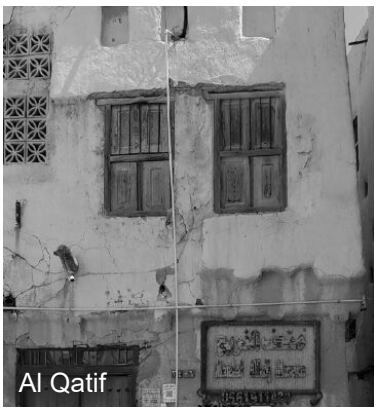


Traditional rooftop elements

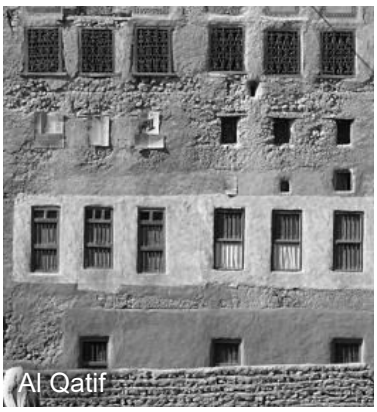
Middle



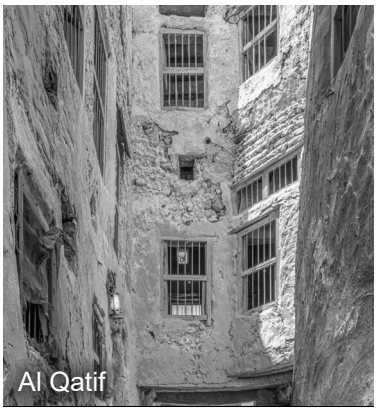
Arched fenestrations and openings



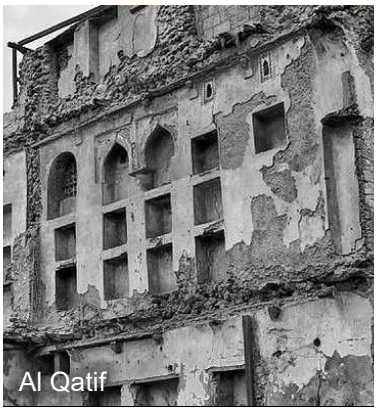
Rectangular fenestrations and openings



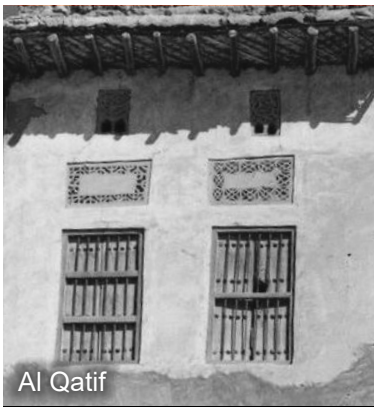
Rectangular fenestrations and openings



Rectangular fenestrations and openings

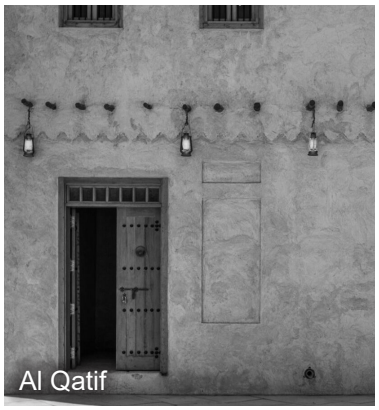


Combination of arched and rectangular fenestrations



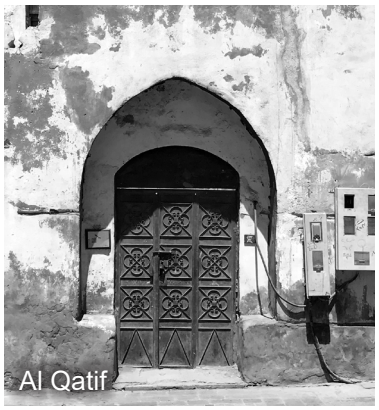
Patterned fenestrations and openings

Base

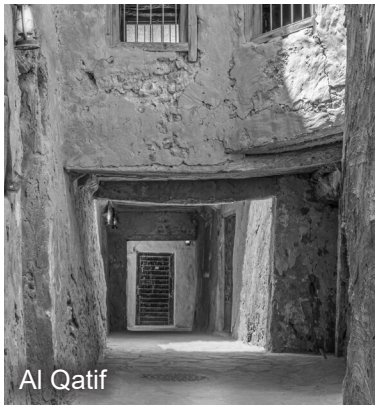


Typical rectangular entrance

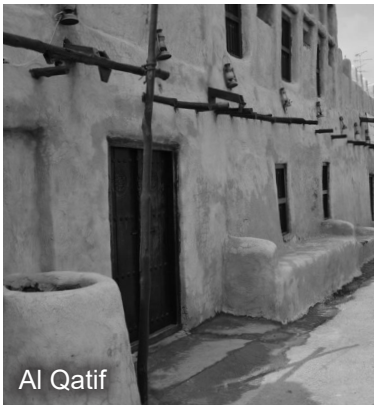
Typical rectangular entrance



Pointed arch entrance



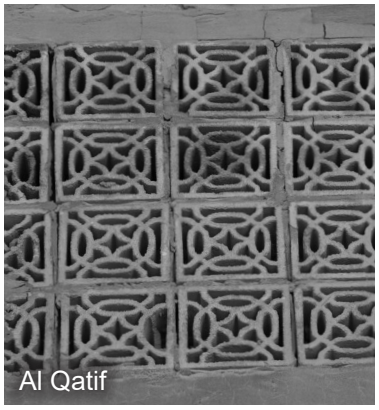
Traditional street corridors



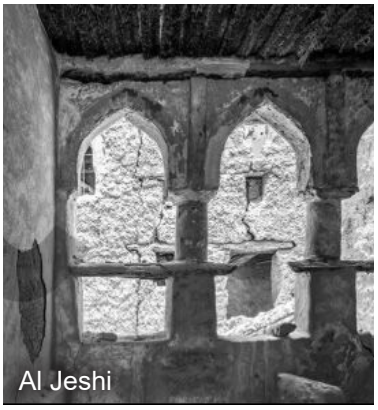
Typical rectangular entrance

Ornamented door

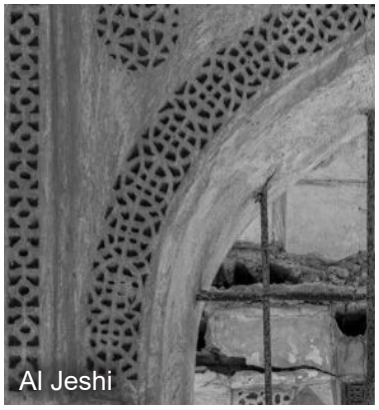
Ornaments and other elements



Ornamented façade openings

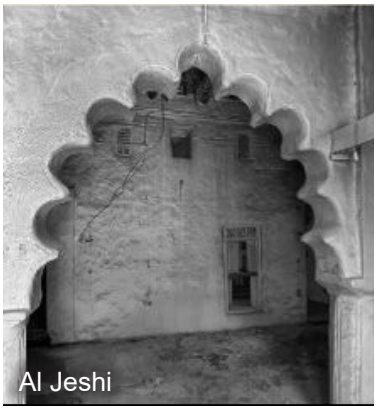


Pointed arch openings

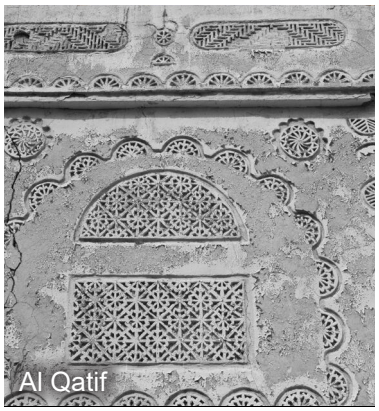


Example plaster detail

Parapet detail



Ornamented arch entrance



Example plaster detail

3.1 Tripartite articulation

Tripartite articulation is a typical feature of buildings in Al Qatif that highlights the hierarchical elements of a building's elevation; façades are typically split into three separate tiers of the base, middle, and top, each having its own distinct character.

1 Openings should be articulated without any change in materiality and/or color from the main façade.

2 Plaster frames should be avoided around openings on external walls.

3 Opening surrounds may be recessed or projected from the main façade to increase both the compositional layering and the play of light on the façade.

4 Openings should be symmetrical and aligned; windows on different floors should adopt axial alignments (i.e. attic windows and smaller openings that are centered above larger ones) to create orders and levels of hierarchy in the façade.

5 Openings may be grouped and, if so, should preferably be part of a tripartite group.

6 Upper floors should have more openings than the ground floor.

Elements depicted here should be a starting point for interpretation rather than direct duplication.

To evoke the character and presence of the Al Qatif's traditional houses throughout the area.

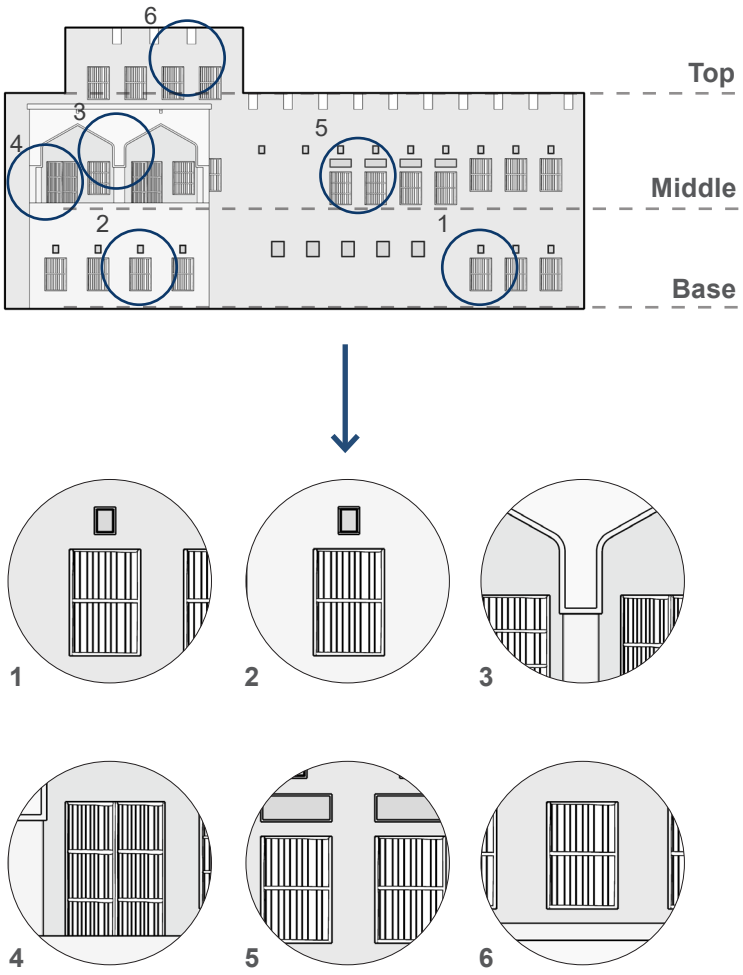


FIG. 25 Tripartite articulation elevations

3.2 Doorways and entrances

The traditional architecture of Al Qatif contains major characteristics of the vernacular style of the area which responds and adapts to climatic factors. Some architectural elements embody the region's craftsmanship, especially the doors and frames of traditional buildings.

1 A vertical symmetrical composition should be followed.

2 Frames and screens should share the following characteristics:

- Made of locally sourced wood.
- Have elongated rectangular moldings.
- Include paneled shutters and iron bars.

3 Doors should have elaborate frames and include either an arch, semicircle arch, or a square-shaped extension area on top which provides space for decoration.

4 The main entrance can be decorated with patterns in the traditional style.

5 Doors should have a width-to-height ratio in which width ranges from 1:2 to 1:5.

Elements illustrated here should be used as a starting point for interpretation rather than simply duplicated.

To continue the tradition of elaborate frames and decorated doors for future generations.

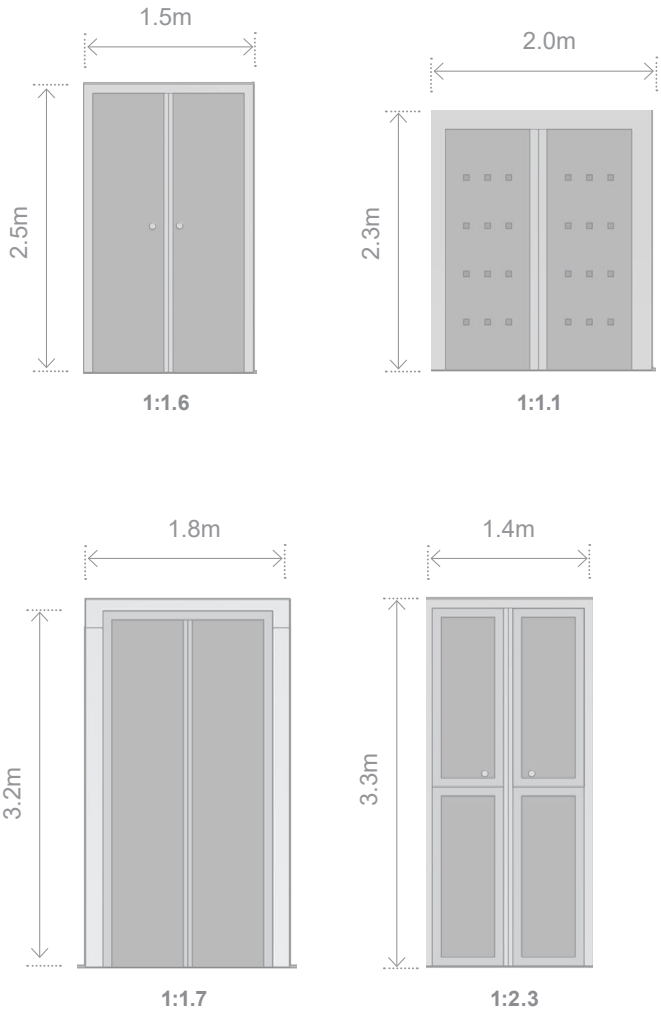


FIG. 26 Traditional door elements

3.3 Windows and openings

The traditional architecture of Al Qatif contains major characteristics of the vernacular style of the area which responds and adapts to climatic factors. While most houses have a plain exterior with only rectangular windows, some architectural elements embody the region's craftsmanship, especially the doors and frames of traditional buildings.

Elements illustrated here should be used as a starting point for interpretation rather than simply duplicated.

1 A vertical symmetrical composition should be followed.

2 The geometry of the windows should be arch-shaped on the front façade and orthogonal on the side façades.

3 Frames and screens should be characterized by:

- Timber as material.
- Cusped pointed arches.
- Elongated rectangular moldings.
- Paneled shutters and iron bars.

4 Punched openings with both arched and flat tops should be integrated into solid walls.

5 Vertical windows should generally have a ratio that ranges from 1:2 to 1:5 and attic windows, which sit horizontally, a more suitable proportion of around 1:1 or 2:1.

To evoke historical window formation and urban character of Al Qatif Oasis throughout the area.

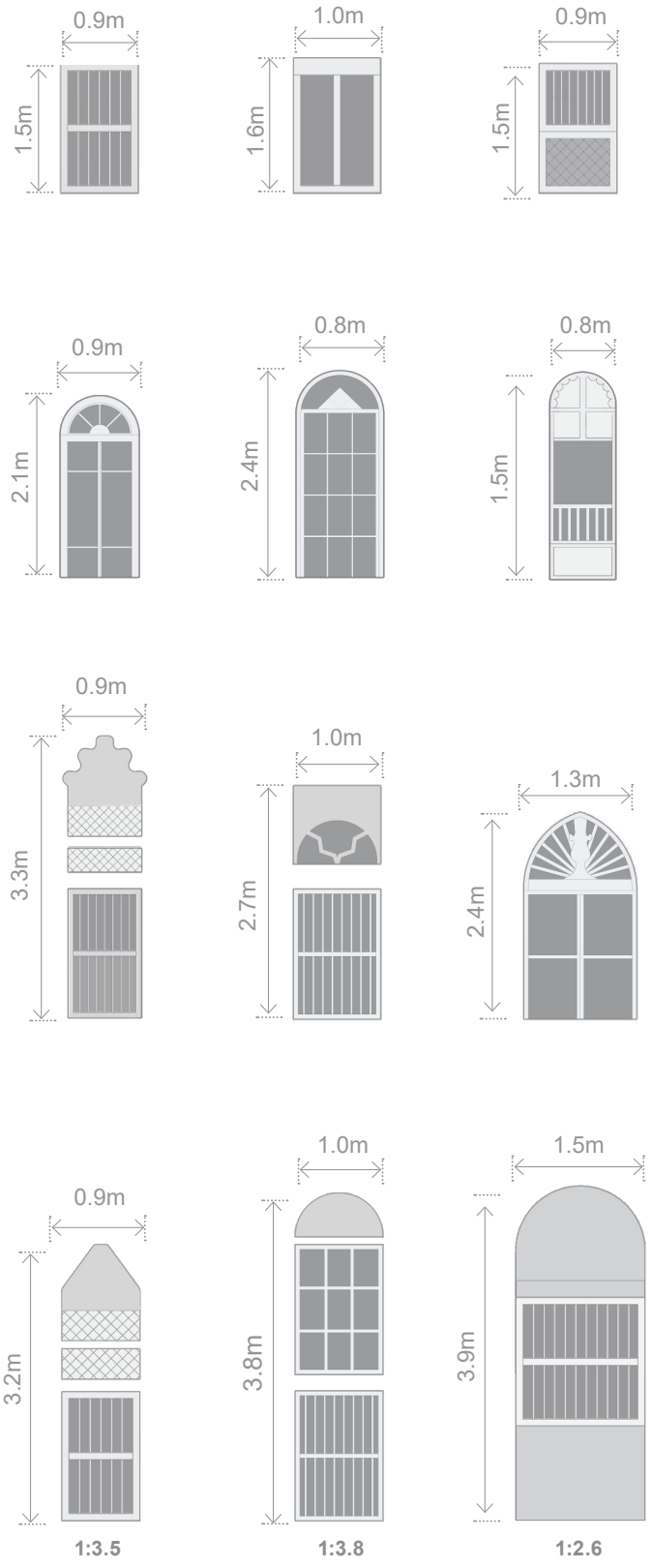


FIG. 27 Traditional window and door elements

3.4 Roofscape perimeter & parapet detail

The traditional roofscapes of Al Qatif are characterized by high parapets in the rooflines and inhabitable roof terraces divided by walls. Roofs are also used as sleeping spaces for families after sunset during summer.

Elements of the roofscape include the following:

1 Roof terraces located at the upper levels of buildings should include screened parapets that provide privacy.

2 Façades should run up flush into tall crenelated terraces to provide privacy between terraces and buildings.

3 Occasional punctures in the parapets with window spaces should be adopted to ease airflow.

4 Parapets in the top third of the building are arcaded with rectilinear or arched recesses.

To create functional inhabitable roof spaces screened from both each other and neighboring buildings.

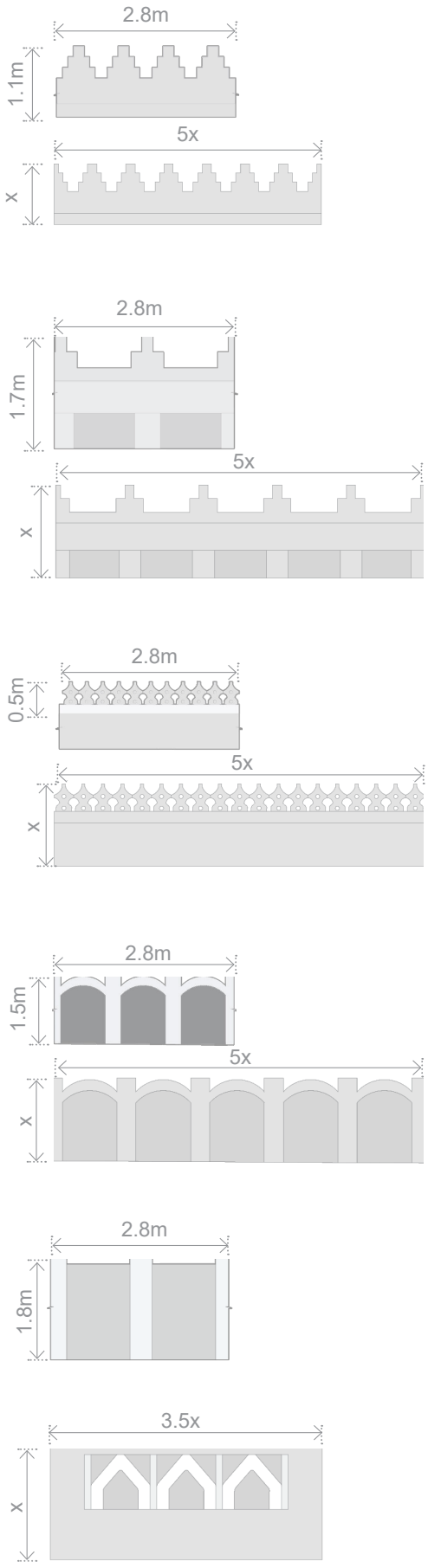


FIG. 28 Roofscape and parapet detail

4 Colors and materials

The prevalent materials used and color range found within the architecture of Al Qatif Oasis.

Utilizing a unified material and color scheme strengthens the architectural character and contributes to a harmonious and unique urban aesthetic. The following recommendations should be applied in Al Qatif Oasis architectural character:

1 Align the chromatic scale of buildings with the surrounding landscape by matching the hues of different natural elements and materials within the immediate environment.

2 Use earth tones as primary colors for the building's palette, and layer with assorted lighter or darker colors as secondary or accent colors.

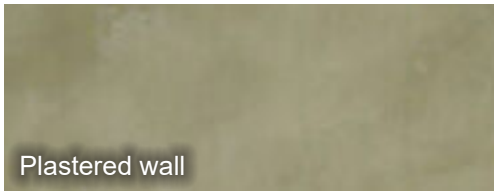
3 Base colors are used on walls, and should be chosen in correlation with the hues of sand and stones specific to each site. Chromatic examples include pebble gray, beige, pearl beige, and brown beige.

4 Use gradients of the base hues as secondary colors on recessed sections of the building. Include accent colors by using lighter or darker tones contrasting with neutrals to highlight particular architectural elements. Color examples include gray, white, red-green, ochre brown, and mahogany brown.

5 Prioritize the use of natural and locally sourced materials such as clay, stone, tamarisk wood, and palm materials.

To integrate the building in its geographical and cultural context by unifying and strengthening the local architectural character through material and color use.

RAL codes are part of a universal color-matching system used to provide consistency in architectural finishes. It is recommended that teams verify colours with a physical fan deck. For more information visit www.ral-farben.de/en/



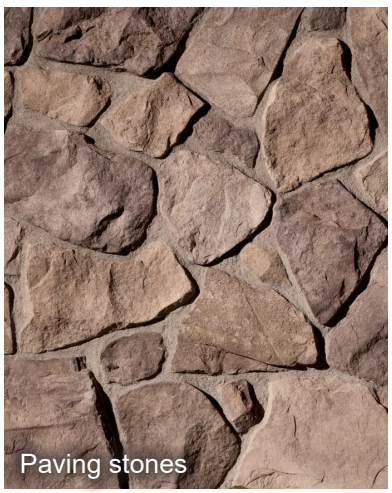


FIG.29 **COLORS AND MATERIALS**

5 Patterns

Common motifs and patterns used in the traditional craftsmanship and material culture of Al Qatif Oasis.

The cultural heritage of the Al Qatif Oasis is rich in traditional patterns. Each element has a specific meaning. Most patterns in the architecture of the Arabian Peninsula symbolize plantlife, the sun, celestial bodies and geometric patterns in line with Islamic traditions of non-figural art. For example, Arabesques represent plantlife such as ivy, palms, or rose. They can be found on the façades, either as stone carvings, wooden carvings of mashrabiyas, or fenestrations.

1 Original traditional geometric patterns should be consulted as they are composed of multiple adjacent and patched layers of geometric motifs.

2 Individual traditional motifs should be extracted and abstracted from their traditional patterns to form elementary geometric motifs that can be harmoniously repeated.

3 Each motif should be re-interpreted in the first instance by repeating it, thus forming a new geometric pattern.

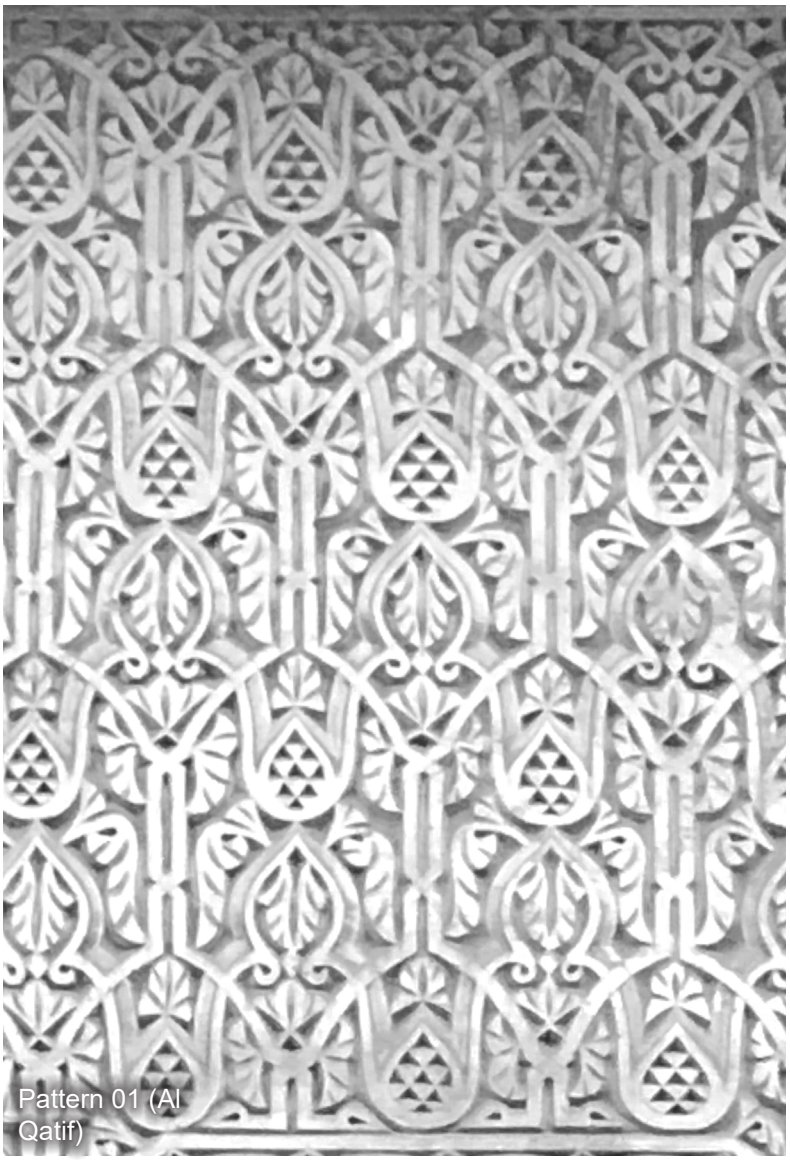
4 The newly created patterns should then be further re-interpreted in a second instance by abstracting it, rendering it a simpler version yet still inspired by its predecessor.

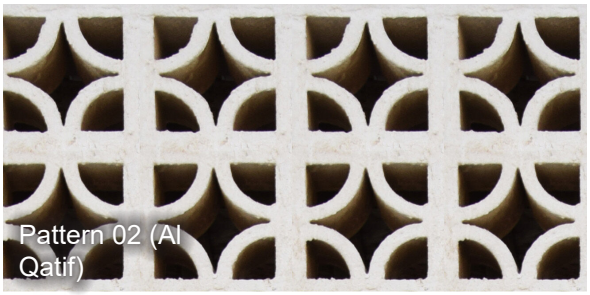
5 Re-interpreted patterns should be used in the façades of new buildings, whether in fenestrations or crenelations.

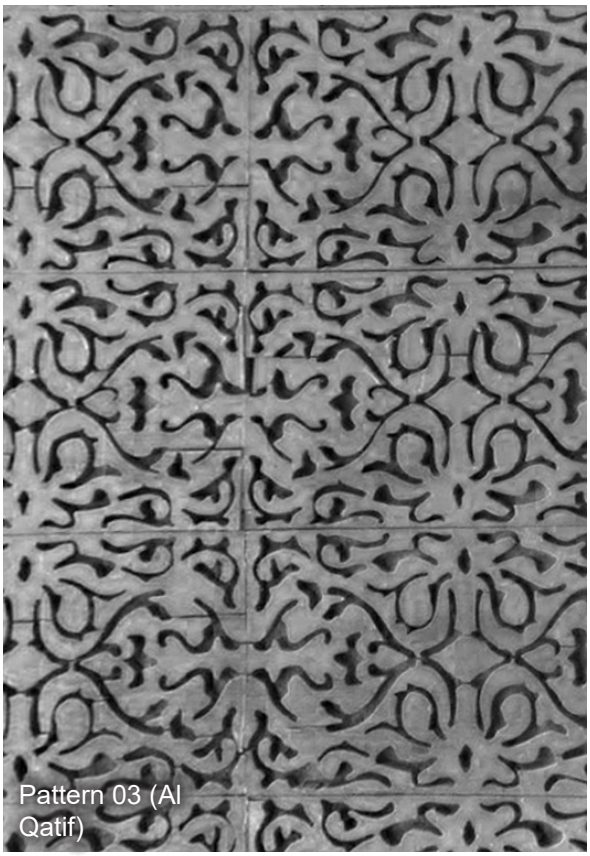
Patterns illustrated here should be used as starting points for interpretation and not simply copied.

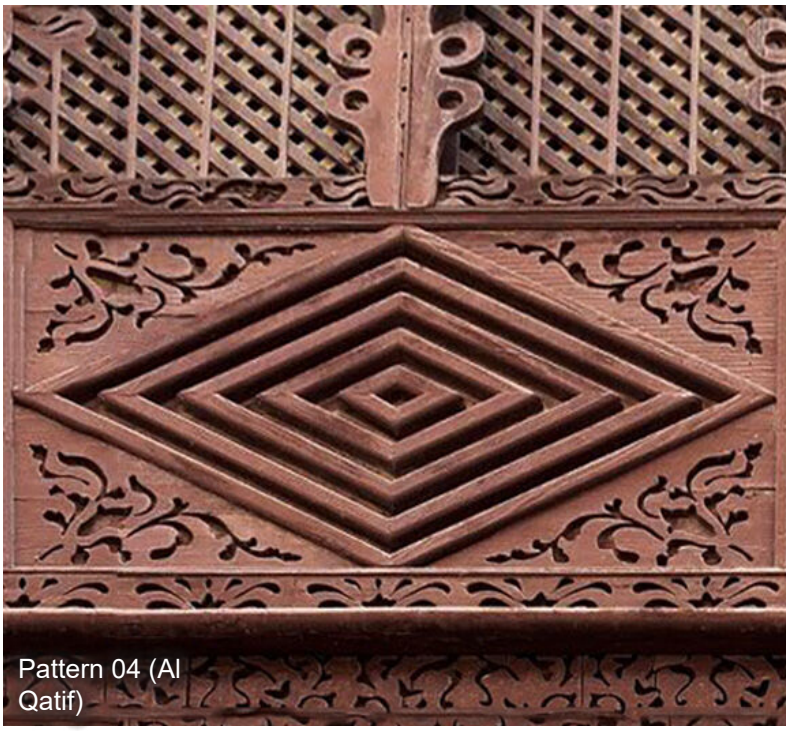
To create spaces that embody continuity with patterns of traditional buildings, whether through the aesthetics of the façades or the lighting effect they create in the interior.

FIG. 30 Patterns abstraction


Pattern 01 (Al Qatif)


Pattern 02 (Al Qatif)


Pattern 03 (Al Qatif)


Pattern 04 (Al Qatif)


Pattern 05 (Al Qatif)


Pattern 06 (Al Qatif)


Pattern 07 (Al Qatif)

FIG.31 **PATTERNS**

6 Applying the architectural character

Guidance for the careful interpretation and application of architectural character to contemporary developments.

6.1 Interpretation

Good application of architectural character does not mean direct copying of historical examples. Their contemporary use should involve interpretation: a selective emphasis of characteristics to create meaning and beauty in its new context. Designers can selectively use formal characteristics such as:

- Color (hue, tonality, tint).
- Shape (figure, outline, 2-D geometry).
- Form (volume, 3-D geometry).
- Texture (physical surface quality).
- Line (verticals, horizontals, diagonals, zigzags, curves, dashes, etc.).
- Value (lightness to darkness).

Interpreted elements can be further transformed in the way they relate to one another. Designers can play with compositional rules such as:

- Balance (equality or harmony of parts).
- Contrast (difference of parts).
- Emphasis (strengthening of parts).
- Movement (change, directionality).
- Pattern (repetition, symmetry).
- Rhythm (even and uneven spacing).
- Unity/variety (degrees of variation).

Designing with architectural characters is an interpretive art, an effort to express the spirit and essence of the original architecture in new yet familiar ways.

To encourage contextually sensitive contemporary design.

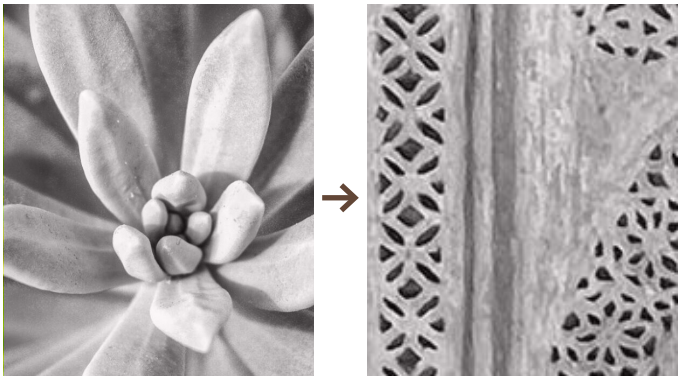


FIG. 32 Example of building pattern abstraction*

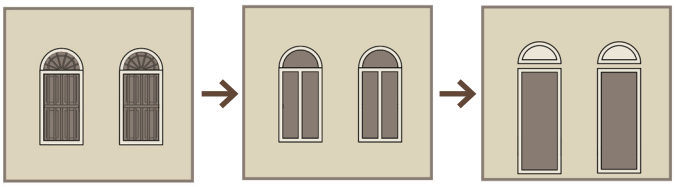


FIG. 33 Example of window shape abstraction*

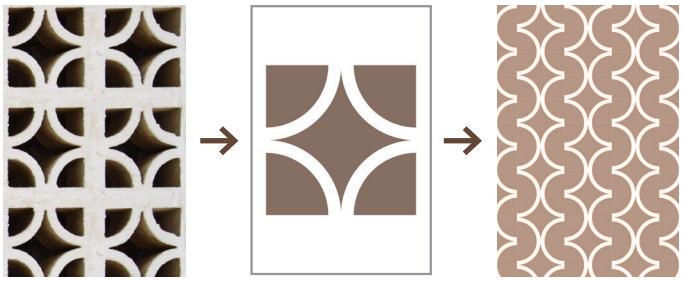


FIG. 34 Example of pattern abstraction*

*Note: Diagrams in this chapter are for explanation of design concepts only. The examples are taken from a variety of sources, and do not form part of the definition of Al Qatif Oasis architectural character.

6.2 Scaling

Architectural characters often come from historical building types of a particular size. When applied to new developments of a dramatically different size, the original character can become distorted or repeated in a way where their quality and craftsmanship are reduced.

When applying architectural characters to new developments, designers should:

1 Be sensitive to the challenges of large project sizes. Break down building massing into smaller, more diverse and interesting massings that can better fit traditional elements of architectural character.

2 Observe the way elements are related to one another and to interior layouts in the source examples of architectural character.

3 Avoid mechanical repetition of elements without a clear design intention.

4 Respect the proportion, size and construction logic of the original architectural elements.

5 Do not scale and distort a small elements into oversized graphic features that ignore the principles behind the use of the original element.

6 Pay special attention to building elements visible from the public realm, especially at the ground floor. The closer the element is to the public, the greater the fidelity and quality it should be. Conversely, elements farther away from public view may be more highly abstracted.

To successfully apply elements of traditional architectural character to large contemporary buildings.

FIG. 35 Break down building massing to better fit traditional elements of architectural character*

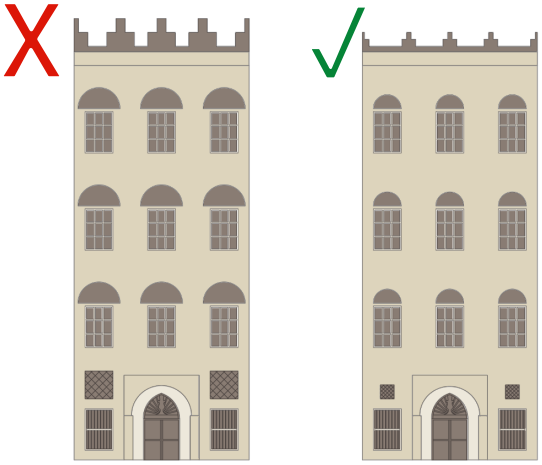


FIG. 36 Do not scale and distort smaller elements into oversized graphic features*

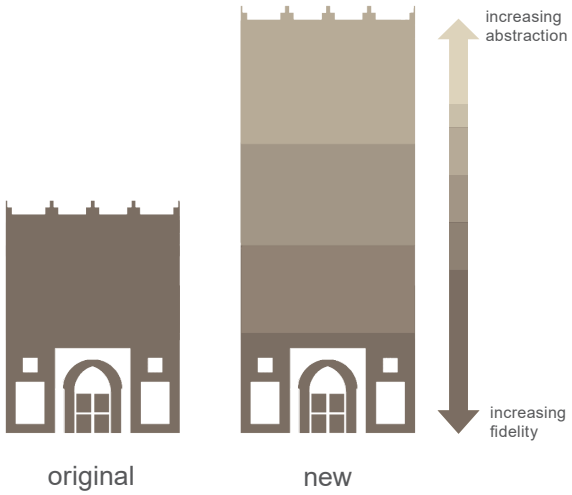


FIG. 37 Pay attention to building elements near the public realm, especially at the ground floor*

6.3 Functionality

Architectural elements should perform functionally like their traditional counterparts, and not be applied superficially like graphic signage.

1 Architectural elements should be purposeful, contributing to the climatic or technical performance of a building. (For example: shutters should be operable, providing shading and privacy.)

2 Architectural characters should not be applied in a superficially like wallpaper on an unrelated building form.

3 Architectural elements should not employ material fakery. (For example: the use of one material that pretends to be another.)

4 Ornamental architectural elements are permitted where they strengthen the character and improve the quality of the building.

To maintain the functionality of architectural elements.

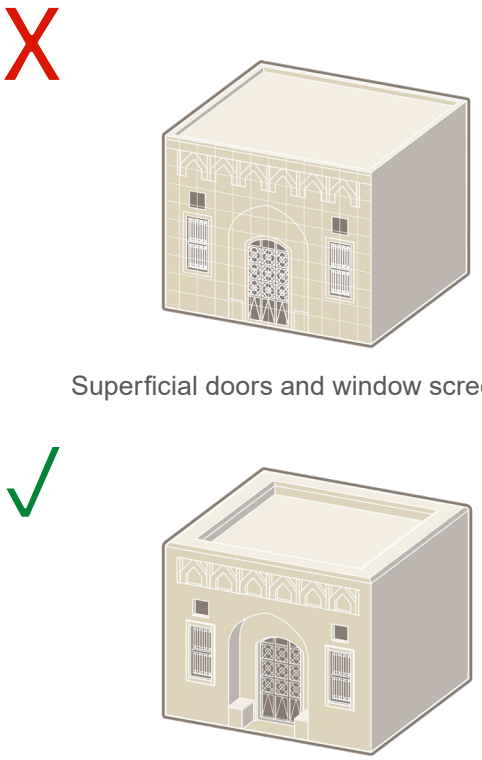


FIG. 38 Example of functional architectural elements*

6.4 Adaptation

The application of traditional architectural styles to new building types requires sensitive adaptation.

1 Precious materials from the original may need to be substituted with suitable replacements.

2 Some architectural elements may need to be adapted for new building systems or methods of construction.

3 Some new building systems may clash with an architectural character, and should be avoided (for example: large space frames, spider-joint glazing, and large areas of curtain wall).

To apply architectural character through contemporary means.

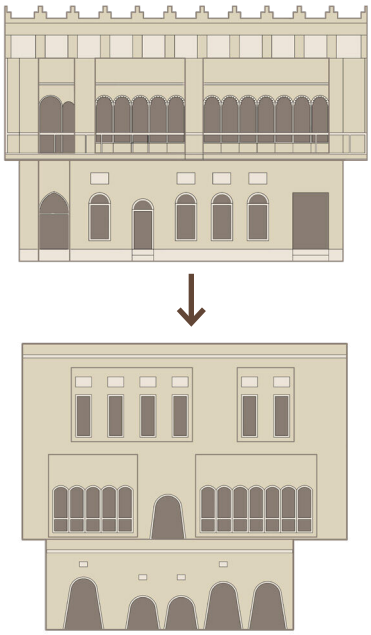


FIG. 39 Adaptation of traditional architectural elements to a contemporary building*

*Note: Diagrams in this chapter are for explanation of design concepts only. The examples are taken from a variety of sources, and do not form part of the definition of Al Qatif Oasis architectural character.

6.5 Mixing

Architectural characters are part of living cultures that continually grow and change. The boundaries defining architectural character areas should be understood as provisional, open to influences from all around, rather than as fixed borders. This invites the possibility of styles and character strengths mixing together in large scale projects, particularly in sites located on the edge of two or more characters.

1 In large scale projects, when the project site is located at the edge of two or more characters, the adjacent characters can influence the project by mixing the characters in different buildings, while prioritizing one above the other based on an analysis of the local context.

2 Avoid mixing more than one character within a single building; instead, the mixing should occur across different buildings depending on their location within the project and their functional use.

3 When mixing characters, the permitted style (traditional, transitional, or contemporary) should be taken into consideration based on the specified level.

4 Exercise informed creativity. Do not slavishly copy architectural characters.

To propose a clear method for the mixing and blending of architectural characters in large scale projects.

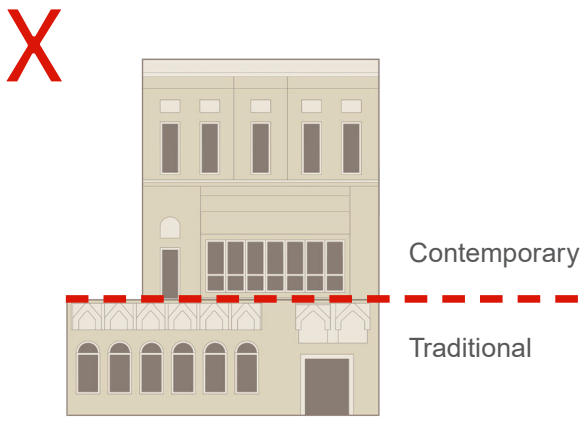


FIG. 40 Do not create hard breaks between mixed sources*

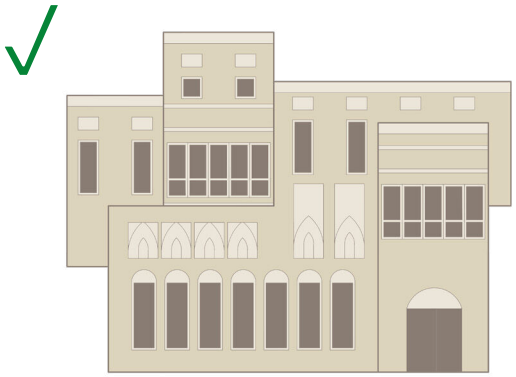


FIG. 41 Create gradual transitions between mixed sources and strengths of character application*

7 Worked examples

A set of design studies illustrating the application of Al Qatif Oasis character to buildings, at different strengths and scales.

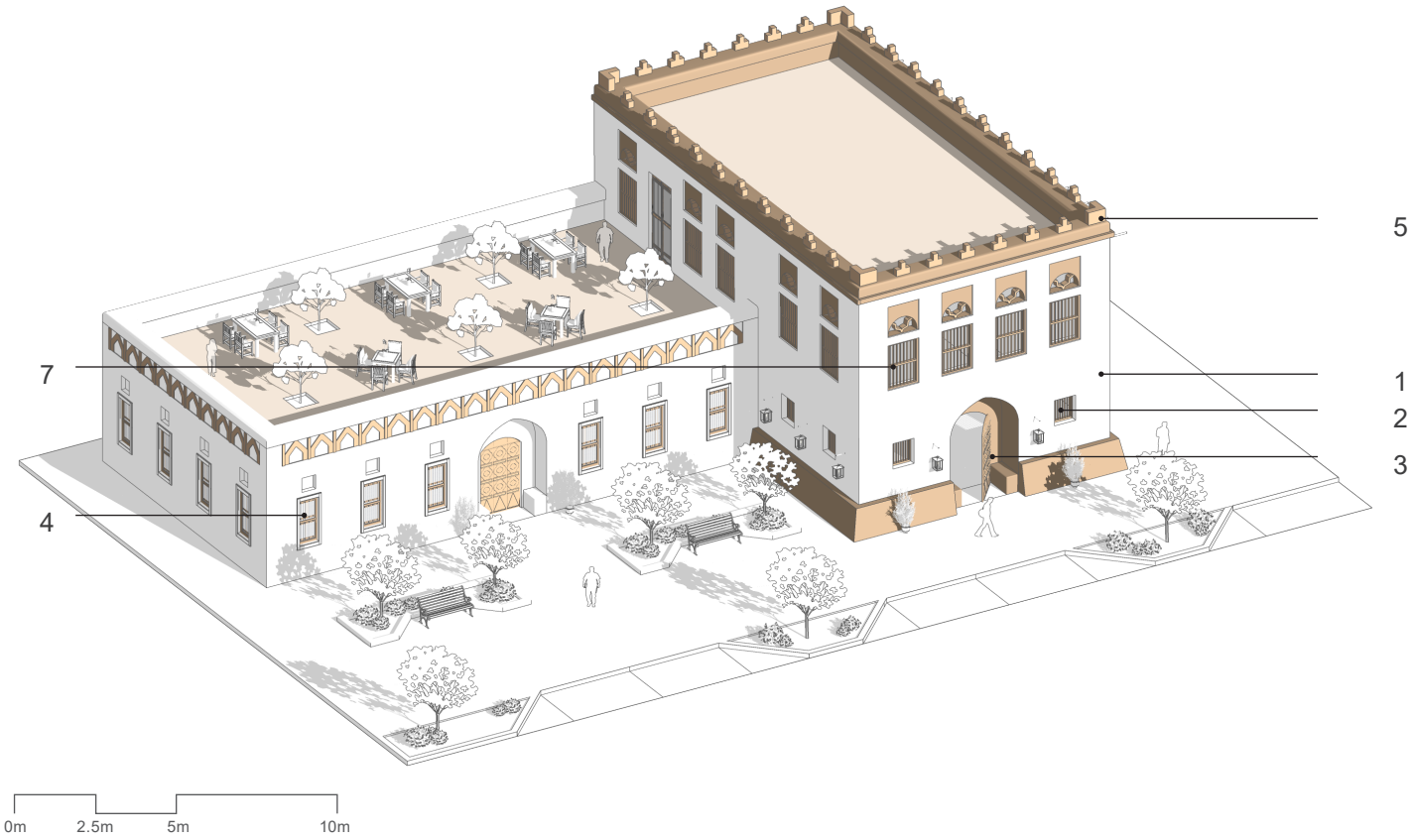


FIG. 42 Small size building

7.1 Traditional

This worked example of the traditional style incorporates a robust and comprehensive application of sections 3-5 of the guidebook. In the scenario, bands, ornamentation, and alignment of windows are designed to differentiate between the levels and functions of the building, meanwhile the opacity of the façade ensures that the building relates to the surrounding environment.

1 Façade proportions are horizontal where 2/3 of the elevation makes up a single story.

2 Window-to-wall ratio is around 30 to 40%.

3 Entrances are situated in a recessed semicircular archs and include bars shaped in traditional geometric patterns on the main door.

4 Windows and openings are vertical and

FIG. 43 Large size building

rectangular with wooden frames and shutters.

5 Parapets consist of single-stepped crenelations combined with a gypsum band at the bottom, a special corner merlon and rectangular niches with vertical piers that serve as separation.

6 Arcades are typically included in larger sized buildings, on the second story, with styled cul-de-four arches within frames and sit on short circular columns, supported by slim circular columns with capitals shaped according to vegetal motifs.

7 The composition of the façade is symmetrical and aligned with windows on different floors adopting axial alignments.

To develop adaptations and in contemporary contexts which reuse material and built heritage of the area.

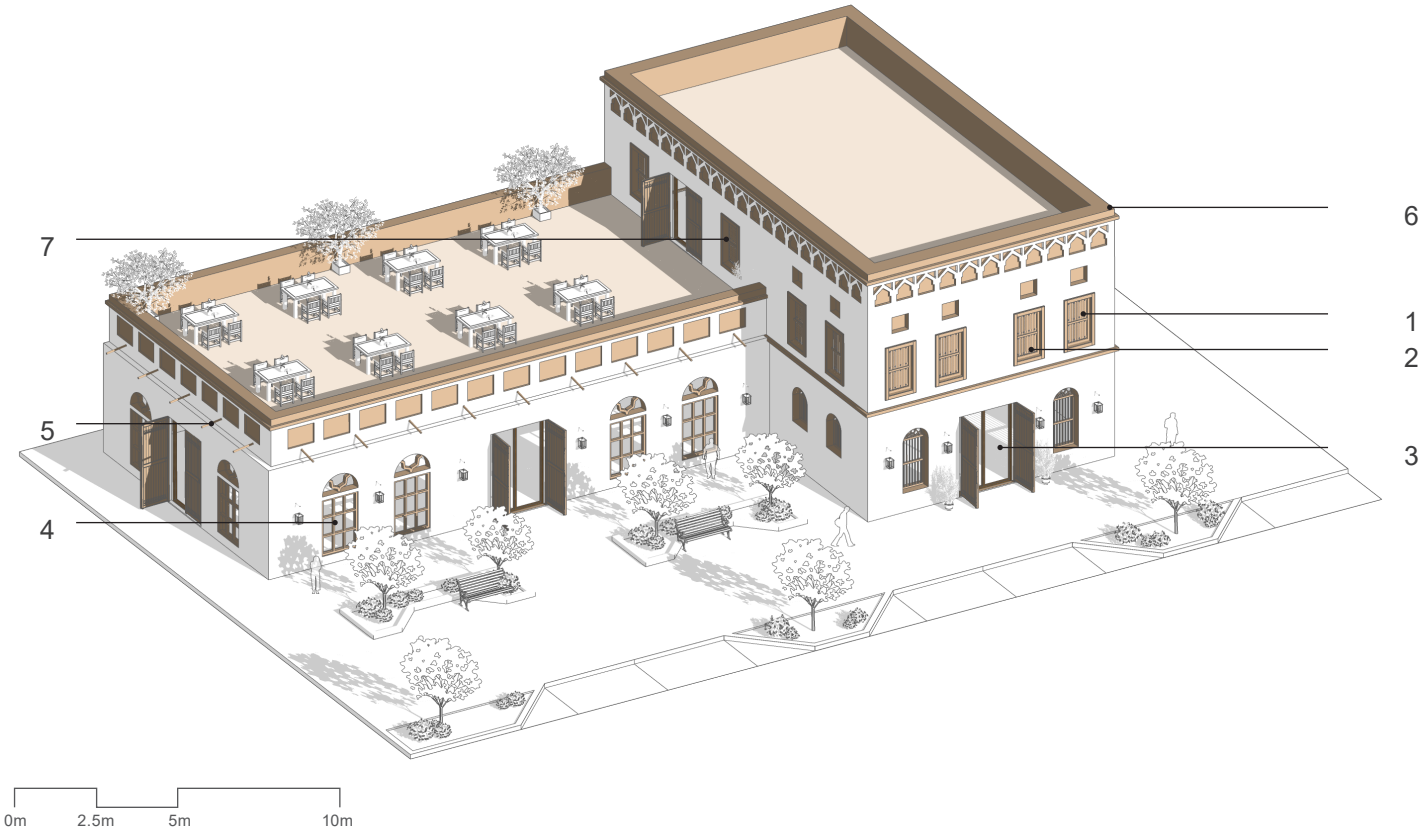


FIG. 44 Medium size building

7.2 Transitional

This worked example of the transitional style incorporates a robust and comprehensive application of sections 3-5 of the guidebook. Borrowing and relying on the original traditional source, this scenario distills yet incorporates angular and more muted design appearances, such as flat parapets, singular band lines for level distinction, and continuous façades.

1 Opening proportions vary from squared (1:1) to vertical (1:2) for windows.

2 The composition of the façade aligns openings on all levels.

3 Main entrances are made of double wooden doors without any ornaments or external frames.

4 Windows and openings are rectangular, and include a squared or semicircular opening on top. Squared windows can lay

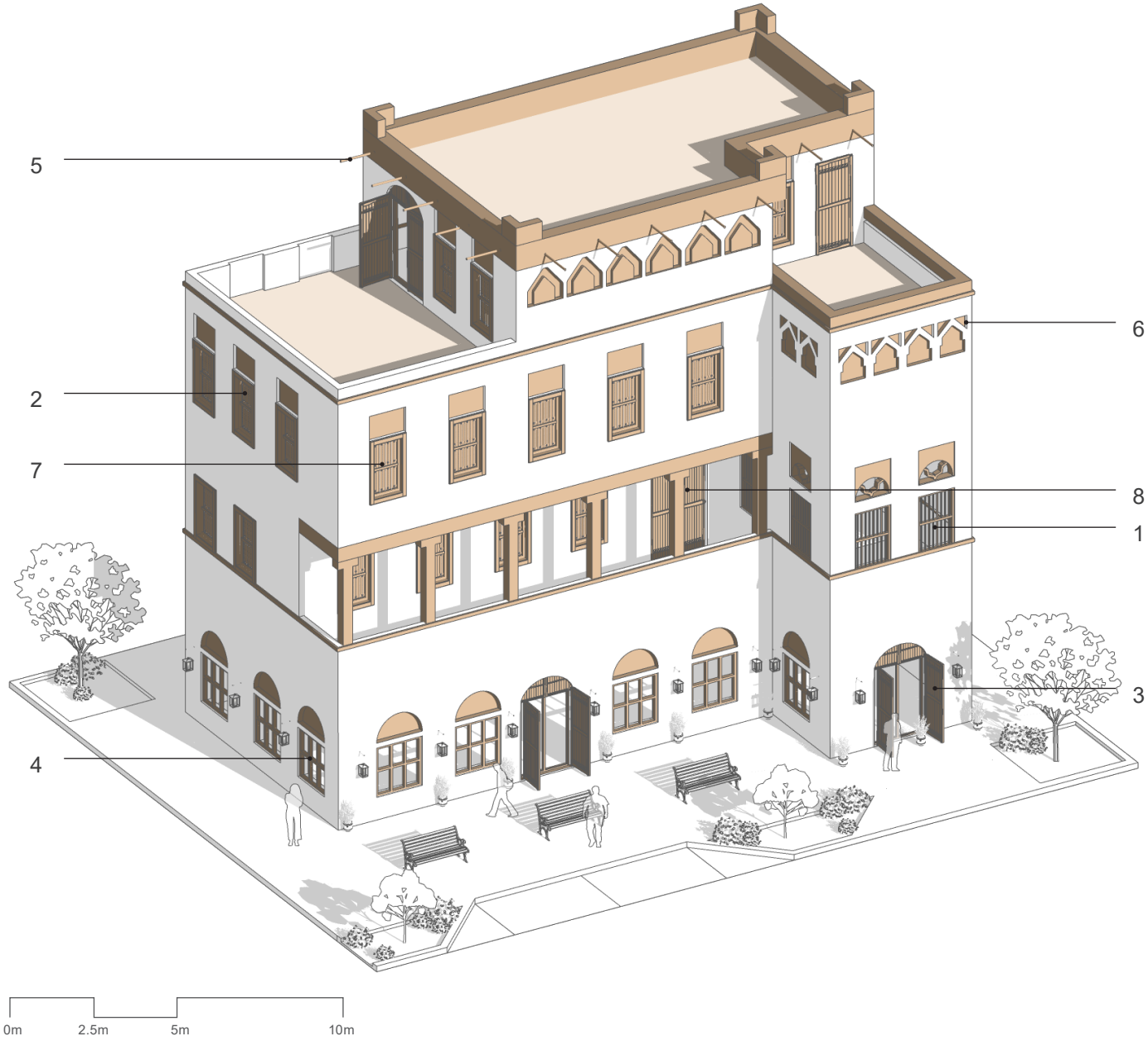


FIG. 45 Medium size building

on vertical niches creating rhythm in the façade.

5 Projecting elements locate the mizab below the parapet in order to discharge water from the roof, meanwhile lanterns can be placed on both sides of the ground floor's doors.

6 Parapets consist of a sequence of niches and topped with a projecting band.

7 Opening proportions have a width-to-height ratio of around 1:2 and be vertically rectangular.

8 Arcades can include cul-de-four arches within frames, sitting on short circular columns, typically on the second story of larger buildings.

To embrace modern living through built architecture which connects with traditional sources.

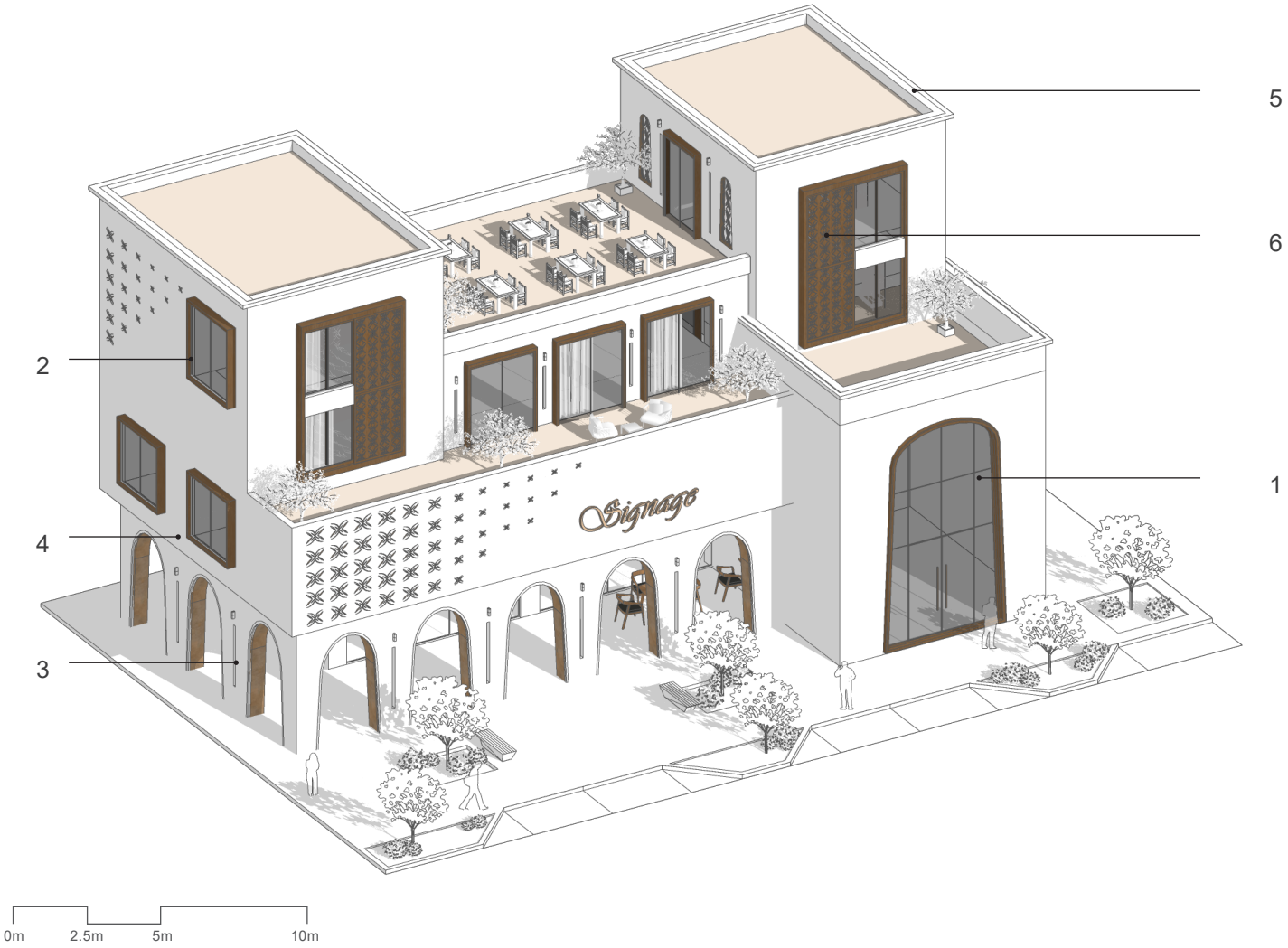


FIG. 46 Medium size building

7.3 Contemporary

This worked example of the contemporary style incorporates a robust and comprehensive application of sections 3-5 of the guidebook. Expanding the traditional source and embracing new architectural styles, this scenario evokes slick hybrid design with abstracted local motifs, such as flat parapets, and interpretive shapes and materials for openings and windows.

1 Opening proportions can vary in proportion and size, ranging from horizontal continuous curtain walls to square or rectangular shapes.

2 The composition of the façade can asymmetrically align openings on all levels.

3 Arcades are marked by curved arches of various widths sitting on columns that are aligned along the main façade.

FIG. 47 Large size building

4 The building's middle levels should cast a shadow on the ground floor and some of the windows can be extruded from the main façade thus projecting a shadow on the wall.

5 If present, parapets should be stepped or have minimal details integrating seamlessly with the rest of the façade.

6 Patterns: can be re-interpreted in the opening louvers whenever the height exceeds one story. The fenestrations in the main façade can integrate and depict geometrical motifs.

To create opportunities for contemporary and innovative design which expand on traditional styles through abstraction and subtle referrals.

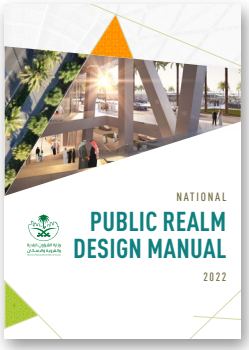
8 Public realm

An overview of public realm character in Al Qatif Oasis.

8.1 Overview

The focus of the public realm guidelines within this document is to strengthen local architecture by identifying and enhancing distinct characteristics of public realm in Al Qatif Oasis. It is meant to provide high-level principles and recommendations to be further developed in masterplans and public realm strategies for the natural and built areas of the region.

These guidelines are not intended to be a comprehensive technical resource. For this the designer should consult the National Public Realm Design Manual prepared by the Ministry of Municipalities and Housing, and support the five key principles identified in it.



1 Human scale

2 Pedestrian mobility

3 Sustainability

4 Culture and heritage

5 Visual appeal

FIG. 48 National Public Realm Design Manual and its five key principles.

This chapter is organized as follows:

- **General character -** a narrative summary and photographic overview of characteristic public realm found in Al Qatif Oasis.
- **Types of public space -** A selection of spatial types that provide the area its distinctive character.
- **Materials -** A summary of hardscape character for Al Qatif Oasis.
- **Planting -** A summary of softscape character for Al Qatif Oasis.
- **Street furniture -** Suggestions and precedents for suitable street furniture.
- **Lighting -** High-level lighting principles for the enhancement of the public realm.
- **Signage -** High-level signage principles for the enhancement of the public realm.
- **Parking -** High-level parking design principles for enhancement of the public realm.
- **Worked examples -** Visualizations that illustrate the combined intentions of the public realm guidelines.

Together the sections above aim to give a a broad overview of public realm that will reinforce the character of Al Qatif Oasis.

8.2 General character

The adjacent photographs summarize the characteristics of public realm and local landscape in Al Qatif Oasis. As set out in the introduction, the area is characterized by its unique history and topography of as an oasis settlement with many wadis and a large resevoir of groundwater resources, both natural and man-made. Similar to other oasis areas, the palm is a major architectural and public realm feature as well as economic resource in addition to maritime activities such as pearling and fishing. Today, the settlement reflects the oil-boom economy as it sits in proximity to oil fields as well as a harbor for its export and shipping.


Historic House (Tarout Castle)


Heritage Village (Tarout Castle)


Waqf Al-Rames (Qatif)


Souq Alsukka (Qatif)


Street (Tarout Island)


Zuqaq and Baraha (Tarout Island)


Lighting (Qatif)


Narrow zuqaq shaded by tall walls (Tarout Island)


Tarout Castle

FIG.49 **PUBLIC REALM AREAS AND ELEMENTS IN AL QATIF OASIS**

8.3 Types of public space

Al Qatif Oasis public realm is characterized by a hierarchy of typical streets and spaces. These typologies are distinguished by their scale, character, and relationship with predominant land uses.

Together, these spaces create a diverse public realm which caters for residents and visitors alike, and contributes to the distinct architecture of the settlement.

The plan illustrates a typical hierarchy of urban spaces and streets in Al Qatif Oasis. The following spaces are considered to be the principal typologies:

- Street: Primary routes which define the edges of smaller settlements, mediating between green oasis areas, and buildings.
- Saha: Larger local space which is more likely to include adjacent commercial uses.
- Baraha: Smaller local space, typically with a more residential character.
- Zuqaq: Local alleys of varying width and footfall which connect spaces and streets across settlements.

Specific areas might include additional variations in these typologies, reflecting local scale, character and use. Parks and recreation areas should also be provided.

FIG. 50 Typical urban plan

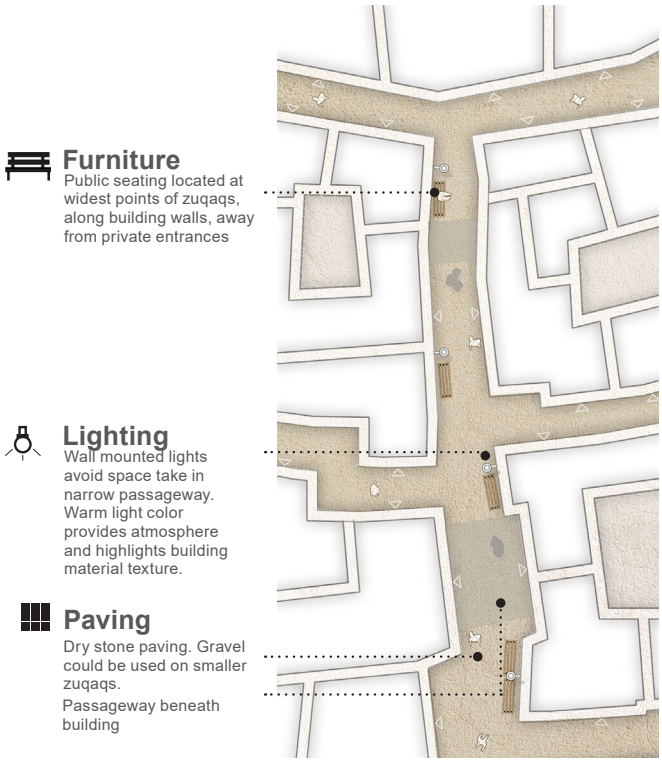


FIG. 51 Zuqaq
No vehicle access

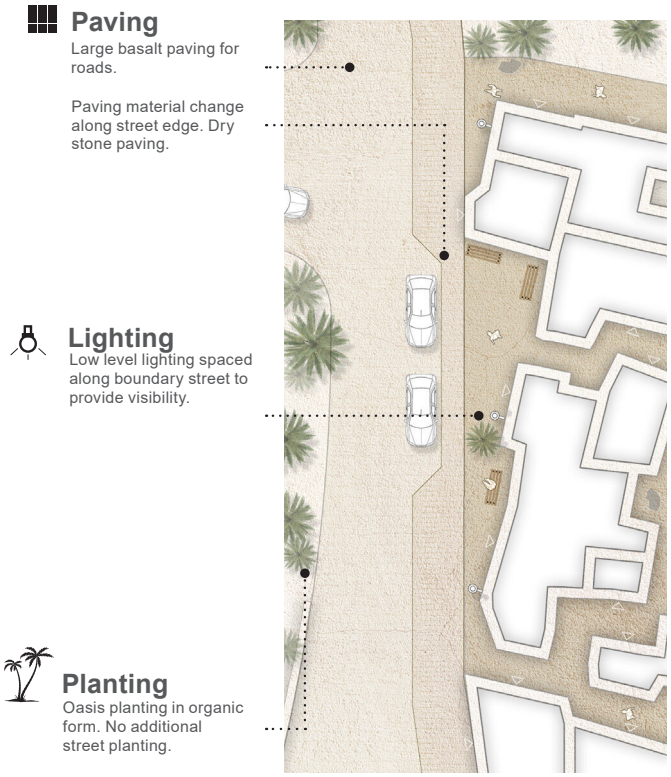


FIG. 52 Street on Oasis edge
Vehicle access
Should allow connections to Oasis

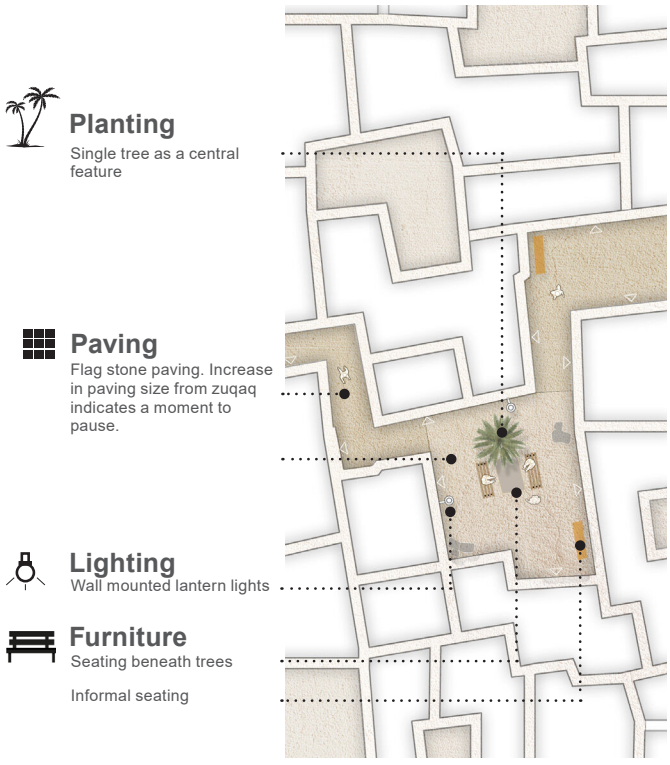


FIG. 53 Baraha
Trees should be used in baraha located close to the oasis. Baraha furthest from the oasis could use a canopy for shade

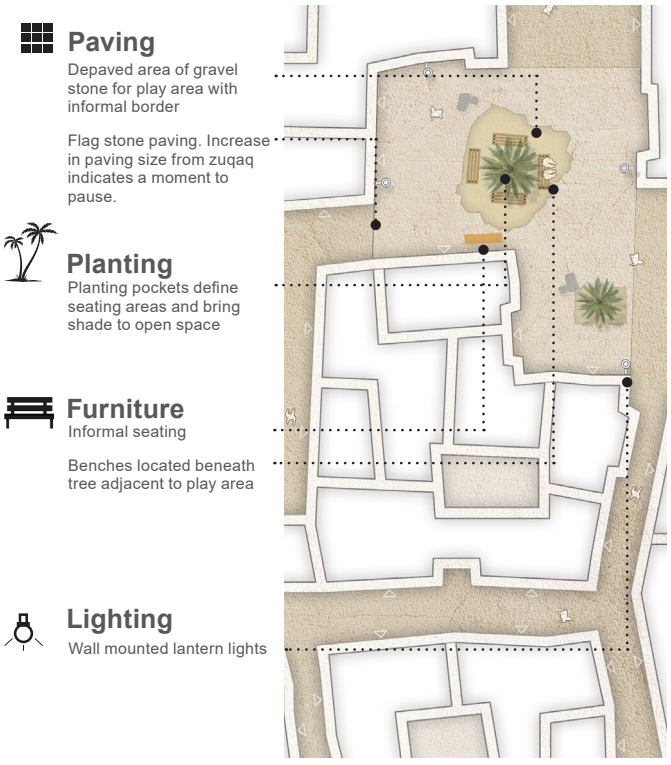


FIG. 54 Saha
Varied seating types/ uses.
Depaved area for play

8.4

Materials

The suggested palette for materials to be integrated in Al Qatif Oasis has been conceived to be contextual and complementary to the existing character of the area.

Key considerations

1 Select locally sourced Saudi materials with low embodied carbon, such as palm fronds, salt rocks, or alluvial mud, and recycling aggregates from ruin sites or community waste.

2 Areas with higher footfall, such as souks and commercial areas or pedestrian walkways, need paving and should have higher specification and materials that are durable, minimizing the need for regular repair and replacement.

3 Select materials that have longevity and that can be easily cleaned, repaired and sourced – so high-quality materials such as granite or basalt.

4 De-pave and rely less on concrete where possible to improve the microclimate and use suitable sands or aggregates in place of paving.

5 Materials should provide varying textures complementing the area's architectural character and color palette.

6 Employ subtle changes to paving to highlight difference between typologies.

7 Map and discover existing streetscapes and ensure materials are replaced only when necessary to minimize carbon footprint.

8 Using a larger paving format to emphasize more prominent routes.

9 Consider incorporating special patterns to emphasize important places or spaces.

To design public spaces which complement the material and environmental properties of Al Qatif.


Sand:
Landscape and planting areas


Gravel:
Zuqaqs and Baraha


Flag stone:
Flooring


Dry stone:
Flooring


Basalt paving:
Roads

8.5 Planting

Tree planting should compliment the agricultural character of Al Qatif Oasis, building on existing planting traditions and fostering future-oriented sustainable practices.

Key considerations

1 The tree landscape character should carefully calibrate and work with existing aquifers, rainwater, irrigation, and canal systems.

2 Rely less on importing new tree species, and source existing drought tolerant and saline water resistant as well as native and locally adapted species.

3 Adopt an informal layout, to avoid overly linear or formal planting for a characterful contribution to the quality of routes and spaces.

4 Be planted where shade can be best utilized or where shade is necessary to encourage using the public realm.

5 Consideration should be given to how a tree is seen and how trees can be used as wayfinding markers.

6 Planting should be relatively limited within the urban area, and mainly found in baraha areas.

7 Contribute to maintaining and enhancing oasis areas, using multi-layered planting where appropriate comprising a variety of palm species, fruit trees and fodder grasses as well as consider additional habitat value such as fruits for birds.

8 Minimize understory and decorative planting should be minimized. If under story planting is necessary, it should be functional e.g. herbs or edible.

To ensure that planting projects work with the existing ecosystem and provide multiple values for the public.

Trees

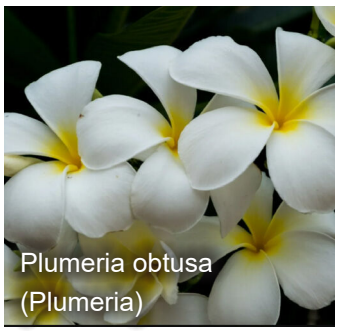

Azadirachta indica (Neem tree)


Albizia lebbeck (Siris)

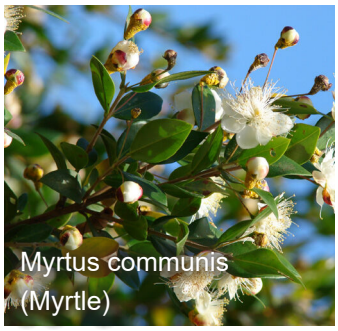

Acacia ampliceps (Salt Wattle)


Phoenix dactylifera (Date palm)

Shrubs


Plumeria obtusa (Plumeria)


Gazania rigens (Daisy)


Myrtus communis (Myrtle)


Vitex agnus castus (Chasteberry)


Atriplex semibaccata (Saltbush)


Dodonaea

8.6 Street furniture

Street furniture should be selected to provide continuity and co-ordination, limiting clutter. Colors and style of furniture should blend into the context rather than stand out as features. In general, the design of street furniture should find opportunities to use local materials, respond to the local landscape and cultural heritage, and celebrate local craft skills.

Key considerations

1 Be distributed evenly across all areas with reference to space types above.

2 Not obstruct pedestrian movement nor clutter public open spaces.

3 Show a color and material consistency.

4 Be minimal in the public realm as traditionally was the case and potentially movable.

5 Feel ephemeral and informal, acknowledging the historic condition of street furniture in the region.

6 Give consideration to accessibility with seating distributed at suitable intervals and heights.

7 Be of high quality, coherent, and rationalized to minimize street clutter.

8 Avoid duplication by rationalizing and combining elements.

9 Be easily maintained and repaired with replaceable components.

10 Be retained and improved where existing furniture has heritage value.

11 Boundary walls should contribute to the landscape character and setting of the oasis.

To provide thoughtful, inviting, and locally-relevant outdoor public furniture.

FIG. 55 Seating

FIG. 56 Trash bin

FIG. 57 Shading

FIG. 58 Planter

8.7 Lighting

Lighting fixtures are street furniture elements that enhance visibility and wayfinding at night. However, lighting design can also be utilized to highlight important buildings or parts of buildings.

Key considerations

1 Type, texture, color and design of the lighting fixture must follow the architectural design language of the building.

2 Source and research existing and traditional lighting methods to innovate a modern take that is contextually relevant.

3 Lighting element placed on the floor should be decided carefully so it doesn't obstruct pedestrian mobility on the sidewalk.

4 The type, design, consistency, and size of lighting fixtures can either degrade and disrupt a scenic area or rather enhance the architectural and urban setting.

5 The sequence and intensity of lighted areas must not be decided randomly as it guides the journey of pedestrians. Lighted areas draw people's attention and thereby determine the path that users walk.

6 The typical light color is white and yellow shades. Incorporating other colors should have a reasonable justification and used with care to not create visual pollution or degrade the quality of the space or building.

To use lighting elements in enhancing the user experience and perception of building and public space.

FIG. 59 Ceiling light

FIG. 60 Wall hanging light

FIG. 61 Free standing light

FIG. 62 Bollard

8.8 Signage

The main purpose of signage is to communicate a specific message to the public. Signage can be promotional to persuade customers into a commercial area and supports the orientation of members of the public in reaching their desired destination.

Key considerations

1 Signage font, material and color should follow and complement the architectural design language of the building.and thus should be straightforward, simple in design, and accurately orient the public to the location.

2 Inconsistent and unregulated sizes, colors, heights, and typography distort the character of a place and reduce the architectural value of buildings, contributing to the city´s overall visual pollution. It should be carefully designed to maximize efficiency in conveying the message as well as maintaining the theme and character of the area.

3 The width and alignment of wall signage boards must be consistent across the building as well as across the entire street frontage in the area.

4 Readability of signage depends on the distance it is viewed from. The maximum distance a signage is to be viewed from by a target receiver is from the opposite side of the street.

To create a consistent visual language across the city and be effective for the orientation of members of the public.

FIG. 63 Main signage

FIG. 64 Wall hanging signage

FIG. 65 Free standing signage

FIG. 66 Column signage

8.9 Parking

Street front parking is provided for customers of active retail frontages, and for visitors to access building entrances as well as for residents of a building. Undesignated parking spaces disturb the visual appeal of the district, but it also may affect public access.

Key considerations

1 The width of parking lots must always be enough for easy parking for all sizes of anticipated vehicles. For this, parking angles are a necessary consideration. Parallel spaces are also common.

2 Parking spaces for those with limited or hampered mobility should always be prioritized and provide easy access to main areas.

3 Parking must never become a physical obstacle that limits access to spaces. Parking must consider other vehicles such as bicycles and motorcycles as well as the navigation of pedestrians between the parking areas.

4 Parking spaces accompanied by shading structures and vegetation is an advantage as it helps protects vehicles from the climate.

5 Creating a planted buffer between the parking and the pedestrian sidewalk or the bike lanes is encouraged where possible.

To ensure that parking spaces attend to multiple needs and work with their surroundings.

FIG. 67 Parking example

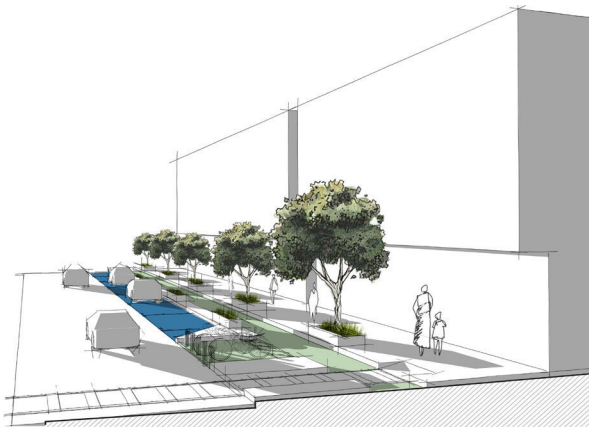


FIG. 68 Road side parking - Type 1

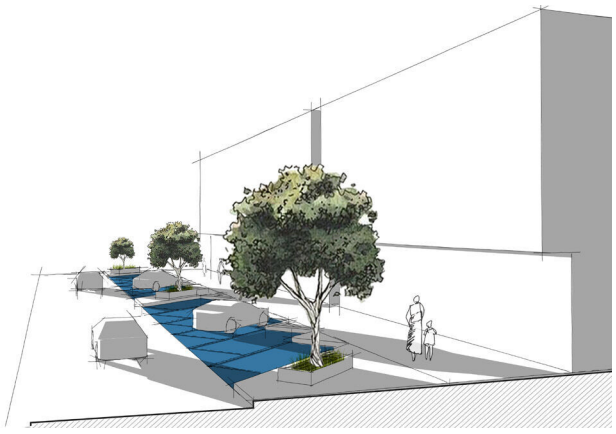


FIG. 69 Road side parking - Type 2

8.10 Public realm worked examples

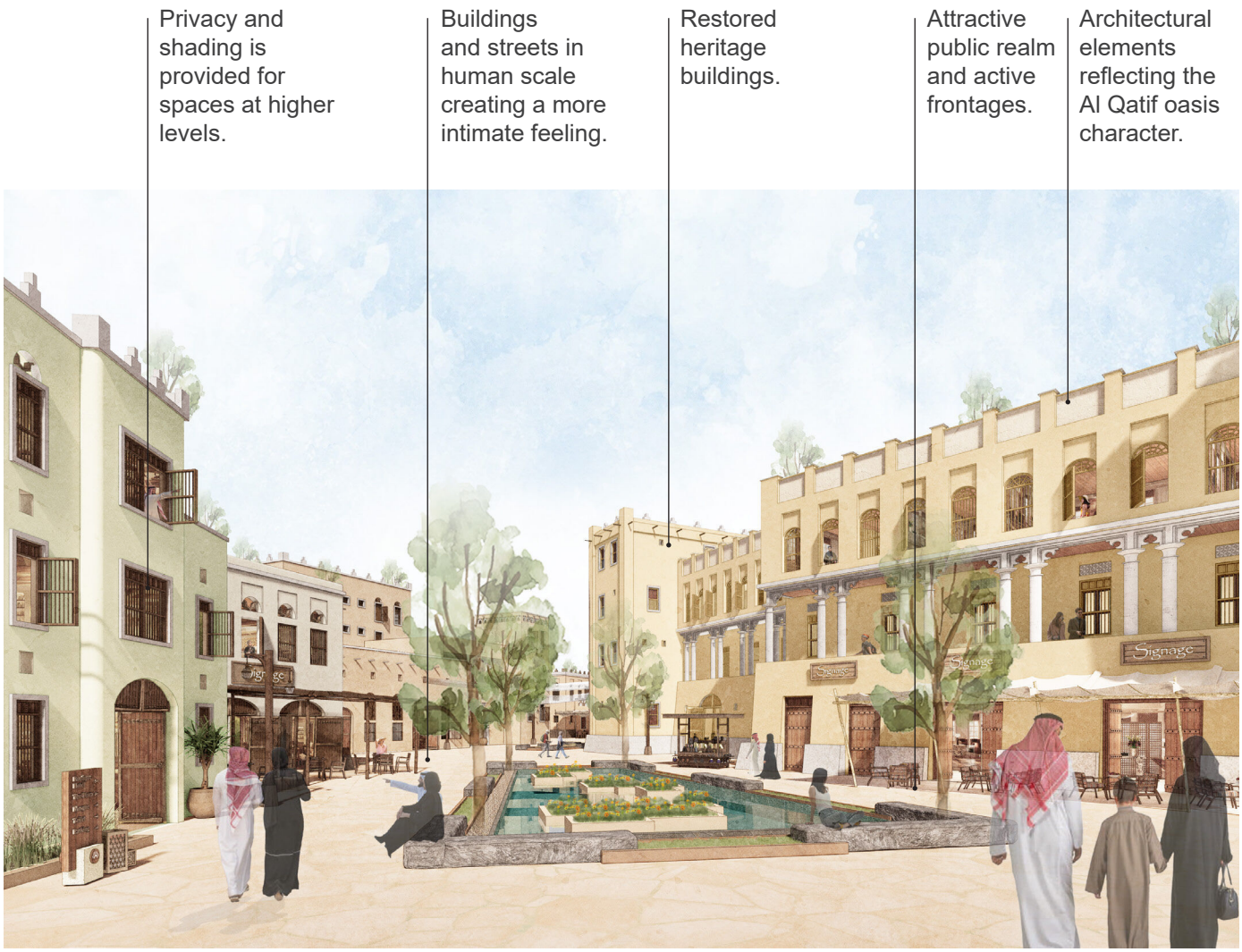


FIG.70 **PROPOSED VIEW OF COMMERCIAL PLAZA IN AL QATIF**

This worked example incorporates suggestions proposed in this section. The scenario presents a public realm adapted to Al Qatif Oasis region's climate, in which openings of dwellings are rendered narrow – smaller than the ones in Al Ahsa yet larger than the ones in the Najdi region – to ensure both privacy and protection from sunlight.

1 Materials prioritize the use of natural and locally sourced materials such as clay, stone, tamarisk wood, and palm materials.

2 The base colors are chosen in correlation with the hues present on the site such as pebble gray, beige, pearl beige, and brown beige. Secondary hues used include gray, white, red-green, ochre, and mahogany brown.

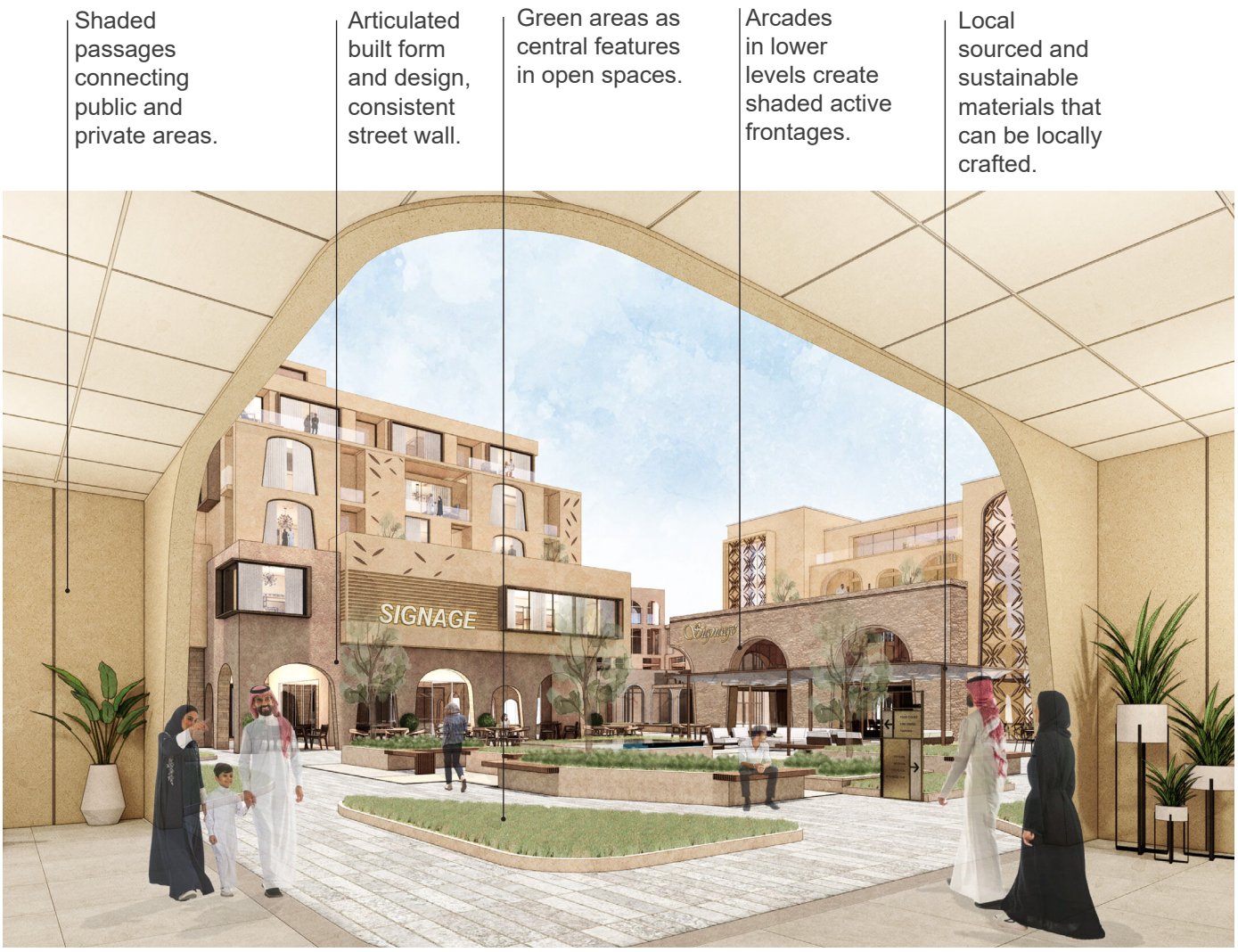


FIG.71 **PROPOSED VIEW OF COMMERCIAL PLAZA IN AL QATIF**

3 For urban furniture, benches have a rendered finish, mixed with local wood, and made from sustainable durable locally-sourced materials.

4 The lighting strategy reinforces the sense of character through minimal elements that emphasize entry points, feature areas, and urban furniture.

5 Large green areas integrate tall shrubs and canopy trees that act as shading, as well as water surfaces. These areas become a central feature of both internal courtyards and plazas where benches are integrated into the perimeter in order to facilitate the pedestrian flow.

To create public realms which connect with the built heritage of the region and express a strong sense of place.

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