

Bisha Desert

Architectural Design Guidelines



Application Handbook - Low-rise Buildings





Bisha Desert Architectural Character Area



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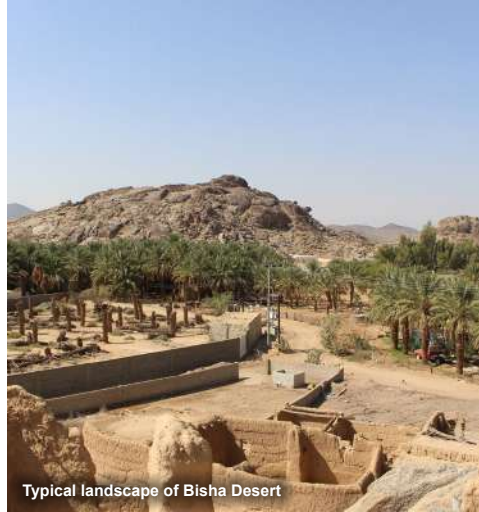


Application Handbook - Low-Rise Buildings

Bisha Desert - Architectural Design Guidelines



Traditional architecture in Bisha Desert



Typical landscape of Bisha Desert

I Introduction

The purpose of this document is to help designers and builders of low-rise mixed-use buildings apply the architectural character of Bisha Desert to their projects.

Bisha Desert character area is the inland desert area in Aseer region where Sarawat Mountain descends steeply towards the east. This area has a semi-desert climate, low rainfall and is filled with magnificent rock formations. Among the numerous villages in this character area Bisha & Tathleeth are the prominent ones.

The northeastern areas are covered with rocky hills and few sporadic sand sheets to the east. Narrow wadi corridors cut through the hills creating micro-climates. Sporadic and sparse settlements can be seen in the lowlands, situated along road corridors. Towards the southeast, the desert flat plains, feature yellow and sand colored sand dunes, some rocky hills and narrow wadi corridors that support sporadic arid vegetation.

Traditional architecture was very much influenced by the hot and dry climatic conditions. The architecture features the use of mainly mud as

a building material that was readily available locally as sun-dried mud bricks and as mud plaster. Houses were compactly built around courtyards to regulate the interior climate.

Houses were usually one to two stories high and expanded horizontally due to the flat topography of the region. Moreover, the use of internal courtyard spaces created different levels of privacy. Small openings at high level feature widely, primarily for thermal comfort with colonnades on the ground floor for shading.

This handbook is a supplement to the Bisha Desert Architectural Design Guidelines. Designers are recommended to read the full version of the Architectural Design Guidelines to gain a comprehensive understanding of all aspects of the character. Please also consult regulating plans that may describe which styles are applicable to your project area.

To access these resources please use the links below.



[Link to Full Guidelines](#)



[Link to Regulating Plans](#)



Example of low-rise mixed-use building elevation in traditional style in Bisha Desert

II Low-Rise Buildings

Low-rise buildings form a large part of the built environment across the Kingdom, and strongly influence people's experience and the character of a place.

Serving the many needs of residents through a wide range of uses, low-rise buildings are a common building type found everywhere. Addressing their design is an important part of the implementation of the architectural design guidelines.

This building type emerges predominantly from contemporary development patterns: larger rectangular plots of land typically accessed by car from a street on one edge, and interfacing with adjacent properties on the other boundaries. These buildings tend to exhibit a horizontal, rectilinear form and a clear orientation to the street, with distinct sides and backs. This introduces inherent differences from historical building types that are the source of architectural identities, and is a primary challenge to their implementation, to be addressed in the compositional rules of this handbook.

Low-rise mixed-use buildings

Low-rise mixed-use buildings are usually subdivided into multiple units that often create a heterogeneity to the facade, particularly where the ground floor use is commercial or retail.

The establishment of a consistent character for the whole building is another important objective of this handbook. This extends to the neighborhood: the consistent character of the streetscapes, and the support of the public realm in conjunction with other low-rise buildings is a high priority.

Low-rise apartment buildings

Where low-rise apartment buildings are assigned primarily residential uses, the relationship between public and private spaces become paramount. Access to individual units, ground floor facade design, the provision of outdoor amenity, and the design of boundary treatments and rooftops will be important. The applicants for apartment buildings should follow the guidelines mentioned in this document, along with the additional guidance provided in Appendix A.

This handbook will implement the Bisha Desert Architectural Design Guidelines in low-rise building types by harmonizing the needs described above with the requirements of the guidelines.

III How to Use the Guidelines

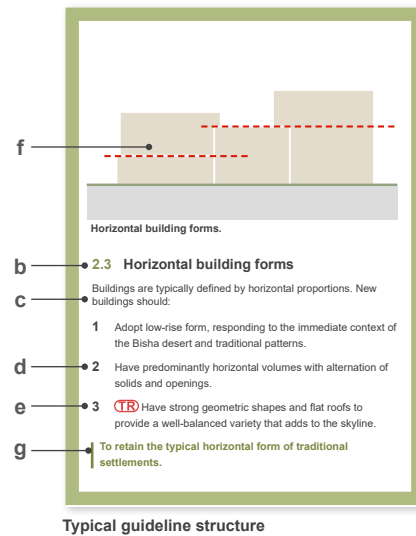
Follow these instructions to create a building that supports the architectural character of the Bisha Desert.

- 1 Consult the regulating plan to determine which architectural style options (Traditional, Transitional, or Contemporary) are permitted at your project location.
- 2 Select from the permitted architectural styles, and review the list of general guidelines on the style start pages (Section 1).
- 3 Assess your design according to each of the 5 guideline categories:
 - **Composition:** do your building massing and facade design follow compositional principles? (Section 2)
 - **Elements:** do the individual parts of your building properly interpret the architectural character for your style? (Section 3)
 - **Materials and Colors:** does your building use acceptable materials and colors in the proportions defined? (Section 4)
 - **Patterns:** do any elements show inspiration from local craftsmanship and culture? (Section 5)
 - **Public Realm:** does your building contribute to the quality and character of the street and the neighborhood? (Section 6)
 - **Dos and Don'ts:** have you avoided common mistakes that lower the quality and character of buildings? (Section 7)
 - **Worked examples:** these are illustrations showing one possibility of how the guidelines can be applied, provided for inspiration. (Section 8)

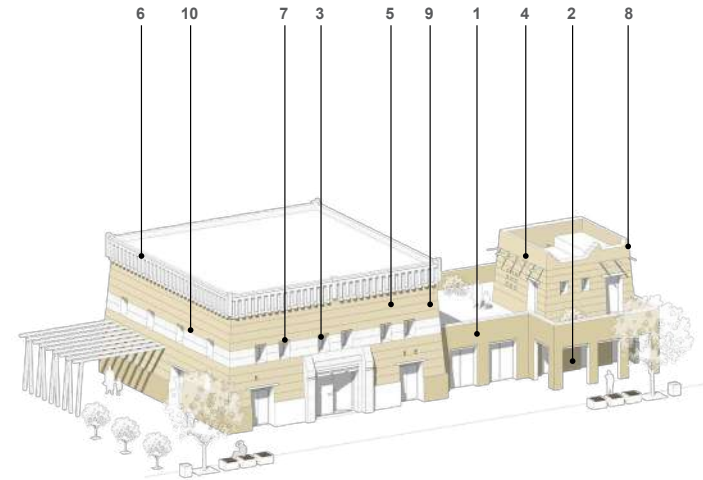
4 Throughout the document, **mandatory guidelines** for each character style will be marked with the following symbols. Where a guideline is mandatory for all styles, all three symbols will be present:

- TR** Mandatory for traditional style
- TN** Mandatory for transitional style
- C** Mandatory for contemporary style

- 5 Guidelines are organized according to the following parts:
 - a. **Section heading:** identifies the general guideline category.
 - b. **Header:** identifies the guideline topic.
 - c. **Description:** expands upon the topic.
 - d. **Instructions:** provides rules and design principles to observe.
 - e. **Mandatory symbol:** indicates high priority guidelines that must be complied with.
 - f. **Illustration:** non-regulatory diagrams that help visually explain guidelines.
 - g. **Rationale:** objective of the guideline, to allow for alternative approaches to fulfillment.



This general character reference model is from the Bisha Desert Architectural Design Guideline, summarizing the key features of the architectural character.



Example of vernacular Bisha Desert architectural elements, for illustrative purposes only

Key features:

- 1 Buildings of smaller to substantial size and mass composed of larger planar wall surfaces.
- 2 Large openings on the ground floor in the form of doors with colonnades for shading.
- 3 Small number and narrow openings on upper floors to protect the interior from thermal transfer inside the building.
- 4 Predominantly horizontal massing.
- 5 Horizontal lines of mud brick courses articulating the walls.
- 6 Flat roofs with parapets articulated with pointed corners or vertical stripes.
- 7 Opening ratio of 15% - 30% of the overall facade.
- 8 Gently inclined walls with an inclination angle between 1.5 and 3 degrees.
- 9 Sober facades with mud, clay and stone as predominant materials.
- 10 Occasional banding using white paint / articulation to highlight the windows and main doors.



Traditional **TR**

The most conservative and faithful effort at interpreting traditional architectural form.

START AT PAGE 5



Transitional **TN**

A style suitable to help create gradual transitions between areas of different character style.

START AT PAGE 6



Contemporary **C**

This style keeps the essence of the architectural character that makes it distinct from contemporary architecture of other places.

START AT PAGE 7

1.0 Traditional Style

Start here to review the general guidelines of the traditional style low-rise buildings.

Traditional style buildings should observe as many architectural design guidelines as strictly and as faithfully as possible. The traditional style is suitable for projects near heritage assets and parts of town closer to historic cores.

Note - guideline numbers below correspond to sections 2 through 5 of this Handbook and are not sequential: only the key features relevant to the application of the traditional style low-rise buildings are shown on this page.

COMPOSITIONAL RULES

2.3 Horizontal building forms

Building massing should predominantly adopt a compact and horizontal form, responding to the immediate context of the Bisha Desert. At least 50% of the building form should have gently tapered walls with a maximum inclination of 3 degrees. Facade should introduce vertical breaks at intervals of around 10 meters. This can be achieved with changes in the form, height and massing.

2.4 Flat roofs

Building massing should be designed to have flat roofs. Varied roofline may be created with stepped conjoined units and varying heights.

2.5 Asymmetrical frontages

The overall form and facades should have an asymmetrical composition. Localized symmetries should be maintained in the placement, size, rhythm and patterns of the openings, interpreting the general asymmetry of buildings derived from vernacular architecture. Openings should be arranged in a repetitive pattern to form horizontal and vertical alignments.

2.6 Simple openings

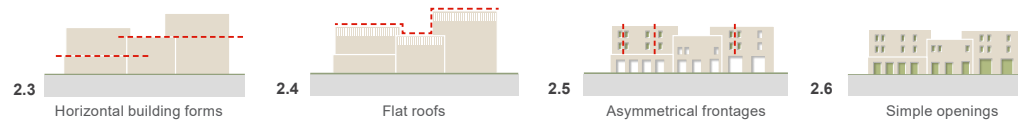
Openings should consist of small to medium sized windows of simple geometry. Small ventilation windows may be used to bring variety to the facade (as patterns or for articulation). A maximum of 30% of the facade's surfaces should be openings. This ratio should respond to the needs of the accommodation and consider solar and wind exposure. Facades should clearly highlight the base, middle and top of the building, showcasing tripartite banding, with the use of layering of mud brick courses or their equivalent. Facades should include occasional horizontal banding painted white to highlight windows and main entrances.

2.7 Solid facades and active ground floor

Facades should express external solid walls grounded to the street level. Facade materials should be hard-wearing and robust. Large openings in the form of colonnades should be encouraged at the ground floor to foster a high-quality interface between building and the street. Colonnades should have vertical proportions and should maintain visual access to the active shopfronts. If signage is included, it should not be placed above but rather within the opening of the colonnade.

2.8 Sober facades and articulated parapets

Facades should be plain, sober with minimal articulation. Parapets should be emphasized using massing, stepping and ornamentation to highlight the top part of the building. Horizontal layering of mud bricks may be interpreted to articulate the facade.

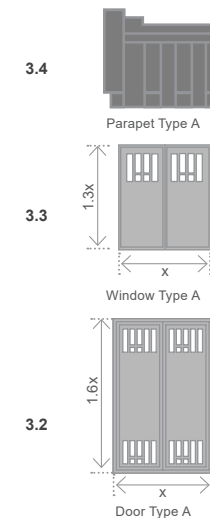


Axonometric view showcasing an example of the application of compositional rules for traditional style low-rise mixed-use building



Elevation view showcasing an example of the application of compositional rules for traditional style low-rise mixed-use building

Key traditional architectural features



TRADITIONAL ELEMENTS

3.1 General details and considerations

Perimeter wall and fence should have low to medium levels of transparency. Main entrance within the perimeter wall should be highlighted.

3.2 Doors and entrances

Entries should be recessed from the building facade and should be well defined, clearly visible and universally accessible from the sidewalk.

Generally, doors and entrances should have simple orthogonal geometries with width-to-height proportions of 1:2 - 1:3.

The main entrance should be highlighted with buttresses or projecting wooden beams or similar.

3.3 Windows and openings

Buildings should have small to medium sized openings articulated with changes in materiality and / or color, often as white bands. Opening surrounds should be recessed.

Windows should be square / rectangular shaped with relatively balanced proportions.

Traditional windows should have typical proportions of 1:1.3 - 1:2.

3.4 Rooftop elements

The roofscape should clearly define and articulate the rooftop with distinct materials and / or features.

The roofscape should feature articulated parapets either with pointed corners, stepped crenellations or a decorative motif of vertical indentations.

COLORS, MATERIALS AND PATTERNS

4.1 Colors

The general palette should be beige, brown, and sand.

90% of the building's color palette should be composed of primary colors and 10% should be composed of accent colors.

At least 70% to 80% of the facade should be composed of one consistent primary color.

Accent colors should be reserved for highlighting key elements, such as entries, openings, shutters and shading structures.

4.2 Materials

Generally, subject to availability, the use of locally available traditional materials, or equivalent, should be encouraged.

At least 70% to 80% of the facade should be composed of one consistent material.

Wood, or its equivalent, should be used for elements in openings such as window frames, shutters and shading structures.

Mud brick (or its equivalent), or stone (or other material that closely resemble the local stone in terms of the texture, color, and appearance), should be used as a primary material.

5.0 Patterns

Typical colors and patterns should be used for decoration and highlights and should be no more than 10% of the facade area.

Patterns should replicate traditional art patterns.

1.0 Transitional Style

Start here to review the general guidelines of the transitional style low-rise buildings.

Transitional style buildings help integrate traditional architecture with the larger urban context and steer design towards new interpretations of traditional form.

Note - guideline numbers below correspond to sections 2 through 5 of this Handbook and are not sequential; only the key features relevant to the application of the transitional style low-rise buildings are shown on this page.

COMPOSITIONAL RULES

2.3 Horizontal building forms

Building massing should predominantly adopt a compact and horizontal form, responding to the immediate context of the Bisha Desert. Up to 30% of the building form may have gently tapered walls with a maximum inclination of 3 degrees.

Facade should introduce vertical breaks at intervals of around 15 meters or less. Facade breaks should be a minimum of 1.5 meters in depth and 3 meters in width, for at least 70% of the facade vertically.

2.4 Flat roofs

Building massing should be designed to have flat roofs. Varied roofline may be created with stepped conjoined units and varying heights.

2.5 Asymmetrical frontages

The overall form and facades should have an asymmetrical composition. Localized symmetries should be maintained in the placement, size, rhythm and patterns of the openings, interpreting the general asymmetry of buildings derived from vernacular architecture. Openings should be arranged in a repetitive pattern to form horizontal and vertical alignments.

2.6 Simple openings

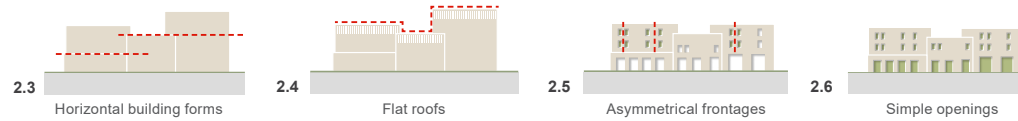
Openings should consist of medium sized windows of simple geometry. Small ventilation windows may be used to bring variety to the facade (as patterns or for articulation). A maximum of 40% of the facade's surfaces should be openings. This ratio should respond to the needs of the accommodation and consider solar and wind exposure. Facades should clearly highlight the base, middle and top of the building. They should display abstract interpretations of vernacular elements and use of facade elements to display horizontal layering. Horizontal layering of mud bricks should be interpreted to articulate the facade.

2.7 Solid facades and active ground floor

Facades should express external solid walls grounded to the street level. Large openings in the form of colonnades should be encouraged at the ground floor. Colonnades should have vertical proportions and should maintain visual access to the active shopfronts. If signage is included, it should not be placed above but rather within the opening of the colonnade.

2.8 Sober facades and articulated parapets

Facades should be plain, sober with minimal articulation. Horizontal layering of mud bricks should be interpreted to articulate the facade.

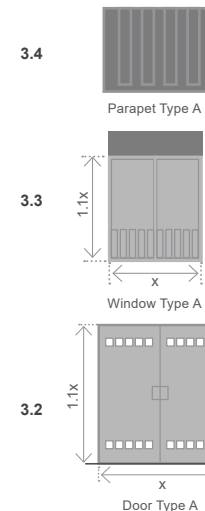


Axonometric view showcasing an example of the application of compositional rules for transitional style low-rise mixed-use building



Elevation view showcasing an example of the application of compositional rules for transitional style low-rise mixed-use building

Key transitional architectural features



TRANSITIONAL ELEMENTS

3.1 General details and considerations

Perimeter wall and fence on the main frontage could have medium to high levels of transparency to provide a permeable connection to the public domain and add to the overall quality of the public realm. Side / back boundary wall may have low, medium or high levels of transparency.

Terraces may be provided over projecting colonnades, articulating the facade. They should be located on the main facade overlooking the public realm.

3.2 Doors and entrances

Entries should be recessed from the building facade and should be well defined, clearly visible and universally accessible from the sidewalk. Generally, doors and entrances should have simple orthogonal geometries with width-to-height proportions of 1:2 - 1:3.

3.3 Windows and openings

Buildings should have recessed openings of small to medium size and typical proportions of 1:1.3 - 1:3.

Windows should be square / rectangular shaped with relatively balanced proportions. Window openings should be highlighted with change in materiality and / or color, often as white bands.

3.4 Rooftop elements

The roofscape should feature articulated parapets and / or articulated roof elements. The roofscape should clearly define and articulate the roof top with distinct materials and / or features.

Parapets should be simple and integrated within the overall design of the facade. Parapets may be articulated using vertical striped patterns in order to highlight the top part of the building.

COLORS, MATERIALS AND PATTERNS

4.1 Colors

The general palette should be beige, brown and sand. 80% of the building's color palette should be composed of primary colors and 20% should be composed of accent colors. At least 60% to 70% of the facade should be composed of one consistent primary color.

Accent colors should be reserved for highlighting key elements, such as entries, openings, shutters and shading structures and / or facade elements.

4.2 Materials

Between 60% to 70% of the facade should be composed of one consistent material.

Wood, or its equivalent, should be used for elements in openings such as window frames, shutters and shading structures.

At least 10% of the facade should use mud brick (or its equivalent), or stone (or its equivalent), to either highlight the base, or on the main frontage, or as an accent feature on doors and entrances.

5.0 Patterns

Typical colors and patterns should be used for decoration and highlights. Patterns should be no less than 10% and no more than 15% of the facade area.

Transitional buildings should utilize interpretations of traditional art patterns.

1.0 Contemporary Style

Start here to review the general guidelines of the contemporary style low-rise buildings.

Buildings of this style should aim to retain the essence of the architectural character by skillful and knowledgeable interpretation of traditional forms into contemporary expression.

Note - guideline numbers below correspond to sections 2 through 5 of this Handbook and are not sequential; only the key features relevant to the application of the contemporary style low-rise buildings are shown on this page.

COMPOSITIONAL RULES

2.3 Horizontal building forms

Building massing should predominantly adopt a compact and horizontal form, responding to the immediate context of the Bisha desert. Building form may feature gently tapered walls with a maximum inclination of 3 degrees. Tapered walls should be a special feature or highlight element only, and should not exceed 20% of the building form. Facade should introduce vertical breaks at intervals of around 20 meters or less. Facade breaks should be a minimum of 1.5 meters in depth and 3 meters in width, for at least 70% of the facade vertically.

2.4 Flat roofs

Building massing should be designed to have flat roofs. Varied roofline may be created with stepped conjoined units and varying heights.

2.5 Asymmetrical frontages

The overall form and facades should have an asymmetrical composition. Localized symmetries should be maintained in the placement, size, rhythm and patterns of the openings, interpreting the general asymmetry of buildings derived from vernacular architecture. Openings should be arranged in a repetitive pattern to form horizontal and vertical alignments.

2.6 Simple openings

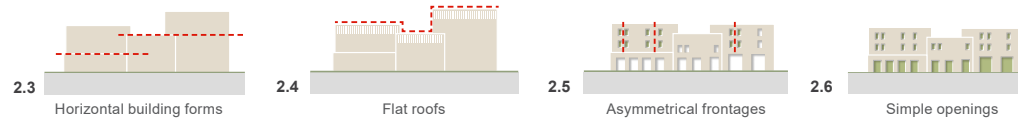
Openings should consist of medium sized windows of simple geometry. Small ventilation windows may be used to bring variety to the facade (as patterns or for articulation). A maximum of 50% of the facade's surfaces should be openings. This ratio should respond to the needs of the accommodation and consider solar and wind exposure. Facades should clearly highlight the base, middle and top of the building. They should display abstract interpretations of vernacular elements and use of facade elements to display horizontal layering. The base may be delineated through a decorative string course.

2.7 Solid facades and active ground floor

Facades should express external solid walls grounded to the street level. Large openings in the form of colonnades should be encouraged at the ground floor. Colonnades should have vertical proportions and should maintain visual access to the active shopfronts. If signage is included, it should not be placed above but rather within the opening of the colonnade.

2.8 Sober facades and articulated parapets

Facades should be plain, sober with minimal articulation. Horizontal layering of mud bricks may be interpreted to articulate the facade.

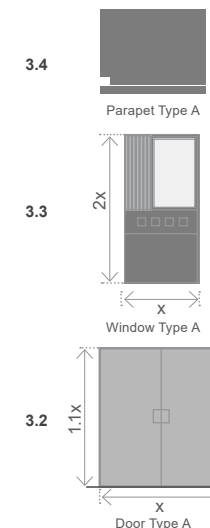


Axonometric view showcasing an example of the application of compositional rules for contemporary style low-rise mixed-use building



Elevation view showcasing an example of the application of compositional rules for contemporary style low-rise mixed-use building

Key contemporary architectural features



CONTEMPORARY ELEMENTS

3.1 General details and considerations

If included, perimeter wall and fence on the main frontage could have medium to high levels of transparency to provide a permeable connection to the public domain and add to the overall quality of the public realm. Side / back boundary wall may have low, medium or high levels of transparency.

Terraces may be provided over projecting colonnades, articulating the facade. They should be located on the main facade overlooking the public realm.

3.2 Doors and entrances

Entries should be recessed from the building facade and should be well defined, clearly visible and universally accessible from the sidewalk. Generally, doors and entrances should have simple orthogonal geometries with width-to-height proportions of 1:2 - 1:3.

3.3 Windows and openings

Buildings should have recessed openings of medium size and typical proportions of 1:1.3 - 1:4. Windows should be square / rectangular shaped with relatively balanced proportions. Window openings should be highlighted with change in materiality and / or color and may include white bands.

Openings may include floor to ceiling windows. Large windows (1:4) and double height windows should feature elements to divide the height to avoid disproportionate scaling.

3.4 Rooftop elements

The roofscape should feature articulated parapets and / or articulated roof elements. The roofscape should clearly define and articulate the roof top with distinct materials and / or features.

Parapets should be simple and integrated within the overall design of the facade. Parapets may be articulated using vertical patterns in order to highlight the top part of the building.

COLORS, MATERIALS AND PATTERNS

4.1 Colors

The general palette should be beige, brown and sand. 70% of the building's color palette should be composed of primary colors and 30% should be composed of accent colors.

At least 50% to 60% of the facade should be composed of one consistent primary color.

Accent colors should be reserved for highlighting key elements, such as entries, openings, shutters and shading structures and / or facade elements.

4.2 Materials

At least 50% to 60% of the facade should be composed of one consistent material. Wood, or its equivalent, should be used for elements in openings such as window frames, shutters and shading structures. Mud brick (or its equivalent), or stone (or its equivalent), may be used to highlight the base.

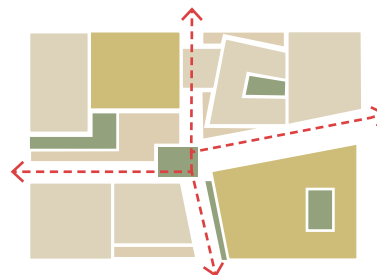
5.0 Patterns

Typical colors and patterns should be used for decoration and highlights, patterns should be no less than 10% and no more than 20% of the facade area. Contemporary buildings should utilize abstractions of traditional art patterns.

2.0 Compositional Rules

The following guidelines provide compositional rules for building design with the Bisha Desert architectural character, specially adapted for low-rise building types.

The rules apply generally to all three styles (traditional, transitional, and contemporary), with mandatory requirements for specific styles identified by the relevant symbol.



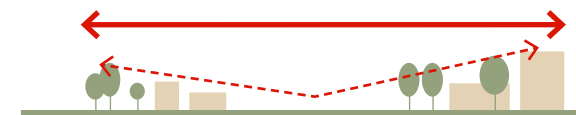
Permeable fabric with hierarchy of open spaces

2.1 Townscape groupings

New developments should contribute to factors like topography of site and its context, figure ground qualities, and public realm. The design of new buildings should:

- 1 Foster human-scale, socio-cultural and family values, with different levels of privacy in the design.
- 2 Promote spatial enclosures to achieve a sense of place with a clear hierarchical variety of open spaces.
- 3 Prioritize walkable and non-car dominated environments with attractive public realm.
- 4 Land use should promote a mix of uses.
- 5 Avoid large blocks (>100m in any direction), or provide mid-block passages for walkability.

A permeable block structure with mix of uses is essential to create a walkable and vibrant urban space.

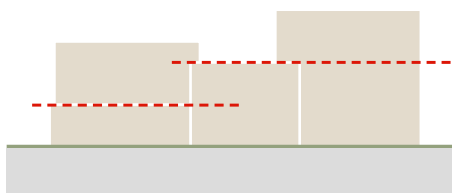


Respecting the natural vastness of plains and open views to the landscape

2.2 Relationship to landscape

- 1 Prioritize the conservation and enhancement of environmental and cultural resources on site.
- 2 Respect the natural terrain and avoid flattening of slopes.
- 3 Provide usable open space within the plot oriented toward the public frontage.

To respect and respond to the natural landscape context, climate and environment.



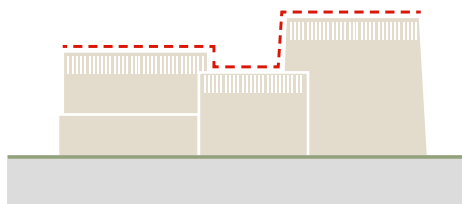
Horizontal building forms

2.3 Horizontal building forms

Buildings are typically defined by horizontal proportions. New buildings should:

- 1 Adopt low-rise form, responding to the immediate context of the Bisha Desert and traditional patterns.
- 2 Have predominantly horizontal volumes with alternation of solids and openings.
- 3 **TR** Have strong geometric shapes and flat roofs to provide a well-balanced variety that adds to the skyline.
- 4 **TR** Have walls tapering towards top with a maximum angle of 3 degrees and flat roofs.
- 5 Have broken floor plates by means of full breaks and / or recesses to introduce variation and avoid large building massing.

To retain the typical horizontal form of traditional settlements.



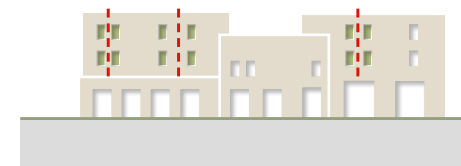
Stepping, rectilinear roofscape

2.4 Flat roofs

Roof and parapets contribute significantly to the character of the place. The design of new buildings should:

- 1 Have flat roofs with varied rooflines created with stepped conjoined units and varying heights.
- 2 Have articulated parapets, supporting privacy requirements and hiding rooftop equipments.
- 3 Always screen MEP equipment, utilities, delivery, refuse containers, and other types of utilities using parapets or by locating them underground / internalized.

To maintain the traditional flat roof forms.



Localized symmetry in opening placement

2.5 Asymmetrical frontages

Frontages have an overall asymmetrical composition. New buildings should:

- 1 Maintain localized symmetries in the placement, size, rhythm and patterns of openings.
- 2 Reserve large-scale symmetry for only the most important of civic and religious buildings.
- 3 Apply the same level of design quality to all public facing facades or frontages for consistency.

To observe simple asymmetry characteristic of the traditional architecture.



Openings with simple geometries

2.6 Simple openings

Buildings are typically defined by simple articulations of fenestrations and openings. New buildings should:

- 1 Provide medium sized window openings with simple square / rectangle shapes and relatively balanced proportions.
- 2 Allocate a maximum share of 30% to 50% of the overall facade surface for openings.
- 3 Include loggias instead of balconies to activate the facade.
- 4 Highlight windows and doorways using color banding
- 5 Use small ventilation windows as pattern or for articulation.

| To observe the defensive yet aesthetic character and detail of the Bisha Desert.



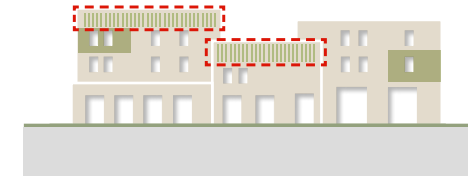
Active base

2.7 Solid facades and active ground floor

An active base is a dominant feature which characterizes vernacular design. New buildings should:

- 1 Have large openings in the form of colonnades while maintaining grounded quality of facades.
- 2 Have colonnades to provide shading for shopfronts.
- 3 Include hard-wearing and robust shading materials for the facade.

| To express the architectural intent and character of the Bisha Desert at street level.



Sober facades and decorative features

2.8 Sober facades and articulated parapets

Buildings are typically defined by sober facades and articulated parapets. New buildings should:

- 1 **TR** Articulate the parapet using interpretations of vernacular parapet patterns like vertical stripes and stepped parapets.
- 2 **TR TN C** Have plain and sober facades with minimal articulation. Horizontal layering of mud bricks may be interpreted to articulate the facade.

| To highlight the plain and sober character while creating attractive facades in Bisha Desert.

intentionally blank

intentionally blank

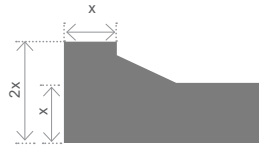
intentionally blank

3.0 Traditional Elements

The elements illustrated are examples and should not limit other possible design solutions that follow guideline principles and historic precedents. Element measurements are illustrative and provided to indicate general proportions only



Top



Parapet Type A



Parapet Type B



Parapet Type C



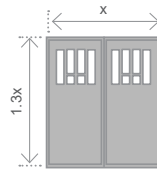
3.4 Rooftop elements

- 1 Parapets should be articulated using pointed corners / stepped articulation / vertical striped patterns.
- 2 Parapets should be tall enough to screen rooftop equipment, functional areas and provide privacy to any usable rooftop area.
- 3 Rooftop elements should be screened and set back from the parapet / building facade. Utilities on the roof should be minimized to allow for other uses. Exceptions may be allowed where the parapet is higher and can conceal 'rooftop elements' from view.

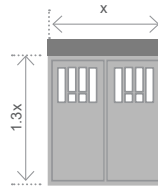
To create roofscapes which embrace the typical characteristics of the local area.



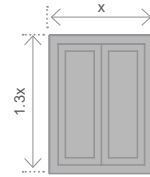
Middle



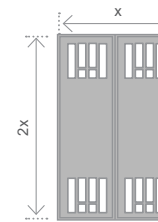
Window Type A



Window Type B



Window Type C



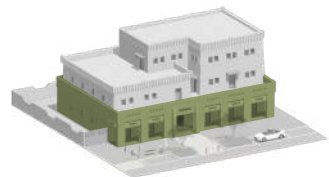
Window Type D



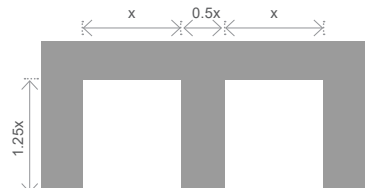
3.3 Windows and openings

- 1 Have small to medium sized openings with simple geometries.
- 2 Use recessed / punched openings to increase compositional layering.
- 3 Articulate openings with change in materiality and / or color, occasionally as white bands.
- 4 Openings should not exceed 30% of the overall facade surface.
- 5 Arrange openings in a regular pattern to have alignments and local symmetries. Adopt axial alignments of windows on different floors to generate bigger orders and levels of hierarchy on the facade.

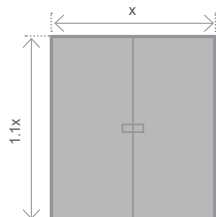
To observe simple asymmetry characteristic of the traditional architecture.



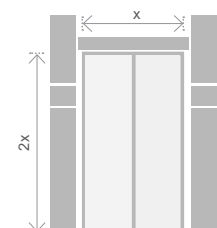
Base



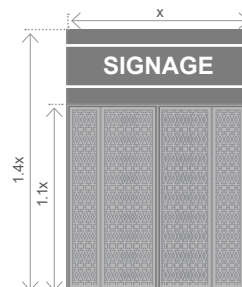
Colonnade Type A



Door Type A



Door Type B



Shopfront Type A



3.2 Doors and entrances

- 1 Have medium to large size openings with simple geometries.
- 2 Entrances to have simple ornament and, in some cases buttresses.
- 3 Have colonnades to provide shades for shopfronts.
- 4 Entries should be recessed from the building facade and should be well defined, clearly visible and universally accessible from the sidewalk.
- 5 Have signage above entrances for multi-tenant retail.
- 6 Canopies and awnings may be included to highlight entrances and provide shade.

To create suitable thresholds within the base which is part of a well-ordered, coherent street scene.



Other elements



Pedestrian gate Type A



Parking gate Type A



Side / back perimeter wall and fence Type A



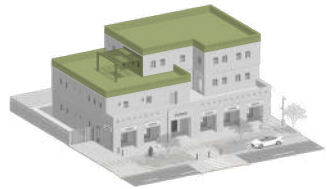
3.1 General details and considerations

- 1 Have an overall palette of beige, brown and sand color using locally available materials.
- 2 Have sober facades with local art patterns used in interior walls.
- 3 Buildings with no perimeter wall / fence should have parking and pedestrian entrances aligned to the building's facade and integrated within the building envelope.
- 4 Perimeter wall and fence on the main frontage should have low to medium levels of transparency. Side / back boundary wall may have low, medium or high levels of transparency.

To embed other elements which are frequently part of the plot.

3.0 Transitional Elements

The elements illustrated are examples and should not limit other possible design solutions that follow guideline principles and historic precedents. Element measurements are illustrative and provided to indicate general proportions only



Top



Parapet Type A



Parapet Type B



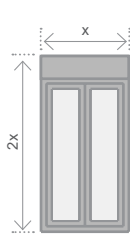
3.4 Rooftop elements

- 1 Have flat roofs with parapets articulated with simple / vertical striped pattern.
- 2 Maintain same form all around the building.
- 3 Parapets should be tall enough to screen rooftop equipment, functional areas and provide privacy to any usable rooftop area.
- 4 Rooftop elements should be screened and set back from the parapet / building facade. Utilities on the roof should be minimized to allow for other uses. Exceptions may be allowed where the parapet is higher and can conceal 'rooftop elements' from view.

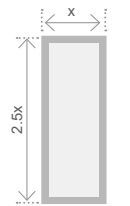
To create roofscapes which embrace the typical characteristics of the local area.



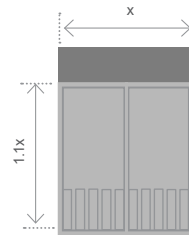
Middle



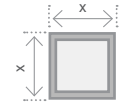
Window Type A



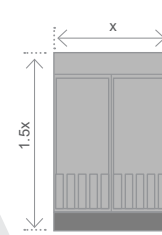
Window Type B



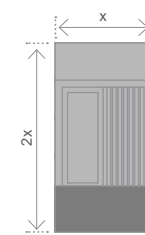
Window Type C



Window Type F



Window Type D



Window Type E



3.3 Windows and openings

- 1 Provide simple geometries with square / rectangular windows.
- 2 Provide recessed openings.
- 3 Arrange openings in a regular pattern to have alignments and local symmetries.
- 4 Openings should not exceed 40% of the overall facade surface.
- 5 Highlight openings with shutters and use of patterns over walls / screening.

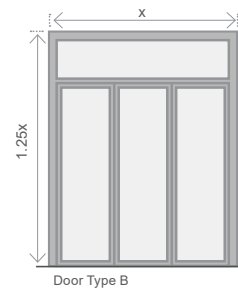
To observe simple asymmetry characteristic of the traditional architecture.



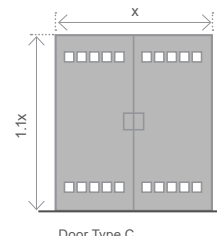
Base



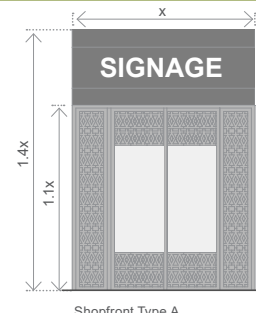
Door Type A



Door Type B



Door Type C



Shopfront Type A



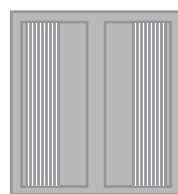
3.2 Doors and entrances

- 1 Have large size openings with simple geometries.
- 2 Define primary entrances as part of a well-ordered street frontage. Door framing and recessing can add depth and create a sense of entry.
- 3 Have colonnades to provide shades for shopfronts.
- 4 Have signage above entrances for multi-tenant retail.
- 5 Canopies and awnings may be included to highlight entrances and provide shade.

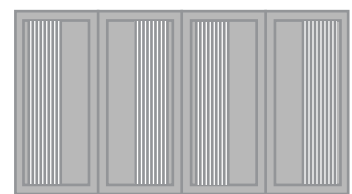
To create suitable thresholds within the base which is part of a well-ordered, coherent street scene.



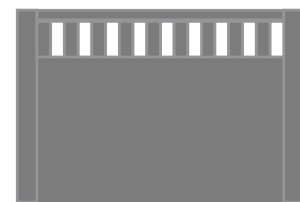
Other elements



Pedestrian gate Type A



Parking gate Type A



Side / back perimeter wall and fence Type A



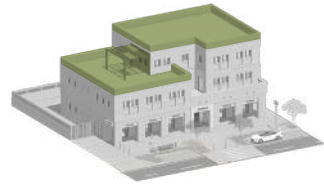
3.1 General details and considerations

- 1 Have an overall palette of beige, brown and sand / off-white.
- 2 Have sober facades with local art patterns used in interior walls.
- 3 Buildings with no perimeter wall / fence should have parking and pedestrian entrances aligned to the building's facade and integrated within the building envelope.
- 4 Perimeter wall and fence on the main frontage could have medium to high levels of transparency. Side / back boundary wall may have low, medium or high levels of transparency.

To embed other elements which are frequently part of the plot.

3.0 Contemporary Elements

The elements illustrated are examples and should not limit other possible design solutions that follow guideline principles and historic precedents. Element measurements are illustrative and provided to indicate general proportions only



Top



Parapet Type A



Parapet Type B



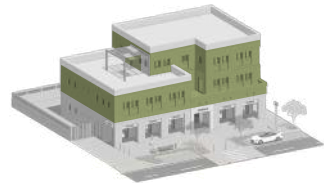
Parapet Type C



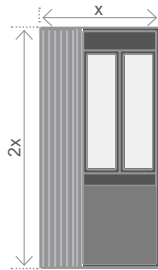
3.4 Rooftop elements

- 1 Use flat roofs with parapets articulated with simple / vertical striped pattern.
- 2 Maintain same form all around the building.
- 3 Parapets should be tall enough to screen rooftop equipment, functional areas and provide privacy to any usable rooftop area.
- 4 Rooftop elements should be screened and set back from the parapet / building facade. Utilities on the roof should be minimized to allow for other uses. Exceptions may be allowed where the parapet is higher and can conceal 'rooftop elements' from view.

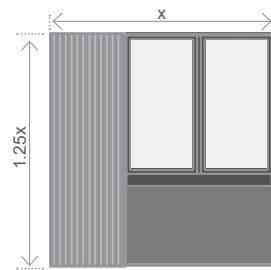
To create roofscapes which embrace the typical characteristics of the local area.



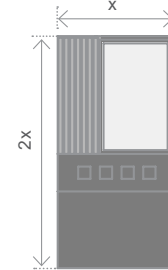
Middle



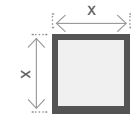
Window Type A



Window Type B



Window Type C



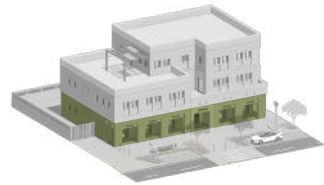
Window Type D



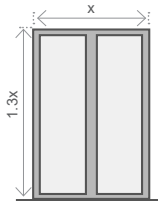
3.3 Windows and openings

- 1 Use simple geometries with square / rectangular windows.
- 2 Use recessed openings.
- 3 Arrange openings in a regular pattern to have alignments and local symmetries.
- 4 Openings should not exceed 50% of the overall facade surface.
- 5 Highlight openings with shutters and use of patterns over walls / screening.

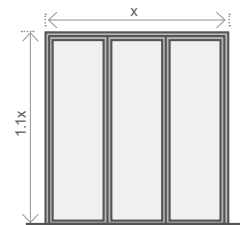
To observe simple asymmetry characteristic of the traditional architecture.



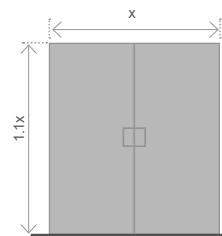
Base



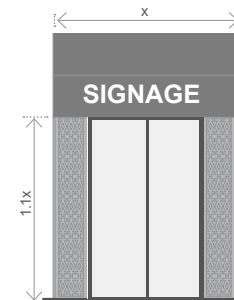
Door Type A



Door Type B



Door Type C



Shopfront Type A



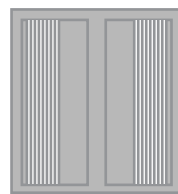
3.2 Doors and entrances

- 1 Have large size openings with simple geometries.
- 2 Define primary entrances as part of a well-ordered street frontage. Door framing and recessing can add depth and create a sense of entry.
- 3 Have colonnades to provide shades for shopfronts.
- 4 Have signage above entrances for multi-tenant retail.
- 5 Canopies and awnings may be included to highlight entrances and provide shade.

To create suitable thresholds within the base which is part of a well-ordered, coherent street scene.



Other elements



Pedestrian gate Type A



Parking gate Type A



Side / back perimeter wall and fence Type A



3.1 General details and considerations

- 1 Have an overall palette of beige, brown and sand / off-white.
- 2 Have sober facades with local art patterns used in interior walls.
- 3 Buildings with no perimeter wall / fence should have parking and pedestrian entrances aligned to the building's facade and integrated within the building envelope.
- 4 Perimeter wall and fence on the main frontage could have medium to high levels of transparency. Side / back boundary wall may have low, medium or high levels of transparency.

To embed other elements which are frequently part of the plot.

4.0 Colors and Materials

4.1 Colors

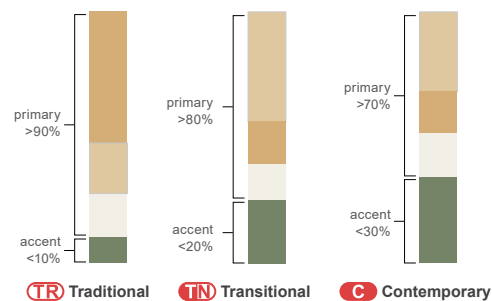
The color palette of the Bisha Desert is closely linked to traditional building materials extracted from the soil such as mud clay, sand and natural stone. The typical colors are mainly shades of beige brown and yellow. Complementary colors derived from the landscape features of the inland desert.

- TR** The building should have darker tones of primary colors similar to those of the region with rammed earth and local stone, changing to rendered light beige and off-white walls above the ground level.
- Generally, use natural colors and finishes for the main body of the building with occasional use of brighter colors for accents on specific elements.
- A maximum percentage of accent color, measured as a percentage of the total facade area, is allowed for each style:
 - TR** <10%
 - TN** <20%
 - C** <30%

- Avoid using brightly colored, mirror-like reflective glass for windows that does not harmonize with the local environment and character.

To create a townscape in harmony with the surrounding landscape and architectural character.

Approximate color proportions



RAL Color codes

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

Primary colors **Accents colors**



Local stone



Sandstone cladding Diorite Stone cladding



Rammed earth



Mud bricks Limestone cladding Adobe



Plaster



Compressed bricks Pigmented concrete Plaster



Adobe



Shell limestone Terrazzo Concrete finish



Wooden doors



Wooden panel door Stainless steel Aluminum frame



Wooden shutters



Timber Wood finish powder coating PVC

4.2 Material

This palette summarizes the prevalent materials found in the architecture of the Bisha Desert.

- TR** The six large images reflect materials used in traditional architecture; new traditional style buildings should employ these materials as faithfully as possible. Between 70% to 80% of the facade should be composed of one consistent material.
- Precious or no-longer available materials may entail the need for substitutions. The smaller images reflect a range of feasible substitutions for the primary images above them, acceptable for use in transitional or contemporary styles, and in a more cautious manner in traditional style.

- When designers can't utilize original materials, they might utilize materials that closely resemble the original materials present in the area while taking into account material quality in terms of sustainability and durability aspects as much as possible. Poor interpretations or applications of the materials should be avoided.

- Local and sustainable sourced materials should be preferred.
 - To create buildings in harmony with the surrounding landscape and architectural character.**
 - To enhance architectural character through the support of local craftsmanship.**
 - To create buildings with tactile and visual richness.**
 - To respond to the landscape and architectural character.**

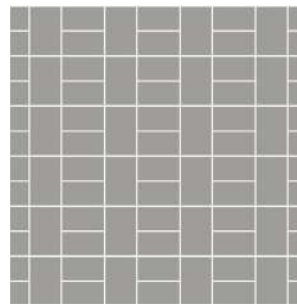
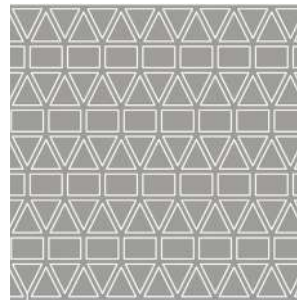
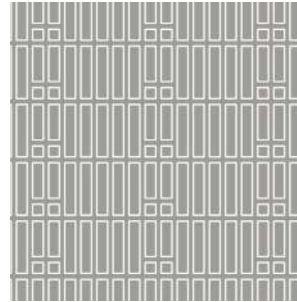
5.0 Patterns

This section provides advice on the interpretation and use of traditional patterns in new projects.

5.1 Patterns

New buildings should:

- 1 Create patterns through the use of local materials and craftsmanship.
- 2 Where multiple decorative patterns are applied across a single facade, these should be complementary.
 - **TR** Focus the use of surface patterns to doors, window screens and shutter doors.
 - **TR** Refer directly to historic precedents and be limited to geometric and floral patterns. Decorative patterns should not exceed 10% of the total facade area.
 - **TN** The transitional use of patterns should be inspired from historic precedents while preserving the balance, rhythm and movement of traditional patterns. Decorative patterns should be between 10% to 15% of the total facade area.
 - **C** The contemporary use of patterns should interpret and abstract from historic precedents while maintaining a degree of balance. Decorative patterns should be between 10% to 20% of the total facade area.
- 3 The use of patterns should involve interpretation and abstraction: 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)
- 4 Patterns 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)



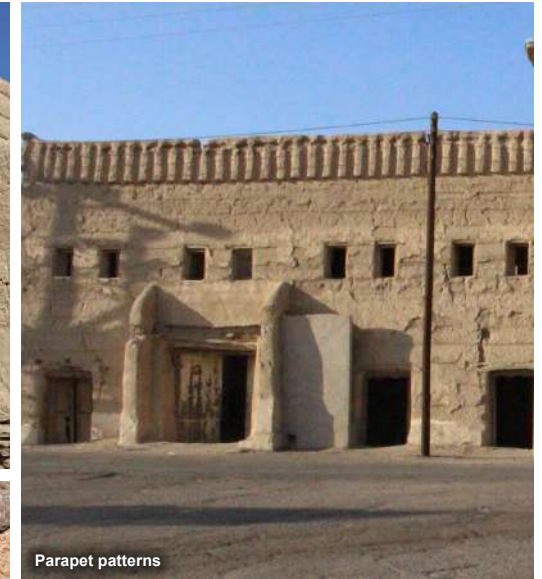
Patterns

To express the spirit and essence of the original architecture in new yet familiar ways.

To encourage contextually sensitive contemporary design.



Horizontal stripe patterns



Parapet patterns



Art work present in the Bisha Desert



Stone patterns



Projecting elements



Stone layering



Rammed earth texture

Traditional patterns present in the Bisha Desert

6.0 Public Realm

This section focuses on the contributions of low-rise buildings to the surrounding streetscape and public spaces, creating strong character and high-quality spaces.

The guidelines apply both to 'semi-public' spaces (public space built by private owners) and 'semi-private' spaces (private space that is generally accessible to the public).

Note: the application of these guidelines should be tailored to the specific project type, scale, and need. Ensure that any modifications or additions to the public-owned spaces are coordinated and approved by relevant authorities.

To enhance the character and quality of publicly used spaces in between buildings.



6.1 Paving materials

- 1 Select robust materials for longevity, easy cleaning, repair, and sourcing.
- 2 Make subtle changes to highlight various typologies.
- 3 Contextual materials complementing the surrounding architecture to be used.

The materials palette has been designed to be simple and sensitive to the existing character area.



6.2 Vehicular access

- 1 Sidewalk must be accessible from the entrance without projecting stairs or ramps into the public space.
- 2 Safe interaction between pedestrian and vehicular areas including legibility and clear zoning of paving materials.

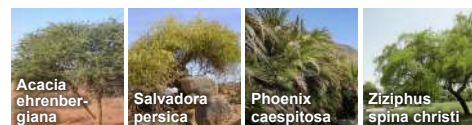
Primary routes allow for full vehicle access, while Barahas / Sahas have restricted access, and Zuqaqs have no access.



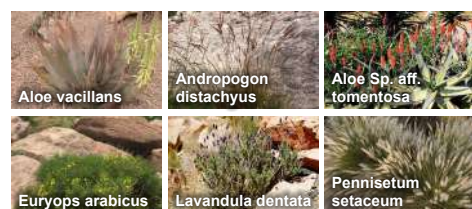
6.3 Parking

- 1 Legible, universally accessible, and safe link between parking and destinations should be planned.
- 2 Planting should respond to shading and screening where necessary.
- 3 The design of parking bays should be integrated with the landscape design, with coordinated surface materials.
- 4 Intersperse parking spots with planting and seating areas.
- 5 Sufficient clearance for pedestrian movement should be provided between parking bays and buildings.

Shade trees



Ornamental species



6.4 Planting

- 1 Planting should be limited to xeriscape solutions within urban areas, mainly in gathering spaces (Saha / Baraha) with a varied mix of indigenous and naturalized species.

Tree and shrub planting should complement the overall character of the Bisha Desert area.



6.5 Signage

- 1 Signage must be well-integrated, coordinated and legible within the overall architectural composition (form, proportion, scale, color, material, surface, size of sign and lettering).
- 2 Signage should avoid conflicts with adjacent residential uses (orient signage towards roads, min. illumination only), and public realm tree canopies.



6.6 Lighting

- 1 Architectural lighting should target color temperatures in the 2200K-2700K range for comfort and good color rendering.
- 2 Utilize lighting temperature to differentiate routes and define in between characters.
- 3 Utilize modern lighting that is low energy, low heat, and dust resistant.
- 4 Lighting design should be consistent and comply with the general theme and character of the area.



6.7 Street furniture

- 1 Carefully selected to provide continuity, coordination and limiting clutter.
- 2 Consider consistency of design (furniture family).
- 3 Be integrated into the public realm, flexible and movable where required.
- 4 Be easily maintained and repaired with easily available / replaceable components.

7.0 Dos and Don'ts

This section focuses on basic design moves to improve architectural quality and character.

They identify common mistakes that cause visual pollution and hostile environments so that designers can eliminate or minimize them.

To raise the overall quality and character of buildings by avoiding common design mistakes.



7.1 Inappropriate materials

- 1 Use durable and quality materials that give the building authenticity, texture and mass while adhering to recommended material palette.
- 2 Do not use building materials alien to the tradition such as metal cladding and high reflectivity and colored glass.
- 3 Do not use low-quality building materials that appear fake or poorly imitate the original materials.



7.2 Non-contextual colors

- 1 Do not use non-contextual bright and artificial colors that detract from the natural landscape and local architecture of the Bisha Desert.
- 2 Have limited colors to generate a harmonious appearance of the building.
- 3 Use a spectrum of earth tone colors adhering to the recommended color palette that perfectly harmonize with each other.



7.3 Screens and closures

- 1 Have all exterior walls and perimeter walls designed to be fully integrated with the overall architectural composition.
- 2 Do not use substandard / low-quality materials such as exposed precast concrete, plastic or metal sheets.
- 3 Do not use exterior surface-mounted rolling shutters.
- 4 Do not have bulky and unarticulated fences.



7.4 Superficial traditional elements

- 1 Use traditional elements that reflect genuine architectural character and contextual architectural shapes.
- 2 Reflect and interpret traditional elements sensitively. Have a selective emphasis of characteristics to create meaning and beauty in its new context.



7.5 Projecting and shading elements

- 1 Avoid having buildings generally lacking shading and projecting elements.
- 2 Avoid shading elements that are not integral to the building and public realm.
- 3 Incorporate light shading structures used as character-defining features to reflect the architectural style or theme consistent with other facade elements. Have shading elements such as screens and awnings be of solid but light (perforated) appearance.



7.6 Exposed service elements

- 1 Avoid uncoordinated and exposed conduits, machinery, ducts, water tanks, pipes, wires, satellite dishes and other utilities.
- 2 All site building services, utilities and mechanical equipment visible from the main road should be hidden / screened from view with the help of landscaping / enclosures.
- 3 Any rooftop equipment should be setback from the edge of the building and properly screened behind the parapet or enclosure.



7.7 Topography

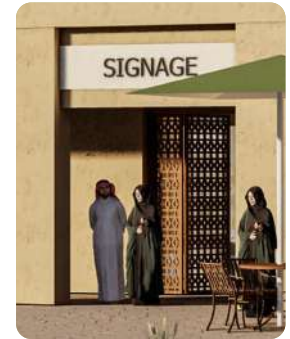
- 1 Respect the natural terrain, flattening of slopes should be avoided.
- 2 General slopes should be stabilized with rip-rap or terracing method.
- 3 Generally, large retaining walls should be avoided or treated in a good way that does not cause visual pollution.



Examples demonstrate one possible application to the guidelines and are for illustration only



1 Parapet with stepped corners and vertical stripes



2 Large openings / colonnades on the ground floor for shading



3 Highlighted main entrance



4 Horizontal banding with layering of bricks

8.0 Traditional Mixed-Use Worked Example

The massing and design of elements adopt traditional forms and patterns, traditional architectural elements and decorations, and traditional materials and colors in a sensible way.

The massing features thick inclined walls with simple orthogonal punched openings, articulated parapets and facades with horizontal banding articulation.

Roof parapets display variety of articulations in the form of pointed corners, stepped articulations and vertical striped crenelations.

The building facades have a strong horizontal organization with occasional vertical massing.

Facades have localized symmetries with alignments between upper and lower floor windows. Window openings have shutters and are set equally apart.

Facades are plain and sober, and are divided into three distinct sections - base, middle and top - through variations in openings types and parapets. The base of the building features large openings / colonnades, also supporting the commercial use at the ground floor.

The middle part of the building features horizontal banding owing to the layering of mud bricks.

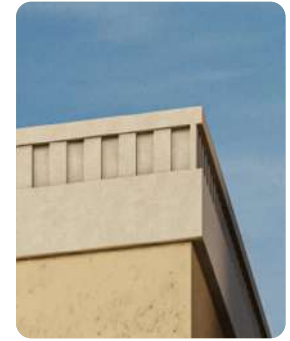
The top part features articulated parapets, often painted off-white.

The materials used for buildings feature primarily mud finish / mud brick / plastered walls of light earth gradation which is a distinct feature of the Bisha Desert, given that mud and sand are locally available materials.

Perimeter walls along the main frontage are discouraged.



Examples demonstrate one possible application to the guidelines and are for illustration only



1 Parapet articulated with vertical stripes



2 Large openings / colonnades on the ground floor for shading



3 Highlighted main entrance



4 Interpretation of traditional horizontal banding

8.0 Transitional Mixed-Use Worked Example

The transitional model is a progression of the traditional form, which allows simplified and less 'crafted' detail. Many of the traditional features remain present, but some variations signal an evolution and reinvention of specific elements.

The massing features rectangular form with simple orthogonal openings, articulated parapets and facades showcasing horizontal banding. Roof parapets display articulations in the form of frieze with vertical stripes. The building facades have a strong horizontal organization with balance of vertical

massing. Facades have localized symmetries with alignments between upper and lower floor windows. Windows and vents display variety with proportions derived from the traditional openings.

Facades are plain and sober, and are divided into three distinct sections - base, middle and top - through variations in openings types, use of materials and parapet design. The base of the building features the main entrance and large openings / colonnades, supporting the commercial use at the ground floor. The middle part of the building features horizontal

banding interpreting the mud brick layering in traditional architecture.

The top part features off-white articulated parapets.

The materials used for buildings feature primarily light earth gradation colors resonating with the desert context which is a distinct feature of the Bisha Desert. Accent colors are used for window shutters to bring variation to the facade.

Perimeter walls along the main frontage are discouraged.



Examples demonstrate one possible application to the guidelines and are for illustration only

8.0 Contemporary Mixed-Use Worked Example

The form and style of contemporary buildings should distill the essential qualities and values of vernacular architecture in a new contemporary expression and address the needs of contemporary living, reflect the changes in construction and availability of skills and materials, yet respect and celebrate the local natural character and traditions.

Overall form should follow the compositional rules described in section 1 & 2 of this document.

The massing features rectangular form with simple orthogonal openings, articulated parapets and facades showcasing horizontal banding.

The building facades have a balanced proportion of horizontal and vertical volumes. Facades have localized symmetries with alignments between upper and lower floor windows.

Windows feature screens and solid parapets displaying larger openings yet maintaining the proportions of traditional architecture.

The materials used for buildings feature light earth tones. Patterns abstracted from local traditional art forms are used to highlight main entrances and other elements.

Perimeter walls along the main frontage are discouraged.

1 Highlighted parapet



2 Large openings / colonnades on the ground floor for shading



3 Highlighted main entrance



4 Interpretation of traditional horizontal banding



A.0 Appendix: Low-Rise Apartment Buildings

This appendix focuses on design issues important to low-rise apartment buildings, for example, the relationship between public and private spaces, access to individual units, ground floor facade design, the provision of outdoor amenity, and the design of boundary treatments and rooftops.

Apartment building design should follow the guidelines for traditional, transitional and contemporary style in the rest of this handbook, but also observe the guidance notes in this appendix.

Ground level

The ground floor may rise above the level of the main sidewalk to provide additional privacy and security for occupants.

The change of level may be contained within the building envelope and should not be visible from the street. Sidewalks should be accessible from the entrance without projecting stairs or ramps into the public space.

If grade changes are required, universal accessibility should be ensured.

Windows and openings

Generally, windows may be placed above the ground level or above the street's eye-level height to provide privacy and security for occupants.

Windows should be equipped with appropriate shutters and screening, and may be set back behind a 'privacy strip' to allow for additional shade and privacy while still allowing for light penetration.

Small openings may be provided at the base of the building to naturally ventilate the basement.

The arrangement, sizes, proportions, materials and colors of windows and openings at the ground floor should be in compliance with guidelines and composition rules provided in the previous chapters.

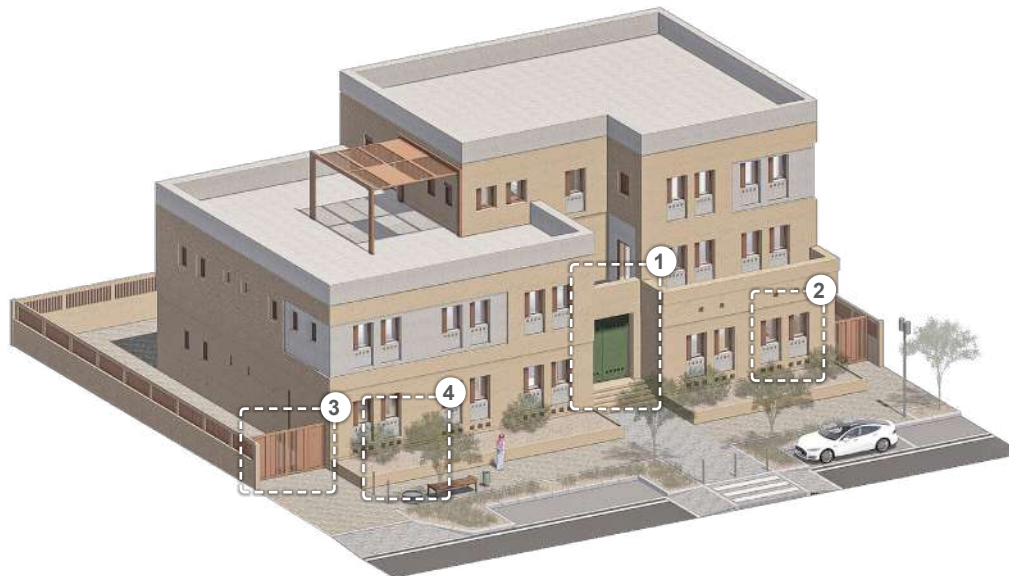
Entrances

Primary entrances, whether pedestrian or vehicular should be well defined, clearly visible, and accessible from the sidewalk. Entrances should level with and should not extend onto the sidewalk.

Canopies and awnings may be used above entry doors to highlight entrances and provide shade.

If the plot is surrounded by a perimeter wall / fence, parking and pedestrian entrances should be integrated inside the perimeter wall / fence and should be consistent with the building's overall design, material and color palette.

Buildings with no perimeter wall / fence should have parking and pedestrian entrances aligned to the building's facade and integrated within the building envelope.



Axonometric view showcasing an example of application of design considerations for low-rise contemporary style apartment building



Elevation view showcasing an example of application of design considerations for low-rise contemporary style apartment building

Perimeter walls and fences

Walls and fences should be decorative and complementary to the building's architectural style and materials and should be uniform in construction, design, material, color and pattern.

Perimeter walls and fences extending across long lengths should provide at least one of the following elements to break the wall's linear rigidity:

- Continuous landscaping at the base of the wall.
- Decorative screens or niches in the wall.

Front yards and landscape treatment

Building may be set back from the property boundary to allow for a planted front garden / yard.

The front garden / yard may act as a comfortable, functional and safe private space that is well connected to the public domain, both physically and visually to add to the overall quality of the public realm.

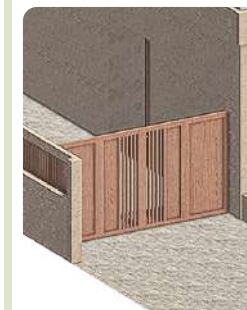
The choice of landscaping for the front garden / yard should respect and contribute to the street and public domain character while screening to maintain privacy.



1 Elevated ground level



2 Elevated windows to maintain privacy



3 Perimeter wall and gates consistent with the overall building design



4 Front garden / yard



Examples demonstrate one possible application to the guidelines and are for illustration only

A.0 Traditional Apartment Worked Example

The massing and design of elements adopt traditional forms and patterns, traditional architectural elements and decorations, and traditional materials and colors in a sensible way.

The massing features thick inclined walls with simple orthogonal punched openings, articulated parapets and facades with horizontal banding articulation. Roof parapets display variety of articulations in the form of pointed corners, stepped articulations and vertical striped crenelations.

The building facades have a strong horizontal organization with occasional vertical massing. Facades have localized symmetries with alignments between upper and lower floor windows. Window openings have shutters and are set equally apart.

Facades are plain and sober, and display distinct base, middle and top part of building through type of openings and parapets. The base features the building's main entrance and elevated window openings partially concealed behind a landscape strip, ensuring privacy on the ground floor.

The middle part of the building features horizontal banding owing to the layering of mud bricks. The top part features off-white painted articulated parapets.

The materials used for buildings feature primarily mud finish / mud brick / plastered walls of light earth gradation walls which is a distinct feature of Bisha Desert given mud and sand as locally available materials.

Gates along the main frontage feature articulations, materials and patterns consistent with the overall design of the building.

1 Parapet with stepped corners and vertical stripes



2 Clearly visible and highlighted main entrance



3 Horizontal banding with layering of bricks



4 Landscape strip partially concealing the elevated windows of the ground floor





Examples demonstrate one possible application to the guidelines and are for illustration only



1 Parapet articulated with vertical stripe



2 Clearly visible and highlighted main entrance



3 Interpretation of traditional horizontal banding



4 Landscape strip partially concealing the elevated windows of the ground floor

A.0 Transitional Apartment Worked Example

The transitional model is a progression of the traditional form, which allows simplified and less 'crafted' detail. Many of the traditional features remain present, but some variations signal an evolution and reinvention of specific elements.

The massing features rectangular form with simple orthogonal openings, articulated parapets and facades showcasing horizontal banding.

Roof parapets display articulations in the form of frieze with vertical stripes. The building facades

have a strong horizontal organization with balance of vertical massing. Facades have localized symmetries with alignments between upper and lower floor windows. Windows and vents display variety with proportions derived from the traditional openings.

Facades are plain and sober, and display distinct base, middle and top part of building through type of openings, materials and parapet design. The base features the building's main entrance and elevated window openings partially concealed behind a landscape strip, ensuring privacy on the ground floor.

The middle part of the building features horizontal banding interpreting the mud brick layering in traditional architecture. The top part features off-white articulated parapets.

The materials used for buildings feature primarily light earth gradation colors resonating with the desert context which is a distinct feature of Bisha Desert. Accent colors are used for window shutters to bring variation to the facade. Gates along the main frontage feature articulations, materials and patterns consistent with the overall design of the building.



Examples demonstrate one possible application to the guidelines and are for illustration only

1 Highlighted parapet



2 Clearly visible and highlighted main entrance



3 Interpretation of traditional horizontal banding



4 Landscape strip partially concealing the elevated windows of the ground floor



A.0 Contemporary Apartment Worked Example

The form and style of contemporary buildings should distill the essential qualities and values of vernacular architecture in a new contemporary expression and address the needs of contemporary living, reflect the changes in construction and availability of skills and materials, yet respect and celebrate the local natural character and traditions.

Overall form should follow the compositional rules described in section 1 & 2 of this document. The massing features rectangular form with simple orthogonal openings, articulated parapets and

facades showcasing horizontal banding.

The building facades have a balanced proportion of horizontal and vertical volumes. Facades have localized symmetries with alignments between upper and lower floor windows. Windows feature colored screens and solid parapets displaying larger openings yet maintaining the proportions of traditional architecture.

The base features the building's main entrance and elevated window openings partially concealed behind a landscape strip, ensuring privacy on the ground floor.

The materials used for buildings feature light earth tones. Patterns abstracted from local traditional art forms are used to highlight main entrances and other elements.

Gates along the main frontage feature articulations, materials and patterns consistent with the overall design of the building.