

Umm Slal Municipality Vision and Development Strategy



Volume 1 of the Umm Slal Municipality Spatial Development Plan



June 2014



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***Umm Slal Municipality
Vision and
Development Strategy***

1.0 General Requirements and Procedures

1.1 Umm Slal Municipality Spatial Development Plan (MSDP)

The Umm Slal MSDP seeks to achieve the orderly planning and development of land and infrastructure across the Umm Slal municipality in response to expected growth.

It sets out a clearly defined urban structure and a coordinated development approach for the municipality over the next 20 years. The MSDP is made up of the following parts:

1. **Strategic Context** - The Vision and Development Strategy for the Municipality.
2. **Zones and Land Use Regulations** – land uses and development standards applying in each zone.
3. **Zone Maps** - showing the future land uses across the municipality.

In addition, **Action Area Plans** (AAP's) will be prepared from time to time and progressively added to the MSPD for specific locations within the municipality, in order to provide a more detailed level of planning.

1.2 Purpose and Effect of the MSDP

The Umm Slal MSDP provides the land use planning framework and regulations for the entire Municipality and the strategic context for growth and change to 2032. The detailed land use zoning maps and the zoning regulations in the MSDP set out the rules against which development will be assessed.

The MSDP has full legal force and effect in the assessment, decision-making and enforcement of land use development applications, and the manner in which land use development is undertaken within the municipality.

It will be reviewed every 5 years to ensure it responds appropriately to community changes at a local and National level.

Developments are also required to separately address the requirements of the Building Regulations.

1.3 Management of Development

Umm Slal Municipality is divided into a series of Land Use Zones identifying the particular land uses which may be permitted in the zone. Development within each zone is controlled by way of a Zone Code containing:

- the Purposes and Objectives of the Zone;
- a Land Use Table showing the range of uses appropriate within the zone; and
- Zone Regulations specifying the development standards which apply within the zone.

Development within each zone may be classified as being either:

- Permitted - does not require a development application but must comply with the development standards in the relevant Zone Code;
- Conditional - requires a development application which will be assessed against the MSDP and the development standards in the relevant Zone Code, and which may be subject to additional conditions of approval; or
- Prohibited – uses considered inappropriate in the zone and where an application for development approval cannot be made.

Further details are contained in the Zone and Land Use Regulations in this MSDP.

1.4 QNDF Context

The Qatar National Development Framework (QNDF) is the overarching physical and spatial planning policy and strategy context for the state of Qatar to 2032.

It establishes a series of guiding principles and objectives that have been based on the Qatar National Vision 2030 (QNV2030) and contains Structure Plans developed for each Municipality which provide a strategic planning context for each MSDP.

Based on the QNV 2030's Four Pillars of Sustainability, the following guiding principles for sustainability were established for the QNDF:

- **Quality of Life for All** – Improving the living, working, playing and learning environment and offering choice, affordability and access for all people.
- **Economic Growth and Diversification** – Fostering competitiveness, encouraging business investment and stimulating innovation.
- **Connectivity of People and Places** – Providing integration, mobility, accessibility and connectivity to improve social, cultural and economic interaction of people, institutions and businesses.
- **Ownership in Planning and Implementation** – Encouraging coordination and commitment

among stakeholders in the QNDF's planning and implementation.

- **Environmental Values** – Supporting the preservation and rehabilitation of the natural and built environments.
- **Identity** - Acknowledging and respecting the Qatar national identity.

The translation of the National Vision and the sustainable guiding principles into a spatial and physical development dimension gave rise to a vision for the future urban development of the country which has guided the preparation of the QNDF and subsequent Municipality Spatial Development Plans (MSDPs).

The QNDF vision is to:

“Create a role model for Sustainable Urban Living and Livable Towns and Cities in the 21st Century”

The Umm Slal MSDP has been prepared in accordance with the QNDF as the regulatory framework for managing development in a way that advances the purpose of the QNDF, the National Development Strategy and the Qatar QNV2030.



2.0 Umm Slal Municipality

2.1 About Umm Slal Municipality

Umm Slal Municipality is located on the north western edge of Metropolitan Doha and includes the northern part of Metropolitan Doha greenbelt which defines the long term urban growth boundary of the municipality.

The municipality is a geographically small area covering less than 2.7% of Qatar (317 sq km). It has no coastline and is landlocked between Al Daayen to the east, Al Khor to the north, and Al Rayyan municipalities to the west and south.

The landscape is predominately flat and open. It is largely rural in character and features farms and agricultural land overlying the Northern Aquifer. There are some small settlements located within the rural area of the municipality.

Umm Slal municipality has grown as the result of many Qatari households moving to new peripheral suburbs in the municipality. The existing urban areas of Umm Slal Mohammed and Umm Slal Ali lying along the Al Shamal Road form part of Metropolitan Doha. Umm Slal Mohammed has merged within the urban area of Metropolitan Doha. Umm Slal Ali, is located within the Metropolitan Doha growth boundary, but is still geographically separated from Umm Slal Mohammed by

an open space buffer and the designation of the Metropolitan Greenbelt.

Al Shamal Road forms the eastern boundary and the north-south national utilities corridor bisects the municipality into an eastern and a western section. The land to the west of the utility corridor outside the Metropolitan Growth boundary, is mainly zoned as Rural/Desert (RD).

Cultural, historic and archaeological sites within the Municipality include Umm Slal Mohammed Fortress (Barzan Tower), which has recently been renovated and opened to the public and the palace of Sheikh Jassim Bin Mohammed Bin Jassim Al Thani.

2.2 Population and Employment Growth Expectations – 2010 - 2032

The population of the municipality is expected to grow from 61,000 in 2010 to 104,100 in 2017, but by 2032 it is expected to decline to approximately 73,300. The large increase in population at 2017 is attributed to the presence of substantial worker population of 57,900 in 2017. This worker population reduces to 10,500 in 2032. The majority of population growth (other than worker accommodation) will occur within the Metropolitan Doha growth boundary.

Other than the worker population, there will be a small increase in Qatari population with a very small increase in Non-Qatari population. Umm Slal Ali will see a small increase in Qatari population and a small decline in Non-Qatari population.

The rural area is split between the area which falls within the Metropolitan Doha boundary and that which falls outside. The rural area outside Metropolitan Doha will see a small increase in Non-Qatari residents with a subsequent small decline in Qatari population. As the rural area inside Metropolitan Doha is designated as greenbelt there will be a small decline in both Qatari and Non-Qatari population.

Table 1 Umm Slal Municipality: Population (2010-2032)

	Population
2010	61,000
2017	104,100
2032	73,300

Employment within the municipality presently numbers approximately 8,000 mainly in construction (3,200), farming agriculture (2,000), retail and service trades (1,500), with smaller numbers in local accommodation and food services (500), and administrative/professional services (400).

The majority of employed residents within Umm Slal, work outside the municipality. The future level of growth in local employment is therefore not expected to be substantial and will mainly be in response to the need for local services for the resident population.

2.3 Key Planning Issues

Some of the key land use issues affecting the Umm Slal Municipality include:

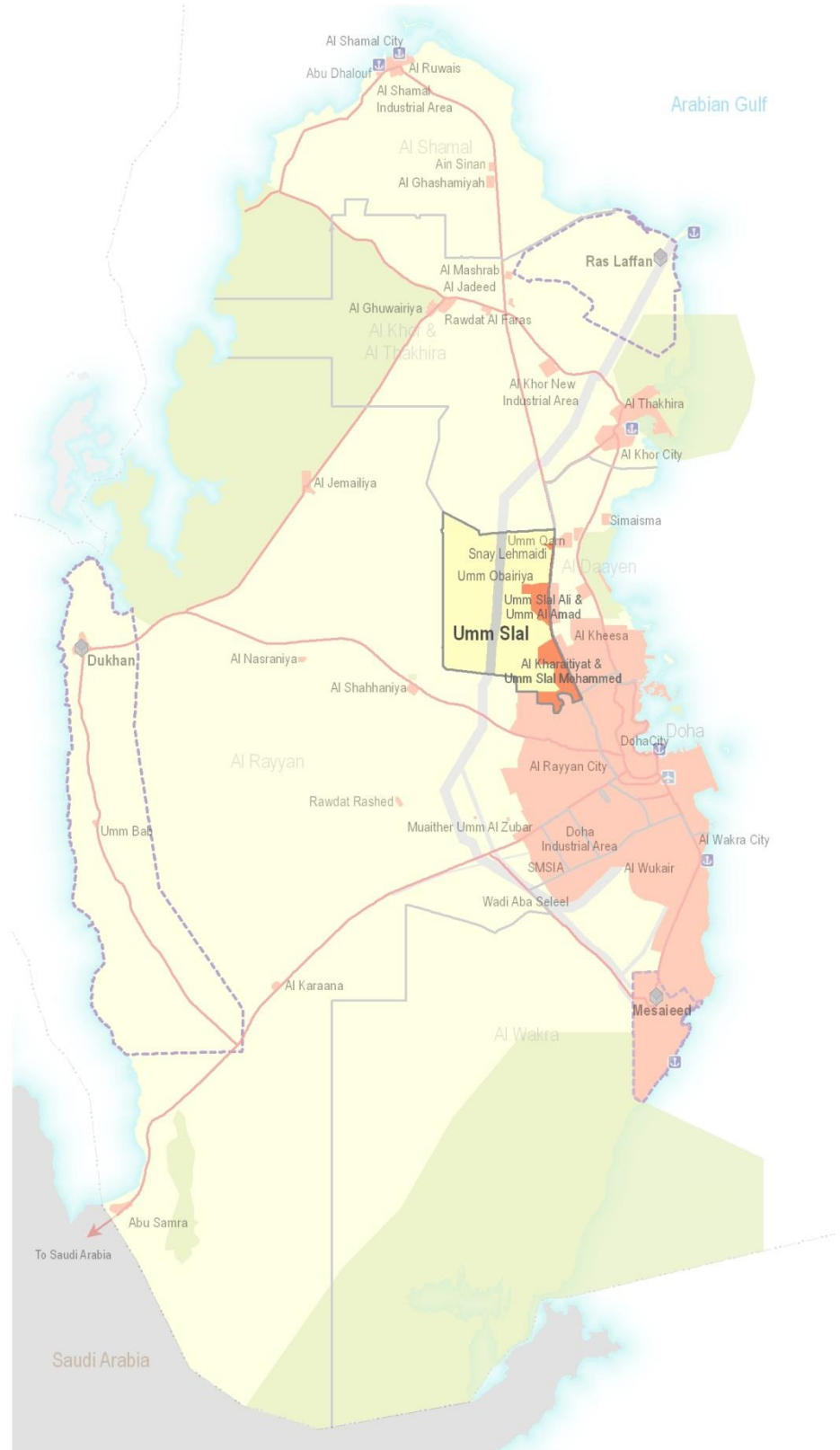
- Sporadic development within the urban growth boundary has created a disjointed townscape with an inefficient use of land.
- Ad hoc urban sprawl has occurred in the absence of a comprehensive planning and development strategy for managing development, resulting in an unattractive built form.
- There is a danger the municipality will slowly merge with Doha and al-Rayyan municipalities as one large continuous urban area, losing its own identity.
- Strip retail development has increased the reliance on the use of cars and adversely impacts on the delivery of centers based polycentric development model.
- The historic character of Umm Slal Mohammed is being degraded through lack of preservation and unsympathetic urban development.
- The need to recognize the value of heritage and cultural assets in creating a distinct character and identity for the municipality.
- The remaining natural areas and the groundwater aquifer are under threat due to inappropriate subdivision and the edge of the urban areas do not respond to the natural features adjacent to the urban boundary.
- Constraints to the expansion of urban areas from the presence of the northern aquifer, need to be respected in future planning for the area.
- Preservation of the remaining rural areas within the municipality is necessary to maintain opportunities for sustainable farming enterprises and national security initiatives.
- Commercial development is car dominated with large areas of poor quality buildings which results in an undesirable public realm and visual appearance.
- The under provision of local parks and green spaces, community facilities, private schools and private healthcare with a need for improvements to Civil Defense facilities to cater for growing population.
- There are very few legibility and sense of place features within the urban area and urban fringe of both Umm Slal Mohammed and Umm Slal Ali to help define their character.
- Within the urban areas of Umm Slal Mohammed and Umm Slal Ali there is no clear distinction of a defined road network and street hierarchy.
- On the urban fringe, road infrastructure has not been completed, which further weakens legibility as well as having a detrimental impact on the appearance of both settlements.

Umm Slal Municipality Vision and Development Strategy

Figure 1 Umm Slal Municipality Context

Legend

- Municipality Boundary
- Urban Land
- Non-Urban Land
- MOE Environmental Protected Area
- QP Industrial City
- Major Road
- Doha International Airport
- Port
- Utilities Corridor
- QP Concession Area



Map Prepared: August 28, 2011

2.4 Municipality Planning Objectives

The planning objectives that apply to Umm Slal Municipality are:

Economic Prosperity

- Encourage the growth of the local economy in Umm Slal Municipality by providing opportunities for small scale commercial activity in the Umm Slal Mohammed Town Center.
- Maintain and encourage rural uses in the northern and western parts of the Municipality to sustain the rural communities in these locations.
- Encourage the use of Treated Sewage Effluent (TSE) in farming and livestock activities.
- Support efforts by the Qatar National Food Security Program and where necessary safeguard suitable land in the Metropolitan Greenbelt for uses such as farming, livestock, etc., whilst ensuring that the amenity of adjoining urban areas is protected.
- Focus all new retail development into Umm Slal Mohammed and Umm Slal Ali ensuring that the scale of development is appropriate for the catchment.
- Encourage tourism related activities into Umm Slal Municipality and in particular to Umm Slal Mohammed Town Center by promoting the Palace of Sheik Jasim and Barzan Towers as a tourist and heritage asset.

Living in the Community

- Limit the expansion of Metropolitan Doha by concentrating the majority of residential development in Umm Slal Mohammed.
- Restrict development outside urban settlements to essential transport and utility infrastructure, construction and farming.
- Reinforce the Qatari character of the municipality through the provision of a range of low density housing typologies, including family compounds, that support the Qatari preferred way of living.
- Provide a high quality environment for higher income non-Qataris, and provide affordable accommodation in the mixed-use centers including Umm Slal Mohammed Town Center.
- Regenerate the traditional and historic precincts of Umm Slal Municipality.
- Promote community cohesion through the provision of daily facilities at the neighborhood level through the creation of a series of local centers.
- Focus the development of Non-Qatari housing around Umm Slal Mohammed Town Center, Al Kharaitiyat, Izghawa and Umm Slal Ali Local Centers, accommodating the remaining demand through utilizing vacant infill plots in the south of the municipality.
- Accommodation for workers should be located within reasonable proximity to their places of employment

and should maintain a high level of affordable living with good access to essential daily facilities and services.

- Expand healthcare coverage and access to private schools by developing facilities in or close to Umm Slal Mohammed Town Center.

Natural Environment

- Strictly enforce the Metropolitan Doha Greenbelt to ensure that development does not go beyond the designated urban growth boundaries.
- Protect natural features such as wadi and rodah which provide greenery to the urban environment, shading, form important wildlife habitats and form part of the natural storm water management system.
- Protect groundwater resources in the Northern Aquifer by monitoring all activities and ensuring any detrimental development activity is prohibited.
- Maintain and promote the green character of the Municipality through the protection of farms, date plantations and the Greenbelt Zone.

Built Environment

- Develop Umm Slal Mohammed Town Center as the primary shopping, leisure, civic, service, transport hub and employment location for Umm Slal Municipality.
- Develop high quality, mixed-use Local Centers in Al Kharaitiyat, Izghawa and Umm Slal Ali that provide

local communities with access to daily retail and community facilities.

- Enhance the streetscape of Umm Slal Mohammed Town Center, the local centers at Umm Slal Ali, Al Kharaitiyat and Izghawa integrating pocket parks and plazas into the centers.
- Ensure open spaces promote and support key pedestrian routes.
- Develop buildings that are sustainable, address QSAS standard, and respond to the climate by taking inspiration from historic Islamic architecture to create a new architectural language for Umm Slal Municipality.
- Improve the quality of local residential neighborhoods to promote family living and community interaction through the provision of recreation and open spaces, networks of local parks and public realm amenities, and community facilities.
- The urban edge should respond to geographical features such as wadi, rodah and the greenbelt.
- Provide a range of spaces from nationally significant parks through to pocket parks at the local level that meet the diverse needs of different cultures and age groups.

Movement

- Develop a choice of metro stations on the Metro Green Line, strategically located in close proximity to the mixed use centers especially Umm Slal Mohammed Town Center.

- Design streets to provide safe, high quality pedestrian connections between the centers and the metro stations, and to ensure safe, legible pedestrian and cycle routes throughout the municipality.
- Safeguard and protect the strategic transport corridors from inappropriate development.
- Promote east west connections between Umm Slal Mohammed and Al Kheesa.
- Utilize the utility corridors as part of the national cycle network.
- Complete the road network, providing a hierarchy of routes that promote permeability and legibility.

Utilities

- Enhance and expand the utility network in the municipality in a coordinated manner ensuring that the future demands of residents, workers and visitors are met in a timely manner.
- Where possible encourage the co-location of utilities infrastructure within the identified utility corridors and sites ensuring the incorporation of appropriate safety buffers.
- Ensure the strategic utility corridor and sewage treatment plant are adequately separated from surrounding development by ensuring that the appropriate buffers are maintained.
- Minimize the impact of utility infrastructure construction and operation on the natural and built environment.

3.0 Vision and Development Strategy

“To create an attractive, self-contained low density family living environment for residents that reflects the natural character and historic fabric of the municipality”.

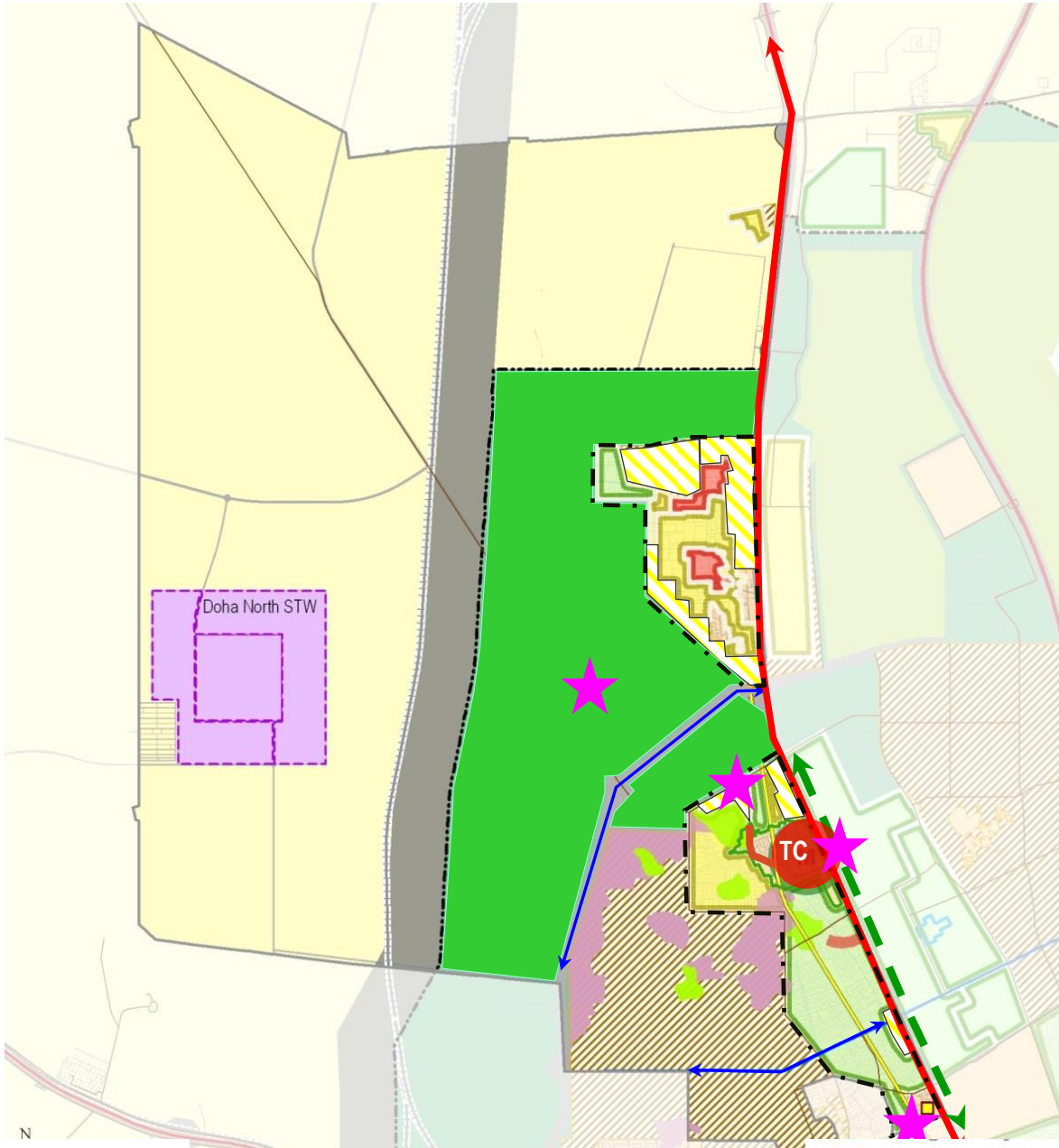
3.1 Vision 2032 for Umm Slal

The vision for Umm Slal Municipality is to:

- “Create an attractive low density family urban setting, which reflects the green character and historic fabric of the municipality and is supported by a high level of urban amenities and community facilities;
- Protect and enhance the farming tradition of the rural fringe that will be protected and enhanced as part of a comprehensive approach to landscape conservation;
- Conserve important heritage assets; and
- Develop Umm Slal Mohammed mixed use Town Center as the heart of the Municipality and the principal location for community facilities and employment.”



Figure 2 Development Strategy



Legend	Planned STW Sites	Upgrading	Landscape Conservation Area
Municipality Boundary	Utilities Corridor	Renewal	Landscape Investigation Area
Metropolitan Doha Plan Boundary	Land Under Investigation	Beautification	Road Network
Urban Boundary	Greenbelt	New Neighborhoods	Freeway
Metro Line (Post 2017)	Urban infill	Mega Project	Expressway
	Key Employment Nodes		Arterial

3.2 Development Strategy

The Development Strategy for Umm Slal Municipality is summarized spatially in the Umm Slal Municipality Structure Plan derived from the QNDF.

3.2.1 Development Strategy Summary Future Growth Management

The communities of Umm Slal Mohammed and Umm Slal Ali are promoted as modern, low density, Qatari family oriented urban areas supported by mixed-use, mixed density centers, with good connectivity to the established urban areas of the adjoining Al Daayen, Al Rayyan and Doha municipalities. Population growth will be gradual with the area being predominantly an area of suburban residential settlement.

As much as possible the intention is to make Umm Slal municipality a self-contained urban community with a well-defined character and identity. The Umm Slal Mohammed mixed use Town Center will be the heart of the Municipality and the principal location for community facilities and employment.

Economic activity will be focused mainly on the provision of local services and community facilities for residents. The future Metro Green Line will provide enhanced public transport accessibility from the municipality to major employment areas of Metropolitan Doha.

Development restrictions will apply in the form of the Metropolitan Greenbelt and rural land zonings to prevent further urban sprawl from northern Doha, the

coalescence of Umm Slal Ali and Umm Slal Mohammed. Future growth will be guided to existing urban areas to sustain local economies and consolidate residential catchments for more effective and efficient provision of a range of community facilities.

Land under investigation for future residential development which sits inside the greenbelt, should be protected from development until after 2017 when the need for additional land expansion can be demonstrated.

The existing built up area will be progressively restructured with future residential neighborhoods redesigned and the urban edge designed to reflect the natural conditions. Landscaping of open spaces and the urban fringe together with natural and heritage resource conservation will make the Municipality a location of choice for future generations.

3.2.2 Creating the Urban Spatial Structure

The broad overall spatial strategy for Umm Slal Municipality implements the principles of the compact city model, responding to the specific characteristics and opportunities associated with the municipality.

Neighborhoods will be focused around community facilities to enable greater accessibility for residents. Each neighborhood will be composed of a small number of local retail units, a daily or Juma mosque, a convenience store, and a small number of non-retail uses. A nursery or primary education facility could also form part of the center, in addition to neighborhood parks. Access to the local center should be via a choice of

routes including safe pedestrian and cycling corridors as part of a permeable network.

Neighborhoods will be safe and healthy for residents. This requires the provision of pedestrian friendly routes and crossing points and low traffic speeds within residential streets. Car parking on pavements should be prohibited. Pedestrian movement network will consist of pedestrian and cyclist friendly streets and pedestrian only routes, incorporating the Arabic tradition of the Sikka into neighborhood design.

Key implementation actions for achieving the future spatial strategy include:

- Containing future growth within the existing urban growth boundary.
- Prioritizing growth in and around Umm Slal Mohammed Town Center to provide a high quality mixed use neighborhood.
- Developing a series of district and local centers to complement the growth of the town center, providing a range of community services and facilities.
- Designing the mixed use centers with a pedestrian oriented public realm that encourages walking.
- Ensuring the design of main streets in the town center, district and local centers as public spaces which can accommodate vehicles, pedestrians and spaces for gathering.
- Building heights will be limited to G+1+P outside centers to maintain the mainly low density, family oriented residential character of the municipality.

- Preserving and integrating natural features such as wadi and rodah into the urban structure.
 - The beautification of existing housing areas with improved landscaping and design features, preserving walkable community lifestyles.
 - Ensuring the public realm includes soft landscaping to provide shading as no shade will be available from buildings.
 - Upgrading the Al Shamal Road corridor borders along the eastern boundary of Umm Slal municipality, as the major northern gateway to Metropolitan Doha leading through the gateway at Al Gharrafa as a priority for public realm and landscape enhancement.
 - Supporting farming and related agricultural activities through protecting the land from urban development and by more efficient means of supplying irrigation water which does not adversely impact the environment.
 - Protection of the unique heritage features and landscape areas with effective development management mechanisms.
 - Utilizing strategic transport infrastructure corridors including the utilities corridor as linear open spaces as part of the open space network through the municipality.
 - The provision of upgraded public transport services which enable residents and workers to access local amenities and services as well as provide efficient connections to major activity and employment nodes, and to the metro green line stations.
- Enhancing the availability and access to education, health and religious facilities with adequate provision of open spaces, particularly in and around the Umm Slal Mohammed town center.
 - Public art should be located along the key locations such as Al Shamal Road and the Umm Slal Mohammed town center.
- In addition, the Development Strategy comprises several components each of which influence and work together to realize the Vision. Each of the components is discussed below.
1. Hierarchy of Centers
 2. Key Employment Nodes outside Centers
 3. Residential Areas
 4. Community Facilities
 5. Open Space and Sports Facilities
 6. Natural Environment
 7. Heritage
 8. Movement
 9. Utilities

3.3 Hierarchy of Centers

The QNDF has established a hierarchy of centers, which are the main locations of employment, community services, retail and commercial activity, and transport services. The hierarchy consists of a network of mixed-use and mixed-density centers each with a specific role, function and scale serving a surrounding population catchment. The focal point of these centers are normally a location with a metro transit station or bus stop, or a daily mosque.

A Town Center will be located at Umm Slal Mohammed, this center is at the third level of the QNDF centers hierarchy and is designed to cater for the weekly and day-to-day needs of surrounding suburban residential catchments of 50,000-100,000 people.

District centers are the fourth level within the QNDF centers hierarchy and are designed to cater for the weekly and day-day needs of surrounding suburban and local area residential catchments of 30,000-50,000 people.

Local centers provide for the daily convenience retail and community needs within the immediate surrounding population catchment. They are located on well-defined sites, are small-scale in and contain a limited number of small shops within a convenient walking distance for residents (generally within 400m). Local centers will be identified through a comprehensive planning process for the entire Municipality ensuring that all residential areas are serviced by these Centers

(a) Umm Slal Mohammed Town Center

Umm Slal Mohammed Town Center is located in the northern part of Umm Slal Mohammed and to the south east of the original settlement. In the future it will be well-connected to the planned Metro station phase 2 at the east side of Al Shamal Highway



The vision for the Town Center is to create a distinctive, unique and thriving medium-density town center that respects the heritage aspects of the town whilst addressing the needs and lifestyle of Umm Slal Mohammed's communities. Umm Slal Mohammed Town Center will develop as the commercial administrative heart of the largely rural municipality.

The Town Center is the preferred location for major new retail development in the municipality. This should take the form of development that can be fully integrated into the town center high street. New commercial office development will be concentrated in Umm Slal

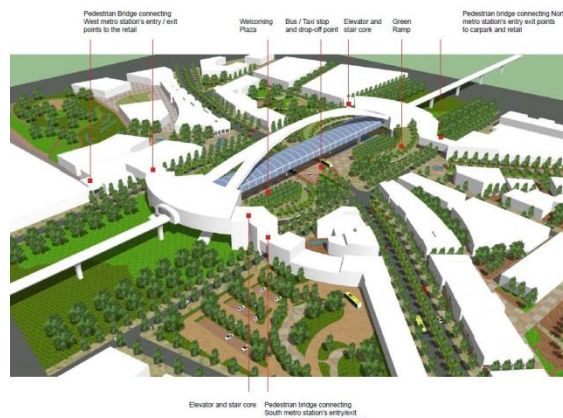
Mohammed Town Center. The Town Center Action Area Plan promotes commercial office space above retail and on the periphery of the town center core.

The Town Center will be made up of different but complementary character areas. It is a focus of growth and intensification where predominant mixed uses and medium density residential will take place and it will provide the retail hub for the municipality. In addition, it comprises undeveloped land to the north and east where the cluster of schools will be preserved, providing the community hub for the town.

A key enhancing of the town center's is the green character of the Municipality by the provision of internal green network that integrates pedestrian and cycling networks, this internal green network also connects the town center to the surrounding original settlement which will be preserved and enhanced as a conservation area, at the same time it will connect visually and physically to the notable landmarks of the town center are Barzan Towers and the Palace of Sheik Jasim

Views to Barzan Towers and the Majlis of Sheik Jasim from the town center will be protected. In addition, views from the town center to the rodah, farms and rural fringe should be created through the redesign of the residential buildings.

The town center will alleviate the future growth, the intensity and density of development from the old area to the east part, in order to maintain the fine grain character of the historic urban fabric at the central and west parts



The urban form of the town center maintains the existing low rise built form and retains the prominence of the mosques and the landmark buildings of the Majlis of Sheik Jasim and Barzan Towers in the town. The only exception is G+4 is permitted for the plots facing onto Al Shamal Highway

The town center will have an important residential function. Large parts of the town center will accommodate mixed-use development., in addition, affordable housing will need to be provided to meet the housing needs of service sector workers employed in the town center.

The following implementation actions are required for developing the Umm Slal Mohammed Town Center:

- Enhance the public realm, focusing on improving the walkability of the town center neighborhood, creating pedestrian connections to the future metro station.
- Provide narrower rights of way and use of tree planting to create enclosure.
- Develop a new municipality park serving the whole municipality.
- Create a series of public spaces and plazas adjacent to the key pedestrian corridors.
- Develop a mix of housing sizes to accommodate a range of residents.
- Develop a lighting strategy that should coordinate lighting across the area, emphasizing key gateways, legibility corridors, vistas and views, public art and the landmark buildings of Barzan Towers and the Majlis of Sheik Jasim.
- Protect views to Barzan Towers and the Majlis of Sheik Jasim through the control of buildings heights.
- Provision of public art amenities as part of open space and public realm enhancement projects.

(b) Other Centers

Al Kharaitiyat is an important existing commercial corridor in the Municipality containing a range of retail shops and services including a medium sized hypermarket. Over time it should develop into a local center with a focus on improving the public realm and walkability of the center. This existing retail function meeting the daily convenience needs of local residents will be consolidated within the Al

Kharaitiyat Local Center. The function of the center will focus on commercial, mainly retail, activity with community and civic functions directed to the center.

Additional local centers are located throughout the residential areas to meet the daily convenience needs of residents. One of these is located at Izghawa which is an important local center meeting the daily needs of residents. The role and scale of the center should not change, although an enhancement to the public realm is promoted. In collaboration with Al Rayyan Municipality a comprehensive strategy to connect the two parts of the local center should be developed.

Due to the limited size of the existing population and relatively low growth, Umm Slal Ali should look to develop a local center. Over the long term this should look to develop into a District Center to serve the northern part of the Municipality. Outside of these identified centers new retail development will not be permitted.



3.4 Key Employment Nodes outside Centers

The traditional economic role of Umm Slal Municipality was predominately agriculture-based, spread throughout the rural hinterland of the municipality. Umm Slal has the highest concentration of farms in Qatar with agriculture remaining an important activity in the Municipality. This economic role supported a modest local population. As the population has grown there is a need to diversify and grow the local economy.

In order to help diversify the economy the following key actions are proposed:

- Promote cultural tourism and eco-tourism
- Promote agriculture in line with the National Food Security Program
- Develop the commercial and administrative function of Umm Slal Mohammed through the expansion and redevelopment of the Town Center.
- Develop sites for light industry and bulky goods adjacent to Al Shamal Road as part of Umm Slal Mohammed Town Center.

3.4.1 Cultural Tourism

The Umm Slal Mohammed heritage quarter will provide a key destination for cultural tourism in Metropolitan Doha. The vision for the heritage quarter is for a living and working environment where traditional crafts and trades

are encouraged through a mixture of regulations, restoration activities, and incentives.

A key part of delivering this potential is acknowledging the comprehensive nature of the cultural and heritage activities, including the use and display of traditional techniques. Through the promotion of active conservation Umm Slal Mohammed has the potential to become a national example of heritage and conservation.

To promote cultural tourism organized trips should be promoted with local guides to key assets such as Barzan Towers and Sheik Jasim's Majlis.

The redevelopment of the historic buildings using traditional techniques should also be promoted as a cultural attraction. The preservation of the small farms is also important from a social heritage perspective. This will enable both Qatari's and Non-Qatari's to understand how previous generations utilized traditional techniques to alleviate the impact of Qatar's harsh climate.



3.4.2 Rural Area



Farming plays an important role in Umm Slal Municipality, contributing economically and visually to the municipality. As part of the Qatar National Food Security Program (QNFS) there is a move to more efficient farming techniques that take advantage of technological advances whilst limiting the impact on ground water extraction. The retention of the farms on the urban fringe is strongly encouraged through the zoning of land as Green Belt, and the Rural/Desert Zone.

The Ministry of Environment has recently developed a weekly farmers market selling local produce at Al Mazrouah Yard to the west of the Umm Slal Sports Club. This provides opportunity for local farmers to sell their products directly to the public.

Umm Slal should play a key role in delivering the vision of the QNFS and through the implementation of QNFS

projects. It is also imperative that any development proposals affecting farmland are considered in the light of the needs of the QNFSP and potential detrimental impacts. The QNFSP will therefore need to be consulted for advice about proposals on Greenbelt and Rural/Desert zones.

employment needs for residents in the southern part of the Municipality for parts of Al Rayyan Municipality.

3.4.3 North Gate Mixed Use Development

The North Gate Mixed Use development located at the southern end of Umm Slal Municipality is located adjacent to the Shamal Expressway and will be served by the Green Line.



It comprises over 98,000m² of retail space, 64,000m² office space and 450 residential units and serviced apartment. North Gate will provide an important function in terms of retail, commercial, entertainment and

3.5 Residential Areas

Residential areas comprise most of the urban land of the municipality, predominantly low density and single dwelling in character.

In most of Umm Slal Mohammed and in the north western corner of Umm Slal Ali the focus is on enhancing the appearance of existing neighborhoods and utilizing vacant sites within the urban areas. In many instances the development of vacant sites with high quality housing will help repair the fragmented urban form, and enhance the appearance of neighborhoods. A program of beautification based on the following actions should be undertaken:

- Enhance the public realm by providing landscaped streets with pedestrian and cycle ways.
- Introduce public parks and meeting spaces in the form of baraha and meyadeen.
- Develop infill plots with high quality low density housing that reinforces the character and sense of place of the neighborhood.

In the central and northern parts of Umm Slal Ali there is a need for neighborhood renewal at the local scale. Renewal should be planned along with the new neighborhoods ensuring an integrated urban form. In Umm Slal Ali renewal should be achieved through:

- The redevelopment of housing areas by replacing housing stock in poor condition with new housing

whilst conserving and enhancing buildings of historic importance.

- Enhancements to the public realm, providing high quality streets and meeting spaces in the form of baraha and meyadeen.

3.5.1 Housing Mix and Housing Choice

There is a need for greater choice in housing options across the municipality. At present there is limited housing choice with most of the municipality having only villas or detached housing. Greater choice and mix of housing will largely be delivered through developments in Umm Slal Mohammed Town Center through a mix of housing options from one bed apartments through to three or four bedroom family orientated accommodation. The form of development will be determined by the location and context of the property with family accommodation in the form of apartments, townhouses or villas.



3.5.2 Qatari Neighborhoods

The development of Umm Slal has seen the emergence of non-Qatari neighborhoods. Going forward it is important that new Qatari neighborhoods are developed in Umm Slal Mohammed and Umm Slal Ali with these neighborhoods meeting the aspirations of Qatari families in terms of plot size, access to retail and community facilities, particularly mosques and Majlis, within each neighborhood. Given the historic and cultural assets of the municipality it is important that the new neighborhoods reflect the traditional housing and townscape in their design and layout.

3.5.3 Rural Settlement

Snay Lehmaidi is a small urban settlement located on the western side of Al Shamal Road. It is located approximately 5km north of Umm Slal Ali and in close proximity Umm Qarn. Its main function and role is to provide housing for the surrounding rural area of the northern part of the municipality.

Snay Lehmaidi has recently been extended to the north with a land subdivision over vacant Government owned land which has been allocated predominantly for future low-density residential purposes. As a result the current population of Snay Lehmaidi is expected to grow because of the new subdivision. The settlement also has the potential to provide accommodation for people who are employed in the rural sector in the Municipality.

3.5.4 Worker Accommodation

In 2017, the worker population resident in Umm Slal municipality is expected to reach 57,900 in response to the needs of new urban development and infrastructure projects throughout Metropolitan Doha. This worker population is expected to progressively reduce to about 10,500 in 2032 as major urban development projects are completed.

A Permanent Worker Accommodation site has been designated within the Greenbelt Zone. It is expected that this site will house the majority of the additional worker population. The construction of the worker accommodation on the site will be subject to the Worker Accommodation Regulations which includes requirements for on-site community facilities, open space and recreation, and other support services for the temporary residents.

3.6 Community Facilities

The adequate provision of community facilities through matching their catchment population requirements, and adequate access is a key component of the Development Strategy. Access is most efficient when community facilities are located within centers. This is facilitated primarily by locating required facilities within those centers through the Action Area Planning Process.

The provision of community facilities has not kept pace with the residential growth that has occurred.

Existing community facilities outside of centers are still recognized through the Zoning Regulations to allow for their efficient continued operation and expansion, but the regulations strongly urge new facilities be located into centers.

3.6.1 Education

Currently only Government schools are available in Umm Slal Municipality. Based on the standards and guidelines for school distribution in the QNDF, the municipality is relatively well supplied.

New primary schools should be located in the south of the municipality. In Umm Slal Ali the demand will be limited to a primary and preparatory school, with a secondary school provided in Umm Slal Mohammed. The land allocated for schools in the existing Land Use plan is sufficient to meet the demand to 2032.



There are no private schools in Umm Slal Municipality, with several required. There will be some demand for private schools in Umm Slal Ali, however the main demand will come from Umm Slal Mohammed. New private schools will be located close to the town center.

Walkability to schools should be an important consideration with sites on the edge of mixed-use centers preferred. School entrances should be located away from major roads to avoid adverse pedestrian safety and localized traffic impacts. Local centers should be developed around school sites to emphasize their importance at the heart of the community.

3.6.2 Healthcare

There is one existing PHC Center at the south edge of Umm Slal Ali. This PHC will soon be replaced by a new facility that meets current standards.

No additional PHC center is required in Umm Slal Mohammed. A secondary hospital will be required by Umm Slal residents and this will be located in the town center.

The general and tertiary hospital will be provided through Hamad medical city master plan.



3.6.3 Religious Facilities

The Ministry of Awqaf and Islamic Affairs (MAIA) has been working on increasing the capacity of mosques to serve the growing population of the municipality. MAIA's standard for mosque allocation is based on walking distance: worshippers should be within 250m walk of daily mosques and 400m of Friday mosques.

Mosques should be located at the heart of communities. They should be co-located with local retail and pocket parks in residential areas and local centers. They should form a key part of the design of district and town centers. Daily mosques should be easily accessible by foot with a network of safe and convenient pedestrian routes provided within each neighborhood. In all instances the minaret can help add legibility to neighborhoods, given a focal point around which to develop non-residential uses.

Residents in Umm Slal will need to travel to neighboring municipalities to access public hospitals, private hospitals

and private clinics. Private clinics will be permitted in Umm Slal Mohammed Town Center.



As part of any major redevelopment proposal, developers are required to work with MAIA to identify sites for future mosques based on the standards in schedule 9 of the QNDF.

A number of new mosques are required for new neighborhoods in both Umm Slal Mohammed and Umm Slal Ali to meet accessibility standards set by the MAIAI. The location of private mosques should be taken into consideration when planning new mosques.

A Grand Juma Mosque is proposed at Umm Slal Mohammed Town Center as part of the Action Area Plan.

3.6.4 Emergency Response Facilities

The strategy for the future provision of emergency response services will seek to secure additional station sites so that coverage can be extended to meet the required target response times. Sites for Emergency Management Services and Civil Defence Centers should be secured at strategic locations within centres in relation to the emerging road network and coordinated with area-wide traffic management and control systems as they are introduced.

Almost all of the urban area of the municipality falls within the target response time for EMS. Umm Slal Ali has an EMS station and Civil Defense Center. EMS stations and Civil Defense Centers located at Umm Qarn in Al Daayen Municipality and at Education City in Al Rayyan Municipality ensure that a greater proportion Umm Slal Municipality is located within the target response time.

3.6.5 Other Community Facilities

Other Government service facilities, such as MOI service centers, Post Offices, Youth Centers and Libraries are important service facilities and should form key parts of the mixed-use centers.

The following is the community facilities program for Umm Slal Municipality.

Table 2 Community Facilities

Community Facility		Aver. Standards	Existing		Demand (2017)		Required (2017)		Required Area (m2)	
			Boys	Girls	Boys	Girls	Boys	Girls		
Education	Independent Schools	KG	4000	2	3	6	6	4	5	3,500
		Prim. Sch.	2 Sch. \ 15,000	2	2	3	3	1	1	18,000
		Prep Sch.	2 Sch. \ 30,000	2	1	2	2	-	1	20,000
		Sec Sch.	2 Sch. \ 40,000	4	1	1	1	-3	-	25,000
	Private Schools	Polarized Sch.	1 SCH \ 40,000	-	-	1	-	1	-	25,000
Health	PHC		30,000	-	-	-	-	-	20,000	
	PHC –C		50,000	1	1	1	-	-	25,000	
	PHC - SML		75,000	-	-	1	1	1	15,000	
Religious	Daily Mosque		1200	29	39	39	10	10	2000	
	Juma Mosque		3000	10	16	16	6	6	5000	
	Grand Juma Mosque		40,000	2	2	1	-	-	10,000	
	Eid prayer		50,000	-	-	1	1	1	50,000	
Social /Cultural Facility	Post Office	local	50,000	3	1	1	-	-	1,500	
	MOI Ser.	Type C	50,000	-	-	1	1	1	3,000	
		Counter ser.	30,000	-	-	2	2	2	200	
	Library	Town	50,000	-	-	1	1	1	500	
		District	20,000	-	-	2	2	2	500	
	Youth Center	General (S)	50,000	-	-	1	1	1	2,000 –3,000	
Social Center	SC	30,000	-	-	2	2	2	2,000 –5,000		
Emergency	Civil defence	Local Station	30,000	1	2	2	1	1	3,000	
	Mid. Emergency	Local Station	30,000	1	1	2	2	1	-	
	Police Res.	Local Station	30,000	1	1	2	2	1	4,000	

3.7 Open Space and Recreation Facilities

3.7.1 Open Space, Leisure and Recreation

A key part in delivering the vision for the municipality is to enhance the supply and quality of open space. While the municipality is characterized by large rural areas access to formal parks and open space is limited. The current provision of parks is insufficient to meet the needs of existing and future residents. Some open spaces will utilize former farmland and should be designed to preserve the small farms as part of the space, adding to the sense of place of Umm Slal Mohammed.

3.7.2 Metropolitan / Municipality Park

There is demand for a metropolitan park to serve as an integrated leisure venue for the municipality. The metropolitan/ Municipality park should be located in close proximity to the Umm Slal Mohammed Town Center or in a location with land resources that express the unique identity of the municipality and should be a minimum of 30 ha and contain active open spaces (playing fields). A series of linear green corridors should connect the residential neighborhoods to the metropolitan park through the number of formal and informal open spaces.

3.7.3 Town Park

A Town Park is proposed in Umm Slal Town center . The park should be designed to link the main urban area of

Um Slal Mohamed with the new subdivision and to maintain the rural character of the municipality. The park use may focus on specific community needs such as cultural identity related events.

It is proposed to provide the indoor sports core activities within the park and co-located with the main passive nature of the open space provided in the town level park.

3.7.4 District Parks

Two District Parks are proposed within the municipality one in Umm Slal Ali and the other one in Umm Slal Mohamed, thus encouraging greater accessibility to parks for all residents.



3.7.5 Local Parks

A series of local parks are currently being developed throughout the municipality. Overtime there will be a need to further enhance the provision of local parks throughout the urban area to ensure that residents have immediate access to a small area of open space for passive recreation.

3.7.6 Green Network

In addition to the provision of parks it is desirable to achieve a network of spaces that are linked by green corridors. This has benefits from both a biodiversity and recreation perspective. Farms, rodah, wadi and tree-lined streets are important characteristics of the municipality. Promoting a green network that builds on these characteristics is encouraged with the development of new residential neighborhoods responding to landscape features and promoting planting in the public realm.

A key part of the proposed Green Network system is the Utility corridor that runs through Umm Slal Mohammed to Al Gharrafa in the south. Utility providers are encouraged to work with MMUP to promote better use of this utility corridor such as tree shaded footpaths, bicycle tracks



and playing courts. The cultural celebration trail in the south is will also be part of the green networks

3.8 Sports Facilities

There are two existing Sports Clubs in Umm Slal Ali and in Al Kharaitiyat.

A Youth and Sports Center is located adjacent to Umm Slal Sports Club. The Barzan Olympic center located at Umm Slal Ali has recently opened to provide both active and passive needs with a playground, playing fields and ancillary facilities including a mosque, cafeteria and toilets. A separate Qatar Olympic playing field is located in Umm Slal Ali. This is proposed to be redeveloped as a Al Farjan.

3.8.1 Community –oriented Sports Facilities

Al Farjan (Sports Playgrounds)



Two Al Farjan sports playgrounds are proposed over the municipality, one in Um Slal Ali and one in Um Slal Mohamed. The close proximity of Al Farjan to existing and proposed schools will promote the use of these playgrounds to serve the students during school time.

Barzan Olympic Park at Umm Slal Ali is considered a new type of active and passive recreational facilities.

Ladies Clubs (Indoor Ladies Only sports Playgrounds)



As the majority of residents in Um Slal Municipality is Qataris, a ladies club dedicated to women and their children is proposed, enriching their social and sports culture. A provision of one indoor ladies club is proposed in Umm Slal Ali

Table 3 Public Parks Program

Park Type	Existing Parks		Standards & Guidelines			2017			2032		
	No	Area (ha)	Proposed Area Ranges	Average Area	Catchment Pop.	Total Demand No. 2017	2017 Gap No.	Required Area(ha)	Total Demand No. 2032	2032 Gap No.	Required Area
Neighborhood Park	11	3.3	0.1 - 0.25	0.2	1200	39	28	5	52	41	7.03
Local Park	9	6.7	0.4 to 2	1.2	3000	15	6	7.70	21	12	14.32
District Park	0	0	2 to 5	3.5	30000-50000	2	2	7.00	2	2	7.00
Town Park	0	0	5 to 15	10	50000-100000	1	1	10	1	1	10.00
Metropolitan / Municipality Park	0	0	60 to 200	130	200000	1	1	130	1	1	130.00
National Park	0	0	N/A	N/A	2 million +	N/A	N/A	N/A	N/A	N/A	N/A

Community Oriented Sports Facilities Program (District Level)

Facility Type	Facility Classification	Size		Facility Per User Group				Total No. of Facilities	
				Mixed		Female			
		Pitch Dimension	Sqm Plot	Quantity	sqm plot	Quantity	sqm plot	Quantity	sqm plot
Indoor Sports Field	Sports hall	30*36m	3,200	3	9,600	2	6,400	5	16,000
Outdoor Sports Field (Shaded)	Shaded tartan sports field	15*30m	1,350	0	0	0	0	0	0
	Artificial grass - FIFA standard	68*105m	10,550	0	0	0	0	0	0
	Double FIFA Standard/ Cricket Combined (artificial grass)	120*156m	23,075	0	0	0	0	0	0
	Artificial grass - 5 aside	25*35m	1,550	2	3,100	0	0	2	3,100
Swimming Pool	Artificial grass - 7 aside	35*50m	3,000	2	6,000	0	0	2	6,000
	Training	15*25m	4,000	0	0	1	4,000	1	4,000
	Standard	25*50m	10,000	0	0	0	0	0	0
Total No. of Additional Facilities				7	18,700	3	10,400	10	29,100

Community Oriented Sports Facilities Program (Town Level)

Facility Type	Facility Classification	Plot Size (Sqm per facility)	Facility Per User Group				Total No. of Facilities	
			Mixed		Female		Quantity	sqm plot
			Quantity	sqm plot	Quantity	sqm plot		
Tennis	Tennis Court	1,300	6	7800	1	1300	7	9100
Squash	Squash Court	350	1	350	0	0	1	350
Beach Volleyball	Beach Volleyball Field	1,500	0	0	0	0	0	0
Athletics	Track and Field	22,000	0	0	0	0	0	0
Total (sqm)			7	8,150	1	1,300	8	9,450

3.9 The Natural Environment

Umm Slal Municipality has a strong rural character and contains vast areas of open countryside punctuated by a concentration of sizable farms and areas of natural vegetation which collectively create a distinct identity. Existing farms are located along wadi and rodah. These features combined with existing hills lead to a varying topography. As the only Municipality without a coastline it is these natural features that contribute to the character of Umm Slal.



Two new Environmental Protected Areas have been declared in the municipality.

- Sunai – is 4km² and located to the north of Umm Al Amad and on the western side of Al Shamal Highway.

- Wadi Sultan – is 1km² and located to the west of the urban area of Al Kharaitiyat and north of Celebration Highway.

The Wadi Wusail EPA is located directly to the east within Al Daayen municipality. This EPA is indirectly connected to the natural environment within Umm Slal Municipality including Sunai EPA.

3.9.1 Protecting and Enhancing the Natural Environment

At the north western edge of Umm Slal Mohammed, there is a continuous slope which creates a natural boundary to define the limits of future urban growth. This slope extends into existing residential area growth that does not recognize this important feature. The topographical character of the area requires protection and enhancement with any future land development proposals responding sensitively to these important topographical features.



To appropriately manage future development two categories of land have been identified. The first is the Landscape Conservation Area which requires protection from future urban development. The second category is the Landscape Investigation area where any new development should respond carefully to the landscape features. Strong protection is also required throughout the municipality for wadi and rodah and there is a general presumption against development in land zoned as recreational or environmental.

3.9.2 Biodiversity

Umm Slal Municipality has a number of natural environmental features including wadi and rodah. There are also a large number of farms that add to the biodiversity value of the municipality. Opportunities also exist to enhance biodiversity in parks, open spaces, landscaped road corridors and private gardens.

Development will need to demonstrate that it will not lead to a loss of wildlife habitat however small. The loss of trees will be strongly resisted with existing private gardens reutilized as open spaces if redeveloped. This is important in preserving the character of the municipality. Biodiversity should be enhanced by maximizing the value of wildlife corridors and spaces.

Landscape conservation areas and agricultural areas should be protected from development with the new parks being designed and managed with biodiversity as a key consideration.

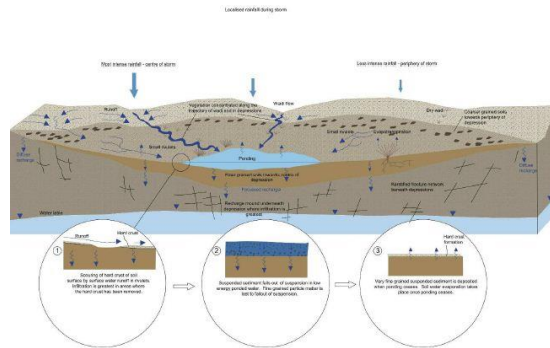
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At the urban fringe, urban development will need to blend the rural landscape within the urban form, softening the boundary and creating green corridors that extend into the wider desert landscape. These corridors should extend across municipality boundaries and meet open space requirements as part of the wider landscape network.



3.9.3 Groundwater

The Northern Aquifer covers much of the Municipality. Water abstraction for agricultural activities is threatening fossil water reserves. In addition, the degradation of the natural environment through pollution from urban development is undermining natural processes which replenish water reserves. Groundwater resources within the Municipality should be protected from excessive extraction and harm from development.



The Northern Aquifer is a nationally significant asset. Groundwater depletion has adverse impacts on the quantity and quality of available potable water in case of emergency. Continued depletion of the groundwater resources risks salination of the groundwater resource. Development within the Northern Aquifer will therefore be subject to the following additional controls:

- All new development must be connected to a reticulated sewage system.
- No ground water extraction will be permitted without the express permission of the Ministry of Environment.

3.9.4 Waste Management

A waste transfer station (Doha West Transfer Station) is proposed as part of the national waste management system) near Umm Al Afai (south of Umm Ali Afai). All the solid waste generated in Umm Slal Municipality will need to be transported to the planned Doha West

Transfer Station, and from there transferred to the new solid waste management center (NSWMC).

3.10 Heritage



The town of Umm Slal Mohammed is rich in heritage and conservation features. These features have an important social and economic value that forms part of the national identity of Qataris. They also contribute to the character and identity of Umm Slal municipality.

In addition to the important buildings such as Barzan Towers and the Majlis of Sheik Jasim the old town displays an almost intact traditional Qatari townscape.

The development of the old settlement is somewhat organic but follows important Arabic townscape principles of routes, relationship of buildings to spaces, and scale of the buildings that result in the towers and minarets dominating the town's skyline. This value is further enhanced by the relationship of the old settlement to the farms that were developed around the wadi.

The Private Engineering Office is developing a heritage quarter around the original settlement of Umm Slal Mohammed. This area is protected under the Land Use Zoning Regulations as a historic area to conserve and enhance this national asset. A Heritage Conservation Management Plan containing urban design and architectural guidelines, needs to be produced to help preserve this area and to inform future development in and around the historic area. The following actions should form part of this plan:

- Removal of large-gatherings households from historic properties;
- Require building owners to maintain and enhance their properties;
- Remove general vehicle access from the core area, enhancing the traditional pedestrian routes;
- Remove inappropriate extensions and structures from historic buildings;
- Ensure development and restoration of buildings is undertaken based on a courtyard style;

- Limit street usage within the conservation areas to pedestrians and service vehicles only, with the narrow right of way maintained.

A key part of the heritage conservation management plan will be to engage with property owners to seek to implement a more sympathetic façade treatment to existing properties.

Traditional townscape elements of the Fareej, should be incorporated, utilizing sikkat and barahaat where possible. The preservation and implementation of the historic street and sikka pattern is particularly important in and around the original settlements.

3.11 Movement

The existing Al Shamal Road corridor runs along the eastern boundary of Umm Slal, which is the main access road to the municipality.

Celebration Road has recently been constructed and now connects the southern part of the municipality to Dukhan Highway, Al Wajba Palace and Al Rayyan Stadium. Celebration Road is a nationally significant road and plays a culturally important role on National Day and Sports Day.

Movement in Umm Slal is currently dominated by private vehicles. While in the future there will be increased public transport, via the Metropolitan railway Green line and new city bus services, private vehicle will still dominate throughout the municipality because of its rural nature. The long distance rail also runs parallel to the Utilities Corridor.

A designated truck route is to be constructed along the Utilities Corridor. This will ensure that trucks are able to bypass much of the urban area of Metropolitan Doha. An Orbital Road is also to be constructed that will link with Al Shamal Road between Umm Slal Mohammed and Umm Slal Ali. This Orbital Route will connect to Dukhan Highway and also to the Northern Relief Road and ultimately provide connections to Lusail.

Further enhancement works are occurring along Al Shamal Road to provide further connections to North Gate and Umm Slal Mohammed. A series of new rural

roads are being developed as part of the Ashghal's Road and Drainage Program. These will provide access to farms and other uses within the municipality and also provide connections to the north and west and beyond the municipality.



3.11.1 Integrated Transport Strategy

An integrated transport system including roads and road infrastructure, convenient public transport services and associated facilities, and bicycle and pedestrian facilities, is an important requirement for the future growth and amenity of the municipality.

The existing level of public transport services for residents and other public transport users within the municipality is generally poor. In particular:

- There are limited public transport services and facilities available for passengers to use;

- The availability of pedestrian facilities such as bus shelters in convenient locations is poor which makes accessing public transport difficult and unattractive; and
- With the exception of Celebration Road there are limited cycling facilities in terms of the cycling network and how it links to the current public transport network. Inadequate provision of cycle parking or cyclist facilities at destinations such as the workplace, also limit the attractiveness of cycling.

A transition from a private car dominated society to a pedestrian friendly society needs to occur within the municipality, with the availability of high quality public transport systems and services being essential. This will not necessarily occur prior to 2017, however, every effort should be made towards this.



This transition will depend on two major factors:

- The provision of quality public transport services
- A change of spatial development pattern.

An increase in residential population and socio-economic activities within the designated centers of Umm Slal will assist this transition together with improved accessibility and mobility between the centers and other cities in Metropolitan Doha through the wider availability of public transport modes and a more pedestrian friendly transport environment (improved public realm).

It is important for the municipality to be actively prepared for the arrival of the metro. To maximize the benefit of having the inter-city rail station (extension of the Green Line) at the centers of Umm Slal, it is imperative to re-structure the street system in a hierarchical manner to provide excellent mobility, accessibility, and integrated opportunities for introducing quality public transport services within the municipality. The following actions are required to achieve an integrated transport strategy:

- A trial provision of suitable local scale public bus services within the municipality can be considered by the operator. It is important for the municipality to plan and provide effective city bus routes and bus stops based on community needs, in collaboration with service providers and land developers.
- Designation and acquisition of sites for the metro station locations is an urgent requirement, and the most important determinant in developing an effective and consolidated transport system in the municipality. Once such locations are identified, preparation of conceptual plans for inter-modal (station plaza, etc.) facilities based on these stations should follow.

- Identification of appropriate Park and Ride sites near the identified Town Center and metro stations as part of the intermodal facilities.
- Re-structuring of the street system to meet TOD requirements.
- Designation of key pedestrian routes and cyclist networks together with a public realm improvement plan including a green network, as part of metro and bus station design and operation.

3.11.2 Public Transport

The existing public transport network within the Municipality is limited to the fixed route Mowasalat Karwa buses. Improving public transport by increasing the service coverage, frequency, and reliability in particular for Umm Slal Mohammed Town Center will encourage people to use public transport. This in turn will lead to a reduction in the number of cars on the highway network and help alleviate future congestion problems.



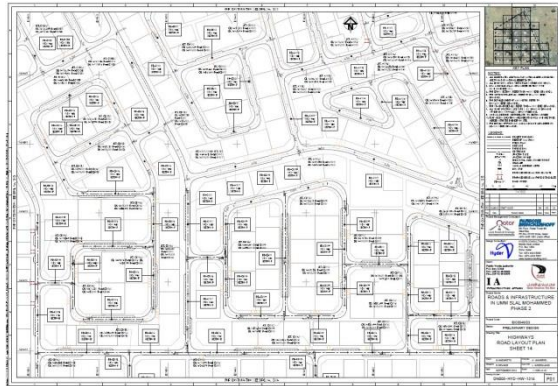
The public transport network should include high quality bus services along Zakreet Street connecting residential areas to the Town Center and rest of Metropolitan Doha.

The attractiveness of public transport services in the municipality can be greatly enhanced by providing convenient and comfortable bus stops and bus shelters, combined bus/metro stations, prompt time schedules, real-time information provision, and an integrated ticketing system to make the transfer between the different modes of public transport easier and more convenient.

3.11.3 Street Hierarchy

The street system in the municipality is being re-structured to achieve maximum accessibility in a hierarchical manner by way of the Local Roads and Drainage Program. The streets will be developed in a pedestrian and cycling friendly manner so that new road infrastructure does not restrict pedestrian movement or have a damaging impact on the setting and amenity of residential neighborhoods.

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In key activity nodes, local centers and parks, the design of the road must respond to its context by reducing traffic speeds, lane widths and increasing the number of pedestrian crossing points. The capacity for private cars should be reduced in favor of public transportation, pedestrian facilities and an enhanced public realm.

Future major highways such as the Orbital Road and Truck Route will need to include provision for pedestrians and cyclists to cross via grade separated routes.

3.11.4 Park and Ride

Provision of Park and Ride sites near the inter-city bus terminal and the future metro station will play an important role in helping reduce vehicular traffic on Al Shamal Road through the transfer of people to public transit services.

The provision of Park and Ride facilities will be considered for the Umm Slal Mohammed Town Center. A detailed study on the potential Park and Ride sites should be undertaken as a priority in order to secure land. A moratorium on future developments at the park and ride sites will to be enacted once these have been identified.

Park and ride sites should be designed in an integrated way with existing and proposed town center, enabling the dual use of car parking spaces throughout the day. Parking spaces should be covered with shading structure with safe and covered pedestrian routes connecting the parking area to the metro station entrance and inter-city bus terminal.

3.11.5 Walking and Cycling

At present there are no major barriers to pedestrian movement in the urban area of the municipality although there are major barriers between urban areas in the municipality and to neighborhoods in Al Daayen. Signalized or grade separated pedestrian crossings are required with priority given to locations around mixed-use centers and development corridors.



The system of Sikkas within the proposed heritage conservation area of Umm Slal Mohammed should be extended to surrounding neighborhoods and coordinated with an improvement to the public realm.

Within the mixed use centers and development corridors streets will need to be designed to promote pedestrian priority. Measures include traffic calming techniques such as widening sidewalks, narrowing lane width, reducing the number of lanes, lowering speed limit and street lighting.

The National Bicycle Master Plan provides the overarching strategy for enhancing routes and facilities for cyclists in Qatar. Cycle lanes have been constructed on either side of Celebration Road. This provides opportunities for recreational cycling in a safe environment. Priority should be given to those routes

connecting with the mixed use centers, with the routes forming part of the integrated public realm design for activity nodes.

Developers will be required to provide facilities for cyclists in the form of cycle parking in centers and other destinations such as workplace areas. Cycle parking should also be provided as part of the public realm in mixed use centers and at public transport stations and stops as they are developed.

3.11.6 Parking

The Umm Slal Mohammed Town Center promotes higher land use densities around a commercial core within a convenient walkable distance of many residents and a pedestrian friendly environment. With the Metro Green Line station and enhanced bus services available at Umm Slal Mohammed Town Center, the number of parking spaces can be reduced below the standard parking requirements for retail, office and residential land uses. The center has a unique context in terms of walkable catchment and public transport provision.

Within centers the visual impact of parking should be reduced through suitable design of parking areas and landscaping of the right of way.

3.12 Utilities

Significant development will occur over the next few years in the provision of utility services. Major utilities developments include the Doha North Sewage Treatment Works, the Local Roads and Drainage Program, the development of the mega reservoirs, the rollout of the broadband network and the implementation of the Integrated Drainage Master Plan.

3.12.1 Water

By 2017 water consumption in Umm Slal Municipality is expected to increase to 1.26 times of the level of 2008 by 2017 (including consumption and network losses). In order to accommodate the projected increase of water demand, Kahramaa has scheduled extensions to the supply network mainly inside the Metropolitan Doha Plan Boundary. In addition, one primary reservoir will be constructed near Abu Thylah for stabilizing supply flow and hydraulic head. No issues are anticipated if the planned infrastructure program proceeds.

Kahramaa is also proposing a series of mega reservoirs throughout Qatar to ensure there is a water supply of up to 7 days. One of these mega reservoirs is planned to be located within the municipality on the western side of the National Utilities Corridor. This site will be appropriately zoned as transportation and utility zone

3.12.2 Wastewater

The Doha North Sewage Treatment Works are located within the municipality and includes a TSE balancing pond. It is located to the west of the National Utilities Corridor. Included within the site is a buffer to ensure its long term operation does not have a detrimental impact on quality of life for neighboring land uses.



No issues are anticipated if the infrastructure program proceeds as planned.

The majority of the urban areas of the municipality will be served by the foul sewer network. There is the possibility of the network being extended north in the future so that the rural settlement of Snay Lehmaidi can be served which would eliminate the use of septic tanks and the tankering of wastewater.

3.12.3 Stormwater and Shallow Groundwater Drainage

There are opportunities to enhance stormwater quality and limit the impact of rainfall storm events on urban areas and the transportation network through the

introduction of sustainable drainage techniques. A potential opportunity also exists to use the network of wadi and rodah in the municipality for managing storm water as natural storage areas thereby reducing the need for expensive infrastructure and further promoting the ecological value of such features.

One area that is subject to shallow groundwater intrusion is at Al Kharaitiyat. Ashghal have commenced the development of a groundwater lowering system as part of the Local Roads and Drainage Program.

Ashghal's Integrated Drainage Master Plan recommends the development of a wetland in the Greenbelt to the west of Umm Slal Ali. This forms part of the stormwater and groundwater network. Stormwater and groundwater would then be combined with TSE from the Doha North Sewage Treatment Works to provide recycled water. Recycled water is a potential source of irrigation for street tree planting and for farm irrigation.

3.12.4 Electricity

There are potential shortfalls in electricity supply across the northern part of Umm Slal Mohammed and Umm Slal Ali. This includes the new town center and metro line.

There will also be a demand for additional sub-station sites as population grows.



3.12.5 Telecommunications

New mobile phone infrastructure should be integrated with new developments minimizing its visual impact.

The Qatar National Broadband Network will be delivering an open access fibre network over the next 5 years. This will support the development of the broadband service offerings to consumers in the municipality from the existing telecommunications providers, Vodafone and Ooredoo.