



هيئة الأشغال العامة  
PUBLIC WORKS AUTHORITY

# PREQUALIFICATION DOCUMENT FOR

**New Doha Zoo – Tree and Plant Works  
(Supply and Installation) Contractor**

PROJECT ID: BA/13-14/C/069/G

PART 2: PROJECT BRIEF

## Authority

Public Works Authority  
P.O. Box 22188  
Doha  
State of Qatar

November 2013

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## **1 INTRODUCTION**

### **1.1 General**

- 1.1.1 The State of Qatar is a peninsula located on the northeast coast of the much larger Arabian Peninsula with a total land area of approximately 11,500 square kilometres. The population is approximately 1.7 million inhabitants (2009 census) with almost 83% of the inhabitants residing in Doha and its main suburb Al-Rayyan.
- 1.1.2 The State of Qatar has experienced rapid economic growth over the last several years. This economic growth has resulted in increased demand for the State to construct and provide first-class infrastructure such as government buildings (hospital, schools, and the like) transportation networks (harbours, airports, highways, pavements etc.) and services (power, water, sewerage, waste disposal etc.).
- 1.1.3 The Public Works Authority (PWA) also known as Ashghal, hereinafter referred to as the "Authority " is responsible for the planning, design, procurement construction, assets management, and delivery of infrastructure and building works in the State of Qatar.

### **1.2 Background**

- 1.2.1 The State of Qatar is undertaking broad and ambitious civic improvements to the national infrastructure in keeping with the strategies and national vision outlined in the Qatar 2030 National Plan. One of the underpinning pillars of the national vision is enhancement of national education and recreation opportunities. In this regard the New Doha Zoo is viewed as a significant initiative to contribute to the national vision.
- 1.2.2 The State of Qatar is highly committed to delivering a world class national zoo programme that emphasises education, entertainment, recreation, environmental sustainability, animal husbandry, and animal conservation - both locally and in a global context.
- 1.2.3 The New Doha Zoo shall form a strategic destination attraction as part of the State of Qatar broader future ambitions, and to enhance the Al Rayyan South Metropolitan Centre area, as part of the broader comprehensive vision of the National Development Framework 2016.
- 1.2.4 To assist the State of Qatar with the delivery of the New Doha Zoo, and subsequent new animal facility, the Authority has been empowered to appoint a tree and plant works (supply and installation) contractor.
- 1.2.5 The existing Doha Zoo occupies 15-20% of the proposed New Doha Zoo site, where the majority of the vegetation is located, including approximately one thousand (1000) trees. The existing vegetation was established in the 1980 's when Doha Zoo was constructed.
- 1.2.6 In addition to the existing zoo vegetation there is a redundant date palm plantation that has approximately one hundred (100) palm trees of varying maturity.

### **1.3 Scope of Works**

- 1.3.1 The supply of trees and plants including installation work shall be completed in advance and post the main contractor appointment for the permanent works under the supervision of the Design and Construction Supervision Consultant (DCSC).
- 1.3.2 The tree and plant works (supply and install) contractor shall be responsible for the delivery of the soft landscaping elements of works on the New Doha Zoo in their entirety.
- 1.3.3 The tree and plant works (supply and install) contractor shall be required to engage with all parties, Engineer, DCSC, main contractor and zoo operator throughout the process of supplying, installing and maintaining the trees and plants on the New Doha Zoo project.

1.4 Location and Size

1.4.1 The New Doha Zoo is located approximately 12km from the city centre, adjacent to Aspire Park and the Villaggio Mall within the municipality of Al Rayyan. The existing Doha Zoo entrance is on Furousiya Street to the south of the Al Waab Street interchange, see Figure 1.1.

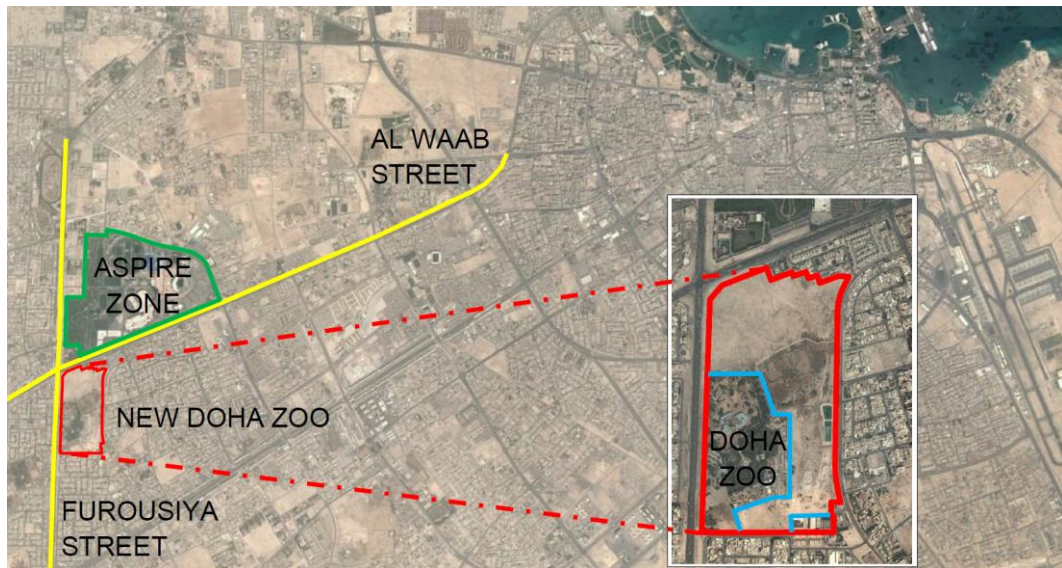


Figure 1.1 – New Doha Zoo Site

1.4.2 The site is approximately 75ha in overall size of which 12.5ha is currently occupied by the existing operational zoo facilities.

1.4.3 The New Doha Zoo Concept Design has been developed by HHCP on behalf of the PWA, see Figure 1.2.



Figure 1.2 – Concept Design of the New Doha Zoo

1.4.4 The New Doha Zoo concept design includes twelve thousand five hundred (12,500) trees including approximately one thousand (1,000) retained from the existing zoo soft landscaping. The quantity of trees and plants shall be confirmed through the development of the various stages of the design, schematic, technical and detailed design.

1.4.5 The concept design has identified one hundred and fifty (150) species of trees and plants in accordance with the animal exhibits and the following three continents:

- Africa;
- Asia; and
- South America.

A corresponding exhibit planting zones plan has been developed with a breakdown of the tree and plant species required, see Figure 1.3. There are a number of species that are common across the entire zoo.

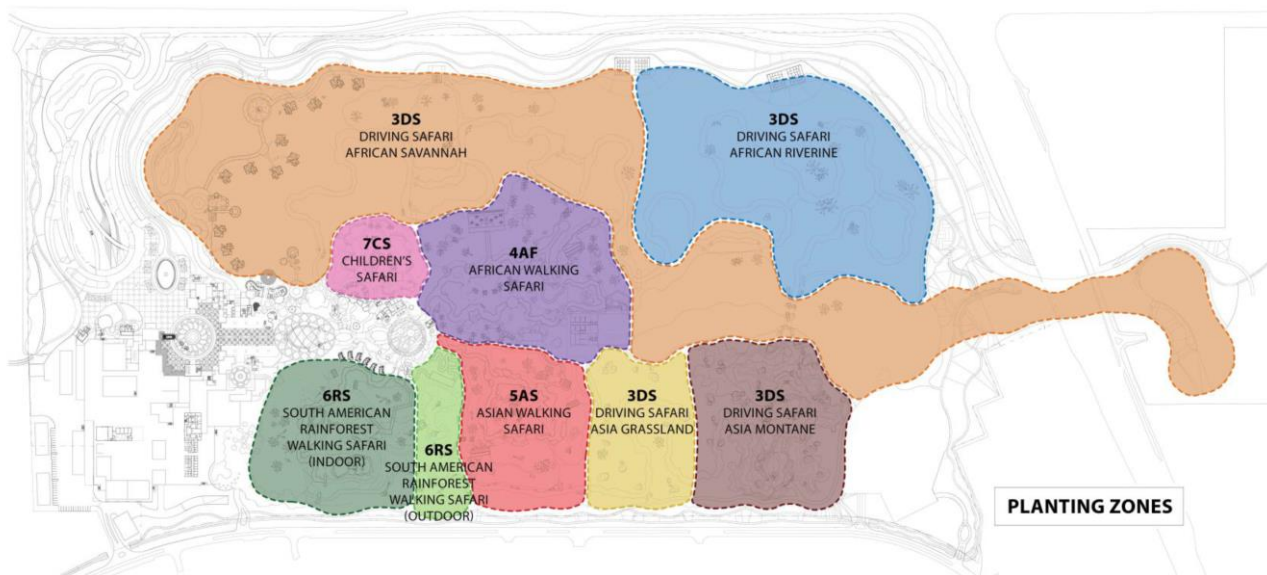


Figure 1.3 – Exhibit Planting Zones Plan of the New Doha Zoo

1.4.6 In addition to the exhibits, there shall be a public gardens area formed around the perimeter of the New Doha Zoo which shall be formed on an elevated batter. The public gardens shall be accessible by the general public from the adjacent area.

## 1.5 Programme Management Consultant (PMC)

1.5.1 In addition to its internal departments, the PWA has recently appointed a number of PMCs to deliver services on behalf of Infrastructure Affairs, Asset Affairs and Building Affairs. The PMC for the New Doha Zoo is 'MACE / EC Harris' Joint Venture. The PMC shall work together with the PWA to achieve the successful delivery of the project. The PMC specific roles, and associated responsibilities, shall be set out in detail within the Invitation to Tender documents.

## 1.6 Design and Construction Supervision Consultant (DCSC)

1.6.1 As part of the development of the New Doha Zoo, the PWA shall appoint a Design and Construction Supervision Consultant (DCSC) to develop the design of the New Doha Zoo and supervise the works. As part of the appointment, the DCSC shall be responsible for the supervision of the tree and plant works (supply and install).



**1.7 Anticipated Project Schedule**

1.7.1 The following anticipated tree and plant works (supply and install) contractor procurement schedule is draft and is provided for information only.

- Tender issue: 16<sup>th</sup> February 2014
- Tender return date: 23<sup>rd</sup> April 2014
- Onsite Open Event: 4<sup>th</sup> – 6<sup>th</sup> March 2014

**1.8 Project Key Stages and Associated Key Dates**

1.8.1 The tree and plant works (supply and install) contractor shall complete the landscaping scope of works in coordination with the main contractor to achieve the SOFT 31<sup>st</sup> December 2016 and GRAND 31<sup>st</sup> December 2017 openings, see Figure 1.3.



Figure 1.3 - The Phasing Plan

The majority of the New Doha Zoo shall be completed in preparation of the soft opening with the areas highlighted in 'orange' and 'pink' being completed for the following grand opening.

- 1.8.2 The works on site shall commence from January 2014 with the site enabling and demolition works in readiness for the main contractor works. The tree and plant works (supply and install) contractor shall be expected to commence the protection and relocation of the retained items in advance of the main contractor and in coordination with the enabling and demolition works contractor.
- 1.8.3 The existing zoo has been closed to the general public and the facility shall be gradually vacated through the course of next year, 2014, allowing the enabling and demolition works to be completed in their entirety.
- 1.8.4 The tree and plant works (supply and install) contractor shall be responsible for coordinating their works with third parties on site including the incumbent zoo operator.

## **2 TREE AND PLANT WORKS (SUPPLY AND INSTALL) CONTRACTOR DELIVERABLES**

### **2.1 General Requirements**

2.1.1 The primary aim of this project is the supply of trees and plants including installation work for the New Doha Zoo in collaboration with the main contractor under the supervision of the DCSC. The tree and plant works (supply and install) contractor shall be responsible for the following elements of work:

- confirmation of the specified tree and plant species suitability;
- in collaboration with the DCSC develop the soft landscaping design (including irrigation system);
- identify and confirm availability of specified tree and plant specimens;
- inspect, select suitable specimens and obtain approval from the DCSC;
- procure, transport approved trees and plants to Qatar;
- manage the temporary storage and acclimatisation of the trees and plants locally if required prior to being delivered to site (an approved horticultural nursery);
- inspect, protect and maintain the trees and plants retained from the original Doha Zoo;
- relocate existing trees and plants on site in accordance with the New Doha Zoo design;
- soil sampling and testing, ensuring suitability of soil to sustain the specified tree and plant specimens being planted;
- deliver and install trees and plants on site in coordination with the main contractor;
- protect, monitor and maintain the trees and plants throughout the construction process;
- prepare the trees and plants for the New Doha Zoo Soft and Grand openings;
- monitor and maintain the trees and plants in coordination with the zoo operator;
- develop in coordination with the zoo operator a sustainable local source of replacement tree and plant stock for potential future tree and plant replacements;
- develop in coordination with the zoo operator a sustainable local animal feed / fodder supply; and
- in coordination with the zoo operator replace any damaged trees or plants at the zoo.

2.1.2 All works by the tree and plant works (supply and install) contractor shall be completed in accordance with Qatar Construction Specification 2010 (QCS 2010), as a minimum. The guidance includes the establishment of acceptable material quality and workmanship and shall be read in conjunction with all established Qatari standards.

## **2.2 Landscaping Planting**

- 2.2.1 The landscaping planting is inclusive but not limited to finished grading, supplying and spreading of soil, layout of plants and areas, turfing, seeding and sprigging of new lawns, ground cover plantings, shrub planting, tree planting, landscape edges, maintenance period, landscape warranty, appliances and services necessary for the incidental to completing all the planting operations in a proactive manner in collaboration with the main contractor.
- 2.2.2 The tree and plant works (supply and install) contractor shall be responsible for the shipping, delivery, storage and handling of all trees and plants required for the New Doha Zoo.
- 2.2.3 The plant list shall be confirmed by the DCSC, as part of the tender information listing the designated plants and the following information:
- Botanical Name;
  - Common Name;
  - Quantity;
  - Size;
  - Condition; and
  - And all other relevant information.
- 2.2.4 It shall be the responsibility of the tree and plant works (supply and install) contractor to confirm the suitability of the specified trees and plants in collaboration with the DCSC.
- 2.2.5 The tree and plant works (supply and install) contractor shall inspect and confirm acceptance of the areas receiving landscaping. The tree and plant works (supply and install) contractor shall be responsible for confirming any unsatisfactory issues that shall have a negative impact on the performance of the proposed trees and plants.
- 2.2.6 The tree and plant works (supply and install) contractor shall be responsible for verifying and updating the existing survey (tender documentation) of the retained trees and plants, confirming condition, maintenance regime and tagging confirming the details of the retained trees and plants.
- 2.2.7 The tree and plant works (supply and install) contractor shall be responsible for sampling and testing the existing soil within the area of the retained trees and plants confirming suitability for future use on the New Doha Zoo.
- 2.2.8 The tree and plant works (supply and install) contractor shall be responsible for providing a specific maintenance team, materials and manual for all the trees and plants during the construction and operational phase of the New Doha Zoo.
- 2.2.9 The tree and plant works (supply and install) contractor shall be responsible for maintaining the trees and plants of the New Doha Zoo for a five year period beyond the grand opening, with a potential for extension of time on agreement from the Engineer.
- 2.2.10 The tree and plant works (supply and install) contractor shall be responsible for confirming in collaboration with the DCSC and Zoo operator the tree and plant species compatibility with the proposed residing animal species.



**2.3 Irrigation System**

- 2.3.1 The tree and plant works (supply and install) contractor shall be responsible for the supply, install and commission of an automated irrigation system with all the related components, field remote control valves, control wires, filter, integrated dripper lines, drippers, flush valves, sprinklers, bubblers and control system.
- 2.3.2 The irrigation system shall be operated utilising the treated sewage effluent (TSE) and, or potable water source.
- 2.3.3 The primary irrigation system main shall be designed by the DCSC and installed by the main contractor, the tree and plant work (supply and install) contractor shall be responsible for the localised element of the irrigation system. It shall be the responsibility of the tree and plant works (supply and install) contractor to confirm the performance requirements of the irrigation in collaboration with the DCSC.
- 2.3.4 The tree and plant works (supply and install) contractor shall confirm and demonstrate that the proposed irrigation system is suitable for use in the zoo, confirming mitigation strategies and any specific constraints.
- 2.3.5 The tree and plant works (supply and install) contractor shall be responsible for validating the DCSC design for the irrigation system in collaboration with the DCSC. The coordination of services shall be the responsibility of the tree and plant works (supply and install) contractor in collaboration with the main contractor.
- 2.3.6 The tree and plant works (supply and install) contractor shall be responsible for developing a preventative maintenance strategy for the irrigation system, and implementing the maintenance as part of the landscaping maintenance.