

# Petra Development and Tourism Region Authority (PDTRA)



سلطة اقليم البترا الترموي السياحي

## Request Proposal For Environmental Impact Assessment Study for the Petra Archaeological Park Museum

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**Date: 8 / 6 / 2014**

**RFP Ref. 6/2014**

**Deadline: 25/6/2014**

# CONTRACT AGREEMENT BOOK FOR CONSTRUCTION PROJECTS

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## (PART 2- PARTICULAR CONDITIONS)

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**Project Name: Environmental Impact Assessment study for the Petra Archaeological Park Museum Project.**

**Tender No: 6/2014**

- A- Instructions to Tenderers
- B- Particular Conditions
- C- Additional Particular Conditions
- D- Forms of Tender, Guarantees, Agreements and Data

This part of the unified Contract Agreement Book is considered complementary to the General Conditions part one, and the following Conditions shall be considered as Particular Conditions of this Contract.

Whatever stated in these Particular Conditions such as addition, deletion or amendment to the General Conditions Clauses shall prevail and to be taken into account to the extent that clarifies or adds or amends these Clauses

## **A- Instructions to Tenderers**

**Tender No.**

**Project Name: Environmental Impact Assessment Study for the Petra Archaeological Park Museum Project.**

- (1)** Contractors who are entitled to purchase the Tender Documents as per the advertisement for this Tender and willing to participate in the Tender may apply to obtain a copy of the Tender Documents distributed as mentioned in the Invitation to Tender upon payment of the price quoted for the said Documents.
  
- (2)** The Tender Documents for this Project include the following:
  - The Invitation to tender including the advertisement
  - Part one:** General Conditions of Contract.
  - Part two:**
    - a- Instructions to Tenderers.
    - b- Particular Conditions.
    - c- Additional Particular Conditions.
    - d- Forms of Tender, Guarantees, Agreements Data.
  - Part three:**
    - General and Particular Specifications.
    - Bills of Quantities and Rates.
  - Part four:** Drawings.

### **Preparation and Submission of Bids**

#### **Submission of Bids:**

- (3)** Any one who wishes to participate in this Tender shall visit the Site of Work and become acquainted with it and shall obtain, by himself and at his own responsibility, all expenses of information required to submit his Bid, and to understand its nature, the circumstances pertaining to the project, all local customs, Work conditions and all other matters related to the Tender or those which affect the pricing of his Bid.

The Bid shall be submitted using the Letter of Tender included in this book, the Bidder shall fill in the forms, the Bill of Quantities and rates, any other schedules or addenda and shall sign the Tender Documents in the specified places.

- b-The unit prices in the Bill of Quantities shall be filled out in numbers and in words in a clear manner.
- c- It is not permissible to make any amendments to the Tender Documents by the Bidder, if the Bidder makes any amendment or if he violates any of these Instructions, this will lead to the rejection of his Bid.

But if the Bidder wishes to submit an alternative Bid, he could submit that in a separate letter attached to the Bid, provided that he submits the original Bid as required in the conditions and the concerned Tenders Committee has the right to consider his alternative Bid or reject it.

**(4)** The Bidder shall submit his Bid in accordance with the manner required in these Instructions and the Invitation to Tender and the Bid shall include the following information:

a. The status of the Tenderer's firm, the letter of authorization to the person empowered to sign in his behalf, and if there is a partnership in the form of a joint venture, then the companies who are part of the joint venture shall submit the joint venture agreement jointly and severally (binding them both and each) and the parties to the joint venture shall sign the Bid, and submit the Guarantees and Securities in their names jointly.

b. Experience and qualifications of the Bidder, description of Projects previously executed, and the Projects currently under construction, stating its actual executed percentage in real figures.

c. State the names of the Subcontractors he intends to employ in the execution of the Work, provided that he nominates the Electromechanical Works Subcontractor, provided that this nominated Subcontractor shall be classified in the same grade as the main Contractor or in the subsequent lower grade.

d. Submit with his Bid a Financial Guarantee or a certified check to the interest and to the order of the Employer in the amount specified in the (Appendix to Tender) as an indication of his seriousness to participate in the Tender, this Guarantee shall be issued by a bank or a financial establishment each of them licensed to work in Jordan.

These Guarantees shall be returned to Bidders who are not awarded the Tender as may the concerned Committee decides within (7) days from the date of the Tender award or the expiry date of the Tender Guarantee whichever comes first. The Tender Guarantee of the successful Bidder shall be returned after submitting the Performance Guarantee and signing the Contract.

But if the Bidder is from a country where Bonds are used, and then the Bidder shall submit a prior request to the Employer to know if such Bonds are acceptable in all circumstances. Such Bonds shall be ratified by local banks upon submitting them.

e-The Bidder's full formal address: If the head office of the main Bidder is outside Jordan, he shall specify an address in Jordan to be considered as his formal address to which all correspondence and notifications to be sent to. Any notice or letter sent by registered mail to this address shall be considered as if it has been handed to him.

f, Submit a price analyses of the main items specified in the Tender showing the cost of materials, plants, workmanship, administrative overheads, and profits to execute all Work items in full.

g- Any other information or data shall be submitted by the Bidder or attach it with his Bid if it is requested in accordance with the Additional Particular Conditions, or the Particular Specifications or these Instructions.

**(5)** The prices quoted by the Bidder against the items in the Bill of Quantities shall be considered to be the total value of the Work for each of these items and its execution and remedy of any defects therein according to the Contract, it also includes preliminary

works (unless separate items provided for the preliminary works in the Bill of Quantities.)

**(6) Clarification of Ambiguity:**

If there is any ambiguity or contradiction in the Tender Documents or if there is a need to clarify any ambiguity in the Tender Documents, the Bidder shall submit a request in writing to the chairman of the concerned Tenders Committee to clarify any ambiguity at a date not later than (7) days prior to the date specified for opening the Bid. Answers to enquiries shall be distributed in writing to all participating Bidders and it is not permissible to consider such clarification to be taken as a justification to request extension of the time set for submission of Bids.

**(7) Submission of Bids:**

a- Bids shall be submitted complete in a sealed envelope marked on the outside, Tender number ( ) for the Project Environmental Impact Assessment study for the Petra Archaeological Park Museum.

- And the name of the Bidder, the Bid shall be deposited in the tenders' box specified by the concerned Tenders Committee in the Invitation to Tender on or before the date and time specified for submission of Bids.

b- Any Bid submitted after the date of submission shall be rejected and returned unopened to the Bidder.

c- Bids are usually opened in an open session in the presence of Bidders who choose to attend, unless Stated to follow another way in the Invitation to Tender.

**(8) Bids Bind ability:**

The Bid submitted shall be deemed binding to the Bidder and may not withdraw this Bid after submission and shall remain binding to the Bidder for a period of (30) days starting from the date of submission of Bids unless a longer period of commitment is specified in the Invitation to Tender.

**(9) Currencies of payment and Bid price:**

The Bidder shall quote his prices in Jordanian Dinar, unless otherwise provided in the Invitation to Tender. If other currencies of payment mentioned in the Letter of Tender, these currencies and their rate of exchange shall be specified at the Base Date.

**Evaluation of Bids and Award of Tender**

**(10) Evaluation of Bids:**

Bids shall be studied and evaluated in accordance to the Government Tenders Instructions issued pursuant to the Government Works Regulation (Bylaw), which the Bidder is supposed to be well informed and aware of these Regulations.

**(11) Methods for Checking Bids:**

a. If an error is found in the Bid or a contradiction between the total sum of any value and what should this total sum be by applying to the unit price. The concerned Committee has the right to amend the total sum according to the application of the unit price; therefore the total price or the total sum of the Bid shall be amended accordingly.

b. If the stated figure in numbers differs from that stated in words, then the words shall be considered binding and the sum shall be corrected accordingly.

c. If there is any error in any arithmetical operations, the sum shall be corrected and this corrected sum shall be binding to the Bidder.

d. If the Bidder did not quote a price to or more than one item, the concerned committee has the right to either reject the Bid, or consider these not priced items as being included in the price of other items and the Bidder shall execute them (if awarded the Tender) free of charge.

e. If the Bidder wrongly quotes a price to an item or in an exaggerated manner, the concerned committee has the right to:

1. Reject the Bid, or
2. Amend the prices with the Bidder's consent taking into consideration the current market price and the

Prices quoted by other Bidders (provided that the total sum of the Bid remains after these amendments equal or less than the sum of the Bid after the arithmetical check).

**(12)** The concerned Tenders Committee reserves the right to ignore any Bid not in compliance with these Instructions and to practice its jurisdiction in accordance with the provisions of the Government Works Regulations (Bylaw) and to award the Tender without being bound to accept the lowest priced Bid. Unsuccessful Bidders shall have no right to claim any compensation from the Employer in concern of this.

### **Guarantees (Securities)**

#### **(13) Performance Security (Performance Guarantee):**

The winning Bidder shall sign the Contract within period of (14) days from the date that he was notified in writing that he was awarded or sole sourced the Tender to him. The Bidder shall submit the Performance Guarantee to the Employer upon signing the Contract Agreement according to the attached Form of Guarantee, the amount of this Guarantee issued by a bank or any financial establishment licensed to work in Jordan shall be as specified (in the Appendix to Tender) to guarantee the full execution of the Contract obligations and for payments due on the Contractor in order to fulfill the Contract objectives.

In case the Bidder refuses or fails to sign the Contract Agreement or he is unable to submit the required Performance Guarantee, then, the Employer is entitled to forfeit the Tender Guarantee enclosed with his Bid without resorting to the Judiciary and the Bidder shall have no right to claim for the said Guarantee or for any other compensation in this regard.

#### **(14) Defects Liability Guarantee:**

The Contractor shall submit to the Employer upon receipt the Taking Over Certificate, a Defect Liability Guarantee in the amount of 5% of the value of the executed Works, as a Guarantee for completion of outstanding Works and remedying defects for the period stated in the Appendix to Tender, provided that this Guarantee shall be issued by a bank or a financial establishment each of them licensed to work in Jordan. And upon submitting this Guarantee to the Employer, the Performance Guarantee shall be returned to the Contractor.

# Letter of Tender

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**Project: Environmental Impact Assessment study for the Petra Archaeological Park Museum.**

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**To: Messer's (The Employer):** -----

We have visited the Site and become acquainted with its surrounding conditions and we have examined the Conditions of Contract, Specifications, Drawings, Bill of Quantities, Appendix to Tender, the other Schedules and Addenda Nos.....for the execution of the above-named Works. We, the undersigned, offer to execute, complete, hand-over and remedy any defects there in conformity with this Tender which include all the above-mentioned documents, for a total sum ----- of Or such other sum as may be determined in accordance with the Conditions of Contract.

We accept the appointment of the Dispute Adjudication Board in accordance to 'Chapter Twenty' of the Contract conditions and we shall reach an agreement on assigning its members according to the Appendix to Tender.

We agree to abide by this Tender for a period of (30) days starting from Tenders submission date and it shall remain binding upon us and may be accepted at any time before the expiration of this period. We acknowledge that the Appendix to Tender forms part of this Letter of Tender.

If this offer is accepted, we will provide the specified Performance Security in accordance with Clause (4/2) of the Conditions of Contract, commence the Works at the Commencement Date, and complete the Works, hand it over and remedy any defects therein in conformity with requirements of the Tender Documents within the Time for Completion.

Unless and until a formal Agreement is prepared and executed this "Letter of Tender" together with the "Letter of Acceptance or Decision of award" shall constitute a binding contact between us.

We also understand that you are not bound to accept the lowest or any tender you may receive.

This offer is edited on day ----- month ----- year-----

Bidder's signature: ----- witness: -----

## Appendix to Tender

### **Project: Environmental Impact Assessment Study for the Petra Archaeological Park Museum.**

<b>Item</b>	<b>Clause No.</b>	<b>Data</b>
The Employer's Name: Address:	1/1/2/2 and 1/3	
The Engineer's Name: Address:	1/1/2/4	
The Contractor's Name: Address:	1/1/2/3 and 1/3	
Tender Guarantee	Instructions	( 5% ) Jordanian Dinars
Defects Liability Guarantee	Instructions	(-----) of the Contract Price
Time for Completion of the Works	1/1/3/3	( 45 ) Days from the Commencement Date
Defects Notification Period	1/1/3/7	(-----) Calendar Days
Governing Law	1/4	Jordanian Laws in effect
Time for access to the Site	2/1	(7) Days after Commencement Date
Amount of Performance Guarantee	2/4	(10%) of the Accepted Contract Amount
Quality Assurance System	4/9	Not Required Required
Normal working hours	6/5	(8) Hours a day, (6) days a week
Time for Commencement of Works after Commencement Date	8/1	(15) Days, this period is considered included in the Time for Completion
Amount of Delay Damages	8/7	( 100 ) JD per each delay day
Maximum amount of Delay Damages	8/7	(15%) of the Accepted Contract Amount
The period defined to the Taking Over Committee for Works of hospitals and power stations projects and the like	10/1	(28) Days
The Percentage rate to be paid to the Contractor of the disbursed Provisional Sum if it is not stated in the Schedules	13/5-b	(15%)



## Form of Tender Guarantee

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Project Name:----- Tender No: -----

To Messrs (The Employer): -----

We have been informed that the Bidder: (Company's Name) -----  
----- is submitting an offer for the above-mentioned project in response to the Invitation to Tender, and whereas, the tender conditions require that the Bidder shall submit a tender guarantee with his offer, and upon his request, our Bank: -----  
----- hereby irrevocably undertakes to pay you the sum of -----  
----- upon receipt by us of your first demand in writing and your written statement (in the demand) stating that:

- a. The Bidder, without your agreement, withdrew his offer after the latest time specified for its submission or before the expiry of its period of validity specified to be (30) days, or
- b. You awarded the Tender to him but he failed to sign the Contract Agreement in accordance with Clause (1/6) of the Conditions of the Contract, or
- c. You awarded him the Tender, but he failed to submit the Performance Guarantee in accordance with Clause (4/2) of the Conditions of the Contract.

Your demand must be received by us before the expiry of the Guarantee validity period determined to be (90) days, after which, it shall be returned to us. This Guarantee is subject to the laws in force in Jordan.

**Guarantor's signature / Bank:** -----

**Authorized to sign:** -----

**Date:** -----

# Form of Contract Agreement

Project Name: -----

Tender No: -----

This Agreement made the ----- day of the (month) ----- (year) ----2014----

**Between**

**The Employer Petra Development & Tourism Region Authority as the First Party**

**And**

**The Contractor .....as the Second Party**

**Whereas**, the Employer desires that the Works known as (.....) should be executed by the Contractor, and he has accepted the Bid submitted by the Contractor for the execution and completion of these Works and remedying of any defects therein and to hand it over in accordance with the Conditions of Contract.

## **The two Parties agree as follows:**

1. In this Agreement words and expressions shall have the same meanings as respectively assigned to them in the Conditions of the Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement:
  - a. The Letter of Acceptance -----
  - b. The Letter of Tender -----
  - c. The Addenda nos -----
  - d. The Conditions of Contract (Particular and General)
  - e. The Specifications
  - f. The Drawings, and
  - g. The Priced schedules (Bills of Quantities and other Schedules)
- 3- The Accepted Contract Amount .....  
Time for Completion .....
4. In consideration of the payments to be made by the Employer to the Contractor as per the Conditions of Contract, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein and to hand it over in conformity with the provisions of the Contract.
5. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price at the times and in the manner prescribed by the Contract.

**In Witness** where of the Parties here to have caused this Agreement to be executed the day and year first before written in accordance with laws in force.

**The Second Party (the Contractor)**

**The First Party (the Employer)**

<b>Signature: -----</b>	<b>Signature: -----</b>
<b>Name: -----</b>	<b>Name: -----</b>
<b>Occupation: -----</b>	<b>Occupation: --- Chief Commissioner ---</b>
<b>Witnessed by: -----</b>	<b>Witnessed by: .....</b>

## Performance Guarantee

To Messrs (The Employer):-----

We are pleased to inform you that our Bank: -----  
----- has agreed to give a Financial Guarantee to the Contractor: -----  
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**In pursuance of Tender No. (            /            )**

Related to the Project: -----for

An amount of: (JD            ) -----

As a security for the execution of the Tender awarded to him in accordance with the Conditions listed in the Contract Agreement Documents.

We undertake to pay you right after receiving your first written demand the said amount or any part you demand not withstanding any reservation or stipulation, provided that you mention the reasons for this demand that Contractor refused or failed to execute any of his duties in accordance to the Contract without any consideration to any objection or prosecution from the Contractor on the payment.

This guarantee shall remain valid from the date of its issuance until Taking-Over the completed Works in accordance with the Contract, which is initially to be on the -----  
----- day of the month of ----- of the year of-----  
unless extended or renewed upon the Employer's request.

**Guarantor's signature / Bank: -----**

**Authorized to sign: -----**

**Date: -----**

## **ACRONYMS**

ACOR	American Center for Oriental Research
EIA	Environmental Impact Assessment
EMMP	Environmental Management and Monitoring Plan
NGO	Non Government Organization
PAP	Petra Archeological Park
PDTRA	Petra Development and Tourism Authority
TOR	Terms of Reference
UNESCO	United Nations Educational, Scientific, and Cultural Organization

## **INTRODUCTION**

The archaeological site of Petra, located in the southern part of the Hashemite Kingdom of Jordan (hereinafter referred to as "Jordan"), is an internationally renowned cultural heritage and was inscribed as a UNESCO World Cultural Heritage Site on December 6th, 1985. It was also selected as one of the New Seven Wonders of the World in July 2007. The site is important to Jordan as a tourist attraction, attracting approximately 750,000 Tourists each year.

Petra is Jordan's number one tourists' attraction, and the largest archaeological park in terms of total area. It enjoys a wealth of cultural and natural history that justifies the need for a standalone museum in the Petra region. The PAP possesses an inventory of more than 10,000 artifacts, showcasing the several layers of park's history. The current coverage of Petra in museums across Jordan is only a fraction of what the history of Petra can potentially offer. The creation of the museum will help reveal a wider range of Petra's history that is not only limited to cultural values, but also offer significant artistic, ecological, geological, anthropological values.

However, there is no museum within or around the archaeological site of Petra aside from an extremely small-scale exhibition facility pretending to be a Museum on the west side of Qasr al-Bint. For that reason, there is a need and strong demand for a new museum facility for the appropriate preservation and exhibition of precious objects excavated or discovered in the archaeological site of Petra, while also promoting a better understanding of the site as cultural heritage and providing a point that will attract visitors to the Petra region.

The Petra Development and Tourism Authority (PDTRA) have already signed a \$7 million grant agreement with the Japan International Cooperation Agency (JICA) to establish a museum showcasing the antiquities of the Nabataean city of Petra. Under the agreement, which was signed by minister of planning and international cooperation and JICA representative in Jordan, the Japanese government will finance the establishment of a museum of antiquities outside the Petra Archaeological Park. Planned museum will boost tourism activity in the old city of Petra. For his part, JICA representative said the agreement was part of the agency's interest in preserving Jordan's historic and humanitarian heritage.

Based on the Jordanian environmental legislation, namely, the Environment Protection Law No. 52 of 2006 and EIA Regulation No. 37 of 2005, development projects need to conduct a form of environmental assessment. Under these laws, The EIA will be used by the relevant government authorities to monitor the impacts on the immediate environment during the life span of the project and will enable major stakeholders of the project, including the Government, to take the necessary actions to manage the environment.

This document presents the Terms of Reference (TOR) for conducting an Environmental Impact Assessment (EIA) by qualified environmental consultants (hereinafter referred to as the "Consultant") for the proposed Petra Museum. The EIA should meet the requirements of the Jordanian Ministry of Environment and be based on international best practice.

# **1. PROPOSED PROJECT**

## **1.1 PROJECT PROPONENT**

The Project Proponent is the Petra Development and Tourism region Authority whose address is:

Petra Development and Tourism Authority

Wadi Mousa, Jordan

Tel. +962-3 215 7093

Fax +962-3 215 4137

Contact Person: Mr. Nahar Rawadieh

E-mail: n.erawadieh@pra.gov.jo

## **1.2 PROJECT OBJECTIVES**

The project will be considered as a central base of conserving the archaeological sites and promoting tourism. The objective of this project is to provide a museum at the location adjoining the entrance to the Petra Archaeological Park in Wadi Musa, the project aims to strengthen the function of offering information regarding the importance of exhibiting the historical and cultural heritages as well as conserving the archaeological sites. Accordingly, it will promote and develop the attractive tourism industry as the region's tourism resources as well as contribute to creating job opportunities.

## **1.3 PROJECT DETAILS:**

The location of the museum was selected from several candidate sites, taking into account such indicators as the current land use, the relationship of traffic conditions and tourist flows, the available area for the museum, cost, etc. Based on this evaluation, the area located in the northern part of the PAP Visitors Centre was selected as the final candidate.

The environmental conditions should be monitored during both construction phase and operation phase of the proposed Petra Museum.

The tentative environmental monitoring plan should be prepared based on the detailed design and the construction plan before implementing the project.

In order to develop the Petra Museum project, the next steps that need to be taken are the following;

- To submit a project basic design and an initial environmental consideration report to the Ministry of Environment, and confirm the EIA category and conduct necessary environmental surveys.
- To explain the project basic design and the initial environmental considerations to the stakeholders such as the advisory committees, JICA, UNESCO, and other related authorities of this project.

## **2. OBJECTIVES OF THE ENVIRONMENTAL IMPACT ASSESSMENT**

PDTRA plans to implement the project on an environmentally-sound basis. The

Environmental Impact Assessment (EIA) will ensure that potential impacts are identified and assessed at an early stage in the project development. The EIA process should inform the planning and design of the project and be based on the most recent project information and data.

The EIA will be conducted to meet the Jordanian environmental legislation requirements, JICA's environmental and social considerations, and to consider UNESCO requirements related to development within buffer zone. It will demonstrate to the Ministry of Environment that all potential environmental and socio-economic impacts have been accounted for through a systematic process of identification and assessment and that safeguards have been developed to ensure that adverse impacts are mitigated.

## **3. GENERAL REQUIREMENTS FOR THE EIA**

**3.1** The EIA should cover all the stages of project development; namely, planning and design, construction, operation phase, and the decommissioning phase.

The EIA report should be produced as a stand-alone document. It should contain sufficient information on the proposed Petra Archaeological Park Museum Project to the extent that will avoid the need to search out previous or supplementary reports by the EIA reviewers.

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**3.2** Information provided in the EIA should be clear, succinct, objective and, where appropriate, be supported by maps, diagrams or other descriptive detail. The purpose of the documents is to enable the reviewer(s) as well as stakeholders to properly understand the environmental consequences of the proposed project and assess the effectiveness of the impact mitigation measures.

**3.3** The EIA should refer, by suitable appendices, to all relevant studies/investigations that may have been carried out. This documentation should be made available on request.

**3.4** An Executive Summary shall be provided in the EIA and be available separately for public information. The Executive Summary will be prepared in English as well as Arabic.

**3.5** The level of analysis and detail in the EIA shall reflect the level of significance of the impacts identified by the EIA.



## 4. SCOPE OF WORK

The following issues must specifically be addressed by the EIA:

### 4.1 EIA OBJECTIVES AND Project ALTERNATIVES

**Objectives** of the Environmental Impact Assessment study for the Petra Archaeological Park Museum project and the relationship of the proposal with the existing arrangements at PAP.

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### 4.2 PROJECT DETAILS (DESCRIPTION OF THE PROPOSED PROJECT AND ITS Construction and Operation ACTIVITIES)

### 4.3 DESCRIPTION OF THE ENVIRONMENTAL BASELINE CONDITIONS

A description of the existing environmental conditions in the area located within the influence of the project (project influence area). This would include but not be limited to the following:

- Ambient air quality and noise environment
- Ecology and biodiversity
- Soil, topography and geology
- Water resources and hydrology
- Cultural Heritage

### 4.4 ENVIRONMENTAL IMPACTS

The potential impacts of the significant issues (as determined during the EIA scoping stage) during the planning and design, construction, operation and maintenance and decommissioning stages of the Museum project shall be covered in the EIA. When some impacts are not quantifiable, they should be fully described. Where applicable, safeguards and mitigation measures to ameliorate the impacts should be proposed with an objective assessment of their effectiveness. Proposals for monitoring of impacts should also be included where appropriate. Legislative restrictions applicable to the physical impacts are to be detailed.

#### A. Bio-Physical Impacts

This will involve impacts on the biological and physical environmental components of the project site including the following:

**Natural and Conservation Areas** – direct or indirect impacts on any natural or conservation areas or habitats for important species.

**Flora and Fauna** – any likely impacts on local flora and fauna especially where new structures/facilities will be constructed.

**Vegetation Clearance** – clearance requirements and amount of natural vegetation affected. Information on possible mitigation measures such as compensatory vegetation and tree planting should be included.

**Air Quality and Noise** – considering the existing background air quality and noise levels in the project area; any increase of air pollutants or noise during construction and operation activities should be identified and assessed.

## **B. Other impacts**

### **Socio-Economic Impacts**

Assessment of the socio-economic impacts should examine how the Petra Archaeological Park Museum will affect the community surrounding the project area and how it is expected to benefit the people living there.

**Property Acquisition and Compensation** – likely impacts on the land use status of the area including compensation for any possible acquisition of plots.

**Land Use** – potential site specific and cumulative impacts of the Petra Archaeological Park Museum on the existing and potential land use of PAP as a UNESCO World Heritage Site.

**Visual Impacts** – visual impacts of the Petra Archaeological Park Museum, and changes in the aesthetic quality of the area.

**Health and Safety Risk** – assessment of the potential risk on public health or safety from the Petra Archaeological Park Museum. This may be associated with occupational health and safety risks, deteriorated air quality, increased noise levels, accidents, etc.

**Existing Traffic and Movement** – potential impacts on traffic and tourist movement during the construction and operational phases of the project.

## **4.5 CONSULTATION**

Input from key stakeholders including community groups and individuals should be collected through consultations and addressed in the EIA. Consultation should include but not be limited to:

PDTRA

Ministry of Tourism and Antiquities - Department of Antiquities

JICA

Ministry of Environment

Representatives of tourist bus and taxi drivers

Representative of tour operators and agencies

Local community representative groups

UNESCO

## **4.6 SPECIFIC EIA TASKS**

The EIA process shall involve tasks that need to be completed in order to fulfill the requirements for the environmental impact assessment. These shall include but not be limited to the following:

- Review all relevant information, reports and data covering the proposed Petra Archaeological Park Museum and the project's area of influence;

- Examine the site of the proposed project and identify its main environmental and socio-economic features;
- Identify stakeholders and parties who may be affected by the construction and operation of the Petra Archaeological Park Museum project and conduct consultations with them to obtain their feedback;
- Describe the context, components and activities of the Petra Archaeological Park Museum as they relate to the surrounding natural and socio-economic environment;
- Identify any project alternatives;
- Identify and assess key positive as well as adverse environmental and socio-economic impacts that may result from the construction, operation, and decommissioning of the Petra Archaeological Park Museum Project including impacts (if any) which might significantly affect the implementation of the project;
- Identify, assess and develop appropriate and practical mitigation measures to avoid or minimize the adverse environmental impacts including any planning and design modifications that may be needed. Evaluate if significant environmental impacts can be reasonably and cost-effectively mitigated during the construction and operational phases;
- Describe the relevant environmental legislation applicable to the project and the site;
- Identify the environmental monitoring parameters that may be needed during construction and/or operation;
- Coordinate with other project consultants working on the feasibility/design and provide input on environmental issues during the development of the Petra Archaeological Park Museum project design; and
- Coordinate with the Project Proponent to clarify any issues as needed.

## **5. EIA CONSULTANT**

**5.1** The Consultant shall provide information on the qualifications and track record of his team who will be conducting the environmental impact assessment.

**5.2** It is the responsibility of the Consultant preparing the Environmental Impact Assessment to identify and address, as fully as possible, all matters relevant to the Environmental Impact Assessment study for the Petra Archaeological Park Museum project. There may be issues other than those raised or mentioned in these Terms of Reference which will be the responsibility of the Consultant to consider in the EIA.

**5.3** It is the responsibility of the Consultant preparing the Environmental Impact Assessment to determine in conjunction with PDTRA those parties which should be consulted during the EIA preparation stage in addition to those mentioned in these Terms of Reference.

## **6. EIA PHASES**

The Environmental Impact Assessment Study shall encompass the following two phases in accordance with the Ministry of Environment's requirements:

### **Phase 1 - Environmental Scoping**

The main purpose of this phase is to determine the scope of the EIA and identify the significant issues that will be examined in greater depth in the EIA. Scoping will present the methodology for conducting the EIA and the timeframe for completing it. The scoping stage will identify viable project alternatives.

A scoping session involving the key stakeholders should be conducted to identify the main concerns and issues, assess the significance of the project's impacts on the environment and affected community. A scoping report will be prepared at the conclusion of this stage which shall contain the proposed terms of reference for conducting the EIA. The report shall be submitted to the Ministry of Environment for review and approval.

The Consultant shall prepare any necessary documentation for the purpose of supporting the scoping session (e.g. pre-scoping documentation, presentation). If necessary, part or all of this documentation shall be prepared in Arabic, in particular for the purpose of involving the local community.

## **Phase 2 - Environmental Impact Assessment**

This phase will involve the collection of detailed information, analysis of data, identification and assessment of anticipated environmental impacts for each of the alternatives and determination of the preferred alternative, in addition to developing adequate and suitable mitigation measures for the preferred alternative. This stage will proceed based on the TOR and methodology presented and agreed upon in the scoping report. It will conclude with the preparation of the environmental impact assessment report.

## **7. DELIVERABLES**

### **7.1 Scoping Session(s) and Scoping Report**

The Consultant will prepare a pre-scoping document which will be submitted and approved by PDTRA in advance of the scoping session. This document will be circulated ahead of and for the purpose of preparing the participants for the scoping session. The scoping session(s) is considered as a required deliverable.

At the conclusion of the scoping phase, a draft scoping report will be produced and submitted to all participants/stakeholders for review, comment and feedback within one week. Comments or suggestions made on the draft scoping report will be taken into consideration in producing the final scoping report which shall then be submitted to the Ministry of Environment (in coordination with PDTRA) for review and approval.

### **7.2 EIA Report**

The Consultant shall prepare an EIA report outlining all the tasks described in the Scope of Work above. The report will first be prepared in draft form then submitted to PDTRA. It will be finalized by the Consultant after receiving comments (if any) from PDTRA. Upon PDTRA's approval of the draft EIA report, the Consultant will submit the draft EIA report to the Ministry of Environment for review and approval., The consultant will be amend the EIA report based on MOE comments.

The following report structure is suggested but the Consultant is at liberty to use any other suitable report organization whilst still fulfilling the requirements of the Jordanian EIA by-law No. 37 for the year 2005 and PDTRA prior approval:

- Section 1: Background, Objectives and Methodology of Preparing the EIA
- Section 2: Description of the Proposed Project and its Components
- Section 3: Policy, Legal and Administrative Framework

Section 4: Baseline Environmental and Socio-economic Conditions  
Section 5: Identification and Assessment of Environmental and Socio-economic Impacts and  
Section 6: Mitigation Measures  
Section 7: Environmental management and Monitoring Plan  
Section 8: Conclusion and Recommendations  
Section 9: Annexes

It should be noted that Section 5 above will include the identification and assessment of impacts on cultural heritage and the necessary mitigation measures.

A non-technical executive summary is required which shall be prepared in English and Arabic, presenting the EIA's key findings, conclusions and recommendations.

### **7.3 Progress Reports**

Every one week, the Consultant shall prepare and submit to PDTRA a progress report that briefly shows - among other information - work progress, planned tasks and any unresolved issues. The EIA Consultant is required to keep close contact and fully coordinate the EIA process with PDTRA.

### **7.4 Presentations**

The Consultant is expected to make presentations to PDTRA and/or the Ministry of Environment at the two key milestones (Scoping Phase and EIA Report Phase) outlining key findings and presenting recommendations.

## **8. EIA WORK SCHEDULE**

The Environmental Impact Assessment study for the Petra Archaeological Park Museum project shall be completed within a period of ten (10) weeks from the date of commissioning the study. Scoping stage and the submission of the scoping report should be completed within a period of (4) weeks from the date of commissioning of the study.

## **9. INSTRUCTIONS FOR PREPARING FINANCIAL OFFER**

This section will provide instructions for the preparation of the financial proposal in order to ensure uniformity in comparing financial proposals by the different offerors. For example, the offeror may be requested to provide a breakdown of costs in terms of labor (LoE and daily rates), meetings, data collection, etc. for each of the EIA stages.

## **10. PROPOSED RFP SCHEDULE**

This section will present a suggested RFP schedule. For example:

- Expression of Interest: (pre-qualification stage), this may include company credentials, and identification of key qualifications for key personnel and project leader, and any other required documentation in order to shortlist qualified companies
- Request for Clarifications: questions submitted by interested parties
- Response to Requests for Clarifications: response by PDTRA
- Submittal of Technical and Financial Proposals (these should be submitted in separate envelopes, each marked clearly as:

“Environmental Impact Assessment Study for the Petra Archaeological Park Museum: EIA Technical Proposal” / Name of Offeror”;

And

“The Environmental Impact Assessment Study for the Petra Archaeological Park Museum: EIA Financial Proposal” / Name of Offeror”

The offeror is required to submit to PDTRA three original copies of each of the technical and financial offers

The following table provides a summary of suggested schedule with the date and time to be filled by PDTRA upon releasing the RFP.

	Date	Time
RFP Release Date	8/6/2014	
Clarification meeting and site visit	18/6/2014	10:00 AM
Deadline to receive written inquiries	22/6/2014	3:00 PM
Deadline to answer written inquiries	23/6/2014	1:00 PM
Deadline for submitting proposal	25/6/2014	12:00 AM
Tender opening session	25/6/2014	12:00 AM
Award of RFP	2/7/2014	

## 11. AVAILABLE REPORTS AND REFERENCES

- Environmental Impact Assessment, prepared for PDTRA by Japan International Cooperation Agency (JICA) October 2013
- Draft report for Preparatory Study on Cooperation in the Petra Museum Development Project January 2014.
- Archaeological Survey
- Statistics for the visitor number from 2010 to 2014 (Daily ,Monthly and yearly)
- Traffic Management Plan and survey

## **1. General information**

THE EXISTING Petra Archaeological Park Museum

The government of Japan (through JICA and with cooperation with PAP will perform the following:

- Archaeological Survey
- Preparation of an outline design of the Project
- Traffic Survey

### **1.1 Study area**

The target area for the analysis of current environmental conditions is Petra Region, Wadi Musa and PAP in particular. The target area for the environmental impact evaluation is the Project site and the Project itself.

### **1.2 Methodology of the Study**

The study method will follow the Jordanian Environmental Impact Assessment (EIA) Bylaw 37 of 2005 is also referred.

## **2. Analysis of Current Conditions**

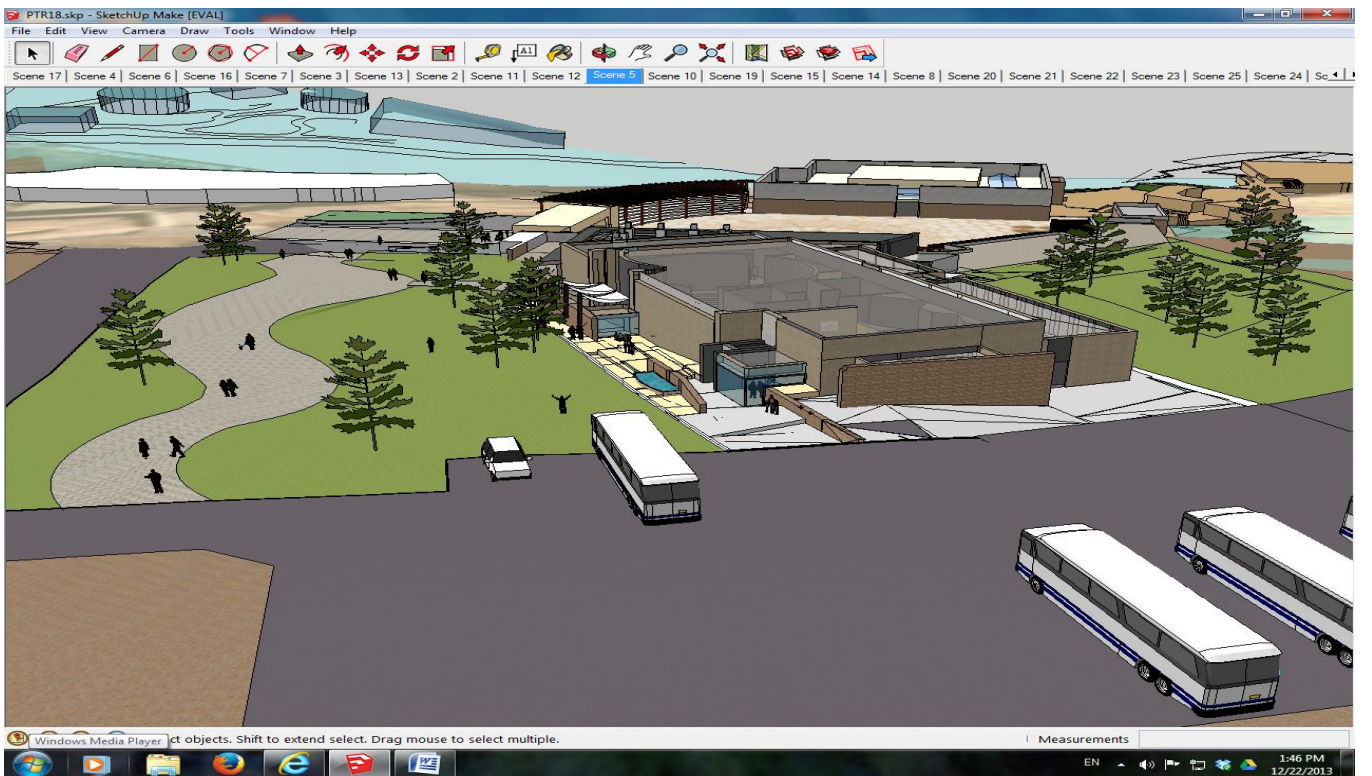
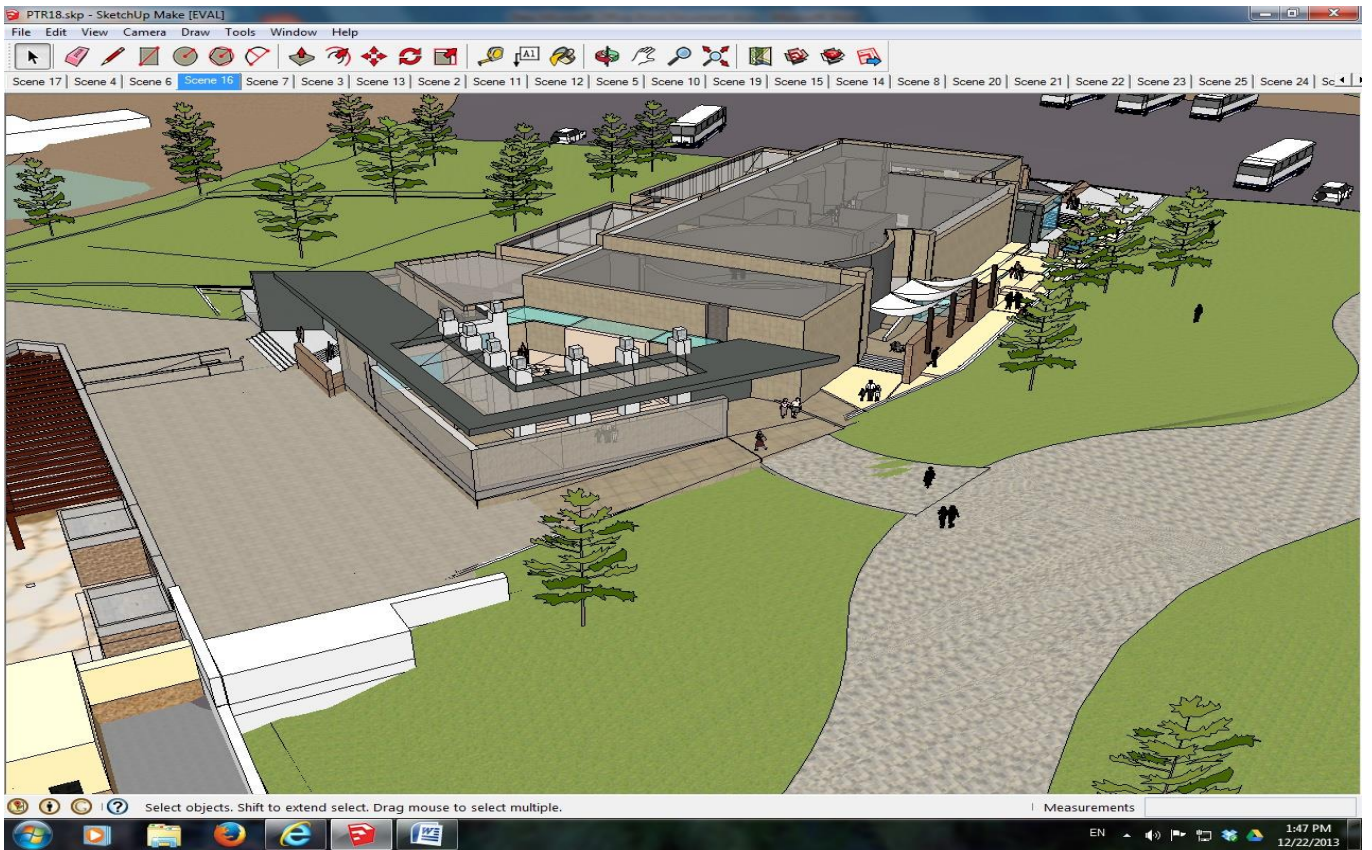
2.1 Collection of data and analysis of current conditions will include not only the Project Area but also all over Petra Region. To understand the condition of Project Area,

### **Evaluation of the Environmental Impact**

Brief identification of potential impacts/scoping for the Project .Identified negative impacts are; air quality, water quality, waste, noise, ecosystem, water usage, existing social infrastructures (traffic jam), landscape, etc. However, if these negative impacts are temporary or limited, and how we can be minimized by implementing mitigation measures. Detail evaluation will be conducted for the negative impact mainly.









## **2. CONSULTANT'S SCOPE OF WORK**

The scope of work for the Consultant will include the following tasks:

### **1. EXISTING CONDITIONS**

Study the existing conditions of the PAP museum with a view to assess the risks and limitations faced in using this location or the proposed. This would include the following:

### **2. EIA AND OUTSTANDING UNIVERSAL VALUE OF THE SITE**

The Consultant is required to review and study the Environmental Impact Assessment (EIA) and take into account its results and findings in his scope for the road rehabilitation study. The protection and conservation of the natural and cultural value of the site is paramount. The Consultant should determine the areas that need to be rehabilitated and avoid any adverse effects on the natural, visual or archaeological character of the area.

### **3. OVERALL APPROACH: LOW IMPACT AND MINIMUM INTERVENTION**

Environmental impact is to be avoided and work undertaken in compliance with the EIA's recommendations, before and during construction.

### **4. CONSULTANT'S QUALIFICATIONS**

It is expected that the Consultant's staff will include, at a minimum, the following key positions:

Position / Specialty	Minimum Years of Experience
Environment Specialist	10 years
Geotechnical and Soil Engineer	7 years
Drainage Engineer	7 years
Land Surveyor	5 years
Cultural Heritage Specialist	10 Years

### **5. DELIVERABLES AND TIMETABLE**

The following reports will form the deliverables throughout the study duration: