

## CONSTRUCTION SUPERVISION CONSULTANT (CSP-2)

### TERMS OF REFERENCE FOR CONSULTANTS

#### A. Introduction

1. Project 1 refers to the scope included in the first tranche of the Investment Program. The output of Project 1 will be about 129 km of constructed highway sections between Taraz and Korday in Zhambyl Oblast. Road Development Component will comprise civil works (roads and bridges) on the following sections:

- (i) **Road Section between Km 404 and 483 (Section 3).** Civil works in this section will neither involve land acquisition and involuntary resettlement nor create significant environmental impacts. This construction is to meet four-lane international design standard within the existing right-of-way.
- (ii) **Road Section between Km 210 and 260 (Section 6).** Civil works in this section will not involve land acquisition and resettlement nor create significant environmental impacts. This reconstruction is to meet two-lane international design within the existing right-of-way.

2. Civil works will be carried out based on the International Federation of Consulting Engineers (FIDIC) contract. A consultant team will be engaged for the Investment Program to perform as the Engineer. The consultant will administer the construction contracts and ensure that the contractual clauses for both quality and specifications of work are complied with, and the works are constructed in accordance with the provisions of the construction contracts. The Engineer's representative will be a full-time professional resident engineer in the project area in accordance with the provisions of the construction contracts.

#### B. Scope of Services

3. The tasks of the consultant will include but not be limited to the following:

- (i) Ensure that the construction methods proposed by the contractor for carrying out the works are satisfactory.
- (ii) Inspection of contractor's construction equipment, results of material and soil tests, safety of the works, property and personnel.
- (iii) Ensure that road safety design requirements are implemented in accordance with the contract.
- (iv) Establish efficient procedures for verifying contractor performance and reporting progress and problems in a timely manner, including quality control reports, quantity survey records, requests for variation or change orders, and contractor's claims and invoices.
- (v) Undertake project performance monitoring and evaluation in accordance with the project framework and ADB's *Project Performance Management System Handbook*, including the baseline data survey and the following annual survey and reporting up to project completion.
- (vi) Ensure that the contractor does not involve child labor in the execution of the civil works contracts in accordance with the provisions of the contract agreement.
- (vii) Undertake supervision works; and prepare and issue the following reports, whose format and content should be acceptable to the employer: an inception

report, a brief monthly progress report, a detailed quarterly report, and a detailed project completion report.

- (viii) Review and verify any proposed change orders to be generated by the contractors and make recommendations to the EA.
- (ix) Check that “as built” drawing is prepared by the contractors for all works as construction processes.
- (x) Carry out the following duties related to environmental mitigation, with particular reference to the technical requirements of sound environmental standards on the basis of ADB’s *Environmental Guidelines for Selected Infrastructure development Projects (Highways and Roads)* during construction: (a) ensure that all the environmental mitigation measures required to be implemented are incorporated in the contract documents; (b) supervise and monitor the implementation of environmental mitigation measures required; and (c) in the event of occurrence of any unexpected environmental impacts, coordinate with the EA/PD to provide necessary mitigation measures for submission to the Committee of Roads and ADB.
- (xi) Monitor contractors’ compliance with and performance of required actions regarding HIV/AIDS, human trafficking, and labor core standards in accordance with the contract documents, such as awareness and education of laborers and workers.
- (xii) Prepare draft project completion report at 90% physical completion.
- (xiii) Prepare final project completion report 2 months after physical completion of the Project, or on an alternative date as agreed with the Road Fund.
- (xiv) Process interim and final payments of the contractors.
- (xv) Any other tasks assigned by the committee of Roads consistent with the above scope.

4. If so required by Project Director, the supervision consultant will provide any of the following as additional services: (i) prepare reports, including technical appraisals, additional contract documentation, and/or review and comment on the contractor’s proposals, as may be required for the successful completion of the Project; and (ii) provide any other specialist services as may be required from time to time.

5. Project Director will authorize all additional services, other than minor extras that do not materially affect the scope of the supervision work, at the rates established in the construction supervision contract, or at the rates mutually agreed upon when the services require the use of specialists not listed in the contract.

### **C. Input**

6. The services will be carried out by international firms in association with national consultants, to be selected by the EA in accordance with ADB’s *Guidelines on the Use of Consultants* (2007, as amended from time to time). A total of 94 person-months of international consultant inputs and 504 person-months of national consultants will be required.

7. Consulting services are expected to take place over 42 months. The team leader will be a senior civil engineer with sufficient experience in road construction. The other experts should also have relevant qualifications and experience. All experts, international and national, must be proficient in both written and spoken English. It is desirable for international consultants to have basic knowledge of Russian.

### Proposed Staffing

Position	No.	Person- Month	Position	No.	Person- Month
Resident engineer	1	42	Assistant resident engineer	3	126
Quality and material engineer	1	42	Quality and material engineer	3	126
Short-term Specialists (pavement engineer- 2 pm, contract specialist-2 pm, social development specialist-2 pm, environmental specialist-2 pm, road safety- 1 pm and bridge engineer- 1 pm)	6	10	Quantity Surveyor	3	126
			Site inspector	3	126
<b>International Consultants</b>	<b>8</b>	<b>94</b>	<b>National Consultants</b>	<b>12</b>	<b>504</b>

Source: MOTC and ADB Staff estimates.

8. The consultants will maintain a central office in Taraz, Zhambyl Oblast Capital, for the duration of the Project 1. The consultant's staff will be based in Taraz but will be expected to travel to Astana when required.

#### **D. Deliverables**

9. The consultant will prepare monthly reports on the Project progress in a format and level of detail agreed with MOTC and ADB. The consultant will maintain records documenting information supplied by the field teams, decisions made at meetings, progress on civil works, certified achievements and milestones, financial records, and any deviations from or changes to the contract plans. The consultant will assist MOTC in preparing quarterly project progress reports, a project completion report, and monitoring and evaluation reports as required under the Loan Agreement.