

TANZANIA NATIONAL ROADS AGENCY  
MSIMBAZI BASIN DEVELOPMENT PROJECT  
**CONSTRUCTION OF JANGWANI BRIDGE**

**TERMS OF REFERENCE**  
**FOR**  
**CONSULTANCY SERVICES OF THE BRIDGE/STRUCTURAL**  
**ENGINEER TO SUPPORT IMPLEMENTATION OF JANGWANI BRIDGE**  
**PROJECT**

**1.0 BACKGROUND**

The Government of the United Republic of Tanzania has received financing from the International Development Association (IDA) in the form of Credit toward the cost of Msimbazi Basin Development Project (MBDP) which among others covers construction of Jangwani Bridge and associated infrastructures.

Tanzania National Roads Agency (TANROADS) under the Ministry of Works and Transport is responsible for implementation of Jangwani Bridge project. The project is being implemented using one Works Contract and one Supervision Consultancy Contract. TANROADS intends to apply a portion of the proceeds of this credit for eligible payments under the contract of the Project Manager to support implementation of Jangwani bridge project

In order to manage properly implementation of the Project, TANROADS looks for a dynamic, motivated, creative and open-minded professional to support management of the project in the capacity of Bridge/Structural Engineer for which this Terms of Reference is concerned.

**2.0 OBJECTIVES OF ASSIGNMENT**

The objective of the assignment is to support TANROADS in implementation of the Project particularly reviewing works requirements (designs, specifications as well as schedule of quantities) and monitoring adherence to requirements during construction.

**3.0 SPECIFIC OBJECTIVE OF THE ASSIGNMENT**

Specific objective of the assignment is to monitor adherence to conditions of contracts (designs, surveys drainage structures) and standard procedures for measurements of structures by Consultants and Contractors to enable execution and completion of project with within agreed time frame, cost and quality.

**4.0 SCOPE OF SERVICES**

The Bridge Engineer shall be responsible for assessing construction and

monitoring that compliance with the Contract Specifications and Contracts provisions in bridge and structural works associated with road works and Bus Rapid Transit infrastructures are maintained. The Bridge/Structural Engineer shall also be monitoring standard procedures specified in the Contract Documents and ensure that only best practice and standard methods of construction are observed in the construction.

In particular, the Bridge/Structural Engineer will be required to undertake inter alia the following tasks:

- 4.1. Participate in reviewing the design of works.
- 4.2. Assessing and ensuring that survey, setting out and construction of structures including drainages are carried out according to design and conform to the contract provisions,
- 4.3. Making sure that works quality assurance system is fully followed and implemented.
- 4.4. Assess and monitor measurements of Structures items on site for compliance with standard procedures for Measurements prior to certification of the same for payment.
- 4.5. Assess Contractor's Work methodology in line with Contract specifications and bring up shortfalls that may result to poor quality of Works for timely intervention pursuant to the Contract provisions.
- 4.6. Conduct site visits and inspect the works for conformity with Contract provisions and identify problem areas and reporting the same to the Project Manager / Employer with advice on remedial measures.
- 4.7. Attending regular site meetings and ensuring that the proceedings are adequately recorded.
- 4.8. Ensuring that design review of structures including take off-sheets is done and submitted as scheduled.
- 4.9. Ensuring that as-built drawings for structures are done continuously throughout the construction time.
- 4.10. Review Works progress reports and other ad hoc reports submitted by Consultants and Contractors.

## **5.0 Qualifications and Experience**

### *a) Education:*

- (i) The Bridge/Structural Engineer must be a registered professional Civil Engineer with a Bachelor Degree in Civil Engineering.
- (ii) A Postgraduate qualification in Bridge/Structural Engineering will be an added advantage.

b) *Working experience:*

- (i) She/he must have a minimum of seven (7) years' experience related to construction supervision of bridges/structures in road projects.
- (ii) She/he must have been involved as a Bridge/structural Engineer in at least one (1) project in urban environment.

c) *Language and regional experience:*

- (i) Must have a minimum working experience of at least three (3) years in developing countries and
- (ii) Proficiency in written and spoken English is mandatory.

## **6.0 FACILITIES TO BE PROVIDED BY TANROADS**

The Employer will provide the following facilities to the staff:

- 6.1 Shared office accommodation including office furniture and equipment;
- 6.2 Work-related transport to and from project sites;
- 6.3 Relevant information and documents necessary for proper execution of the assignment;

## **7.0 DURATION OF SERVICES**

### **7.1. Duration**

Duration of assignment will be Three Years (36 Months) with possible extension if need arises.

### **7.2. Termination**

The Contract may be terminated before expiry of the duration of the assignment, in accordance with provisions of Employment and Labour Law Act No. 6 of 2004 of the United Republic of Tanzania.

## **8.0 RESPONSIBILITIES OF BRIDGE ENGINEER**

The Bridge Engineer shall be responsible for the following:

- 8.1 All information, data and reports obtained from TANROADS shall be treated as confidential.
- 8.2 All plans, drawings, specifications, designs, reports, other documents and software prepared by the Bridge/Structural Engineer for TANROADS under this Contract shall become and remain the property of TANROADS, and the Bridge/Structural Engineer shall, not later than upon termination or expiration of this Contract, deliver all such documents to TANROADS.

8.3 Arranging and paying for his/her own accommodation.

## **9.0 REPORTING**

9.1. The Bridge/Structural Engineer will report to the Project Manager responsible for Project under the Director of Projects.

9.2. The Bridge/Structural Engineer will be required to provide inputs on progress of Works and all technical issues, to regular and ad hoc reports prepared by TANROADS.

9.3. The Bridge/Structural Engineer will prepare a brief report in each month, summarizing activities performed by him/her on daily basis; the report shall be in a format to be agreed by the Project Manager.

## **10.0 LEAVE AND WORKING HOURS**

### **10.1. Working Hours**

10.1.1 Ordinary working period starts from 8:00 AM to 4:30 PM commencing Monday to Friday excluding public holidays;

10.1.2 The Bridge/Structural Engineer will be expected to work on reasonable extra time when need arises at no additional payment; the Bridge/Structural Engineer's remuneration shall be deemed to cover for such overtime.

### **10.2. Leave**

10.2.1 The Bridge/Structural Engineer will be entitled to twenty-eight (28) days paid annual leave during the assignment.

## **11 PAYMENT TERMS**

11.1. The Bridge/Structural Engineer shall negotiate with TANROADS and agree on remuneration for carrying out the assignment. The agreed remuneration shall be paid on monthly basis. The agreed remuneration shall cover all costs and profits, including social securities, health insurances, pension, as well as any tax obligation that may be imposed on the Bridge Engineer.

11.2. In case of travel requirements outside TANROADS HQ and within Tanzania for project-related assignments, the Bridge Engineer shall be paid travel expenses in line with the Government rules and procedures.

11.3. Payment to the Bridge/Structural Engineer will be fixed for the duration of the assignment.

## **12 DUTY STATION**

Dar es Salaam (TANROADS HQ offices), Tanzania. with possibility of TANROADS HQ Offices to move to Dodoma mid-way the Contract