

Title	Senior Bridge Maintenance Engineer
Vacancy Number	MOPW/SRTAP/1400-20
Ministry	Ministry of Public Works
Organization	Road Maintenance Directorate
Project	Sustainable Reform & Technical Assistance Project (SRTAP)
Duty Station	Afghanistan (Various Provinces)
Duration	1 Year (with possibility of extension)
No of Jobs	2
Nationality	Afghan
Sex	Male/Female
Salary Range	According to NTA Salary Scale (C-2)
Announcing Date	03/May/2021
Closing Date	15/May/2021
Job Type	Engineering
Shift	Full Time
Experience	+8 years

Background:

The Ministry of Public Works (MoPW) is responsible for the planning, design, procurement, implementation, monitoring, and maintenance of the various transportation infrastructure projects such as bridges, and its relevant drainage and retaining/protection structures in the government of the Islamic Republic of Afghanistan.

Therefore, to enhance the capacity to strengthen its ability to deliver effective, efficient and transparent services in MPW the Human Resource Directorate wishes to recruit the following staff on contract basis from development Budget for the Ministry of Public Work (MPW)

Scope of Work/Job Summary:

MPW is looking to recruit a Senior Bridge Maintenance Engineer with extensive experience in a wide range of civil construction activities including, but not limited to, building, maintenance, and repair of bridges, drainage structures, retaining walls, and culverts. The incumbent must have a thorough understanding of the international and local design and construction codes/regulations/standards. The incumbent will function as a member of the operation and maintenance team where He/She provides technical inputs and Supports technical and engineering personnel with project support duties.

The potential candidate will remain active through all project phases and should work in close coordination with the senior management in MPW. He/ She must directly report to the Senior Engineers/Consultants of the team.

The Senior Bridge Maintenance Engineer will carry out the following

Duties & Responsibilities:

- Responsible for the provision of technical supervision and quality assurance for all project activities.
- Supervise the work of consultants, including the quality and appropriateness of work and adherence to technical specifications.
- Continuously follow up the on-going projects and coordinate with the contract management unit of the MPW.
- Recommend an appropriate institutional structure for a Ministry of Public Works to manage the maintenance of overall bridges,
- Monitor the implementation of the works by conducting site visits and providing guidance for improvement and good results;
- Develop training programs and conduct training to enhance technical expertise and skills of MPW Civil Servant counterparts, contractors.
- Conduct frequent site visits to ensure that maintenance activities in place with quality control and quality assurance and the contractors perform their tasks as per technical requirement. And verify all payments of maintenance works and forward it to relevant sections.
- Review QA/QC site visit and materials testing reports to ensure sampling, testing and inspection of materials are carried out regularly and works are implemented in compliance with design specifications;
- Monitor the construction of foundations of bridges and culverts. Ensure QA/QC Engineers are undertaking testing of safe bearing pressures;
- Implement a QA/QC Management System and ensure that it is being applied in a fair and equitable manner.
- Ensure project implementation is in adherence to relevant guidelines, procedures and policies.
- Facilitate and maintain a working relationship with the MPW Staff to keep them updated and fully informed regarding project implementation and development.
- Observe and regular monitor the bridge under traffic, for excessive deflection and vibration.
- Check the bridge for damaged, missing deformed, corroded or decayed members, and assess significance.
- Check underside of concrete deck for cracking, adequacy of cover to reinforcement, evidence of corrosion in reinforcement etc.
- Ensure to apply certain inspection procedures including, examination for excessive or abnormal movements, the incidence of cracking and the occurrence of accidental damage in the form of distortion, buckling and removal of structure material.
- Ensure and check the foundation for unforeseen movements, differential movements, deterioration of structural material, corrosion cracking, and fungal deterioration.
- Check for cracks between adjoining wing walls or in the abutment and the end beams or in the abutment itself, and inadequate or abnormal.
- Regular check and monitor of cracking, scaling, spalling, reinforcing corrosion, leaching, porous concrete excessive deformation in concrete deck and slab.
- Check and monitor the expansion to ensure loosening or movement of joint, irregularities of vertical profile, drainage of water through joints, and asphalts overlay over joint.
- Plan and conduct field surveys to locate new sites and analyze details of project sites and Data collection.
- Report maintenance problems occurring at project site to supervisor and negotiate changes to resolve system conflicts.
- Investigate causes of asset defects and propose efficient and effective repaired options
- Analyze proposed site factors and design maps, graphs, tracings, and diagrams to illustrate findings.
- Maintain records, with support of the administrative assistant, on technical and financial aspects of project operation, including monitoring of project activities and their outcomes; as well as minutes, decisions and recommendations of meetings and workshops;
- Demonstrate a comprehensive knowledge of currently adopted design and construction procedures and approaches for bridges and operation and maintenance projects in Afghanistan;
- Assist in overall operation and maintenance activities relate to items, materials, processes,

- equipment, methods, designs, and engineering practices applied on bridges;
- Share expertise related to all aspects of designing, building, and maintaining bridge structures;
- Prepare timely and quality project progress and implementation reports for submission to Operation and maintenance senior management.
- Prepares technical reports, datasheets and documents under the direction of senior engineers/consultants.
- Provide bridge and major culvert service level that ensures safety, integrity of the structure and satisfies community and economic needs
- Perform other functions related to required or assigned by the senior management.

Skills & Competencies:

- Must know bridges construction mechanisms, materials, and machinery;
- Able to analyze survey reports, maps, technical drawings, and other topographical or geological data;
- Must be familiar with pre-stress and post tension bridge design
- Must be able to deliver cost effective structures/bridges designs
- Strong technical background and working knowledge of structure design and construction work
- Good analytical capability and attention to detail within calculations, checking and summarizing.
- Ability to interpret engineering documentations such as drawings, specifications, scope of works, etc.
- Excellent working knowledge for preparing the bridge design drawings and site-specific structure design drawings in all phases of engineering design.
- Have strong computer knowledge of Road Software (e.g., AutoCAD Civil 3D) and Spreadsheets,
- Have strong knowledge of AutoCAD, and performing material takeoffs with CAD.
- Ability to work effectively and harmoniously with colleagues from varied cultures and professional backgrounds.
- Excellent English skills, both written and verbal. Fluent in Pashtu and Dari, both written and verbal.
- Familiar with local, regional, and international standards, including MPW standards, IRC, AASHTO, ASTM;
- Hands-on experience with MS Office, Auto CAD, Civil 3D, etc. and ability to use modern survey instruments;
- Highly motivated and enthusiastic team player with a strong desire to succeed;
- Able to manage conflicting priorities Demonstrate leadership in handling and working with multidisciplinary teams.
- Highly knowledgeable in the practical application of technical requirements of bridge construction projects. Experience within the region is highly desirable.
- Excellent verbal, written, computer, and presentation communication and organizational skills.
- Proven ability to manage multiple priorities and deliverables within fast paced, team project-oriented work environment.
- Able and willing to travel to provinces within Afghanistan, including volatile and insecure areas.

Job Requirements:

- Bachelor Degree's in Civil Engineering required with 8 years of work Experience related supervising the implementation of bridge construction projects including leading supervision teams; or Experience in managing QA/QC in construction
- Having Master Degree in Civil Engineering Structure, Transportation with 6 years working experience supervising the implementation of bridge construction projects including leading supervision teams or; Experience in managing QA/QC in construction

- Experience in Rural Development Projects involving local stakeholders in the construction process would be an advantage;

Required Documents:

- Copy of verified Bachelor Degree by Ministry of Higher Education
- Copy of verified Afghan ID Card (Tazkera)
- Copy of verified last Posting Contract

Submission Guideline:

Interested candidates are requested to forward their applications and detailed CV to mopw.vacancies@yahoo.com , kindly indicate the vacancy number (**MoPW/SRTAP/1400-20**) and the post title (**Senior Bridge Maintenance Engineer**) in the subject line when applying by email. To the Human Resource Unit – Sustainable Reform and Technical Assistance Project of Ministry of Public Work Kabul Afghanistan.

Office Add: SRTAP Office, Kabul Jalalabad Road, In front of KMTC, Ministry of Public Work, Kabul Afghanistan.

Only short-listed candidates will be notified