

Title	Central Control System of Highways and Tunnels Specialist
Vacancy Number	MOPW/SRTAP/1400-11
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	1
Nationality	Afghan
Sex	Male/Female
Salary Range	According to NTA Salary Scale (C-3)
Announcing Date	03/May/2021
Closing Date	15/May/2021
Job Type	Engineering
Shift	Full Time
Experience	+6 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 roads, 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 MoPW the Human Resource Directorate wishes to recruit the following staff on contract basis from development Budget for the Ministry of Public Work (MoPW)

Scope of Work/Job Summary:

MoPW is looking to recruit a Central Control System of Highways and Tunnels Specialist with extensive experience in a wide range of civil construction activities including, but not limited to the Analyze the current road safety concerns, recommend cost effective measures to maximize safety conditions on roads that are improved under the project Based on appropriate international good practices. 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 MOPW. He/ She must directly report to the Senior Engineers/ Consultants of the team.

The Central Control System of Highways and Tunnels Specialist will carry out the following

Duties & Responsibilities:

- Use advanced techniques and modification and extension of theories, precepts, and practices in developing design.
- Perform complex assignments requiring development of new and/or improved techniques and procedures.
- Share expertise knowledge in this capacity, for developing a new central control system which encompasses all networks.
- Regular meetings with the relevant staff to allocate tasks and responsibilities ensuring a thorough overview of the quality procedures adhered in the project.
- Conduct preparatory, initial and follow up meetings to establish an understanding of the standards of care desired for each definable feature of work.
- Analyzes technical problems, assessing the feasibility of proposed techniques and procedures, and devising new approaches and alternative solutions.
- Review existing practices and provide expert knowledge for modification and improvisation of conventional technologies for road networks; make recommendations that will increase efficiency, safety, and productivity through good practices and troubleshooting methods.
- Verify and document that all materials received for the project are in conformance with the approved submittal, are handled and stored appropriately and are acceptable for use in the project
- Monitor traffic flow and identify impending congestion or stoppages caused by breakdowns or incidents.
- Maintain a safe tunnel environment, response to traffic density and travel speed.
- Communicate travel restrictions to motorists approaching and passing through the tunnel.
- Mobilize emergency response to clear incidents as soon as possible
- Initiate, when necessary, the necessary systems operation for emergency conditions.
- Monitor the status of tunnel service equipment to ensure continued operation and availability when needed.
- Performs Highway project design, sketching design concepts to be developed by junior engineers, CAD designers or technicians.
- Overview and recommendation of available technologies for highway and tunnel control systems.
- Monitor to detect fires, measure air pollution levels, and sense dangerous spills in the tunnel.
- Plans and reviews the production of engineering drawings and specifications.
- Plans and reviews the production of engineering investigations or planning work.
- Develops and evaluates plans and criteria for new projects, weighing alternatives and selecting the most cost-effective solution.
- Analyzes project dimension and scope, and prepares or oversees the preparation of cost and manpower estimates, schedules and job budgets.
- Coordinates work with project manager, and guides junior professionals and technical personnel on the design and drafting of preliminary and final plans.
- Advise and support the Consultant responsible to perform the tunnel design.
- Review all design reports issued by the Consultant and propose modifications and/or improvements if needed.
- Review the assumptions, data and other technical issues related to highways and tunnels.
- Undertake a comprehensive review of the highway and tunnel central control system.
- Provide capacity building to MPW engineers in tunnel design and construction techniques including construction planning.

- Provide technical advice and guidance related to central control system to MPW to ensure that economic and good quality equipments are purchased
- Develop and submit weekly and monthly progress reports.
- Assist MoPW in the preparation of tunnel's maintenance manuals.
- Assist MoPW in the preparation of tunnel's operation manuals
- Assist in the education and development of design staff and act as resource for design questions.
- Research design options and document findings for project engineer/manager
- Submit concept designs and work through approval processes such as permits from municipalities.
- Work with senior engineers to create project designs.
- Meeting with the engineering team to discuss the scope and scale of the project.
- Creating rough draft designs and listing possible engineering tasks.
- Providing contractors with technical drawings and engineering documents.
- Conducting on-site safety and progress inspections.

Skills & Competencies:

- Basic knowledge of standard practices of Tunnel engineering;
- Basic experience working with traffic survey equipment as necessary;
- Required verbal and written communication skills in English;
- In-depth knowledge of NATM and TBM excavation techniques.
- Knowledge of trenchless construction.
- Detailed knowledge of geology and structural engineering.
- Proven organizational and problem-solving skills;
- Able to travel to the remote area all over Afghanistan, collect required data and work as part of a team;
- Physical fitness and able to travel and complete inspection procedure;
- Perform any other survey-related duties and tasks as assigned by the head/supervisor.
- Proven work experience as a Tunnel Engineer.
- Experience with tunnel construction in hard and soft rock conditions.
- Strong attention to detail and excellent problem-solving skills.

Job Requirements:

- Bachelor/Master degree in civil engineering, transportation engineering, traffic engineering, and or any other similar discipline with 6 years of professional experience in the transportation engineering field (traffic survey, roads survey, design, construction, maintenance, quality control, quality assurance); or other similar filed.
- Master's degree in the similar filed is highly preferable
- Having of personal computer installed with MS Word, Excel, PowerPoint and AutoCAD software;
- Having a min of Eight-years' experience
- Basic experience working with traffic survey equipment as necessary;
- Physical fitness and able to travel and complete inspection procedure;
- Required verbal and written communication skills in English

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/1400-11**) and the post title (**Central Control System of Highways and Tunnels Specialist**) in the subject line when applying by email. To the **Human Resource Unit – Sustainable Reform and Technical Assistance Project of Ministry of Public Works** Kabul Afghanistan.

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

Only short-listed candidates will be notified