



PAPUA NEW GUINEA PUBLIC SERVICE

## JOB DESCRIPTION



Form OD2.7

### 1. IDENTIFICATION

<b>AGENCY:</b> Works & Highways	<b>SYS. POSN. NO:</b>	<b>REF. NO:</b> 60ESHE16	
<b>WING:</b> Network Planning, Design & Standards	<b>DESIGNATION/CLASSIFICATION:</b> Supervising Technical Officer - Grade 12		
<b>DIVISION:</b> Engineering Services & Standards	<b>LOCAL DESIGNATION:</b> Supervising Technical Officer		
<b>BRANCH:</b> Highway Engineering	<b>REPORTING TO:</b> Chief Technical Officer Grade 13	<b>SYS. POS. NO:</b>	<b>REF. NO:</b> 60ESHE11
<b>SECTION:</b> Technical	<b>LOCATION:</b> Headquarter - Boroko		

### HISTORY OF POSITION

FILE REF.	DATE OF VARIATION	DETAILS
111 - 60 - A00	10/12/2021	Re-number

### 2. PURPOSE

Lead and oversee the Drafting Section duties and tasks on technical drawings & standards required to impellent the road, bridge and road safety projects/programs involved by the design branch to comply with existing DoW approved design standards and specifications.

### 3. DIMENSIONS

- 3.1 Through Chief Technical Officer, Supervising & Principal Engineers (Roads, Bridges & Road Safety) on drafting and technical standards of roads, bridges and road safety programs relating to Design, Documentation and implementation of the National Governments Infrastructural Development Programmes on Road Transport (Roads & Bridges) Network in Papua New Guinea.
- 3.2 Assist Chief Technical Officer, Supervising & Principal Engineers (Roads & Bridges) and Assistant Secretary (HEB) to advise technical drafting standards to DoW field staff in the provinces on road & bridge design, documentation and other related issues of the involved by the Design Branch.
- 3.3 Assist Chief Technical Officer, Supervising & Principal Engineers (Roads & Bridges) to oversee and allocate existing hardware equipment including existing and new road design software's, other stationary materials/supplies for improved performance of the design branch and implementation of the National Road Transport Network in Papua New Guinea.

### 4. PRINCIPLE ACCOUNTABILITIES

- 4.1 Accountable to Assistant Secretary (HEB) through Chief Technical Officer, Supervising & Principal Engineers (Roads, Bridges & Road Safety) on design, drafting standards & programmes involved are implemented on all sixteen (16) priority national roads identified under the Medium-Term Transport Development Plans (MTDP) and National Road Network Strategy (NRNS) programmes including other sub-national roads within the country.
- 4.2 Assist Chief Technical Officer, Supervising & Principal Engineers (Roads, Bridges & Road Safety) and Assistant Secretary (HEB) to ensure that all road, bridge & road safety design/drafting guidelines, standards and policy requirements are complied with when these projects are designed and constructed. This includes the existing roads that are open to public use throughout the country.
- 4.3 Assist Chief Technical Officer, Supervising & Principal Engineers (Roads, Bridges & Road Safety) and Assistant Secretary (HEB) to ensure that all road approaches to bridge crossings including cross drainage culvert crossings have correct safe guard rails installed/replaced with the approved

"Bull Nose" end terminal through all sixteen (16) priority national roads and other sub-national roads within the country.

4.4 Assist Chief Technical Officer, Supervising & Principal Engineers (Roads, Bridges & Road Safety) and Assistant Secretary (HEB) to arrange training workshops etc. on design/drafting software's and other related training requirements for implementation of safer road projects for all road users within the country.

## 5. MAJOR DUTIES

5.1 Lead and oversee all technical design and drafting related duties and tasks of all roads, bridges and road safety guidelines, standards and policy requirements involved by the design branch are completed as scheduled to meet the required outcomes of the projects.

5.2 Lead and oversee all electronic data/files of various road, bridge and road safety projects involved by the design branch for safe keeping and future reference purposes.

5.3 Lead to check and ensure that the technical accuracy and appropriateness of the design/drafting outputs from various CAD design/drafting software's comply with DoW approved design standards & specifications.

5.4 Lead and oversee recording of all technical reports of various road & bridge projects involved by the design branch for future reference purposes when required.

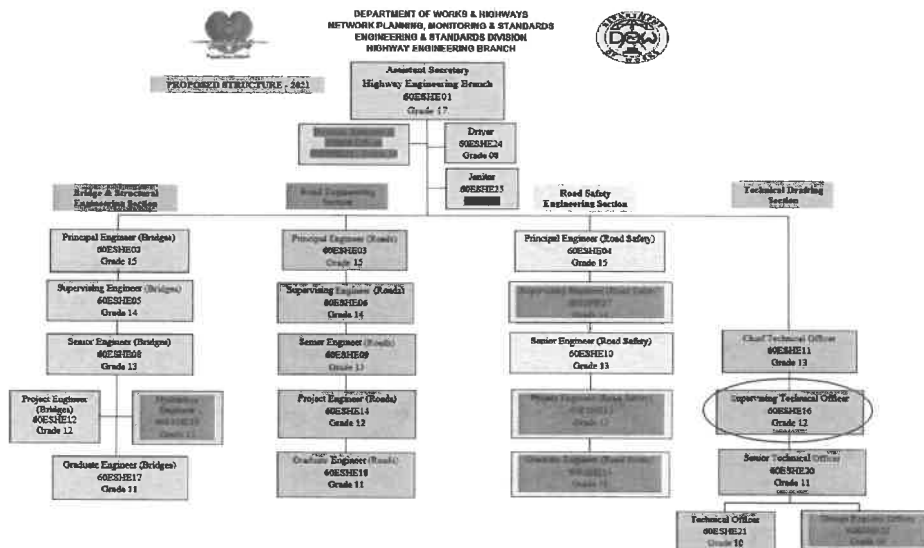
5.5 Lead and oversee allocation of drawing numbers on various road & bridge projects designed in-house or out-sourced to consultants on behalf of the design branch.

5.6 Assist Senior, Supervising and Principal Engineers (Roads, Bridges & Road Safety Sections) to be engaged in a team for site inspections, preliminary design and final design of various projects involved by the design branch.

5.7 Other relevant duties and tasks as directed by the Assistant Secretary (HEB) through Principal and Supervising Engineers (Roads, Bridges & Road Safety Sections).

## 6. NATURE AND SCOPE

This position is within the management level of the Design Branch and reports directly to the Activity Head (Assistant Secretary – Highway Engineering Branch) as depicted in the structural framework of the branch.



## 6.1 WORKING RELATIONSHIP

### (a) Internal

*Liaise through Chief Technical Officer, Supervising & Principal Engineers (Roads, Bridges & Road Safety Sections) to Assistant Secretary (Highway Engineering Branch) on technical design/drafting standards to other Branches, Divisions within Department of Works Headquarters and Provincial Establishments.*

### (b) External

*Assist to liaise through Chief Technical Officer, Supervising and Principal Engineers (Roads, Bridges & Road Safety Sections) and Assistant Secretary (HEB) to advise various line Departments, Provincial Governments, State Authorities and other Agencies on existing DoW approved design standards and specifications.*

## 6.2 WORK ENVIRONMENT

*Assist to implement all road, bridge & road safety engineering, technical design specifications and standards on behalf of Department of Works (DoW) for the National Government of Papua New Guinea on Road Transport (Roads, Bridges & Road Safety) network for a safe and easy accessibility for the people of Papua New Guinea.*

## 7. CONSTRAINTS FRAMEWORK AND BOUNDARIES

### ▪ Rules/procedures

- *The National Government through Department of Transport's National Road Network Strategy (NRNS) Policy Guidelines for Road Transport Networks for upgrading and rehabilitation works has identified the sixteen (16) priority road network sections including the missing links in the Medium-Term Transport Development Programmes (MTTDP's).*
- *Department of Works (DoW) shall be confined and limited to meet these policy guidelines as stated in the MTTDP and NRNS as a result when implementing these development projects.*
- *All engineering designs, documentation and Road Safety requirements shall be focused on these road networks within the country subject to annual development budget funding as a result of these policy guidelines.*

### ▪ Decision

- *The Government through Department of Transport has the mandated role and obligation to decide and include other relevant sections of road network throughout the country into MTTDP, NRNS and Sub-National Roads for implementing that will open accessibility to the rural population for economic and social developments.*
- *This decision will not only alleviate poverty but also improve living conditions of the rural population through delivery of services such as health, education and other social improvements as well as agricultural developments.*

### ▪ Recommendations

- *It is recommended that other policy guidelines be developed to include other missing sections of road network and funding to be made available through the Department of National Planning and Monitoring (DNP&M).*

## 8. CHALLENGES

- *The current challenge with respect to this position is the appropriate design/drafting hardware and software requirements for the officer on this position to support/perform the specific duties and tasks involved in order to produce the required outcomes and meet deadlines on the various road projects involved by the design branch.*
- *The road, bridge & road safety designs in draft, preliminary and final design phases can be checked thoroughly at various stages of the design phases to ensure that TOR as well as*

*approved design standards, specifications and safety requirements are complied with before approval of the design. Road Safety Checklist is now included and forms part of the design checks required before approval of design is granted.*

## **9. QUALIFICATIONS, EXPERIENCES AND SKILLS**

### **(a) Qualifications**

- *Appropriate Diploma in Civil engineering studies from a recognized College or University.*
- *Registered member of Institute of Engineers – Papua New Guinea (IEPNG).*

### **(b) Knowledge**

- *Significant experience in design/drafting and documentation of variety of road or bridge projects ranging from rural to urban applications.*
- *Significant knowledge on various types of design/drafting software's used for road & bridge design/drafting engineering applications.*
- *Sound knowledge on types of road & bridge technical design and construction standards/specifications to comply with the approved DoW design & construction standards.*

### **(c) Skills**

- *Significant experience in various road/bridge design/drafting concepts and CAD software applications used to produce relevant road/bridge projects in compliance with existing DoW approved design standards & specifications.*

### **(d) Work Experience**

- *Minimum experience of eight (8) years in road/bridge engineering applications on design/drafting, and documentation phases including road safety requirements.*