

## Terms of Reference



### Regional Bridge Coordinator

#### Education and Experience:

Regional Bridge Coordinator should have at least a Bachelor's Degree and preferably a Master's Degree in Civil Engineering with a minimum of 5 years' in construction supervision, including quality control and management of roads and bridges. The RBCs must have capability to supervise, manage and execute the construction of bridges as per the provided designs and drawings. S/he should have experience of supervision of construction of at least 10 motorable bridges of different types such as Reinforced Cement Concrete (RCC), Steel, Pre-stressed bridges etc. Demonstrated experience in managing multiple district level teams and coordination with local bodies and local stakeholders. Experience in geo-technical and hydrological investigations for the bridges and interpreting the findings thereof will be an added advantage. S/he should have excellent written and oral communication skills in English and Nepali, strong interpersonal skills and ability to work in a multidisciplinary team.

#### Role and Responsibility:

Under the overall guidance and supervision of the Deputy Team Leader/Bridge Design Engineers, S/He will be responsible for construction, supervision, quality control, reporting of the bridges in the districts. S/He will be responsible for construction, supervision, quality control, reporting of the bridges in the districts. S/he will coach/supervise and manage a group of Technical Officers and Social Safeguard Officer and to undertake additional tasks related to bridge as required.

- Support Bridge Design Engineer to conduct preliminary and detailed survey including reconnaissance, preliminary survey, pegging and trace cutting, final survey etc.
- Support Bridge Design Engineer to collect inventory data and to conduct condition survey of bridges, culverts etc.
- Support Bridge Design Engineer to prepare strip plan showing the existing road land width, utility services (both above and below ground level), trees, electric poles, telephone poles, water pipeline, sewer line, bridges, culverts, junctions, adjoining land use, encroachment etc. and digitise these for computer storage;
- Support Bridge Design Engineer for digging test pits at least 1m below the underside of the lowest pavement layer or up to rock level, whichever is less wherever pavement condition changes or at 2 km intervals whichever is less;
- Collect information about hydrology e.g. catchments characteristics, rainfall, stream/channel characteristics, design discharge, linear waterway, scour depth etc. for all cross drainage works and bridges;
- Align the design and comply with the IRC special publication No.54 "Project Preparation Manual for Bridges";
- Do drainage studies indicating general drainage pattern, HFL, water level, seepage flow, etc and prepare drainage design as per IRC guidelines;
- Do investigation for naturally occurring materials and identify suitable quarries for these materials; to the extent possible promote locally available construction materials.
- Conduct tests for the physical strength characteristics of materials as per relevant national or international standard; visit materials factory for inspection and quality control if required;

- Carry out geo-technical investigation and sub-surface exploration at all the proposed location of bridge
- Carry out studies for environmental clearance requirement as per the guidelines of Ministry of Environment and Forestry and IRC SP-19-2001, and assist the department by providing the data required like environmental clearance required, forest clearance required with numbers of trees to be cut etc.;
- Support Bridge Design Engineer to prepare detailed working drawings good for construction, prepared in international standard using AutoCAD ( or other popular software), containing all details required for execution of the project;
- Check Bill of Quantities and estimate prepared by consultants; Ensure quality of works and certify it after completion.
- Coordinate with short term experts for conducting environmental and economic analysis, cost benefits and sensitivities test for the individual bridge project as required.
- Monitor, supervise and coach assistant engineers at district levels as required.
- Closely liaise with the consultants in the construction and provide feedback on the designs.
- Coordinate with Focal Person in Central Level for project implementation and management support.
- Collect information about hydrology e.g. catchment characteristics, rainfall, stream/channel characteristics, design discharge, linear waterway, scour depth etc. for all cross drainage works and bridges;
- Any other tasks as per requirements and delegation of line managers.