

## 6.2 Road & Structure Inspection & Maintenance Professional Responsibilities & Considerations

### 6.2.1 Road Maintenance Works

The information components for the Ministry's road maintenance works normally include:

- an inventory of those roads for which the Ministry is responsible for maintaining;
- a risk-based maintenance plan that details inspection priorities and schedules;
- inspection reports of the roads and structures;
- maintenance plan descriptions of the remedial works that may be required based upon the results of the inspections;
- a record of the proposed annual budget priorities and resulting allocations for the roads and structures; and
- a record of the maintenance works actually carried out;

### 6.2.2 Maintenance Plan

Of the foregoing maintenance components, and as with other road activities in this manual, a CM **must** be professionally responsible for the preparation of a maintenance plan as well as the oversight of the maintenance works themselves.

Where conditions are fairly benign or predictable, a maintenance plan prepared by a CM may consist of general guidelines such as those provided in this chapter. However, for all structures and where there is a significant risk of detrimental effects on safety and adjacent resources, there is a need for specific instructions for those structures and road sections.

A maintenance plan may incorporate specific maintenance considerations provided in road or structure plans or construction documents or, because road use often changes over time and the present use may be different than the original road use contemplated in design, may require updated measures that address those changes. Accordingly, include in such a plan any original or amended planning objectives, such as:

- intended road use;
- existing road conditions; and
- safety and environmental considerations.

The CM that prepares the maintenance plan must determine the level of detail required and ensure that the plan:

- incorporates maps of the roads to be included in the plan;
- identifies current or expected road use, both in terms of use types and volume;
- sets maintenance objectives for safety, structural integrity and potential hazards to adjacent resources;
- provides hazard and risk criteria for prioritizing inspection schedules and maintenance work;
- establishes the frequency and scope of inspection schedules;
- provides for implementation of remedial work on a priority basis determined from inspections;
- recognizes where other member or specialist input is required for site specific remedial work, and incorporates the results of such input;
- where professional work is required, indicates the need for and timing of any field reviews of remedial works and professional sign-off of the completed work; and
- sets conditions, if any, of road use.

Examples of works where there may be a need for professional specialist input to a road maintenance plan include:

- stabilization of failing cut or fill slopes;
- repairs to or replacement of bridges, major culverts and engineered structures;
- replacement of drainage structures under high fills;
- road widening on steep slopes; and
- evaluating suitability of road grades or surface conditions, particularly in inclement weather, for specific vehicle configurations.

Where a CM for a road may not be comfortable with overseeing a structure maintenance program as well, it may be reasonable to separate the maintenance responsibilities such that one CM can oversee the road maintenance and another CM can be responsible for the structure maintenance (and so note the assurance statements accordingly).

### 6.2.3 Inspections of Roads

Based upon the maintenance plan, the CM must develop a system for carrying out inspections for those roads for which the Ministry is responsible for maintaining. This includes specifying which roads or road sections require professional inspections (field reviews), and for such roads, inspection reports **must** be prepared by professional specialists or members as designated in the

maintenance plan, and signed off by those individuals. For those roads not requiring professional inspections, a person determined by the CM to be suitably qualified to inspect the roads **must** carry out the inspections under the direction of the CM, and then sign off on the inspections.

A tabular summary for each road under consideration for inspection and maintenance is illustrated in the [Sample Forest Service Road Maintenance Inspection Schedule \(PDF\)](#).

## 6.2.4 Engineered Structure Inspection & Maintenance

A maintenance plan also includes engineered structures (bridges, major culverts and retaining structures over 1.5m in height). These elements must be routinely inspected at least every two or three years, depending upon site specific issues and the type of materials used in the construction of the structures (see [Engineered Structure Inspection Frequencies](#)). The CM responsible for the road maintenance plan must:

- incorporate into the maintenance plan the schedule and details of structure inspections consistent with the requirements in the bridge register, and separately from the road maintenance issues;
- ensure that the structures are inspected by qualified individuals, including professional specialists where necessary, and the results are reviewed and accepted by the Ministry bridge engineer; and
- include in the maintenance plan any remedial measures for structures as specified by professional specialists.

## 6.2.5 Project Assurance

Once a maintenance plan is completed, a CM must complete the [Road Project Assurance Statement \(PDF\)](#) for the plan.

In addition, a CM is responsible for overseeing the implementation of any remedial work and must complete the [Road Project Assurance Statement \(PDF\)](#) for road and structure maintenance.