

# Appendix C

## Road Cards

### Introduction

The following road cards are organized with new proposed National Forest System (NFS) roads first, followed by reconstructed NFS roads second, and roads with bridge replacements (and/or roads that will be closed through the 2002 ATM decision) last. Road cards in this appendix are for all roads in the Iyouktug project that require construction, reconstruction, or bridge replacement. Other roads within the project area will follow the objectives from the 2002 ATM decision (USDA Forest Service 2002). Numbers found in “Stream Crossings” correspond to stream numbers on road card maps with the exception of reconstructed roads that have Tongass Road Condition Survey (RCS) data; RCS data is not reflected in the current stream map.

### General Mitigation Measures

The general measures described in Introduction to Appendix B, Unit Cards, apply to all units and roads in the Iyouktug Timber Sale project. The source(s) of each general measure is listed after the measure in terms of individual Forest-wide Standards and Guidelines (see Chapter 4 of the Forest Plan) or BMPs (see Appendix C of the Forest Plan and Chapter 10 of FSH 2509.22, The Soil and Water Conservation Handbook). Measures with application to a particular road are listed on the individual road cards as Site-specific Design Criteria.

Timing restrictions will be required on all pit and r/w blasting within ½ mile of eagle nests, if any are discovered. Timing restrictions will be required on all pit and r/w blasting within 600 feet of goshawk nests, if any goshawk nests are found within 600 feet of a road or pit.

General Design Criteria and Elements are shown on the Road Management Objectives portion of the road cards and are defined as follows:

- Functional Class: Local (L), Collector (C), and Arterial (A) classifications
- Service Life: Long (L) or Short (S), Constant (C) or Intermittent (I), Intermittent stored service (IS) consistent with NEPA disclosure document
- Traffic Service Level: Traffic Service Level anticipated for the design (A, B, C, or D) that takes into consideration the characteristics of the road and operating conditions. Applicable traffic service levels for the project area are C and D: C-Interrupted traffic flow, limited passing facilities, may not accommodate some vehicles; low design speeds; unstable surface under certain traffic or weather. D-Traffic flow is slow and may be blocked by management activities; two-way traffic is difficult, backing may be required; rough and irregular surface; travel with low clearance vehicles is difficult; single purpose facility.

Operational Maintenance Levels indicate the level of road maintenance, either Maintenance Level 2 or 3, during sale-related activities. Objective Maintenance Levels indicate the long-

term maintenance plan for the roads (after completion of the sale) and incorporate Traffic Service Levels, as described in the following definitions. Applicable maintenance levels for the project area are:

- Maintenance Level 1 - Assigned to intermittent service roads during time they are closed to vehicular traffic. The process/action of closing a road to vehicle traffic and placing it in a condition that requires minimum maintenance to protect the environment and preserve the facility for future use. Roads are closed by barrier, bridge removal or are existing roads that have organic encroachment and are monitored for resource protection. If the closed road is causing resource damage BMP maintenance shall be performed to keep damage to an acceptable level. Closed roads may remove or bypass all drainage structures to restore natural drainage patterns, add water bars as needed to control runoff, and are revegetated. Cross drains and ditch relief culverts may be bypassed with deep water bars but may be left in place to minimize the cost of re-using these roads in the future. They should also include storm proofing: provide water bars, out sloping, etc., to assure controlled runoff and meet BMPs. Each culvert will be evaluated as to where the water would go if the culvert were to fail to carry the high flow. A water bar or out slope at this location will minimize the potential for erosion of long stretches of ditch line or roadway. Roads in storage are left in a self-maintaining state in order to use more road maintenance funds on the open drivable roads. In the Iyouktug project, the intent is to remove all stream crossing structures upon closure of roads
- Maintenance Level 2 - Assigned to roads operated for use by high clearance vehicles. Roads are maintained for high-clearance vehicles and monitored for resource protection. Traffic would be minor, consisting of logging trucks during sale operations, and administrative uses. Provide frequent cleanout of ditches and catch basins to assure controlled drainage. Control roadside brush to maintain sight distance. Grade as needed to maintain crown and running surface. Provide water bars, rolling dips, out sloping, etc., to assure controlled runoff until any needed maintenance can be performed on the primary drainage system.

AFRPR Status: Alaska Forest Resource Protection Regulations. The application of BMPs during layout, implementation, and maintenance [of roads] will maintain water quality to State of Alaska standards for all alternatives.

The road segments are described using mileposts as beginning and ending points. Lengths are given in miles (mi). Road width is given in feet (ft).

Road locations and information are generally determined using field surveys and on the ground reconnaissance. In some instances, the best location was determined using aerial photos and GIS. Field data will continue to be gathered, and road locations/construction methods may be refined to minimize or mitigate impacts to resources. Any changes to roads or the effects of roads would be reported in the FEIS.