

## NOTES ON FENCE CONSTRUCTION

### 1. SCOPE

These notes are for guidance in the preparation of specifications for fence construction. Since suitable fencing types vary from district to district and even from job to job, a standard NRB specification is not applicable. Specification NRB F/1 gives requirements for temporary fencing associated with earthworks, but requirements for permanent fencing should be in accordance with the local standard.

### 2. EXTENT OF WORK

All permanent changes to the existing fencing should be planned where ever possible and the appropriate details shown on the drawings and described in the job specification.

### 3. TYPE OF FENCE

#### 3.1 General

Before preparing the contract documents, the landowner being affected should be consulted on the proposed type of fencing. Any new fencing required should be of similar nature to the existing fence and comparable in standard with recent fencing erected on the property. Should agreement be reached to construct a fence of a higher standard than either the former fence or a fence constructed to comply with the minimum requirements of the Fencing Amendment Act 1953, the property owner should be required to find any additional cost involved.

#### 3.2 Boundary Fences

Boundary Fences should comply with the requirements of the Fencing Amendment Act 1953, unless agreed otherwise. Any agreement to deviate from this standard of fencing including the use of high tensile wires, should be recorded and signed by the principal parties. The Act defines a sufficient non-rabbit proof fence as follows:

"A substantial post, batten, and wire fence, having not less than seven wires, not more than two of the wires being barbed; barbed wires to be placed in a position agreed upon by the persons interested, or to be omitted if those persons agree; the

posts to be of durable timber metal, stone, or reinforced concrete, and not more than 16ft. 6ins. (5 metres) apart, and securely rammed and, in hollows or where subject to lifting through the strain of the wire to be securely footed, or stayed with wire; the battens to be of durable timber or metal, evenly spaced and not less than four in each space between posts; the wires to be galvanized and not lighter than No. 8 guage (4 mm dia.); the barbed wire to have barbs spaced 6 ins (150 mm) apart, and to be galvanized; the bottom wire to be not more than 5 ins (125 mm) from the ground, the three bottom wires to be not more than 5 ins (125 mm) apart; and the top wire to be not less than 3 ft 9 ins (1.15 m) from the ground; all wires to be strained tightly and fastened to or let through the battens and posts to provide a tight, durable, stock-proof fence."

### **3.3 Secondary Fences**

Where it is necessary to erect new subdivisional fences they shall be erected to the same standard as the other subdivisional fences on the property or to a standard to which both the property owner and the Engineer have agreed.

## **4. REUSE OF EXISTING FENCES**

### **4.1 General**

Dismantling and stacking for reuse elsewhere and/or dismantling and re-erection of existing fencing may be possible on some works where the condition of the existing fencing is of a high standard.

### **4.2 Dismantle and Stack**

A clause such as the following should be used to cover the dismantling and stacking of existing fence materials:

"All materials salvaged from existing fencing which is required for reuse shall be neatly stacked in separate heaps in a position readily accessible to road transport. Any materials damaged due to negligence or poor workmanship shall be replaced by approved materials at the Contractor's expense.

Where the dismantled fence line is outside the limits of the formation work, the Contractor shall backfill the postholes and leave the old line in a neat and tidy condition to the satisfaction of the Engineer.

Payment will be made on the total number of metres of fencing dismantled and stacked as specified. The unit rate shall be in full compensation for dismantling uplifting, carting, stacking materials, and the restoration of the existing ground line where appropriate."

### **4.3 Dismantle and re-erect**

The dismantling and re-erection of existing fencing should be specified as follows:

"The Contractor shall completely remove the existing fencing nominated to be dismantled and re-erected. The materials from such fences shall be salvaged for reuse, in the positions shown on the drawings or nominated by the Engineer.

The standard of the reconstructed fencing shall be at least equal to the standard of the fencing prior to removal. Any material broken or damaged by the Contractor shall be replaced by approved material at the Contractors expense.

All tie wires and staples used on re-erected fences shall be new.

Where the dismantled fence line is outside the limits of the formation work, the Contractor shall backfill the postholes and leave the old line in a neat and tidy condition to the satisfaction of the engineer.

Payment will be made on the total number of metres of existing fencing dismantled and re-erected as specified. The unit rate shall be in full compensation for the dismantling of the existing fence, restoration of the old fence line, the replacement of any inferior or damaged material as specified or as directed by the engineer."

Where the Contractor is expected to replace salvaged material that is unsuitable for reuse without additional payment, this should be clearly stated in the specification.