

*Form and Scheme of Sections.*

78. Sections are to have as nearly as practicable a depth of not less than twice the width or frontage to a road, stream, lake, or coast; but where the land is open for selection before survey the sections must have a depth of not less than 40 chains, and must conform to a general scheme, with frontages, depth, &c., as may be approved by the Chief Surveyor and the Land Board. Practicable road access shall be provided for each section.

*Boundaries, how marked.*

79. All boundaries of blocks and sections shall be pegged at every angle. In open country, straight boundary-lines under a mile in length must be cleared where necessary, and distinctly marked by pegs and lock-spits at intervals not exceeding 30 chains, which, however, at the discretion of the Chief Surveyor, may be varied to suit the conformation of the country. Advantage should be taken of the most prominent and favourable positions on the line for the pegging, so that the direction may be seen from peg to peg.

*Boundary-lines in Forest Country.*

80. In forest country the boundary-lines shall be cut, ranged, and pegged in the same manner and at similar intervals, advantage being taken in rough country of ridge-crossings for the pegging, in which case, where measurements are not required, subject to the approval of the Chief Surveyor, only such cutting of the line will be required as will ensure adjacent pegs being visible from each other, but it must be sufficient to enable the distances of such pegs along the line to be arrived at approximately for showing on the map. Under any circumstances the lines must be cut from the frontage from 3 to 5 chains and pegged, but should the peg come in an impracticable or unsuitable position for extending the line, then the cutting must be continued until the peg can be placed in a position that will enable this to be done, and in either case its distance from the front peg must be noted in field-book and on maps.

*Pegging at Intersections.*

81. The points of intersection of all section-lines with traverse-lines shall be pegged, measured to, and noted on the map, and should the section-pegs be off the traverse-lines, the distances of the section-pegs from such points shall also be given. The measured or calculated distances from the section-pegs to the adjacent road-angle pegs on same side shall be given, and the boundary of a section intersecting a road in all cases shall be pegged on the traverse-line as well as on both sides of the road. Such traverse intersection-pegs, however, should be driven flush to avoid confusion.

*Line-cutting.*

82. Lines in bush shall be cut and cleared 4 ft. wide, the scrub cut close to the ground, and overhead 7 ft. from the ground. All trees 3 ft. through and under to be cut down, and the height of the stump should not exceed its diameter. In open country, with scrub, the lines shall be cut and cleared at least 2 ft. wide.

*Traverses and Trig. Connection.*

83. In traversing, the surveyor is to proceed to the nearest trig. station and base his work on the circuit meridian, clearly denoting on the plan the line and the bearing used as origin, and the co-ordinate value in terms of the initial of the circuit. Connections should be made with trig. stations or other established points when opportunity offers to test the accuracy of the work.

All traverse stations should be pegged *before* being measured or observed to, and the surveyor when at a trig. station should take readings be traverse or subsidiary stations in view. All check bearings should to repeated and thrown forward, so as to limit the accumulation of instrumental errors, and checks and closures must be noted in the field-book. Vertical angles required to reduce all inclined measurements to their horizontal values are to be observed by theodolite.

*Magnetic Bearing.*

84. Magnetic bearings are not admissible except for filling in topographical detail work, and that very sparingly, and only with the permission of the Chief Surveyor.

*Offsets.*

85. Offsets to irregular boundaries such as rivers, streams, terraces, and fences must not exceed 2 chains in length, and must be taken at intervals in the traverse not greater than 3 chains, but at shorter distances when necessary to correctly define the irregularities of such boundaries.