

Appended to a Letter 1869/63 from the
SURVEYOR-GENERAL To MR. W. C. BOYD LL.D. dated
23rd July 1863 W.S.K.
24.5.00

DIRECTIONS TO BE OBSERVED IN MARKING BUILDINGS AND SUBURBAN ALLOTMENTS
WITHIN TOWN BOUNDARIES.

1. The building lines of streets, and the side lines of lanes, are, where the ground is not naturally clear, to be cleared to a width of not less than 4 feet, by the removal of all scrub and trees less than 1 foot diameter.
2. Should large trees stand in the building line they are to be marked with the usual horse-shoe mark, and the precise position of the line indicated by a vertical mark 6 inches in length cut in the horse-shoe marks.
3. The corners of sections and of allotments are to be lock-spitted to a depth of 6 inches and a length of 2 feet in the direction of the boundary lines, and where rocks occupy the positions of corners they are to be marked by lines cut with a pick.
4. At each section corner, except those which are marked by trees or rocks, a post, 4 inches square, is to be sunk 2 feet in the ground, and rising $1\frac{1}{2}$ feet above the surface, the top of the post to be pointed and the side marked with the number of the section in Roman figures, four inches in height; where a tree stands at the corner of a section it is to be similarly marked.
5. At allotment corners, stakes not less than 18 inches long are to be driven 1 foot into the ground, and on the street frontages the number of the allotment is to be cut in Roman figures 2 inches in height.
6. In marking the first surveys in any new town, in addition to the above, which will obviously disappear with the occupation of the allotments, strong posts, 6 inches square and 4 feet high, and at least 2 feet in the ground, are to be placed in the kerb line (12 feet from the building line) of a principal street, at the intersections of the building lines of the transverse streets. These posts are to be marked with a large broad arrow cut on them, and, as they are intended to form a basis for all future surveys in the town, they should be carefully placed with their outer faces in the lines indicated.
7. All building and other boundary lines are to be laid out with the theodolite.

DIRECTIONS TO BE OBSERVED IN MARKING BOUNDARIES OF LAND MEASURED BEYOND
THE LIMITS OF TOWNS.

1. All boundary lines, where the ground is not naturally clear, are to be cleared to a width of not less than 3 feet, by the removal of all scrub and trees of a less diameter than 6 inches.
2. All trees upon boundary lines within 3 feet in thickly-wooded country, or 6 feet in open forest, are to be marked with the horse-shoe mark (which is to be cut into the wood of the trees) on opposite sides in the direction of the boundary line; and those trees which are actually in the line are to be marked in addition with smaller horse-shoe marks above the others.
3. The corners of portions are, where a tree may stand at the corner, to be marked by four horse-shoe marks in the lines of the boundaries and their continuations, and a broad arrow, not less than 4 inches long, to be cut deep in the marks with a chisel on two sides, where the boundaries of one portion only may meet the tree, on three sides where the boundaries of two portions may meet the tree, and on four sides where the boundaries of three or four portions may meet the tree. The horse-shoe marks in all cases to face the direction the lines run.
4. Should there be no tree at the corner, the nearest large tree is to be marked with the horse-shoe mark on four sides, and a single broad arrow to be cut on one of these marks exactly facing the corner. At the corner, a strong stake, not less than $2\frac{1}{2}$ feet in length, is to be driven at least eighteen inches into the ground, and lockspits cut 1 foot deep and 3 feet in length, in the directions of the several boundary lines.
5. Where the stony nature of the ground precludes a stake being driven, the lockspits are to be cut to the corner, and then packed closely with large stones. Rocks at corners are to be marked with pick-lines in the direction of the boundaries, and a broad arrow.
6. In very open country or plain the boundaries are to be marked at every tenth chain by a lockspit 1 foot deep and 10 links long, in the direction of the boundary, and a stake driven in the centre of the lockspit.
7. Where portions being measured form part of a regular series, for which numbers can be used as portions of a parish, the numbers of the portion or portions on or near the corner of which the tree may stand, are to be cut in the horse-shoe marks facing the boundary lines of the portions, or facing the corner.
8. Where measurements are made in isolated localities, where no parish boundaries have been proposed, and no perfect series of

numbers can be adopted, or used in the descriptions for deeds, it is still necessary, for the recognition of the lands by purchasers or intending purchasers, that the boundary marks of different portions should be distinguished by numbers which may be introduced in the sale proclamation of the lands. With this object, the corners of portions in each separate locality, or on any particular creek on which surveys may be made, are to be numbered in a series which will extend to all measurements made in the locality in each year, and to these numbers the unit number of the year is to be prefixed, the numbers appearing, of course, at all the corners of the portions which they represent. It is of the greatest importance that no confusion should occur in numbering, and Surveyors will therefore exercise the greatest care and discretion in determining the boundaries for each series.

9. Field-books are to be kept on an uniform plan, and transmitted to the Surveyor-General's Office as they are filled up, in order that they may be compared with the plans and kept with other records. Surveyors should not, therefore, use books of large size, except in the case of extensive continuous surveys; several short isolated surveys may, however, be entered in one book.

10. The title of each survey is to be entered at its commencement in the Field-book, so as to correspond with the title of the plan, and each station must be numbered, so as to correspond with the reference numbers on the plan, and the date of commencement and completion of each survey must also be entered in the Field-book.

11. All bearings are to be given in degrees and minutes, numbering from North, round by East, to 360 degrees.

12. Where not incompatible with the objects of the survey, it is desirable that the bearings of lines may be made to coincide with whole degrees, and the lengths with whole chains or tens of links, so as to avoid fractions.

As it is expedient to provide, in the future sub-division of Crown Lands, against the inconvenience which might arise from the fencing in of main roads before they have been constructed and drained, the first duty of the Surveyor will be to select the best lines of road passing through, and affording access to the several portions to be marked out.

This having been done, the portions to be measured are to be designed with frontages on such roads, and having the boundaries directed to the cardinal points, only so far as such boundaries would ensure a fair subdivision and distribution of the available land into portions of convenient size and shape, with a view of preserving sufficient space for deviations from time to time from the existing tracks as these may become cut up and unsuitable for traffic, and more especially where the traffic is likely to be considerable, and where the character of the soil, its low or level position, or other cause, may render it unsuited, in its natural state, to resist the action of traffic, a series of portions should be marked out on one side of the projected road only. A design for the other side should be transmitted but not marked out on the ground.

These allotments, as designed, will be reserved, to admit of divergence from the existing tracks as occasion may require, but will be brought to sale so soon as the road may have been properly formed.

The depth of such reserved portions from the projected road may, in some measure, depend on the breadth which it may be desirable to reserve for the deviations of the track, and their frontage should bear a fair proportion to the depth.

They may be designed on either side of the projected road, and should, as a rule, be on the side on which the soil is best calculated to form a roadway in its natural state.

The design for these reserved allotments should only be marked on the plan in faint, colored, or dotted lines, and should be marked as temporarily "reserved to prevent interruption of traffic."

A report of the present and probable traffic on roads where such reservations are made, as well as the character of the soil and present state of the track, should be embodied in the letter transmitting the plan of any such reservation.

GENERAL DIRECTIONS TO BE OBSERVED IN DRAWING PLANS OF LAND MEASURED FOR SALE &c., BY OFFICERS OF THE SURVEYOR-GENERAL'S DEPARTMENT.

Paper on which Plans are to be drawn.

1. For the convenience of transmission and record, plans should not be drawn on larger paper than is necessary to contain the work, and in cases of plans of land for sale, thick paper, which is liable to crack by being folded, should be avoided. Bank-post paper, foolscap size, is recommended where the work can conveniently be placed within it.

Position of Plans.

2. Unless there be special reasons for a contrary course, plans should be made to read with the North upwards.

North Point.

3. The magnetic North should be carefully placed on every plan, and where the survey represented is of any considerable extent, the variation of the magnetic from the meridian should be stated.

Scale.

4. On plans of any extent, the scale should be drawn at the time when the plan is plotted, as it will thus be affected equally with the remainder of the plan by expansion or contraction of the paper, the scale of the plan should in every instance be stated.

Scales of Plans. {
Of Town Allotments.
Of Suburban Allotments.
Of Country Portions.

5. Plans of Town Allotments are usually to be plotted on a scale of 4 chains to one inch, but in cases where the details are so small as to be indistinct on that scale, the larger scales of 2 chains or 1 chain to one inch, may be used. Plans of Suburban Allotments are usually to be plotted on a scale of 8 chains to 1 inch, but the scale may be varied to 4 chains to 1 inch. Plans of Country portions are usually to be plotted on a scale of 20 chains to 1 inch, but the scale may be varied to 10 chains to 1 inch where the details of the survey render it desirable.

Traverse Lines.

6. Traverse lines of survey are to be shown by red or blue lines, and the bearings, or angles, or lengths, are either to be introduced in red or blue on the lines, or stated in a tabular form on the plan with reference by numbers to the lines.

Bearings, &c., and Connecting Lines.

7. Bearings to, and angles formed by distant or remarkable points, opposite sides of rivers, &c., and connecting lines for commencing points for descriptions, are to be shown in red or blue dotted lines, with the bearings and lengths (when ascertained) stated.

Physical features.

8. Lines of Coast, Rivers, and Creeks, &c., are to be shown, where surveyed, by black lines, and where unsurveyed, by broken black lines, both sides of rivers are to be shown and an arrow inserted to indicate the direction in which the waters flow.

9. Hills and undulations of the ground are to be carefully represented, either with a brush or pen, and if with the latter, either in the horizontal or vertical style, they are not to be confined to the lands measured, but to be represented on either side of the lines of survey so far as they can be sketched in with any degree of accuracy.

10. The boundaries of swamps, forests, plains, lands liable to inundation, &c., are also to be represented, and the position and extent of any improvements, such as buildings, fences, cultivation, &c., which may exist on or adjacent to the lands measured, and their character and approximate value stated in a note.

11. Existing roads and tracks are to be represented by brown lines, and where reserved, are to have reserved road 1 chain wide (or $\frac{1}{2}$ chain, &c.) written along their course. Roads.

12. Boundaries of previously alienated or measured lands and opposite sides of streets are to be shown as they exist, as surveyors marked lines; corner trees, fences, walls, &c., will be specially noted, and all discrepancies from the new survey clearly shown, and where considerable, explained, as far as practicable, in a note on the plan. Old Boundaries.

13. All known names of rivers, creeks, hills, lakes, localities, &c., should be shown on the plan, care being taken to ascertain and adhere to the correct orthography. Names of features and localities.

14. The Geological and Mineralogical character of lands measured, their suitability in towns for building or cultivation purposes, and in country portions to agricultural or pastoral occupation, the supply of water, and indigenous produce, as timber, grass, &c., are to be shown on the plan either by writing across the portions or in a note. Any circumstances such as proximity to towns or main thoroughfares which may give increased value to the lands is to be stated in the note. Character of Lands.

15. Where lands are situated on or near navigable rivers or creeks the fact should be noted on the plan as also the extent and description of vessel by which the stream may be navigable. Access by water carriage.

16. Boundaries of portions and allotments should be shown by black lines, whether dividing them from previous measurements, from unmeasured lands or from roads and the bearings and lengths of all boundary lines should be clearly shown upon them. Boundaries.

17. The portions represented by a plan are to be distinguished from other measured portions and sold lands by being tinted, while the others are edged, or edged while the others are uncolored. Coloring.

18. The area of each portion is to be carefully calculated, and so far as practicable without having recourse to scale measurements, and it is to be shown within the portion, but broken quantities are to be omitted in the proportion to the total areas set forth in the subjoined table:— Areas.

In portions of not more than one rood	less than $\frac{1}{4}$ perch
More than 1 rood and not more than 2 acres	less than $\frac{1}{4}$ perch
More than 2 acres and not more than 10 acres	less than 1 perch
More than 10 acres and not more than 30 acres. {	less than 1 rood
If bounded by right lines	
If bounded partially by rivers or creeks or having roads excluded. }	less than 1 rood
More than 30 acres and not more than 640 acres. {	less than 1 acre
If bounded by right lines	
If bounded partially by rivers or creeks or having roads excluded. }	less than 1 acre
More than 640 acres	less than 1 acre.

19. The numbers will represent either numbers of Town sections and Allotments, Suburban portions, County portions, in a parish or those marked in isolated localities beyond the limits of Parishes. Numbers.

20. The reference on plan to marking of corners will in the case of Town allotments be merely a statement that they have been marked in accordance with the general directions for marking boundaries, except where a tree or rock may form a corner, when its existence may be shown on the plan. Tables of Corners.

The reference to the marking of Country portions is to be strictly in the form of the annexed table, the letter referring to the corner being of course varied as circumstances may require.

Corner.	Bearing.	From.	Links.	Number on Trees.
A	North	Bloodwood	50	XV. XVI.
B	N. 4° 30' E.	Ironbark	1-23	XVII.
C	No Tree near	
D	N. 29° W.	Swamp Oak	19	XVIII.
E	Rock	

Where in isolated surveys the unit number of the year is marked on the trees the circumstance should be stated in a note at the foot of the table.

Instruments used in the Survey.

21. A note should be inserted on each plan stating whether the theodolite or circumferentor, or both, have been used in the survey.

Title to Plan.

22. The titles to plans are to explain clearly what the plan is intended to represent, indicating the town, parish, and county, if within any or all of these, the numbers of the allotments and portions measured, and their general or particular locality where not in a town.

23. The word "lot," which is specially applied to lots of sale is not in any case to be used in a surveyor's plan. "Allotment" is to be applied to town or suburban allotments in sections, and "portion" to other suburban and country portions.

24. The words "applied for by" with the name of the applicant, or "measured for sale" if measured to meet the general demand, should be introduced under the title.

Where measurements are made for special purposes, such as pre-emptive purchases, sites for schools, hospitals, &c., the fact should be clearly stated in the title thus,—“Applied for as a pre-emptive purchase by _____ in right of his licensed (or leased) run of _____ District,” “Applied for as site for National School,” &c.

The Surveyor's name should in every case be attached to the plan, with the date of transmission and number of letter.