Australian Capital Territory

Surveyors (Chief Surveyor) Practice Directions 2008 (No 1)*

Disallowable instrument DI2008–192

made under the

Surveyors Act 2007, Section 55 – (Chief Surveyor Practice Directions)

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1 Name of instrument

This instrument is the *Surveyors (Chief Surveyor) Practice Directions 2008 (No 1)*.

2 Commencement

This instrument commences on day after notification.

3 Revocation

This instrument revokes the Surveyors Practice Directions Determination 2003 (No1) (DI2003-118)

Bill Hirst
Chief Surveyor
25 July 2008

*Name amended under Legislation Act, s 60

CHIEF SURVEYOR PRACTICE DIRECTIONS

Established in accordance with provisions of the Surveyors Act 2007 Section 55 (Chief Surveyor Practice Directions)

Endorsed by the Survey Practice Advisory Committee 23 July 2008

Part 1 - Preliminary

1. These Directions may be cited as the Chief Surveyor Practice Directions 2008 (No. 1).

2. These Directions are divided into parts as follows:

3. To remove any doubt, the Surveyors Practice Directions Determination 2003 (No. 1) is hereby revoked.

Part II - Definitions

Definitions

4. In these directions, unless the contrary intention appears:

'AHD' means Australian Height Datum as defined in the National Mapping Council (now ANZLIC) Special Publication 10 (NMC SP10) published in May 1971.

'Appropriate accuracy' means such accuracy as is reasonably possible of attainment in any particular survey.

'Chief Surveyor' means the person occupying the position of Chief Surveyor of the Australian Capital Territory.

'Control Survey' means a high accuracy geodetic survey or a breakdown of a high accuracy geodetic survey established for the purpose of setting out any other survey or to which any existing survey can be related, shown on a plan signed by a registered surveyor and available from a government authority.

'Control Mark' means a survey mark of a durable nature established and maintained as part of a horizontal or vertical control survey network.

‘Co-ordinated Reference Mark’ or ‘CRM’ means a reference mark, registered by a government authority, which has been or will be connected to a control survey such that co-ordinates derived from that control survey have been or will be attributed to the mark.

‘GPS’ means Global Positioning System.

‘Monument’ means a natural or artificial object or point thereon which is used for the purpose of locating or relocating a boundary or point thereon.

‘Plan’ means any drawing or record, signed by a registered surveyor, of either a partial or complete survey of land.

‘Reference Mark’ means a survey mark of a durable nature placed or situated near and connected by measurement to a corner, angle or tangent point of any survey.

‘Rural Survey’ means a survey, as defined by the Act, other than an urban survey, of land within the Territory.

‘SP1’ means the publication titled *Standards and Practices for Control Surveys (SP1)* as amended from time to time, published by the Inter-Governmental Committee on Surveying and Mapping.

‘Stratum’ means any parcel of land consisting of a space of any shape below, on or above the surface of the land or partly below and partly above the surface of the land, all dimensions of which are limited.

“Survey / Land Survey” has the meaning assigned to the term ‘survey’ in the Act.

‘Survey Mark’ means any mark placed in accordance with these Directions or shown on a plan of a survey.

‘The Act’ means the Surveyors Act 2007.

‘Urban Survey’ means a survey, as defined by the Act, of land within the Territory for urban development.

Part III - Supervision

Requirements for Supervision

5. No requirements of these Directions shall be construed as to allow any survey to be made by other than a registered surveyor or without the supervision of a registered surveyor.

Nature of Supervision

6. The nature and extent of supervision to be exercised by a surveyor over a survey made under the supervision of the surveyor shall be as follows:

The Surveyor shall attend personally on the ground during the making of the survey, and exercise such immediate oversight and direction of the work, as will ensure that the survey is carried out in accordance with these Directions.

Part IV - Survey Practice

Power of Entry

7. A written notice of intention to enter upon land given under Section 45 of the Act shall be in or to the effect of Form 3 in the Schedule to these Directions.

General Provisions for Undertaking a Survey

8. When undertaking a survey in accordance with these Directions the surveyor shall:

(a) (i) during the course of the survey locate or relocate with appropriate accuracy the boundaries of the land surveyed;

(ii) place or if required replace such survey marks as are required by that survey considering the purpose of the survey;

(iii) determine with appropriate accuracy the position of all monuments relevant to the survey; and

(iv) in the absence of adjacent surface reference marks, determine with appropriate accuracy connections to kerbs as laid provided the kerb offset is less than 15m;

(b) make complete field notes of the survey in accordance with Part X of these Directions; and

(c) if so required prepare a plan of the land surveyed and if necessary a report on the survey.

Survey Search Information

9. A surveyor shall procure all information necessary to locate or relocate the boundaries of any land surveyed.

Standardisation and Calibration of Equipment

10. (1) In making a survey, the surveyor shall ensure that all equipment used in the survey is in accurate adjustment, standardised and properly calibrated.

(2) Steel and invar bands and electronic distance measuring equipment must be verified at least once every 12 months and immediately after repairs on a certified baseline established by or acceptable to the Chief Surveyor.

(3) GPS equipment should verified at least once every 12 months and immediately after repairs on a geodetic network approved by the Chief Surveyor.

(4) Details and results of a standardisation and calibration of equipment used for making a survey are to be supplied to the Chief Surveyor on request.

Azimuth

11. (1) Before adopting a line as the datum for the azimuth of a survey, a surveyor shall determine and confirm the position of the marks defining such line.

(2) Whenever possible the defining marks shall be contained within a single registered survey.

(3) The bearing of the azimuth line shall:

(a) be taken from the datum survey either directly or by calculations from stated dimensions; or

(b) be calculated from datum co-ordinate values if the defining marks are CRMs or control marks; or

(c) be obtained from astronomical observations; or

(d) be obtained from GPS observations.

Connection to Control Marks

12. (1) If the land being surveyed is not connected by survey to a control survey, a surveyor shall connect the survey to the nearest control mark if within a reasonable distance of the survey.

(2) Measurements between all control marks found or placed, and connections to the survey, must be proved by closed traverse.

(3) If GPS equipment is used in the making of a survey a surveyor shall connect to at least three control marks the co-ordinates of which are known in the appropriate geocentric datum.

Use of Direct Measurements

13. A surveyor shall measure all boundaries and lines by the most direct method that is reasonable and practicable.

Partial Surveys

14. If surveying part of the land in a document of title, the surveyor shall connect such part by actual measurement to monuments or points having a known relation to a corner of the land in the title.

Location of Easements or Proposed Easements

15. (1) Where the land being surveyed is subject to or it is proposed that it be subject to any form of easement the surveyor shall connect such easement or proposed easement by measurement to essential relevant monuments and where practical to corners of the parcel in which the easement is or is to be located.

(2) The surveyor shall show on the plan the essential dimensions of the site and shall note it thereon as 'easement' or 'proposed easement' as appropriate, provided that the essential dimension to be shown on the plan need not be determined by measurement of the boundaries of the easement or proposed easement unless the circumstances so require.

Marking Urban Surveys

16. (1) Where a surveyor makes an urban survey the surveyor shall whenever possible firmly mark each corner thereof (including corners of each parcel of land in a subdivision) with a peg or mark of a nature as prescribed in Direction 34.

(2) Where it is not possible or practical to mark a corner the surveyor shall:

(a) place a reference mark adjacent to the corner, and

(b) note on the plan that the corner was not marked.

(3) Where a surveyor makes an urban survey the surveyor shall mark distinctly and durably all lines which form or are to form the boundaries between parcels on unfenced boundaries with pegs or marks as prescribed in Direction 34 placed at intervals of not more than 200m, and the position shown on the plan.

(4) Making of urban surveys shall not be completed until land servicing has reached a stage where all CRMs, reference marks and corner marking will be durable and stable.

Connections to CRMs where available

17. Where a surveyor makes an urban survey and the land surveyed abuts or comprises a road or street or other public place:

(a) in which CRM(s) have been placed adjacent to the survey but not connected to any other survey the surveyor shall:

(i) connect the subject land to such CRM(s) by a closed traverse which includes the CRM(s) and a control mark; and

(ii) record the derived co-ordinate values of the CRM(s) on the plan of survey.

(b) in which CRM(s) have been placed adjacent to the survey and are shown on another registered plan the surveyor shall connect to those marks by closed traverse and show connections on the plan.

Placement of Reference Marks for Urban Surveys

18. (1) Where a surveyor makes an urban survey for any purpose and the land surveyed:

(a) abuts a road or street in which, within the limits of the frontage of the land surveyed:

(i) reference marks have not been placed or have been disturbed, the surveyor shall place a reference mark near each extremity of the boundary of the land where it abuts the road or street, including at road intersections;

(ii) reference marks or CRMs have not been placed or have been disturbed, the surveyor shall place reference marks at intervals of not more than 200m throughout the length of the frontage of the land surveyed;

(b) does not abut a road or street, the surveyor shall place 2 reference marks suitable for azimuth.

(2) The requirement of subclause (1)(a) is subject to the condition that a reference mark need not be placed within 25m of another reference mark or CRM.

Marking Rural Surveys

19. Where a surveyor makes a rural survey the surveyor shall mark distinctly and durably all lines which form or are to form the boundaries between parcels:

(a) with a peg or mark as prescribed in Direction 34 together with lockspits cut in the direction of each unfenced boundary from each corner and angle; and

(b) on unfenced boundaries with pegs or marks and lockspits as prescribed in Direction 34 placed at intervals of not more than 200m and the position shown on the plan.

Reference Marks for Rural Surveys

20. Reference marks shall be placed on rural surveys in accordance with the following:

(a) where the land surveyed is not being subdivided - at least two reference marks suitable for redefinition of the survey;

(b) where the land surveyed is being sub-divided - at least 2 reference marks in respect of each parcel;

(c) where a boundary other than a road frontage exceeds 2000m - additional reference marks at intervals of not more than 1500m; and

(d) where a boundary required to be marked in accordance with the Directions is a road frontage - pairs of reference marks suitable for azimuth at intervals of not more than 1000m along such boundary, and one reference mark at each extremity of that boundary.

Surveys of Rural or Reserved Roads

21. When making a survey of a rural or reserved road a surveyor shall:

(a) measure and mark definitely and durably all lines which form the boundary of one side of the road with pegs or marks and lockspits of the nature prescribed in Direction 34;

(b) place pegs or marks at each angle along the surveyed boundary and where the distance between angles is in excess of 200m at intervals of not more than 200m except where angle marks are intervisible the distance should not exceed 300m;

(c) mark with the prescribed pegs or marks each angle of the unsurveyed boundary; and

(d) place pairs of reference marks suitable for azimuth at intervals of not more than 1000m along the surveyed boundary and one reference mark at each extremity thereof.

Part V - Re-determination of Boundaries

Adoption of Original Survey Marks

22. Where a surveyor makes a resurvey of land in a Crown Grant or Crown Lease or part thereof the boundaries as originally marked on the ground shall be adopted as the true boundaries, even though the bearings and lengths appearing in a relevant plan or document do not agree with those between the corresponding monuments.

Variation from Original Dimensions to be Shown

23. Where a corner peg and reference mark or control mark are found a surveyor shall determine the bearing and distance between them, and if a difference from the original reference is disclosed the surveyor shall decide from other evidence which of the monuments to adopt, and shall note details of such evidence and difference on the plan.

Practice to be Adopted where Original Marks are Missing or disturbed

24. Where monuments of an original survey are missing or disturbed the surveyor shall determine the boundaries and corners of the subject land by measurement in correct relation to boundaries of adjacent parcels of land and parcels of land on opposite sides of roads, and to fences, and to such other evidence of correct location as may be found after full investigation and inquiry.

Disclosure of Excess or Shortage

25. (1) Where a measurement discloses a boundary of land surveyed to be longer or shorter than is indicated in the document of title to such land a surveyor shall verify the length of such boundary and record appropriate entries in field notes, and show in such notes and on any plan of the survey the monuments adopted.

(2) In the absence of monuments defining the land surveyed a surveyor shall indicate whether there is sufficient land available to permit the adoption of such measurement without causing any encroachment upon or hiatus with any road, street or lane or upon any adjoining or adjacent parcel of land.

Reference to Old Marks to be Shown on Field Notes and Plans

26. (1) A surveyor shall indicate in field notes and in any plan of survey the nature and position, or non-existence of all monuments relevant to the survey.

(2) A monument shall not be recorded as missing, lost or destroyed unless a thorough search for it has been made, and when it is so recorded measurements to its probable location shall be entered in the field notes.

(3) Where a surveyor ascertains during the making of any survey that control marks or co-ordinated reference marks are missing, disturbed or likely to be disturbed the surveyor shall report the fact to the Chief Surveyor.

Variation in the Position of Non-Tidal Streams

27. (1) Where since the date of any survey there has been a change in the position of any non-tidal stream forming a boundary of land to be surveyed caused otherwise than by gradual and imperceptible accretion or erosion, then in any subsequent survey, the position of such bank as it was immediately before such change shall be relocated after examination of all relevant accessible information.

(2) The middle line of a stream need not be determined by offsets nor marked unless the purpose for which the survey is made so requires.

Variation in the Position of High Water Mark

28. Where since the date of any survey there has been a change in the position of high-water mark forming a boundary of land to be surveyed caused otherwise than by gradual and imperceptible accretion or erosion, then in any subsequent survey the position of mean high-water mark as it was immediately before such change shall be relocated after examination of all relevant accessible information.

Part VI - Irregular Boundaries

Location of Irregular Natural Boundary

29. Where the land surveyed has an irregular natural feature as a boundary, a surveyor shall take such measurements as may be necessary to accurately determine each change of course or direction of the boundary.

Use of Photogrammetric Methods

30. Notwithstanding the provisions of Direction 13, the Chief Surveyor may authorise the determination of natural boundaries by photogrammetric methods, or by a remote-sensing method approved by the Chief Surveyor.

Location of other Irregular Boundaries

31. (1) Where an irregular fence must be used to define a boundary a surveyor shall carefully traverse it and place the angle points of the boundary in such a way that the boundary shall follow the material of the fence at the surface of the ground.

(2) Angle points shall be substantially marked by the surveyor, and the nature thereof shown on the plan.

Definition of High Water-Mark

32. (1) High-water mark in a document relating to land shall, unless a contrary intention appears, be taken to mean the line of mean high-tide, between the ordinary high-water spring and ordinary high-water neap tides.

(2) The boundary of land abutting on tidal water shall, unless a contrary intention appears, be taken to be the mean high-water mark.

(3) Where it is not reasonably practicable for a surveyor to determine an inaccessible or irregular high-water mark, the surveyor may determine it approximately by reference to regular or approximately regular curves, or to right lines or to any combination thereof, and, in these circumstances, it shall not be essential to place marks on the mean high-water mark.

Area to be Determined by Survey

33. The area of land abutting on a non-tidal stream or on tidal water shall be ascertained by the surveyor, and shall include all lands to the bank or the high-water mark as the case may be.

Part VII - Nature and Position of Marks

Description of Marks

34. (1) Where any line or corner of any portion of a survey is required to be marked in accordance with these Directions, the points shall be firmly marked with a peg; drill hole in rock, concrete, or other similar material; a chisel mark or nail in fixed timber; or otherwise suitably marked.

(2) For rural surveys, or surveys of blocks of 5000 m^2 or more, all pegs shall be of sound durable wood at least 350mm long and not less than 75mm by 75mm section at the top end.

(3) For urban surveys of blocks less than 5000 m^2 pegs shall be of sound durable wood at least 250mm long and not less than 75mm by 40mm section at the top end.

(4) Angles and tangent points along road or street frontages in other than urban surveys shall be marked with pegs of sound durable wood at least 350mm long and not less than 75mm x 75mm in section at the top end.

(5) All pegs shall be pointed for approximately two-thirds of their length and shall be bevelled at the top.

(6) The centre of the top of all pegs shall represent the survey point, provided that where conditions prevent the correct centring of pegs a tack shall be placed eccentrically to represent the survey point.

(7) All pegs are to be placed upright point downwards so that the top is not more than 75mm above the ground level in the case of a rural survey and 40mm above the ground level in the case of an urban survey and the surrounding earth shall be securely rammed.

(8) Lockspits shall consist of trenches 1.5m long, 200mm wide at the surface and 150mm deep dug in the direction of the boundary lines and commencing 300mm from each corner or angle or may consist of packed stones of similar dimensions.

(9) Where any corner, angle or other point is marked other than with a peg, where practicable wings shall be cut in solid rock, concrete or fixed timber, 75mm long 20mm wide and 10mm deep commencing 50mm from the corner or where the surface renders it desirable lines may be painted at least 300mm long and 20mm wide.

Description of Reference Marks

35. (1) Where a surveyor is required to place reference marks in accordance with these Directions - they shall consist of:

(a) a reinforced concrete block in the form of a truncated pyramid at least 375mm long, 150mm square at the lower end and 100mm square at the upper end, with a galvanised nail or other suitable metal plug not less than 75mm long inserted therein;

(b) a galvanised iron pipe at least 300mm long and 10mm internal diameter with a wall thickness of not less than 3mm;

(c) a galvanised iron spike at least 100mm long driven into fixed timber with a wing 75mm long cut into the timber and directed to the galvanised iron spike;

(d) a drill hole cut into a kerb or other substantial structure at least 5mm in diameter and 10mm deep with a wing 75mm long and directed thereto;

(e) a drill hole at least 10mm in diameter and 25mm deep cut into bedrock with a wing 75mm long and directed thereto where such bedrock exists within 300mm of the natural surface of the ground;

(f) an appropriate chisel mark cut into the sound wood of a suitable tree; or

(g) a mark of a durable character or a specific point on a permanent or substantial structure.

(2) Where a surveyor has placed or has found a reference mark referred to in either sub-clause (1)(a) or (1)(b) of this Direction or a control mark more than 400mm below the natural surface of the ground, the depth shall be indicated on the plan.

Description of CRMs

36. A CRM shall be either:

(a) a non-corrosive metal plaque set in a concrete kerb;

(b) a deep driven stainless steel rod; or

(c) such other mark as approved by the Chief Surveyor.

Placement of Reference Marks and CRMs

37. (1) Where these Directions require a surveyor to place reference marks the surveyor shall place them adjacent to the corner, angle or line mark, in selected positions designed to preserve them from disturbance, and the reference mark shall not be more than 25m from the corner, angle or line mark to which it is connected.

(2) Where a reference mark is placed in a road it shall be placed at a suitable distance from the existing road boundary; such distance shall be determined at the discretion of the surveyor having regard to the existence of any water, lighting or other services for which provision is or has to be made.

(3) CRMs of a type described in Direction 36(b) or (c) are required to be placed at a ratio of at least 1 such CRM per one 100 parcels of land or part thereof.

(4) CRMs of the type described in Direction 36(a) shall be installed along roads at intervals of not more than 150m throughout the length of the land surveyed and should have a clear line of sight to adjacent CRMs.

(5) Where a CRM is installed in such a position that it has, or the surveyor may have reason to consider that it may have in future, clear line of sight only to one other CRM then the surveyor shall place nearby a reference mark and shall connect the CRM to it by closed traverse.

(6) Where these Directions require a surveyor to place a CRM of the type described in Direction 36, the surveyor shall determine the AHD reduced level of the CRM to an accuracy of Class LC or better as specified in SP1 and promptly provide the results to the Chief Surveyor.

Connections to be Shown

38. Where a surveyor is required to place a reference mark, the requirement shall include the connection by direct measurement from the mark to the survey made by the surveyor.

Part VIII - Accuracy of Surveys

Angular Checks

39. A surveyor who makes a survey which exceeds a length of 10km on level or undulating country, 8km on steep country or 6km on mountainous country shall check the surveyor's angular work by astronomical observations, by GPS observations or by a complete angular close and shall not, for this purpose, interpolate any angular measurement made by another surveyor.

Angular Closure

40. Wherever practical a complete angular close shall be obtained. The observed angular misclose shall not exceed 20 seconds plus $10\sqrt{n}$ seconds where 'n' is the number of traverse angular stations either for the whole surround or between and including stations at which astronomical or GPS observations for azimuth have been made; provided always that any misclose shall not exceed 2 minutes.

Closure of Surround

41. (1) A surveyor shall check all measurements and where the nature of the survey permits, the check shall be by the mathematical closure of the lines in all surrounds in the survey.

(2) The closure of any survey must be such that the length of the misclose vector must not exceed:
(a) 15mm + 100 ppm of the perimeter for boundaries crossing level or undulating country; or
(b) 15mm + 150 ppm of the perimeter for boundaries crossing steep or mountainous country.

(3) The misclose vector may be determined as $\sqrt{(a^2+b^2)}$ where 'a' is the misclose in eastings and 'b' is the misclose in northings.

Accuracy of Measurement

42. (1) When making a survey, a surveyor must measure all lengths to an accuracy of 6mm + 30 ppm or better at a confidence level of 95%.

Classification of Country

(2) For the purposes of Directions 39 and 41, country shall be deemed to be:

(a) level, where slopes do not exceed 3 degrees;

(b) undulating, where slopes vary between 3 and 10 degrees;

(c) steep, where slopes vary between 10 and 15 degrees; and

(d) mountainous, where slopes are greater than 15 degrees.

Surveys using GPS

43 (1) When making a survey of other than an irregular natural boundary using GPS equipment, a surveyor must use an approved GPS surveying technique that will achieve an accuracy of Class B or better, as specified in SP1.

(2) When making a survey of an irregular natural boundary using GPS equipment, a surveyor must use an approved GPS surveying technique that will achieve an accuracy of Class C or better, as specified in SP1.

(3) The procedures used when operating GPS must be in a manner approved by the Chief Surveyor, and the details and results of the least squares adjustment are to be supplied to the Chief Surveyor on request.

Part IX - Identification Surveys and Remarking

Identification Surveys

44. (1) A surveyor may make:

(a) a survey (commonly known as an Identification Survey) of a previously measured parcel of land for the purpose of re-identification of the boundaries thereof, or of its location in relation to adjoining interests in such a manner as may be required by the nature of such survey; and

(b) a survey requiring the remarking of a previously surveyed parcel of land in such a manner and with such marks in such position as may be specially required by the client, but such survey shall not include one required in connection with any disposition of land or of any interest in land.

(2) Where such a survey is made in accordance with this Direction, the provision of Directions 6, 8(a)(i), (ii), (iii), (iv), (b), 42 and 46 to 51 both inclusive (but no other provision of these Directions) shall apply in respect thereof.

Surveys of Lesser Accuracy

45. (1) A surveyor may make a survey for a purpose not requiring strict accuracy under arrangement made between the surveyor and the surveyor's client and in such a manner and with such marking as may be agreed upon between them. A sketch made in accordance with this Direction shall show monuments as approximately located.

(2) Where a survey is made in accordance with this Direction the surveyor shall endorse on the sketch a certificate in or to the effect of Form 2 in the Schedule to these Directions.

(3) Where a survey is made in accordance with this Direction no other provision of these Directions shall apply in respect thereof.

Lodging of Plans

46. Plans or sketches prepared in association with surveys made under Directions 44 and 45 may be lodged with the Chief Surveyor who shall keep a register of all such plans.

Part X - Field Notes

Field Notes

47. (1) A surveyor shall make neat, precise, complete and readily intelligible field notes of every survey in accordance with the usage of surveyors.

(2) The field notes shall show in a distinctive manner any supplementary information such as references to official documents and measurements not made by the surveyor as considered necessary for clarity.

(3) Indexes and cross-references shall be used in such a manner as would facilitate the preparation of a complete and accurate plan from the field notes without reference to any additional records and without further explanation.

(4) No erasures shall be made and all amendments shall be initialled by the surveyor.

Information to be Shown

48. The field notes shall show:

(a) all the facts, readings and observations immediately they are ascertained by the surveyor, together with coefficients of standardisation and calibration of measuring equipment;

(b) the date, station and latitude and longitude thereof, and full particulars of all astronomical observations made in the course of the survey;

(c) the datum line of the survey and the origin of the azimuth adopted and, where a level is required, will clearly state the datum of levels and bench marks used to establish that level;

(d) all angles or bearings observed: recorded in degrees, minutes, and seconds of arc or decimal parts thereof and all such bearings shall be recorded and expressed clockwise from zero to 360 degrees; and

(e) the names of estates, houses, roads, streets, lanes, rivers, creeks, lakes and the like, and house numbers as far as material to the survey and ascertainable by the surveyor.

Alternative Methods of Recording Information

49. If a survey has been recorded in whole or in part by electronic methods, field notes and a paper copy of the reduced and formatted electronic data must be retained in a manner which facilitates the preparation of a complete and

accurate plan from the data without recourse to other records and without verbal explanation.

Disclosure of Difficulties

50. A surveyor shall disclose any doubt, discrepancy or difficulty suggested by or encountered in a survey in the field notes.

Field Notes to be Signed

51. A surveyor shall sign as evidence each page or sheet of the field notes and shall indicate thereon:

(a) whether the work shown in the field book was performed personally or under supervision as defined in these Directions; and

(b) the date on which the work recorded on such page was performed.

Part XI - Plans

Standards for Plans

52. The "Standards and Specifications for Plans" may be reviewed and approved by the Chief Surveyor and promulgated as a Disallowable Instrument.

Datum to be Shown

53. A surveyor shall show the datum line of the azimuth of a survey in the plan by distinguishing letters placed at the terminals thereof and the nature of the marks defining the datum line shall be noted therein.

Description of Marks and Connections to be Shown

54. A surveyor shall indicate on the plan:

(a) the nature of any corner, angle or line mark placed which is not a peg;

(b) the nature of any reference mark placed together with the relevant essential measurements; and

(c) the nature of any reference mark or CRM found and connected to, together with the relevant measurements.

Information to be Shown on Plan

55. A surveyor shall show in a plan of re-survey or of a subdivision:

(a) (i) the nature of all boundaries at the time of the re-survey or of the subdivision, irrespective of how they are marked or defined; and

(ii) if a wall is on a boundary, the boundary shall be described in the plan as 'face of wall' or 'passing through wall', or otherwise, as appropriate: A wall shall not be described as a 'party wall' except in accordance with Section 32 of the *City Area Leases Ordinance 1936,* as applied and modified by Section 5 of the *National Lands Ordinance 1989,* and/or Sections 27 and 28 of the *Common Boundaries Act 1981*;

(b) the description and width of all walls used in common and the position of the boundary therein;

(c) offsets to all physical objects relevant to the survey within 1m of the boundaries; and

(d) offsets to all physical objects relevant to the survey and suitable for use as monuments to redefine a boundary within 3m of the boundaries.

Certification

56 (1) Where a surveyor is required to furnish a plan of a survey for lodgement at the Registrar-General's Office the surveyor shall endorse thereon a certificate in or to the effect of Form 1 in the Schedule to these Directions.

(2) Such certificate may be incorporated in any certificate required by any law to be endorsed on such plan.

(3) A surveyor shall disclose any doubt, discrepancy or difficulty suggested by or encountered in a survey in the plan thereof or in an annexure thereto or in an accompanying report.

Requisition

57. (1) On receipt of a requisition from the Chief Surveyor or the Registrar-General to amend a survey plan or to supply information concerning a survey or plan and which amendment or information is necessary to complete the plan in terms of these Directions, the surveyor concerned shall promptly comply with the requisition.

(2) After certification of the plan by the Chief Surveyor such amendments shall be made by striking through the erroneous matter and inserting the correct information.

(3) Amendments and additional information added to a plan shall be initialled and dated by the surveyor.

Part XII - Stratum Surveys

Requirement for Stratum Surveys

58. Where a plan of survey of a stratum is required the surveyor shall:

(a) mark at ground level the projection of the extremities of the stratum block and relate it to existing boundaries and occupations;

(b) define the stratum by dimensions of regular, or description of irregular surfaces;

(c) delineate on the plan the extent of any easement and fully describe its purpose and limits;

(d) show on the plan elevations and sections sufficient to delineate the stratum using reduced levels based on the AHD;

(e) verify AHD reduced levels by closed height difference between two control marks, the AHD reduced levels of which are to an accuracy of Class LC or better, as specified in SP1. The control marks used must be those recorded on the ACT Government survey mark register.

(f) show on the plan the position and reduced level of at least two permanent physical objects adjacent to the stratum; and

(g) determine all reduced levels to an accuracy of Class LC or better, as specified in SP1.

Part XIII - Units Title

Survey and Plan Requirements

59. (1) Where a surveyor is required to carry out a survey for the preparation of a Units Plan (within the meaning of the *Unit Titles Act 2001*) it shall be done in accordance with Direction 44.

(2) Standards, specifications and/or guidelines for the preparation of Units Plans may be issued by the Chief Surveyor.

SCHEDULE

Form 1 Direction 56
CHIEF SURVEYOR PRACTICE DIRECTIONS

Surveyors Act 2007

I ..... of.....
a surveyor registered under the *Surveyors Act 2007* hereby certify that the survey represented on this plan is accurate and has been made in accordance with the Chief Surveyor Practice Directions No 1 2008 and was completed on .....

(Signature).....
Surveyor, Registered under the
Surveyors Act 2007

Form 2 Direction 45
CHIEF SURVEYOR PRACTICE DIRECTIONS

Surveyors Act 2007

I ..... of .....
a surveyor registered under the *Surveyors Act 2007* hereby certify that the survey represented in this sketch being a survey which does not require strict accuracy was made in accordance with Direction 45 of the Chief Surveyor Practice Directions No 1 2008.

(Signature).....

Surveyor, Registered under the
Surveyors Act 2007

Form 3 Direction 7
CHIEF SURVEYOR PRACTICE DIRECTIONS

Surveyors Act 2007

To the owner of..... .....
(here insert reference to land proposed to be entered)

In pursuance of Section 45 of the *Surveyors Act 2007*, notice is hereby given that I, the undersigned registered Surveyor, intend to enter the above mentioned land on .....for the purpose of making a survey.
(here insert dates of proposed entry)

Dated this ..... day of ..... 20 .....

(Signature).....
Registered Surveyor

(Address) .....