REPUBLIC OF ZAMBIA

# THE LAND SURVEY ACT

# CHAPTER 188 OF THE LAWS OF ZAMBIA

# CHAPTER 188 THE LAND SURVEY ACT

# THE LAND SURVEY ACT

# ARRANGEMENT OF SECTIONS

# PART I

# PRELIMINARY

Section

- 1. Short title
- 2. Interpretation
- 3. Application

PART II ADMINISTRATION

- 4. Appointment of Surveyor-General
- 5. Powers of Government surveyors
- 6. Establishment of Survey Control Board
- 7. Duties of Board
- 8. Qualifications and application for grant of licences
- 9. Grant of licences
- 10. Duties of land surveyor
- 11. Offences by land surveyor
- 12. Complaints against land surveyors
- 13. Powers of Board on inquiries
- 14. Unauthorised practice as surveyor

# PART III

#### ORIGINAL SURVEYS AND RE-SURVEYS

- 15. Original survey of land
- 16. Agreement as to beacons and boundaries
- 17. Rectification of title deeds after determination of boundary dispute
- 18. Replacing incorrect diagram by new diagram after re-survey
- 19. Re-survey of blocks of land

### PART IV

# SUBDIVISIONAL SURVEYS

### Section

- 20. No diagram of portion of unsurveyed land to be approved
- 21. Approved plans of proposed subdivisions
- 22. Subdivisional diagrams
- 23. Rectification of errors ascertained by subdivisional survey
- 24. Diagram of exact fraction of land

# PART V

# BEACONS AND BOUNDARIES

- 25. Beacons and boundaries lawfully established
- 26. Manner and cost of erecting beacons for survey purposes
- 27. No poles, etc., to be placed near beacon
- 28. Repair or re-erection of beacons
- 29. Offences and compensation
- 30. Authority to remove beacons

#### PART VI

# GENERAL PLANS AND DIAGRAMS

- 31. Manner of preparing general plans and diagrams
- 32. No registration of land without approved diagram
- 33. Consistency between general plans or diagrams and survey records and signing and approval thereof
- 34. Approval of general plan or diagram for consolidation purposes or rearrangement of boundaries
- 35. Endorsement on general plan
- 36. Registrar and owner to be informed of incorrect diagram
- 37. No approval for plan or diagram of parcel of land not provided with access rights

# PART VII

#### MISCELLANEOUS

- 38. Aerial photography
- 39. Powers of entry, etc., upon land
- 40. Regulations
- 41. Fees of office
- 42. Act to bind President

# SCHEDULE-Declaration

# CHAPTER 188

# LAND SURVEY

An Act to make further and more comprehensive provisions for the registration and licensing of land surveyors; to provide for the manner in which land surveys shall be carried out and diagrams and plans connected therewith shall be prepared; to provide for the protection of survey beacons and other survey marks; to provide for the establishment and powers of a Survey Control Board which will be responsible for the registration and licensing of land surveyors and for the exercise of disciplinary control over such surveyors; and to provide for matters incidental to and connected with the foregoing.

[23rd December, 1960]

#### PART I

#### PRELIMINARY

- **1.** This Act may be cited as the Land Survey Act.
- 2. In this Act, unless the context otherwise requires-

"approve", in relation to any plan or diagram, means the signing of such plan or diagram by a Government surveyor in order to signify that the requirements of this Act and of any regulations made thereunder have been complied with in regard to such plan or diagram;

- "beacon" means the mark or structure made or erected at, or indicatory of, the corner point of a parcel of land, or at an intermediate line point on a rectilinear boundary of a parcel of land, by a land surveyor or by his agents, servants or workmen acting under his direction, and includes a bench mark, reference mark and trigonometrical station;
- "Board" means the Survey Control Board established under the provisions of section *six*;

"the Court" means the High Court;

"Customary area" has the meaning assiged to it in section two of the Lands Act. Cap. 184

59 of 1960 57 of 1964 44 of 1965 69 of 1965 9 of 1973 34 of 1974 13 of 1994 Government Notice 274 of 1964 Statutory Instrument 65 of 1965

Short title

Interpretation

- "diagram" means a document containing geometrical, numerical and verbal representations of one or more parcels of land, the boundaries of which have been surveyed by a land surveyor, and which document has been signed by such surveyor or which has been certified by a Government surveyor as having been compiled from approved records of a survey or surveys carried out by one or more land surveyors, and includes any such document which, at any time prior to the commencement of this Act, has been accepted as a diagram in the Registry or in the office of the Surveyor-General or his predecessors;
- "general plan" means a plan depicting, in such manner and to such standards of accuracy as may be prescribed, the relative position, beacons, boundaries and dimensions of one or more parcels of land as surveyed by a land surveyor, and which has been signed by such surveyor or which has been certified by a Government surveyor as having been compiled from the approved records of a survey or surveys carried out by one or more land surveyors, and includes any general plan which, at any time prior to the commencement of this Act, has been accepted as a general plan by the Surveyor-General or any of his predecessors;
- "Government Surveyor" means the Surveyor-General and any public officer employed in the office of the Surveyor-General and so appointed by the Surveyor-General;

"land surveyor" means a person holding a licence;

"legal practitioner" means a person authorised to practise as a barrister and Cap. 30 solicitor under the provisions of the Legal Practitioners Act;

"licence" means a licence issued under the provisions of section *nine*;

"local authority" means-

- (a) a city council;
- (b) a municipal council;
- (c) a township council; and
- (*d*) a district council;

"owner" means-

 (a) the person registered as the proprietor of any land except where that person has leased or sub-leased the land to another person for a period not shorter than ninety-nine years less three days;

- (b) the person in whom the fee simple of any land is vested under a registered deed;
- (c) the lessee of State Land expressed to be for a period of fourteen years or more;
- (*d*) the lessee of land held under any other lease expressed to be for a period not shorter than ninety-nine years less three days; and
- (e) the allottee of land held under a provisional title and in process of alienation by the President;
- and includes the liquidator of any company which is an owner as aforesaid, and the representative recognised by law of any owner as aforesaid who has died, become insolvent, assigned his estate for the benefit of his creditors, or is under any legal disability;
- "parcel of land" means any piece or unit of land, enclosed within determinable boundaries, which has been or is to be registered;

"prescribed" means prescribed by regulation made under the provisions of this Act;

- "public place" includes any street, road, thoroughfare, sanitary lane, park, square or other open space shown on a general plan of a township filed in the Registry or in the office of the Surveyor-General and all other land in a township the control whereof is vested, to the entire exclusion of the owner thereof, in the President or a local authority or to which the owners of other land in such township have a common right;
- "Registrar" means the Registrar assigned to the Registry of Deeds in Lusaka under Cap. 185 the provisions of the Lands and Deeds Registry Act;
- "registration", in relation to any land, means the registration of any right in or to Cap. 185 such land, or of any document or plan relating to such land, in accordance with the Lands and Deeds Registry Act; and "register" and "registered" shall be construed accordingly;
- "Registry" means the Registry of Deeds, and any District Registry of Deeds, Cap. 185 established under the provisions of the Lands and Deeds Registry Act;
- "stand" means a parcel of land as originally surveyed within a township, but does not include a public thoroughfare;
- "State Land" means any land included within "State Lands" as defined in the Lands Cap. 184 Act;

- "subdivisional survey" means a survey of a portion or portions of a registered parcel of land;
- "the Surveyor-General" means the Surveyor-General appointed under the provisions of section *four*;

"township" means the area of-

- (a) a municipality;
- (b) a township;

"trigonometrical station" means a permanent mark in the form of a beacon, bolt or mark cut into rock, stone, concrete, brick or wood, the position of which permanent mark has been determined by or on behalf of the Surveyor-General, and includes any such permanent mark as was on the \*(1)commencement of Act No. 44 of 1965 a trigonometrical control point under the provisions of the Trigonometrical and Topographical Survey Act, 1958;

\* 27th August, 1965.

(As amended by Nos. 44 and 69 of 1965, S.I. No. 65 of 1965 and No. 9 of 1973)

**3.** This Act shall only apply to any survey used for the purpose of effecting the Application registration of any parcel of land, or for re-determining the position of a curvilinear boundary or of any beacon defining the boundary of any registered parcel of land.

#### PART II

#### ADMINISTRATION

**4.** (1) There shall be a Surveyor-General who shall be a public officer and land Appointment of surveyor. Appointment of Surveyor-General

(2) Subject to the general or special directions of the Minister, the Surveyor-General shall-

- (a) supervise and control the survey and charting of land for the purposes of registration;
- (b) take charge of and preserve all records appertaining to the survey of parcels of land which have been approved;

- direct and supervise the conduct of such trigonometrical, topographical and level surveys, and such geodetic and geophysical operations, as the Minister may direct;
- (a) take charge of and preserve the records of all surveys and operations carried out under paragraph (c);
- (e) supervise the preparation of such maps as the Minister may direct from the data derived from any surveys, and the amendment of such maps; and
- (*t*) generally administer the provisions of this Act.

(3) All records and documents in the custody of the Surveyor-General shall become the property of the Government, but approved plans and diagrams shall be available, for the purposes of reference, to the public in the office of the Surveyor-General.

(As amended by S.I. No. 65 of 1965 and No. 9 of 1973)

\*27th August, 1965.

- 5. Any Government surveyor may-
  - (a) examine and check survey records which have been lodged with the Surveyor-General for approval, and reject the whole or any part of any such records when his examination reveals inconsistencies in data outside such limits as may be prescribed or doubt as to the standards of accuracy, or the soundness of methods, employed in the survey concerned;
  - (b) examine all plans and diagrams of surveys of parcels of land before any registration of such parcels is effected, and approve such plans and diagrams if he is satisfied that such surveys have been carried out in such a manner as should ensure accurate results, and that such plans and diagrams have been prepared, and the boundaries of the land surveyed have been defined, in the prescribed manner:

Provided that no such approval shall be given in contravention of any other written law;

- (c) on the diagram of any parcel of land attached to a registered document-
  - define the geometrical figure representing any surveyed portion of such parcel, the transfer of ownership of which has been lodged with the Registrar for registration;

Powers of Government surveyors

 define the geometrical figure representing any surveyed portion of such parcel of land which has been declared a private township in accordance with the provisions of the Town Planning Act, Chapter 123 of the 1959 Edition of the Laws;

and inscribe a certificate at some suitable place on the face or on the reverse of such diagram reciting the numerical extents of the portion which is to be so transferred and of the remaining portion of the original parcel of land;

- (*a*) cancel or appropriately amend any general plan or diagram found to be incorrect;
- (e) prepare, certify and issue, at the request of any person and on payment of the prescribed fees, copies of approved diagrams filed in the office of the Surveyor-General which are available to the public, and copies of diagrams attached to registered documents;
- (*t*) endorse, amend and, if necessary, correct any registered diagram or plan, and sign such endorsement, amendment or correction.
- 6. (1) There is hereby established a Survey Control Board which shall consist of-

Establishment of Survey Control Board

- (a) the Surveyor-General;
- (b) one member appointed by the Minister from amongst public officers who are land surveyors and nominated by the Surveyor-General;
- (c) not more than two members appointed by the Minister from a panel of names of land surveyors submitted by the representative body of land surveyors in Zambia; and
- (*d*) one member appointed by the Minister from amongst legal practitioners of not less than five years' standing.

(2) The Surveyor-General shall be the Chairman of the Board, and, in case of his absence from any meeting of the Board, the member appointed under paragraph (b) of subsection (1) shall preside over such meeting.

- (3) Three members of the Board shall form a quorum.
- (4) The Minister may, in his discretion-
  - (a) revoke the appointment of any member of the Board made by him;
  - (b) appoint a land surveyor of his own choice temporarily to fill a vacancy on the Board caused by the temporary inability of a member appointed under paragraph (c) of subsection (1) to attend meetings of the Board.

(5) The Board shall meet at the discretion of the Chairman or upon requisition in writing addressed to the Chairman by one or more of the members.

(As amended by S.I. No. 65 of 1965 and No. 9 of 1973)

- 7. The duties of the Board shall be-
  - (a) to conduct examinations of and trial surveys by persons who desire to become land surveyors;
  - (b) to keep a register of land surveyors;
  - to hear complaints and to take such disciplinary action as may be necessary against land surveyors in accordance with the provisions of this Act;
  - (*d*) to make recommendations to the Minister relating to the making of regulations under section *forty*;
  - (e) generally to control and regulate the practice of the survey profession.

**8.** (1) Any person who, immediately before the commencement of this Act, held a licence to practise as a land surveyor under the law then in force shall be entitled to be granted a licence.

Qualifications and application for grant of licences

(2) Any person who is not entitled to be granted a licence under subsection (1) but who-

- (a) has attained the age of twenty-one years; and
- (b) has passed an examination to the satisfaction of the Board demonstrating a comprehensive knowledge of the provisions of this Act and of any regulations for the time being in force thereunder; and
- (c) holds-
  - a licence to practice as a land surveyor in such country other than Zambia as may be approved for the purpose by the Board; or
  - (ii) a degree in land surveying from a university approved by the Board; or
  - a degree in geography, mathematics, physics or engineering from a university approved by the Board, including a post-graduate diploma or post-graduate qualification in land surveying; or
  - such other qualification from such educational institution as may be approved by the Board; or
  - has had such practical experience of land surveying in Zambia extending to a period not less than five years as may be approved by the Board; and

Copyright Ministry of Legal Affairs, Government of the Republic of Zambia

Duties of Board

(d) has completed to the satisfaction of the Board, a trial survey set or approved by the Board;

may apply for a licence.

(3) Any person entitled to be granted, or to apply for, a licence may make written application in that behalf to the Board, and such application shall be accompanied by such proof of such entitlement as the Board may require.

(4) Notwithstanding the provisions of subsection (2), the Surveyor-General shall be entitled to be granted a licence if he satisfies the requirements of paragraphs (a) and (c) of the said subsection.

(As amended by No. 9 of 1973. and No. 34 of 1974)

Grant of licences

9. (1) Upon receipt of an application for a licence from a person mentioned in subsection (1) of section eight, the Board upon being satisfied that such person is duly entitled under the said subsection, shall issue to such person a licence.

(2) Upon receipt of an application for a licence from a person mentioned in subsection (2) of section eight, the Board shall, if satisfied of the qualifications of such person and upon receipt of the prescribed fee and of a declaration in the form set forth in the Schedule, grant a licence to such person.

(3) Licences granted under the provisions of this section shall be in such form as may be prescribed.

10. (1) A land surveyor shall-

Duties of land surveyor

- carry out every survey undertaken by him in such a manner as will ensure (a) accurate results and in accordance with the provisions of this Act and any regulations in force thereunder;
- be responsible to the Surveyor-General for the correctness of every survey (b) carried out by such land surveyor or under his supervision and of every general plan and diagram which bears his signature;
- deposit with the Surveyor-General, for the purpose of being permanently (C) filed in the office of the Surveyor-General, such records as may be prescribed relative to every survey carried out by him after the commencement of this Act; and

(d) when required by the Surveyor-General, without delay correct in any survey carried out by such land surveyor after the commencement of this Act or in any work appertaining thereto, any error which is in excess of the prescribed limits of error and take such steps as may be necessary to ensure the amendment of any diagram and general plan based on such incorrect survey and to adjust the position of any beacon he has placed in accordance with such incorrect survey.

(2) As soon as practicable after the commencement of this Act, the Surveyor-General shall examine all such records as are mentioned in paragraph (c) of subsection (1) before approving any general plan or diagram to which such records refer.

(3) Neither the Government nor any officer thereof shall be liable for any defective survey or work appertaining thereto performed by a land surveyor, notwithstanding that a general plan or diagram relating to such survey or work has been approved or accepted for registration.

- 11. If a land surveyor, other than a Government surveyor-
  - (a) signs, except as provided in section *thirty-four*, a general plan or diagram of any parcel of land in respect of which he has not carried out or personally supervised the whole of the survey and field operations and carefully examined and satisfied himself of the correctness of the entries in any field book, and the calculations, working plans and other records in connection therewith, which may have been made by any other person; or
  - (b) signs a defective general plan or diagram knowing it to be defective; or
  - (c) repeatedly performs, through negligence or incompetence, defective surveys or surveys to which adequate checks have not been applied; or
  - (d) makes any entry in a field book, copy of a field book or other document which purports to have been derived from actual observation or measurement in the field when it was not in fact so derived; or
  - (e) supplies erroneous information to the Surveyor-General in connection with any survey, boundaries or beacons of land knowing it to be erroneous; or
  - is guilty of such improper conduct as, in the opinion of the Board, renders him unfit to practise as a land surveyor;

the Board may impose upon him such of the penalties prescribed in subsection (1) of section *thirteen* as it thinks fit.

**12.** (1) Every complaint against a land surveyor shall be submitted in writing to the Board and shall be signed by the person making the complaint, and, if it appears to the Board that an inquiry is justified, the Board shall fix a time and date for the holding of such inquiry.

(2) At least thirty days before the date fixed for the inquiry, the land surveyor against whom the complaint has been made shall be notified, by registered letter sent to his last known address, of the time, date and place fixed for the inquiry and shall be provided with a copy of the complaint.

Complaints against land surveyors

Offences by land surveyor

(3) At an inquiry under this section the land surveyor against whom the complaint has been made shall be entitled to be heard in his defence either personally or by his legal representative.

(4) The Board shall have full power to summon witnesses and to examine them upon oath or affirmation and to carry out any investigations concerning the complaint, and may hold the inquiry whether or not such land surveyor appears before it or is represented by his legal representative or has filed any reply to the notice prescribed in subsection (2).

(5) For the purposes of subsection (4), any member of the Board may administer an oath or affirmation.

(6) The findings and decision of the Board on such inquiry shall be made in writing and signed by the Chairman.

**13.** (1) If, after an inquiry, a land surveyor is found to be guilty of an offence under section *eleven*, the Board may-

- (a) admonish such land surveyor; or
- (b) suspend his licence for a period not exceeding three years, in which case the Chairman of the Board shall enter the reasons for and period of such suspension in the Register; or
- (c) cancel his licence, in which case the Chairman of the Board shall remove the name of such land surveyor from the Register; and
- (*d*) in addition to admonishment or suspension or cancellation of his licence, order such land surveyor to pay the cost of any correction to any survey records which his conduct may necessitate.

(2) Any person whose licence has been suspended or cancelled under subsection (1) may appeal to the Court whose decision shall be final.

(3) The Board may, in its discretion and subject to such conditions as it may deem fit-

- (a) reinstate any land surveyor whose name has been removed from the Register; or
- (b) cancel the suspension of a land surveyor's licence.

(4) Notice of suspension or cancellation of a licence or of reinstatement or cancellation of suspension of a land surveyor's licence shall be published in the *Gazette*.

(5) For the purposes of this section, "Register" means the register of land surveyors kept under the provisions of paragraph (*b*) of section *seven*.

14. After the commencement of this Act, no person, except a land surveyor, shall-

- (a) perform any survey for the purpose of preparing any diagram or plan to be filed or registered in the Registry or referred to in any manner whatsoever in any other document to be so filed or registered;
- (b) perform any survey affecting the delimitation of the boundaries or the location of the beacons of any parcel of land registered or to be registered in the Registry; or
- (c) hold himself out in any matter whatsoever as a land surveyor;

and any person who contravenes any provision of this section shall be guilty of an offence and liable to a fine not exceeding three thousand penalty units.

(As amended by Act No. 13 of 1994)

#### PART III

#### ORIGINAL SURVEYS AND RE-SURVEYS

**15.** If a land surveyor carries out a survey of any previously unsurveyed parcel or parcels of land, he shall deliver or transmit to the Surveyor-General for examination and filing-

- (a) a plan approved by the Commissioner of Lands showing the boundaries of such parcel or parcels of land or, in the case of land subject to the provisions of the Town and Country Planning Act, a plan approved by the appropriate town planning authority;
- (b) such original records as may be prescribed relative to such survey, and any other information which such land surveyor may consider material and useful or which the Surveyor-General may require;
- (c) where applicable, an agreement as to beacons and boundaries as prescribed in section *sixteen*.

(As amended by No. 44 of 1965)

16. (1) An agreement as to be acons and boundaries (in this section referred to as the agreement) shall be required-

Agreement as to beacons and boundaries

(a) when, in the course of an original survey abutting upon a previous survey, or of a re-survey, or of a subdivisional survey, the data derived from the later survey differ beyond the prescribed limits from the data obtained in the previous survey;

Copyright Ministry of Legal Affairs, Government of the Republic of Zambia

Unauthorised practice as surveyor

Original survey of land Cap. 283

(b) in any survey performed for the purpose of settling a boundary dispute, when such dispute has been resolved and new diagrams resulting from such survey are to be registered.

(2) The agreement shall be, as far as practicable, in such form as may be prescribed and shall be signed by the owner of the parcel of land under survey or his duly authorised agent, by every contiguous owner or his duly authorised agent, and by two competent witnesses to each signature, being persons of either sex above the age of eighteen years, one of whom may be the land surveyor performing the survey.

(3) If any contiguous owner fails to sign the agreement within a period of one month from the date upon which he or his duly appointed agent was called upon to sign the agreement, the owner of the land under survey of his duly authorised agent shall serve upon such contiguous owner or his duly authorised agent a notice in writing, informing him that if he fails, within a further period of one month from the date of service of such notice, to lodge with the Surveyor-General an objection to the boundaries or beacons of such parcel of land as set forth in the agreement which he was called upon to sign, he will be deemed to have agreed to such boundaries and beacons:

#### Provided that-

- (i) if such contiguous owner is outside Zambia when so called upon to sign such agreement and when so served with such notice, the periods of one month shall be extended to three months;
- (ii) if the address of any such contiguous owner cannot be ascertained by diligent inquiries, the publication of such notice in an issue of the *Gazette* and once each week during two consecutive weeks in a newspaper circulating in the District within which such parcel of land is situate shall be deemed to be service of such notice for the purposes of this subsection.

(4) The service of notice referred to in subsection (3) shall, subject to proviso (ii) to that subsection, be effected by personal delivery or by registered post, and in the latter case, the date of service shall be deemed to be the date upon which the letter containing such notice would, in the ordinary course, reach the post office from which it is to be delivered to the addresse thereof.

- (5) Whenever-
  - (a) a contiguous owner has failed to sign the agreement; and
  - (b) the Surveyor-General has been satisfied by such proof as he may deem necessary that the provisions of subsection (3) have been complied with; and

- (c) no objection to any beacon or boundary adopted in the survey to which the agreement relates has been lodged with the Surveyor-General by such contiguous owner within the period mentioned in the notice served upon him in terms of subsection (3); and
- (*a*) the other requirements of this Act and the regulations have been complied with in regard to the survey and resulting plans and diagrams;

a Government surveyor shall approve the survey to which the agreement relates.

(6) If any contiguous owner has failed to sign the agreement, and has, within the period mentioned in any such notice as is referred to in subsection (3), lodged with the Surveyor-General an objection to any beacon or boundary adopted in the survey in question, the Surveyor-General may, if every person affected by such objection undertakes in writing to accept the award of an arbitrator or arbitrators to be appointed by the Surveyor-General as final and conclusive upon all matters in dispute in connection with any beacon or boundary and in regard to the costs of or incidential to such arbitration, appoint such arbitrator or arbitrators to determine such matters and costs and his or their award shall thereupon be final and conclusive.

(7) If any person who has lodged an objection mentioned in subsection (6) fails to give the undertaking therein referred to, he may, if he was in Zambia upon the date upon which he was called upon to accept the award of an arbitrator or arbitrators as aforesaid, within one month, and, if he was not in Zambia on such date, within three months after such date, institute an action in the Court to determine any such matter, or, if the President is one of the persons affected by such objection, proceed to arbitration in respect of any such matter and, if he fails within such period to institute such action or to proceed to such arbitration, as the case may be, he shall be deemed to have agreed to such beacons and boundaries.

(8) For the purposes of this section, "contiguous owner" means the owner of any land abutting upon the boundary under dispute.

(As amended by S.I. No. 65 of 1965)

**17.** (1) Whenever a dispute in regard to any boundary or beacon of contiguous parcels of land has been finally determined by the judgment of the Court or by the award of an arbitrator or arbitrators, the owners of any land affected by such judgment or award, or such of them as may be specially directed thereby, shall take such steps as may be necessary to produce an amended title to such land, and such amended title shall be based upon a diagram correctly representing the boundaries and beacons of such land as determined by such judgment or award.

(2) Any judgment or award mentioned in subsection (1) shall determine in what proportion the costs of any survey for the purpose of framing any diagram or otherwise giving effect to such judgment or award, and of the amended title, shall be borne by the owners of any land affected by such judgment or award.

Rectification of title deeds after determination of boundary dispute

**18.** (1) Whenever it is established to the satisfaction of the Surveyor-General that the diagram of any registered parcel of land or attached to any registered document (in this section referred to as the existing diagram) does not correctly represent the boundaries of such parcel of land-

Replacing incorrect diagram by new diagram after re-survey

- (a) the owner thereof may apply to the Surveyor-General for the cancellation of the existing diagram and the approval in lieu thereof of a new diagram of such land for registration; or
- (b) the Surveyor-General may in writing call upon the owner thereof to arrange within a specified period for a new approved diagram to be registered which shall supersede the existing diagram;

and, in the event of an owner failing to comply with any requirement mentioned in paragraph (*b*), the Surveyor-General may apply to the Court for orders to be made for the execution of such obligations by the said persons:

Provided that the provisions of section *sixteen* shall, *mutatis mutandis*, apply in regard to such new diagram and to all matters in connection therewith, or with the survey upon which it is based, and that it shall not be approved unless the said provisions have been complied with.

(2) A land surveyor performing the re-survey of land for the purposes of this section shall, in addition to the other documents required by section *sixteen* to be delivered or transmitted to the Surveyor-General, deliver or transmit to him for the purpose of being filed for record in the office of the Surveyor-General a report with an explanatory plan, clearly setting forth the degree or particulars in which such re-survey differs from the survey upon which the existing diagram or diagrams was or were based as disclosed by such diagram or diagrams and containing such other information as such land surveyor may deem useful or the Surveyor-General may require.

(3) Upon receipt by the Surveyor-General of an application from the owner, or upon the Surveyor-General calling on the owner to arrange for the registration of a new diagram under subsection (1), the Surveyor-General shall notify the Registrar accordingly, and no registration of the land represented by such new diagram, or any portion thereof or undivided share therein, shall be effected in the Registry until an amended title thereto has been registered.

(4) If it appears from a re-survey under this section that an existing diagram is correct, the Surveyor-General shall endorse thereon a certificate that the land represented thereby has been re-surveyed and that the existing diagram has been found to be correct, and thereupon the beacons and boundaries of such parcel of land shall be deemed to have been lawfully established in accordance with section *twenty-five*:

Provided that the provisions of section *sixteen* shall, *mutatis mutandis*, apply in the same manner as if such re-survey were a survey and as if such endorsement were an approval of a diagram for the purposes of that section, and that such endorsement shall not be made unless those provisions have been complied with.

Re-survey of blocks of

		land
(a)	the owners of not less than one-half of a section or block of registered parcels of land apply to the Surveyor-General for a re-survey of such section or block; and	
(b)	the Surveyor-General reports that the boundaries of the several parcels of land constituting such section or block are confused and need adjustment;	

the Minister may order that such section or block be re-surveyed.

19. (1) Whenever-

(2) No beacons or boundaries which have been lawfully established under section *twenty-five* shall be affected by any re-survey or any other act performed under this section.

(3) Whenever in the course of a re-survey ordered under this section a dispute arises as to the boundaries of the parcel of land concerned, the Surveyor-General may give notice in writing to every person who is a party to such dispute that he proposes to appoint an arbitrator for the purpose of determining such dispute, and the provisions of subsection (4) of section *sixteen* shall, *mutatis mutandis*, apply in regard to such notice.

(4) Any person to whom notice is given under subsection (3) may, if he was in Cap. 41 Zambia upon the date when such notice was served upon him, within one month, and, if he was not in Zambia on such date, within three months after such date, institute an action in the Court to determine such dispute, or, if the President is one of the parties to such dispute, proceed to arbitration in respect thereof under the Arbitration Act; and if no such person institutes any such action or arbitration proceedings within such periods, the Surveyor-General may appoint an arbitrator to determine such dispute, and the award of such arbitrator in regard to such dispute and in regard to all costs thereof or incidental thereto shall be final.

(5) The Minister may direct that the costs of any such re-survey be recovered by the Surveyor-General proportionately from the respective owners in such manner as the Minister may direct.

(6) Upon payment by an owner of any parcel of land of all costs due by him in respect of a re-survey ordered under this section, a Government surveyor shall cancel the existing registered diagrams of such parcel of land and shall issue for registration in lieu thereof a new approved diagram.

(7) A Government surveyor shall not approve a general plan representing any parcels of land based upon a re-survey under this section until a copy thereof has been available for inspection during a period of six weeks at his office and at the office of the District Secretary of the District within which such land is situate, and until he has published, in two consecutive issues of the *Gazette* and once every week during two consecutive weeks in a newspaper circulating in such District, a notice stating his intention to approve such general plan and calling upon persons interested who object to such approval to lodge such objection with the Surveyor-General:

Provided that a Government surveyor may approve any such general plan, without publishing such notice, if every owner of any land affected by such re-survey has agreed in writing to such general plan or to the beacons and boundaries adopted in such re-survey, or if such general plan is in accordance with a judgment or award under subsection (4) in an action or arbitration proceedings to which every such owner was a party.

(8) If, within four weeks of the date of the last publication of a notice under subsection (7), no objection has been lodged by any person, other than a person who was a party to an action or arbitration proceedings under subsection (4), a Government surveyor may approve such general plan, and upon such approval, he shall, by *Gazette* notice, declare that such general plan has been approved.

(9) If, within such period of four weeks, any such objection has been so lodged, the provisions of subsections (6) and (7) of section *sixteen* shall, *mutatis mutandis*, apply:

Provided that a Government surveyor may approve and make use of a general plan or general plans of such portions of the area re-surveyed as are not affected by such objection and generally may take any steps in regard to such portions as if no such objection had been lodged.

(As amended by S.I. No. 65 of 1965)

# PART IV

#### SUBDIVISIONAL SURVEYS

**20.** No diagram of any portion of a registered unsurveyed parcel of land shall be approved until a survey has been made of the whole of such parcel of land and a diagram has been registered on the basis of such survey.

No diagram of portion of unsurveyed land to be approved

**21.** When submitting to the Surveyor-General for approval the records of a subdivisional survey, the land surveyor concerned shall deliver, in addition to any other records-

- (a) a plan showing the proposed subdivision or subdivisions approved by the appropriate authority constituted under the Town and Country Planning Act when the land is subject to the provisions of that Act;
- (b) in the case of land leased from the President, a plan of the proposed subdivision or subdivisions approved by the Commissioner of Lands.

(As amended by No. 44 of 1965 and S.I. No. 65 of 1965)

**22.** (1) Whenever the owner of a surveyed parcel of land desires to subdivide the same and to effect separate registration of one or more portions of such land, each of the portions to be so registered shall be surveyed and a diagram thereof, prepared in accordance with this Act, shall be submitted to the Surveyor-General for approval:

Subdivisional diagrams

Provided that, if it is desired to effect a separate registration of the remaining extent of such parcel of land, no diagram of such remaining extent shall be submitted to the Surveyor-General or approved unless it be designated as a subdivision of the parcel of land.

(2) Upon separate registration of any subdivision of a parcel of land being effected, a Government surveyor shall, in accordance with the provisions of paragraph (c) of section *five*, define on the copy of the registered diagram of the parcel of land so divided belonging to the owner of such remaining extent, and on the copy of such diagram registered in the Registry, the geometrical figure representing such subdivision, the numerical extent thereof and the numerical extent of the remaining portion after deduction of the subdivision from the parcel of land:

Provided that, in such cases as may be prescribed, such definition and deduction may be made on a supplementary plan to be attached to the registered diagram or registered separately instead of on such diagram.

Approved plans of proposed subdivisions Cap. 283

**23.** If a subdivisional survey discloses, in the opinion of a Government surveyor, that-

- nat-
- (a) the numerical data derived from the subdivisional survey differ beyond the prescribed limits of error from the numerical data on the diagram of the parcel of land under subdivision, a Government surveyor shall not approve a diagram based upon the subdivisional survey until the provisions of section *sixteen* and subsection (2) of section *eighteen* have been complied with in regard thereto and to all matters in connection therewith, as if the parcel of land represented on the diagram based upon the subdivisional survey were a parcel of land such as is referred to in the said section or subsection:

Provided that every parcel of land, a beacon or boundary whereof has a bearing on or reference to the parcel of land represented on such last mentioned diagram, shall be deemed to be contiguous to such parcel of land for the purposes of subsection (1) of the said section *sixteen*;

(b) the numerical data derived from the subdivisional survey differ from the numerical data on the diagram of the land under subdivision upon which any registration has been based, but not beyond the prescribed limits of error, a Government surveyor shall, if satisfied that the subdivisional survey has been more accurately performed than the previous survey of the land under subdivision and that the positions of the beacons and boundaries adopted in both such surveys are identical, approve a new diagram of the parcel of land under subdivision or a diagram of any portion thereof prepared in accordance with the subdivisional survey:

Provided that if a Government surveyor approves of a new diagram of the whole parcel of land under subdivision, the provisions of subsection (3) of section *eighteen* shall apply in regard to such new diagram.

**24.** When a surveyed and registered parcel of land is subdivided into one or more precise fractions, a Government surveyor may withhold his approval of a diagram purporting to represent an exact fraction of the total area of such surveyed and registered parcel of land until he is satisfied that such total area has been redetermined by a re-survey of the whole of such parcel of land in conjunction with the survey of the subdivisional fraction or fractions.

# Rectification of errors ascertained by subdivisional survey

Diagram of exact fraction of land

#### PART V

#### BEACONS AND BOUNDARIES

**25.** (1) Notwithstanding anything contained in any written law, the position of any beacon or boundary deemed in terms of this section to have been lawfully established shall be unimpeachable, that is to say, it shall not be capable of being brought into question in any court, and the Surveyor-General or Registrar shall not accept for filing or registration any document which shows any beacon or boundary inconsistent with such position.

Beacons and boundaries lawfully established

(2) A beacon or boundary shall be deemed to have been lawfully established-

- (a) when its position is in agreement with the position thereof adopted in a re-survey and when a diagram based on such re-survey has been approved in accordance with the provisions of section *eighteen*;
- (b) when its position is in agreement with the position thereof adopted in an original survey and when a diagram based on such original survey has been approved in accordance with the provisions of section *sixteen*;
- (c) when its position is in agreement with the position thereof adopted in a subdivisional survey such as is referred to in paragraph (a) of section *twenty-three*, and when a diagram based on such subdivisional survey has been approved and registered in the Registry;
- (d) when its position is in agreement with the position thereof adopted in a re-survey in accordance with the provisions of section *nineteen*, and when a general plan based on such re-survey has been approved;
- (e) when its position is in agreement with an order of the Court.

**26.** (1) All beacons erected for the purpose or in consequence of any survey or re-survey of land under this Act shall be substantially and durably constructed under the supervision of, and in the position determined by, a land surveyor.

Manner and cost of erecting beacons for survey purposes

(2) Beacons shall be composed of such materials, and erected in such manner, as may be prescribed.

(3) Subject to the proviso to subsection (4) of section *twenty-eight*, the cost of erecting beacons, including the cost of determining their position by survey, when necessary, shall be borne by the owner of the land surveyed or re-surveyed, who shall be entitled to recover from the owner or owners of land contiguous to the boundaries concerned a proportionate share of the cost of determining the position of and erecting any beacon which is also a corner beacon of his or their properties.

**27.** Except with the consent of a Government surveyor, it shall not be lawful for any No poles, etc., to be person to place any fence post or fence anchor or any other erection, or to make any placed near beacon excavation, within 1220 mm of any beacon or survey station:

Provided that, subject to the provisions of section *twenty-nine*, the foregoing provisions of this section shall not apply to-

- (a) any township stand; or
- (b) any parcel of land not exceeding 4.047 hectares.

**28.** (1) Every owner of land shall maintain in proper order and repair, in accordance with any regulations made under this Act, any beacon or mark defining a corner point of his parcel of land, whether such beacon or mark was erected for the purpose of or in connection with a survey or re-survey of such land under this Act or any prior written law, or for the purpose of or in connection with a survey or re-survey of re-survey of any land contiguous thereto.

(2) If any such beacon or mark has not been maintained in proper order or repair, or has been removed or obliterated, the Surveyor-General may, by delivery or by transmission in a registered letter through the post, serve upon the owner of every parcel of land whereof such beacon or mark indicates a corner point a notice in writing calling upon him to arrange for the restoration of such beacon or mark to its correct position, or to have it re-erected in the prescribed manner, as the case may be:

Provided that the restoration or the re-erection of any such removed or obliterated beacon or mark shall be carried out by or under the immediate supervision of a land surveyor.

(3) If a beacon or mark in respect of which notice has been given under subsection (2) is not restored or re-erected within six weeks of the date upon which any such notice was delivered or posted, the Surveyor-General may cause such beacon or mark to be so restored or re-erected by a land surveyor.

(4) The owners of all parcels of land of which a beacon or mark indicates the corner points shall be liable in equal shares for the costs of the repair, restoration or re-erection of any such beacon or mark, and the Surveyor-General may recover from every such owner his proportionate share of all costs incurred by the Surveyor-General under subsection (3):

Provided that, if it is clearly established that any such owner, or the servant or agent of any such owner, has damaged, removed or obliterated any such beacon or mark, the entire costs of the repair, restoration or re-erection of such beacon or mark shall be borne by such owner.

(5) In the case of a township, the local authority shall be responsible for the maintenance of all reference marks and beacons of unalienated stands, and any destruction of or damage to any such reference mark or beacon may be made good by the Surveyor-General at the expense of such local authority.

**29.** (1) Any person who, without lawful excuse, the burden of proof whereof shall be on him-

Offences and compensation

(a) alters, moves, disturbs or wilfully damages or destroys any beacon, bench mark, reference mark, signal or trigonometrical station intended to be permanent and erected for the purpose of or in connection with any survey operations, whether such beacon, bench mark, reference mark, signal or trigonometrical station is upon his own land or not; or

Copyright Ministry of Legal Affairs, Government of the Republic of Zambia

Repair of re-erection of beacons

(b) erects any such beacon, except under the supervision of a land surveyor, whether his intention is to alter the boundary line of any parcel of land or to cause deception as to the boundary line or not;

shall be guilty of an offence and liable to a fine not exceeding two thousand penalty units or to imprisonment for a period not exceeding six months, or to both; and the removal or disturbance of any such beacon, mark or signal for the purpose of erecting another beacon, mark or signal in its place shall not constitute a lawful excuse under this section unless a land surveyor personally superintends such removal or disturbance and the erection of such other beacon, mark or signal.

(2) For the purpose of awarding compensation under the law relating to criminal procedure in respect of any damage caused by such offence, any beacon in connection with which such offence was committed shall be deemed to be the property of any person upon whose land or upon a boundary of whose land such beacon was situate; and any bench mark, reference mark or trigonometrical station in connection with which any such offence was committed shall be deemed to be the property of the Surveyor-General.

(As amended by Act No. 13 of 1994)

Authority to remove beacons

**30.** Any person who, for the purpose of carrying out any work which he may lawfully perform, desires to remove or disturb any beacon or mark erected in connection with the survey of land, may apply to the Surveyor-General for authority to effect such removal or disturbance, and the Surveyor-General may thereupon authorise in writing such removal or disturbance and, at the expense of such applicant, employ any land surveyor personally to effect or supervise the removal or disturbance and subsequent replacement of such beacon or mark or the erection or placing of any other mark to indicate the position of such removed or disturbed beacon or mark, in such manner as the Surveyor-General may direct.

(As amended by S.I. No. 65 of 1965)

#### PART VI

#### GENERAL PLANS AND DIAGRAMS

**31.** Every general plan or diagram submitted for approval shall be prepared in accordance with the requirements prescribed, and the numerical and other data recorded thereon shall be within the prescribed limits of consistency:

Manner of preparing general plans and diagrams

Provided that a Government surveyor may approve a diagram prepared before the commencement of this Act in accordance with any law or usage in force at the time of such preparation.

**32.** No diagram of any parcel of land shall be accepted in the Registry in connection with any registration therein of such land, unless such diagram has been approved:

No registration of land without approved diagram

Provided that, in the event of such approval being contingent upon any act being subsequently performed in the Registry, the Surveyor-General may approve such diagram provisionally, and, upon the performance of that act in the Registry, the Surveyor-General shall finally approve such diagram when submitted to him.

(As amended by No. 44 of 1965)

**33.** (1) No general plan or diagram shall be approved unless its geometrical figure and all the other data it contains are consistent with all details furnished in the approved survey records of the parcel of land to which such general plan or diagram relates.

(2) Subject to the provisions of section *thirty-four*, no general plan or diagram shall be approved unless-

- (a) it is prepared under the direction of and signed by the land surveyor or land surveyors who carried out the respective survey; and
- (b) it accords with such requirements as may be prescribed:

Provided that a general plan or diagram may be approved if it has been framed from an approved general plan or from an approved diagram or diagrams or from approved survey records filed in the Surveyor-General's office or registered in the Registry, without the signature thereon of the land surveyor who signed the original general plan or diagram, if he is not available or unreasonably refuses to sign the general plan or diagram so framed.

(No. 44 of 1965)

**34.** A Government surveyor may approve a general plan or a diagram which is not signed by a land surveyor and which has been framed without any re-survey from an approved general plan or general plans or from other approved survey records or from two or more approved diagrams and which has been framed for the purpose of-

(a) a consolidation of two or more parcels of land; or

(b) a rearrangement of boundaries of one or more parcels of land.

(No. 44 of 1965)

35. Whenever the Surveyor-General is satisfied that-

(a) the whole or any part of a survey relating to any general plan has been cancelled; or

Endorsement on general plan

Approval of general

plan or diagram for

rearrangement of boundaries

consolidation

purposes or

Consistency between general plans or diagrams and survey records and signing and approval thereof

(b) the numerical and other data recorded on any general plan have been superseded by a re-survey or by a consolidation of parcels of land or by a rearrangement of boundaries of one or more parcels of land;

he may insert an endorsement to that effect on such general plan.

(No. 44 of 1965)

**36.** If the Surveyor-General is satisfied that the diagram of any registered parcel of land entirely fails to represent such land, or misrepresents it to such an extent that damage or loss might result to any person who is or may become interested therein, he may give notice of such fact to the Registrar and to the owner of such parcel of land, and thereafter no further registration relating to such parcel of land or of any portion thereof or undivided share therein shall be effected in the Registry until a new diagram thereof has been approved and an amended title thereto has been registered in accordance with such new diagram:

Provided that, if the Surveyor-General is unaware of the address of the owner of such parcel of land, a publication of such notice in one issue of the Gazette and once every week during two consecutive weeks in a newspaper circulating in the District within which such parcel of land is situate shall be deemed to be sufficient notice to such owner for the purpose of this section.

A Government surveyor may withhold his approval of a general plan or 37. diagram if he considers that any parcel of land represented thereon is not lawfully provided with adequate access rights.

No approval for plan or diagram of parcel of land not provided with access rights

Powers of entry, etc.,

upon land

Registrar and owner to

be informed of

incorrect diagram

#### PART VII

# MISCELLANEOUS

**38.** (1) Aerial photography shall not be used for the purposes of land survey without Aerial photography the written permission of the Surveyor-General.

(2) A request for permission to make use of aerial photography for the purposes of land survey shall be accompanied by a plan showing clearly the extent to which it is intended to make use of such photography and specifying the extent of ground control to be provided.

**39.** (1) A Government surveyor, a land surveyor and any other person generally or specially authorised in that behalf by the Surveyor-General may, for the purpose of performing any duties imposed by or under any written law relating to survey-

(a) enter upon any land with such assistants or servants, animals, vehicles, appliances and instruments as are necessary for or incidental to the performance of such duties;

- (b) place or erect any permanent beacon, bench mark, reference mark or trigonometrical station, or any temporary flag, signal or other mark upon such land or upon any building or structure erected thereon;
- (c) make use of any natural material upon which no work has previously been expanded and, except within a township, of any water, whether conserved or not, found upon or in such land;
- (d) cut any vegetation growing wild in the vicinity of any such beacon, mark, station, flag or signal for the purpose of enabling observations to be made thereto or therefrom:

### Provided that-

- reasonable notice of the intention to exercise any of the powers conferred by this subsection shall be given to the owner, or, if such owner is not in occupation, to the occupier, of such land; and
- (ii) as little damage and inconvenience as possible shall be caused by the exercise of the said powers, and such owner or occupier shall be entitled to compensation for any damage caused to or in any enclosed place, and for any unreasonable damage caused to any other property belonging to such owner or occupier.

(2) Any person who in any manner whatsoever prevents, obstructs or impedes, or attempts to prevent, obstruct or impede, the exercise of any power conferred by subsection (1), or who moves, obscures or destroys any flag, peg, signal or other mark of a temporary character lawfully placed on any land in connection with any surveying operations, shall be guilty of an offence and shall be liable to a fine not exceeding seven hundred and fifty penalty units.

(3) The Minister may require that an easement in favour of the President protecting any beacon, bench mark, reference mark or trigonometrical station, and ensuring an unobstructed view to and from any such beacon, mark or station, shall be granted over any land upon or near which any such beacon, mark or station is situate by the person who may lawfully grant the same in respect of such land, and may cause such easement to be registered against the title of such land:

Provided that the costs of such registration and reasonable compensation for the depreciation, if any, in the value of the servient tenement by reason of the establishment of such easement, shall be paid by the President.

(As amended by S.I. No. 65 of 1965 and Act No. 13 of 1994)

40. The Minister may, by statutory instrument, make regulations prescribing-

Regulations

- (a) the fees to be paid by an owner of land for any survey of such land, including any records relating to such survey, the manner in which and the person by whom such fees may be taxed, the costs of such taxation and by whom they shall be borne;
- (b) the manner in which surveys shall be performed and the manner and form in which the records of such surveys shall be prepared and furnished to the Surveyor-General;
- (c) the degree of accuracy to be obtained and the limit of error to be allowed in surveys and re-surveys of land;
- (d) the diagrams and general plans required in respect of all surveys of parcels of land, the manner of preparing such diagrams and general plans, the information to be recorded thereon and the number of such diagrams and general plans to be supplied;
- (e) the form and dimensions of beacons, reference marks, bench marks and trigonometrical stations, the manner of marking the same for identification and the manner of their construction, erection, protection, maintenance and repair;
- the procedure to be followed in arbitration proceedings under this Act and the powers and duties of arbitrators appointed thereunder;
- (g) the manner in which surveys shall be based upon existing secondary and tertiary triangulations;
- (h) the manner of re-surveying stands in any township, or any part thereof, or sections or blocks of land, other than such stands, for the purpose of re-establishing the boundaries and the beacons thereof, and the manner of recovering the costs of such re-surveys;
- the steps to be taken by the Surveyor-General to test the accuracy of surveys, the records of which are lodged with him for approval and, in the event of such surveys being inaccurate in the opinion of the Surveyor-General, the action to be taken to ensure the rectification of the survey and the records thereof;
- (*j*) the testing of surveying instruments and of measuring tapes to be used in the survey of land;
- (k) the unit of measure to be used on general plans and diagrams;
- (*I*) the manner in which the Survey Control Board shall conduct its meetings;
- (*m*) anything which is to be prescribed under this Act;

and generally as to any matter appertaining to the surveying and charting of land and for carrying out the objects and purposes of this Act.

(As amended by G.N. No. 274 of 1964)

**41.** Notwithstanding anything contained in any other written law, the Minister may, Fees of office by statutory notice, specify the fees to be charged in respect of any act or matter required or permitted to be performed or dealt with in or in connection with the office of the Surveyor-General.

42. (1) This Act shall bind the President in so far as any land surveyed or Act to bind President re-surveyed or otherwise dealt with thereunder is State Land which has not been alienated to any other person or which, having been so alienated, has been re-acquired by the President, and, for the purpose of giving or serving any notice required or permitted to be given under this Act in respect of State Land, the Surveyor-General shall be deemed to be the owner thereof.

(2) Where any land surveyed or re-surveyed or otherwise dealt with under this Act is unalienated land in a former Reserve\* or in Trust Land\*(2), the President shall, for the purposes of this Act, be deemed to be the owner thereof, and any notice required or permitted to be given or served under this Act in respect of such land shall be given to or served on the Surveyor-General.

\* Also referred to as "customary area". See meaning assigned thereto by section 2 of the Lands Act, Cap. 184.

(As amended by S.I. No. 65 of 1965)

SCHEDULE

THE LAND SURVEY ACT

(Section 9)

# DECLARATION

I, ....., do solemnly and sincerely declare that I will discharge the duties of a land surveyor carefully and without partiality, fear, favour or affection, and will conform to all regulations defining those duties which are now in force, or shall hereafter be established by competent authority.

De	clared before me				
at		this		day	of
	19			,	
		Daths			

\*Also referred to as "customary area". See meaning assigned thereto by section 2 of the Lands Act, Cap. 184.

# SUBSIDIARY LEGISLATION

THE LAND SURVEY REGULATIONS

CAP. 188

ARRANGEMENT OF REGULATIONS

# PART I PRELIMINARYPART I

# PRELIMINARY

# Regulation

- 1. Title
- 2. Interpretation
- 3. Licences
- 4. Notification of postal address
- 5. Units of measure and conversion factors
- 6. Survey fees
- 7. Surveyor-General to be taxing officer
- 8. Fees of office

# PART II CHECKING OF SURVEY WORKPART II CHECKING OF SURVEY WORK

- 9. Surveyor-General may have field work checked
- 10. Testing of doubtful surveys

# PART III FIELD WORKPART III

# FIELD WORK

- 11. Information to be obtained prior to survey
- 12. Testing of instruments
- 13. Land surveyors to have a field book
- 14. Observation of horizontal angles
- 15. Surveys to be based on trigonometrical stations or reference marks
- 16. Determination of position of trigonometrical stations
- 17. Surveys by traverse
- 18. Surveys by triangulation from measured base
- 19. Devious connections
- 20. Survey stations and traverse points
- 21. Reductions of measurements
- 22. Orientation and position
- 23. Determination of azimuth by astronomical observations

# Regulation

- 24. Field checks
- 25. Classification of surveys and standards of accuracy
- 26. Verification of existing beacons and adoption of existing data
- 27. Line beacons
- 28. Accepted curvilinear boundaries
- 29. River boundaries from aerial photographs
- 30. Topography
- 31. Allowable difference between original and subsequent surveys

# PART IV BEACONSPART IV

# BEACONS

- 32. Beacons required
- 33. Beacon specifications
- 34. When beacon not required
- 35. Indicatory beacons
- 36. Restoration of missing or dilapidated beacons
- 37. Beacon to be numbered
- 38. Beacons and boundaries of parcels of land

# PART V SURVEY RECORDSPART V SURVEY RECORDS

- 39. Survey records required
- 40. Computations
- 41. Co-ordinates of a point on a straight line
- 42. Comparison of data
- 43. Report
- 44. Working plan

# PART VI GENERAL PLANSPART VI GENERAL PLANS

- 45. When required
- 46. Materials, size, margins and accuracy
- 47. Scales

# Regulation

- 48. Symbols for beacons
- 49. Co-ordinate grid
- 50. Title
- 51. Co-ordinates required
- 52. Statement of co-ordinates
- 53. Co-ordinates not required
- 54. Data required
- 55. Contiguous parcels of land
- 56. True North
- 57. Radius
- 58. Locality plan
- 59. River boundaries and topography
- 60. Connecting data
- 61. Description of beacons and stations
- 62. Dilapidated and untidy general plans
- 63. Signature and date
- 64. Amendments
- 65. Colours
- 66. Limits of inconsistency
- 67. Compiled general plan

# PART VII DIAGRAMSPART VII

# DIAGRAMS

- 68. Form, quality, size of paper and margins
- 69. Ink
- 70. Figure, scale, information and general style
- 71. Beacon letters and verbal definition
- 72. Numerical data
- 73. Official designations only to be shown
- 74. Geographical positions
- 75. Photographic and other copies

#### PART VIII MISCELLANEOUSPART VIII

# Regulation

- 76. Surveys from aerial photographs
- 77. Unqualified assistants
- 78. Revocation of Land Survey Regulations

FIRST SCHEDULE-Certificate

SECOND SCHEDULE-Tariff of Fees

THIRD SCHEDULE-Surveyor-General's Charges

# SECTION 39-THE LAND SURVEY REGULATIONS

Regulations by the Minister

Title

Interpretation

#### PART I PRELIMINARYPART I

### PRELIMINARY

<ol> <li>These Regulations may be cited as the Land Survey Regulations.</li> </ol>	
--	--

- 2. In these Regulations, unless the context otherwise requires-
  - "angle", when used in relation to a figure on a diagram or general plan, means the value of the interior angle within a closed figure made by the intersection of two contiguous straight boundary lines of such figure, or by the intersection of a straight boundary line with a theoretical line joining consecutive beacons of the figure between which the boundary is curvilinear or by the intersection of two such contiguous theoretical lines;
  - "arc of observation" means two successive rounds of horizontal observations taken in opposite directions to each other with the telescope reversed for the second round;
  - "figure of regular shape" means a rectangle, a right-angled triangle, or a right-angled trapezium, whether or not one or more of its corners is cut off by a right-angled triangle;

"left bank of a river" means that bank of the river which is on the left side of the watercourse when facing downstream;

"middle of river" means the line midway between the right and left banks;

"the Act" means the Land Survey Act;

Cap. 188

"parent diagram" means the diagram of a parent parcel of land;

- "parent parcel" means a parcel of land which is subdivided or a portion of which is subject to easement rights;
- "original diagram" means the registered diagram of a parcel of land which is to be superseded by a new diagram for the purposes of rectification or consolidation of title;
- "registered diagram" means the diagram to which the current registered title of a parcel of land relates;
- "Registry" means the Registry of Deeds established under the Lands and Deeds Cap. 185 Registry Act;
- "right bank of a river" means the bank of the river which is on the right side of the watercourse when facing downstream;
- "side" when used in relation to a figure on a diagram, general plan or deed plan, means the length of a straight boundary line represented thereon, or the length of a theoretical line joining consecutive beacons between which the boundary is curvilinear;
- "subdivision" means a portion of a parcel of land, which parcel of land is represented on a general plan or diagram deposited with the Surveyor-General;
- "trigonometrical station" means any station established in the systematic geodetic survey of Zambia;

**3.** Every licence to practise as a land surveyor issued by the Board in accordance Licence with the provisions of section *nine* of the Act shall be in the form set forth in the First Schedule.

**4.** Every land surveyor shall furnish the Surveyor-General with a permanent address in Zambia to which all correspondence despatched to him by mail is to be sent and shall promptly notify the Surveyor-General of any change of such postal address.

Notification of postal address

5. (1) The units of measure in all calculations and on all plans and diagrams shall Units of measure and conversion factors

- (a) the metre for linear distances;
- (b) the hectare or square metre for areas;
- (c) sexagesimal measure for angles and angles of direction:

Provided that the Surveyor-General may authorise the use of English measure for any surveys commenced before the date of commencement of these Regulations and for a period of six months thereafter:

Provided further that diagrams approved before the date of commencement of these Regulations shall remain effective.

(2) To convert from English feet to metres the conversion factor to be used will be-

1 English foot = 0.304799472 metre.

6. Unless a land Surveyor and his client have agreed to other charges, the fees to be paid for surveys undertaken by a land surveyor shall be in accordance with the Second Schedule.

(As amended by S.I. No. 156 of 1976, No. 179 of 1982 and 182 of 1990)

7. Subject to the provisions of regulation 6, the Surveyor-General shall exercise all Surveyor-General to the functions of a taxing officer in relation to fees charged by a land surveyor under the taxing officer tariff of fees prescribed in the Second Schedule.

**8.** The fees of office to be paid to the Surveyor-General shall be in accordance with Fees of office the Third Schedule.

PART II CHECKING OF SURVEY WORKPART II

CHECKING OF SURVEY WORK

- 9. The Surveyor-General may at any time depute a land surveyor to-
  - (a) check in the field any survey made by another land surveyor under the Act or any information recorded in connection with such survey; or
  - (b) test any surveying instrument or measuring bands used by another land surveyor; or
  - (c) inspect and report upon the erection and maintenance of beacons in accordance with the provisions of the Act and these Regulations.

**10.** (1) (*a*) Whenever the Surveyor-General has reason to suspect that the accuracy of any survey is not within the limits prescribed in regulation 25, he may, in writing, call on the land surveyor responsible to admit or deny the suspected inaccuracy within a period of thirty days from the date of such writing.

- (b) If the land surveyor admits the inaccuracy he shall, without delay, take the Ca appropriate steps to rectify his error as required by paragraph (a) of subsection (1) of section *ten* of the Act.
- (c) If the land surveyor denies the inaccuracy he and the Surveyor-General may agree upon another land surveyor, who may be an officer of the Government, to be appointed to test the accuracy of the survey in question; should the Surveyor-General and the land surveyor fail so to agree, the Board shall appoint another land surveyor to test the survey.
- (*a*) The land surveyor whose survey is to be tested may be present at his own expense during the testing of the survey.

(2) Should a land surveyor, when called upon by the Surveyor-General in pursuance of paragraph (*a*) of sub-regulation (1), fail either to admit or deny the inaccuracy of his work, the Surveyor-General may, without further reference to such land surveyor, appoint another land surveyor to test the survey.

(3) (a) In the event of the test survey proving to the satisfaction of the Surveyor-General that the accuracy of the survey so tested is not within the prescribed limits, the Surveyor-General may reject the whole or any portion of the survey and charge the cost of the test to the land surveyor responsible for the inaccurate survey.

(b) Should the test survey prove to the satisfaction of the Surveyor-General that the accuracy of the survey he had doubted is within the prescribed limits and that the survey has been carried out in accordance with these Regulations, the land surveyor responsible for the survey shall not be liable for any portion of the costs of the test survey.

Surveyor-General may have field work checked. Cap. 188 Cap. 188

Testing of doubtful surveys

Cap. 188

## PART III FIELD WORKPART III

# FIELD WORK

Information to be **11.** (1) Before carrying out any survey a land surveyor shall provide himself with all obtained prior to available information in respect of any previous surveys of the parcel of land to be surveyed, and of all adjoining parcels of land.

(2) The Surveyor-General will furnish this information to land surveyors free of charge if it is available at his office.

**12.** (1) Every land surveyor shall ensure that all measuring bands used by him are properly standardised at least once a year under the direction of the Surveyor-General, and also that his theodolite and other instruments are in a proper state of adjustment.

(2) The Surveyor-General may call upon a land surveyor at any time to submit to him any of his measuring bands or other distance measuring instruments for testing, and a land surveyor may, if he so wishes, submit any of his measuring bands for testing at lesser intervals than one year; such testing will be done free of charge.

(3) The Surveyor-General shall assign a distinctive number to each of the measuring bands tested under his direction and, in the field notes of every survey, the land surveyor shall quote the respective number or numbers so assigned to the measuring band or bands used.

(4) The Surveyor-General may condemn any instrument or measuring band which he considers unfit for survey work, or he may prescribe on what class of work any particular instrument may be used.

13. (1) When carrying out a survey, every land surveyor shall keep and maintain a Land surveyors to field book, in such form and in such manner as the Surveyor-General may require, in which he shall record the following information in connection with such survey-

- the type and other particulars of the theodolites and other instruments used, (a) the official numbers of the measuring bands used, the tension applied to the measuring bands in taking measurements and, where sag corrections are to be applied, the weight of that particular measuring band;
- (b) all angular observations, linear measurements, and the slope, temperature and length involved in corrections for sag; when a measurement of length exceeds the length of the tape used, each tape length shall be recorded in the filed book;

Copyright Ministry of Legal Affairs, Government of the Republic of Zambia

survev

Testing of instruments

have a field book

- the date on which the observations are made at each observing point, entered above the column of readings;
- (*a*) any special circumstances which may affect the quality of any observation, noted in an appropriate position and, if possible, on the same page; and
- (e) a full description of all beacons, whether placed or found, and other marks used in the course of the survey; it shall be clearly stated whether each beacon was found or placed, and in the former case a description of its condition, as found and as left, shall be given.

(2) (a) All observations and measurements made in the field shall be recorded in the field book clearly and legibly in pencil at the time of making such observations; the contents of each page in the field book shall be shown in an index thereto.

- (b) Any entries in the field book, other than those of actual observations or measurements made in the field, shall be written in ink unless under exceptional circumstances this is impracticable; entries of data for placing new beacons shall be written in ink and cross-referenced to the pages containing the computations by which such data were determined.
- (c) On no account shall erasures be made in the field book; any alterations must be made in the field, as the result of actual direct re-observations or re-measurements, at the time of such re-observations or re-measurements, and by drawing a line through the erroneous entry in such a way that the original remains legible, the correct value of the entry being written outside the erroneous entry and never across it.

(3) A field plan, not necessarily drawn to scale, with calculated data written in ink, or a print of the general plan, may be used to record the placing of the internal beacons of a block of stands in township, the actual measurements and observations made in the field being recorded thereon in pencil.

**14.** (1) Observations of horizontal angles shall be made with the telescope in both the direct and reversed positions for all rays longer than 300 metres, and on at least two arcs where any ray is longer than five kilometres and these observations shall be separately entered in the field book.

Observations of horizontal angles

(2) Rounds of observations from any point shall be observed and fully recorded alternately in clockwise and anti-clockwise order.

(3) Wherever practicable in the first round of observations at any point, the readings recorded in the field book shall be approximately in the system of direction angles adopted for the whole survey.

(As amended by S.I. No. 156 of 1976)

**15.** All surveys are to be based on trigonometrical stations or reference marks whenever practicable, and shall be on such system or projection as the Surveyor-General may direct.

**16.** The position of a trigonometrical station or reference mark which is not used on a survey shall be determined precisely in relation to the beacons of the parcel of land being surveyed when it is on that parcel, or outside the parcel but within 300 metres of the nearest beacon or station used in the survey.

**17.** (1) The direction angles of rays used for orienting and adjusting the direction angles of traverses shall be determined by independent closed traverses, or by triangulation, or by direct astronomical observation.

Surveys by traverse

Surveys to be based on trigonometrical

stations or reference

Determination of

trigonometrical

position of

stations

marks

- (2) In any traverse-
  - (a) the direction angles shall be controlled and adjusted at intervals not exceeding fifteen kilometres measured along the traverse lines;
  - (b) when the traverse is an extension from an existing survey system and is closed on to its starting point without any other control rays, at least two rays shall be used for orienting and closing the traverse direction angles and the length of one of those rays shall not be less than either 200 metres or the direct distance between the starting point and the point furthest from it in the traverse, whichever is the less;
  - (c) when the traverse extends more than three kilometres between the stations controlling the direction angles, the angles or angles of direction shall be the mean of at least two arcs taken at each station.

(3) When two traverse lines in the same survey are in very close proximity to one another each line shall be measured entirely independently of the other including the vertical angles for slope corrections.

**18.** (1) If in any survey it is necessary to measure a base line for the initiation of a S local triangulation system, the length of the measured base used for such triangulation shall not be less than 10 *per centum* of the perimeter of the land containing the beacons determined from such base:

Surveys by triangulation from measured base

Provided that-

(i) the length of the base need not exceed 1,000 metres; and

 the Surveyor-General may, in exceptional circumstances, approve the use of a shorter base.

(2) (a) A base line used for any triangulation survey shall be measured at least twice, in opposite directions, or once in two sections, not necessarily in the same straight line, the lengths of which sections shall be compared with each other through subsidiary triangles. The angles of slope shall be independently observed for each such linear measurement.

(b) Should a difference greater than 1:10,000 between any two base line measurements result after all corrections have been made, the base line shall again be measured until the resultant difference between any two measurements does not exceed that limit.

(c) A check base not less than one-third of the length of the base line shall be measured when the distance between the extreme triangulation stations exceeds twenty kilometres:

Provided that a traverse may be used as a check base, in which case the direct distance between the traverse terminals shall not be less than one-third of the length of the base line.

**19.** In a survey of one or more parcels of land exceeding 10 hectares in extent the Devious connections sum of the lengths of the traverse lines of the shortest surveyed connection between any two beacons or stations marked in a permanent manner shall not exceed 5d where d is the direct distance between the two points.

**20.** All favourably situated triangulation and traverse stations used in a survey Survey stations and traverse not likely to be disturbed shall be marked in a permanent manner preferably by traverse points iron pipes or pegs or wire nails not less than 150 millimetres long.

**21.** Except when otherwise required by the Surveyor-General, all linear measurements shall be adjusted for standardisation, temperature, tension, slope and sag, and only those measurements made in the course of a survey, which is based on trigonometrical stations, shall be reduced to sea level and corrected for projection enlargement.

**22.** When the survey of a piece of land is not based on trigonometrical stations, the direction of true north shall be determined as accurately as possible by astronomical position observation or, if not derived from other sources and at the discretion of the Surveyor-General, by magnetic needle. The manner in which the true north has been determined shall be recorded in the field book and stated in the report on survey.

(As amended by 156 of 1976)

**23.** (1) Any azimuth determination by astronomical observation with a theodolite for purposes of orienting or closing the direction angles of a traverse or orienting the direction angles of a triangulation scheme of a survey shall be the mean of the computed results of an equal number of separate sets of observations taken on opposite sides of the meridian.

Determination of azimuth by astronomical observations

(2) The sun instead of stars may be observed only if weather conditions preclude observing at night.

(3) The final result shall be the mean of the separate determinations of at least two sets of observations taken on each side of the meridian; unless otherwise authorised by the Surveyor-General, no such determination shall be used if they vary by more than ten seconds of arc from any other determinations used from the same side of the meridian.

(4) Pairing of East and West stars in regard to altitude is to be obtained to a reasonable degree to the satisfaction of the Surveyor-General.

**24.** (1) Every land surveyor shall perform sufficient field work to enable him to apply Field checks a thorough check to every part of his survey.

(2) Unless checks considered adequate by the Surveyor-General are applied the position of no point shall be determined by-

- (a) a single triangle when the angle at the point being determined is less than 30 degrees or greater than 150 degrees;
- (b) resection from less than four favourably situated points;
- (c) a single direction and measured distance from a survey station or beacon;
- (*d*) intersection by less than three suitable rays.

(3) When the position of a point is determined by a single triangle the angles or direction angles used in the calculations shall be the mean of at least two arcs taken at each point and the angles deduced from the final co-ordinates after the point has been calculated, shall be compared with the angles derived from the second arc as recorded in the field book in order to guard against gross error.

25. (1) Surveys shall be classified as follows:

Classification of surveys and standards of accuracy

Class A refers to surveys to determine the position of township control or reference marks;

Class B refers to surveys in townships;

Class C refers to surveys not included in Class A and Class B

(2) (a) The misclosure in a traverse shall not exceed

- (i) for Class A, 1:12,000
- (ii) for Class B, 1:8,000
- (iii) for Class C, 1:4,000:

Provided that a reasonable misclosure shall be allowed in the case of short traverses.

(b) The misclosure for a traverse made solely to survey a curvilinear boundary or a photo-control point shall be commensurate with the plottable accuracy that can be achieved at the scale of the final plan.

(3) The field operations shall conform with current survey practice using instruments and methods commensurate with the class of survey and standard of accuracy required.

(4) Notwithstanding the provisions of sub-regulation (2) the Surveyor General may stipulate in writing other standards of accuracy in special cases.

(As amended by S.I. No. 156 of 1976)

**26.** (1) The positions of all existing beacons or stations established in previous approved surveys which are to be adopted in a new survey shall be verified.

Verification of existing beacons and adoption of existing data

(2) The verification of the position of an existing beacon or station shall be effected by determining its position in relation to at least two other beacons or stations established in previous surveys and comparing the data so determined with the respective data of the previous surveys. The minimum requirement for this purpose shall be the distance from the beacon being verified to another beacon or station and the angle which that line makes with a ray to a third beacon or station.

(3) The position of an existing beacon or station shall be deemed to be verified if its position as redetermined in the new survey in relation to the positions of all other beacons or stations of previous surveys which are also redetermined in the new survey does not differ from the respective data of the previous surveys by more than the following limits:

# 0.03 metre or <u>d</u> whichever is the greater where d is the 3.000

distance in metres between the two beacons or stations as derived from the later survey. Should the differences be greater than these limits and the land surveyor is satisfied that the beacons or stations have not been disturbed, then he shall refer the matter to the Surveyor-General.

(4) The co-ordinate value of any survey station or beacon, whose position on the trigonometrical system or other system approved by the Surveyor-General has been determined in a manner and with a degree of accuracy acceptable to the Surveyor-General, may be used by any land surveyor in any subsequent survey after verification of its ground position to ensure that it has not been disturbed.

**27.** (1) The greatest care shall be taken to ensure that existing line beacons are in Line beacons fact on line and that new line beacons are accurately placed on line between the terminals.

(2) When a beacon is to be placed on line between two beacons placed in an approved previous survey and its distance from the nearer of those beacons does not exceed one-fiftieth of the distance between them it shall not, in any of the following cases, be necessary to determine the line to the further terminal beacon-

- (a) when it is possible at the nearer terminal beacon to lay out the direction angle of the line from another beacon or station of the previous survey or from a point, the position of which is accurately related to the nearer terminal beacon and that other beacon or station of the previous survey;
- (b) where the positions of the nearer terminal beacon and that other beacon or station of the previous survey are verified in the manner prescribed in regulation 26;
- (c) where the distance between the nearer terminal beacon and the other beacon, survey station or point from which the direction angle of the line is laid out is not less than the distance between the terminal beacon and the new beacon being placed on line.

(3) When an existing beacon placed in a previous survey is moved on to a line between two other existing beacons it shall where practicable be placed at the intersection with that line of the other boundary line of which that beacon is a terminal provided that if it is a terminal beacon of more than one other boundary line the beacon shall be placed in the mean position of intersection of those other boundary lines with the said line.

(4) For the purpose of this regulation a beacon shall be deemed to be on a boundary line between two beacons when, in the checking of its alignment in a subsequent survey, its displacement from the line is proved to be not greater than-

# 0.05+0.0005d metres with a maximum of one metre

where d is the distance in metres between such beacons and the nearer terminal beacon thereto of the said boundary line.

**28.** (1) Except with the prior consent of the Surveyor-General, a regular curve shall not be adopted as a boundary of a new parcel of land.

(2) The only irregular curvilinear boundaries which are normally permitted are the right bank or left bank of clearly defined and permanent watercourses. The provisions of this section shall not apply to existing irregular curvilinear boundaries represented on diagrams approved prior to the date of commencement of these Regulations:

Provided that any natural or artificial feature or contour line may, with the approval in writing of the Surveyor-General, be used in special cases.

(3) At the discretion of the Surveyor-General an irregular curvilinear boundary determined in a former survey may be adopted in a subsequent survey, and, where possible, it shall be abstracted from the curvilinear boundary plan which is supplementary to the working plan.

**29.** River boundaries may be determined from near vertical air photographs River boundaries from provided that the methods, control and equipment to be used have the prior approval of the Surveyor-General in each and every instance.

**30.** Where it is not possible to obtain sufficient and accurate topographical detail Topography from existing maps the Surveyor-General may require the land surveyor to make sufficient observations and measurements and comprehensive sketches in the field to enable him to fill in with reasonable accuracy on the general plan and diagram the topographical features of the land surveyed, particularly prominent hilltops, watercourses, buildings, bridges, dams, springs, roads and railways. Such topography in the neighbourhood of beacons is to be determined with special care. The provisions of this regulation need not apply to parcels of land less than five hectares in extent.

**31.** For the purposes of section *sixteen* of the Act the limit of disagreement <sup>A</sup> between the later and previous surveys is 0.05 square root d where d represents the distance in metres between any two beacons.

Allowable difference between original and subsequent surveys

Accepted curvilinear boundaries

# PART IV BEACONSPART IV

#### BEACONS

**32.** Subject to the provisions of regulation 34, every corner point of a parcel of land Beacons required shall be marked with a beacon.

**33.** (1) The standard beacon shall consist essentially of an iron peg at least 12 millimetres in diameter, or an iron pipe at least 12 millimetres in internal diameter, and at least 400 millimetres in length set vertically in concrete not less than 200 millimetres cube. The top of the peg shall not extend more than 10 millimetres above the top surface of the concrete which shall be flush with the surface of the ground:

Provided that-

- (a) where the ground is soft or sandy the iron peg or pipe shall be at least 600 millimetres in length; and
- (b) where the ground is rocky and it is not possible to drive in an iron peg at least 400 millimetres in length, a shorter peg may be grouted into the rock or a hole at least 12 millimetres in diameter and 20 millimetres in depth may be drilled in solid rock.
- (2) The standard beacon shall be used for parcels less than one hectare in extent.

(3) For parcels between one and one hundred hectares in extent, a cairn of stones, bricks or concrete not less than 300 millimetres in diameter and height shall be erected over the standard beacon.

(4) For parcels more than one hundred hectares in extent, a cairn of stones, bricks or concrete not less than 750 millimetres in diameter and height shall be erected over the standard beacon. In addition, the beacon letters and numbers allocated to the land surveyor in accordance with the provisions of regulation 37 shall be clearly and permanently marked on the beacon.

(5) In localities where stones are not available the cairns referred to in sub-regulations (3) and (4) may be replaced by excavating a circular trench, at a radius of one metre from the beacons to a depth and width of 300 millimetres, and the excavated earth shall be piled in a symmetrical mound over the beacon. In addition, for parcels more than one hundred hectares in extent-

- (*a*) trenches, 2 metres in length and to a depth and width of 300 millimetres, shall be excavated along the boundary lines meeting at the beacon; and
- (b) a hardwood pole at least one and a half metres in length and 150 millimetres in diameter shall be planted in the middle of the mound.

Beacon specifications

(6) The Surveyor-General may authorise types of beacons other than as prescribed in this regulation.

**34.** (1) When the corner point of a parcel of land coincides with the corner of a building, the corner of the building shall be adopted as a substitute for the beacon and such circumstance shall be recorded on the diagram, the general plan where such is required, and the working plan.

(2) When the corner point of a parcel of land does not coincide with, but is in such close proximity to the corner of a building or some other permanent obstruction that the placing of a beacon would be impracticable, the position of such corner in relation to the point which the centre of the beacon should occupy shall be determined and clearly indicated on the diagram and on the general plan, if such is compiled, by a diagrammatic representation with numerical data in an inset.

(3) When a strip of uniform width, not exceeding 100 metres, is surveyed for the registration of easement rights, it shall only be necessary to beacon one side of the strip or a line parallel thereto within the strip.

(4) The Surveyor-General may waive the requirement to erect or restore any beacon, when it is evident that such beacon would serve no useful purpose.

**35.** (1) Where the position of a previously surveyed beacon has been rendered inaccessible or unsuitable since it was originally placed or when a new corner point of a parcel of land falls on inaccessible ground or in a place where it is likely to be damaged or destroyed, such as in a river, stream, dam, swamp, railway track, road or street, its position shall be indicated on the ground by a beacon erected on the straight boundary line passing through that beacon or by beacons erected on the straight boundary lines meeting at the said point and as near thereto as is deemed desirable in the interests of their preservation, and the distance between such indicatory beacons and the point they indicate shall be furnished on the general plan.

(2) (a) A beacon placed to define the point of intersection of a rectilinear boundary with a curvilinear boundary shall be erected as near to the curvilinear boundary as the nature of the land will permit without endangering the preservation of the beacon. Whenever practicable, the beacon shall be on the same side of the curvilinear boundary as is the parcel of land of which it is a beacon.

(*b*) The distance from the indicatory beacon to the corner point it indicates shall be furnished on the general plan to the nearest metre.

When beacon not required

Indicatory beacons

(3) When a beacon has been removed under the authority of the Surveyor-General, and it is not possible or advisable to replace it in its original position, an indicatory beacon shall be placed on each of the straight boundary lines meeting thereat. The placing of such indicatory beacons shall be effected by, or under the supervision of, a land surveyor, who shall furnish the Surveyor-General with such information as he may require, and the position of the indicatory beacons shall be recorded on the relative general plans as prescribed in sub-regulation (1).

**36.** (1) When a parcel of land which has been previously surveyed is being resurveyed or subdivided, the land surveyor shall rebuild in its original position to the appropriate standard prescribed in regulation 33, any beacon defining the limits of that parcel of land being surveyed which is missing, dilapidated or found to be in a state not complying with the said prescribed standard even though it might be apparent to the land surveyor that the condition of the beacon has not deteriorated since it was originally constructed and that it still conforms to the standard which was required at the time of the original survey.

(2) If it should come to the knowledge of a land surveyor in the course of his work that any bench mark, reference mark, trigonometrical station or beacon of a parcel of land which he is not surveying has been damaged, destroyed, removed, altered in position or fallen into disrepair, he shall immediately report the circumstances to the Surveyor-General.

(3) If a land surveyor repairs or rebuilds a damaged or dilapidated beacon he shall supply the Surveyor-General with a description of the repaired beacon.

(4) When a land surveyor has replaced a missing beacon he should report forthwith the circumstances to the Surveyor-General, and shall submit to that officer, for examination and filing, the survey records relative to such replacement.

37. Every beacon placed shall be alloted a distinctive letter and number to numbered distinguish it from other beacons in its vicinity.

(As amended by S.I. No. 156 of 1976)

**38.** (1) No surveyed parcel of land shall have less than three corner or indicatory boundary beacons.

(2) The distance between consecutive beacons on any boundary of a parcel of land shall not exceed 3 kilometres in length except with the written consent of the Surveyor-General.

Copyright Ministry of Legal Affairs, Government of the Republic of Zambia

Restoration of missing or dilapidated beacons

Beacons to be

Beacons and boundaries of parcels of land

# PART V SURVEY RECORDSPART V

# SURVEY RECORDS

39. In addition to the field book, the survey records shall consist of-

- (a) the computations;
- (b) a report;
- (c) a working plan; and
- (*a*) such photographs, documents and plans as the Surveyor-General may require.

**40.** (1) Every land surveyor shall by his computations apply an efficient check to every part of his survey. These checks shall be clearly indicated by means of cross-references or concise statements.

(2) Computations shall be clearly and legibly written and shall be in such form and in such manner as the Surveyor-General may direct. Each sheet shall be numbered and reference shall be made to the page or pages in the field book or the place elsewhere in the computations from which the data have been obtained.

- (3) The computations of a survey shall include-
  - (a) a complete list of the final co-ordinates of every point fixed or adopted in the survey and reference shall be made in the list to that page of the calculations on which the co-ordinates have been computed; in the case of co-ordinates adopted from another survey the respective survey records number shall be quoted; and
  - (b) a consistency calculation in respect of each irregular shaped parcel of land represented on a general plan or diagram.

(4) The rectilinear, curvilinear and total areas shall be given with the consistency calculation.

**41.** In determining the co-ordinates of a point on a straight line they shall be calculated from the nearer of the two terminals to the point.

Co-ordinates of a point on a straight line

Comparison of data

**42.** In all surveys which include previously surveyed rectilinear boundaries, a comparison shall be made between the data thereof as determined in the new survey and the respective data furnished on the original diagrams or general plans of the former surveys. Such comparison may be in the form of a drawing on which original data shall be shown in black and the data determined in the new survey shall be in red.

Copyright Ministry of Legal Affairs, Government of the Republic of Zambia

Survey records required

Computations

- 43. The report shall include reference to-
  - (a) assistants employed;
  - (b) the purpose and instruction for the survey;
  - (c) methods adopted and standards of accuracy obtained;
  - (d) source of adopted co-ordinates or other data;
  - (e) comparison with previous surveys;
  - (*t*) alignment, replacement and rebuilding of beacons;
  - (g) encroachments, if any;
  - (*h*) any other matters which may be considered material or useful.

**44.** (1) The working plan, the minimum size of which shall be 300 millimetres by 200 millimetres, shall be neatly drawn to scale in ink on approved material and in such form as the Surveyor-General may direct, with a title which shall include the designations of all the parcels of land surveyed and on it shall be recorded in the appropriate positions in or adjoining the geometrical figures the following:

- (a) the designations of each parcel of land represented on the plan;
- (b) the designations of all contiguous parcels of land as at the time of the survey;
- (c) every beacon, reference mark, traverse point or other station, whether permanently marked or not either found or connected to, used or placed in the survey and the designation of each such beacon, reference mark, traverse point or other survey station;
- (d) all boundary lines;
- (e) the curvilinear boundaries;
- (*t*) all lines used in the determination of curvilinear boundaries;
- (g) the scale on which the working plan is plotted;
- (*h*) the axes of co-ordinates;
- (*i*) the relevant topographical features of the ground;
- (*j*) the straight lines between beacons indicatory to curvilinear boundaries which shall be broken black lines, used in the determination of the curvilinear area.

Copyright Ministry of Legal Affairs, Government of the Republic of Zambia

Report

Working plan

- (2) There shall also be shown in suitable places on a working plan-
  - (a) explanatory insets when it is necessary to show details which cannot be clearly shown on the main figure. Such insets need not be to scale;
  - (b) a description of every beacon and survey station or point either found and connected to or placed in the course of the survey;
  - (c) the direction of the true North.
- (3) Information shall be depicted on working plans as follows:
  - (a) all boundaries shall be shown in black, continuous for the parcels surveyed and broken for others;
  - (b) all measured lines shall be shown in red; when the measured line is a boundary line, it shall be drawn in red as close as possible to the black line;
  - (c) beacons placed in the course of the survey shall be indicated by small black circles; beacons found, verified and adopted shall be indicated by two concentric circles in black, and beacons found and connected to but not adopted by two concentric circles in black with a line drawn through them;
  - (a) all observed rays not coinciding with measured lines in fine blue lines in ink and all rays observed in one direction only by blue lines broken towards the end not observed;
  - (e) all traverse points and other survey stations except triangulation stations, shall be indicated by small red circles, and where such points and stations were established in previous surveys and have been verified and adopted, they shall be indicated by two concentric circles in red;
  - (*t*) triangulation stations shall be indicated by small circles inscribed in triangles in red and where such stations were established in previous surveys and have been verified and adopted they shall be indicated by circles enclosing the triangles with small interior circles all in red;
  - (g) any base line measured for the purpose of the survey shall be indicated by two parallel lines ruled close together in red;
  - trigonometrical stations shall be indicated by small circles inscribed within triangles all in black;

- reference marks shall be indicated by crosses inscribed in circles, both in red;
- (*j*) theoretical points by small green circles.

(4) (a) Beacons which are used as survey stations shall be shown only in the manner prescribed for beacons.

(b) Beacons which are also trigonometrical stations shall be shown only in the manner prescribed for the latter.

(c) Triangulation stations which are also used as traverse stations shall be shown in the manner prescribed for triangulation stations.

(5) Irregular curvilinear boundaries shall be accurately plotted on approved material to a scale not smaller than 1:10,000 and in addition to adjoining beacons, it shall show all traverse points and lines, offset lines and other sight rays employed for the determination of the curvilinear boundary.

(6) The working plan shall be signed by the responsible land surveyor(s) under the following certificate:

"Surveyed by me/us in accordance with the Land Survey Act and Regulations.

.....

Land Surveyor(s)

Date of Survey "

.....

#### PART VI GENERAL PLANSPART VI

#### GENERAL PLANS

**45.** (1) A general plan shall be submitted in such form as the Surveyor-General When required may direct.

(2) For single parcels and in special cases the Surveyor-General may accept diagrams of each parcel in lieu of a general plan where the diagrams show full data.

**46.** (1) A general plan shall be neatly drawn with approved black ink on approved Materials, size, material measuring not less than 297 millimetres by 385 millimetres or larger than 800 margins and accuracy millimetres by 1 metre:

Provided that the Surveyor-General may allow other sizes in special cases.

(2) When more than one sheet is required for a general plan, each sheet shall be complete in itself but they need not necessarily be of the same size.

(3) No writing or drawing, except endorsements added by the Surveyor-General, shall encroach upon the margins of a general plan, which margins shall be 100 millimetres wide along the right-hand edge and 30 millimetres wide along the other edges.

(4) The misplotting of any beacon or boundary shall not exceed 1 millimetre.

**47.** (1) A general plan shall be plotted to one of the following Scales: Scales

1:1,000; 1:1,250; 1:2,500; 1:5,000, or any one of the above in which the denominator is multiplied or divided by an integral power of 10.

(2) In special cases the Surveyor-General may authorise the use of other scales.

(3) The size of each figure shall be sufficiently large for all essential information to be adequately represented thereon and generally shall be not less than 650 square millimetres. If necessary insets may be drawn of one or more figures or part of a figure.

(As amended by S.I. No. 156 of 1976)

**48.** The following symbols shall be used on a general plan:

Symbols for beacons

Boundary and Indicatory Beacons-small circle

Trigonometrical Beacons-small circle inscribed in a triangle

Reference Mark-cross inscribed in a small circle.

**49.** On a general plan the co-ordinate grid shall be indicated by short lines at the Co-ordinate grid extremities and, where convenient, at the intersections and the value of each line shall be stated.

**50.** Every general plan shall have a title which shall include the scale, the Title designations of the parcel shown, the Province, District and, if applicable, the name of the city, municipality, township, registry block or other numbering area.

**51.** (1) There shall be recorded on a general plan the rectangular co-ordinates to Co-ordinates required two decimal places of a metre of-

- (a) every corner point defining the outside rectilinear figure;
- (b) the centre of any circular curve defining a boundary;
- (c) any reference mark or trigonometrical station which can be plotted on the plan;
- (d) the corner points of each block of lots or stands:

Provided that in the case of a splayed corner, the co-ordinates of the apex instead of the two corner points at the base of the splay may be recorded, in which case distances connecting the apex to such corner points shall be recorded;

- (e) every corner point defining the rectilinear figure of any parcel which is more than 10 hectares in extent;
- (*t*) any indicatory beacon defining a corner point referred to in sub-paragraphs
   (*a*), (*b*) and (*e*);
- (g) every corner point required for connecting data;
- (*h*) any other points required by the Surveyor-General.

(2) In special cases, the co-ordinates may be expressed to a lower degree of accuracy on the written authority of the Surveyor-General.

**52.** (1) The algebraic sign "+" or "-" shall be written before each ordinate and in the tabulated list of co-ordinates the Ys shall always appear in the left and the Xs in the righthand column, and it shall be distinctly stated above the co-ordinate column which are the Ys and which are the Xs:

Provided that the terms "all plus" or "all minus" may be used at the top of each column where applicable:

Provided further that in the case of surveys based on the Universal Transverse Mercator projection, the terms "Eastings" and "Northings" shall be used instead of Y and X and the algebraic signs shall not be used.

(2) On a general plan the survey of which has been based on trigonometrical stations or other system, such fact shall be recorded.

(3) When a constant is applied to co-ordinates on a general plan, such constant, with its sign, shall be inserted above the column containing the ordinates accordingly reduced.

(As amended by S.I. No. 156 of 1976)

**53.** At the discretion of the Surveyor-General co-ordinates otherwise required, may co-ordinates not required

**54.** (1) There shall be recorded on a general plan the lengths in metres to two Data required decimals of a metre and directions of the sides of every parcel:

Provided that when no co-ordinates are used, angles may be given instead of directions.

(2) When it is feasible to do so legibly and unambiguously the data of any parcel shall be recorded within the figure, otherwise it shall be tabulated.

(3) It shall not be necessary to record such data on both sides of a common boundary.

(4) It shall only be necessary to record a direction once when sections of a straight line are boundaries of two or more parcels.

(5) When the sides of two or more adjoining stands in a block are parallel, it shall only be necessary to record the directions of the first and last of such parallel sides.

(6) The value of the direction of a side shall be recorded within the figure so as to represent the clockwise direction of such side.

(7) When a change of direction is not visually obvious on the general plan, the point at which the change occurs shall be distinguished by a double circle.

(8) The directions or angles shall be given to the nearest ten seconds when the length of the side is less than 200 metres, and to the nearest second for longer sides.

(9) The area of each parcel shall be tabulated on a general plan. These shall be expressed in hectares to four decimal places for areas of one or more than one hectare and in square metres to the nearest square metre for areas of less than one hectare.

(10) The rectilinear and curvilinear areas shall be tabulated in addition to the total area of each parcel.

(11) In special cases, data may be expressed to a lower degree of accuracy or may be omitted on the written authority of the Surveyor-General.

**55.** Adjacent boundaries of contiguous parcels, roadways and wayleaves shall be Contiguous parcels of indicated on a general plan by broken lines and their designations shall be written in their land respective positions:

Provided that abbreviations may be used and the words "Stand", "Farm", "Lot", "Subdivision" and other designation may be omitted when these are obvious from the main designation.

**56.** The direction of true North shall be indicated on a general plan pointing, as a True North general rule, towards the top of the sheet.

**57.** The radius of any curve adopted as a boundary shall be shown on a general Radius plan.

**58.** In the event of the position of a parcel or parcels not being obvious from the Locality plan main figure, a locality plan shall be shown on a general plan indicating the position in relation to other surveyed parcels, roads or other main topographic features.

**59.** (1) When a river, stream or watercourse is adopted as a boundary, the name, if any, shall be given on a general plan and the direction of flow shall be indicated.

(2) When required by the Surveyor-General the main topo-graphical features shall be shown on a general plan.

**60.** (1) Sufficient connecting data as required by the Surveyor-General shall be Connecting data shown on a general plan in order to locate the position of each parcel precisely in relation to-

(a) the parent parcel in the case of a subdivision;

(b) to other previously surveyed parcels, or to trigonometric stations, or other points whose geographical co-ordinates have been determined to the satisfaction of the Surveyor-General, in the case of new parcels.

(2) Unless otherwise required by the Surveyor-General, the sides and directions of the connections need not be shown when co-ordinates are recorded on the general plan.

(3) The co-ordinates of a beacon to which connection may be made may be adopted from a previous approved survey when-

- (a) in the opinion of the Surveyor-General both the previous and present surveys are based satisfactorily on the same system;
- (b) the connecting distance is not less than 300 metres.

(4) In special cases, the Surveyor-General may dispense with connecting data in respect of new parcels where these may be clearly located on a suitable map.

**61.** All beacons and stations shown or co-ordinated on a general plan shall be concisely described. Description of beacons and stations

**62.** The Surveyor-General may refuse to approve a general plan if he considers Dilapidated and untidy that-

Signature and date

- (a) it is dilapidated or carelessly framed; or
- (b) its appearance has been spoilt by amendments or additions.

63. A general plan shall be dated and signed as follows:

(a) if framed from survey-

"Surveyed in (month, year)..... by me/us

.....

Land Surveyor(s)"

The Laws of Zambia					
or					
(b) if compiled-					
"Compiled in (month, year) General Plan(s)	by me from (Survey Records,				
Diagram(s))					
Government Surveyor					
<b>64.</b> (1) No amendment or addition shall be made on an except by a Government Surveyor.	approved general plan Amendments				
(As amended b	by S.I. No. 156 of 1976)				
<b>65.</b> Normally colours shall not be shown on a general plan:	Colours				
Provided that the Surveyor-General may authorise the use cases.	se of colours in special				
<b>66.</b> (1) The sides, angles or angles of direction and areas g shall agree with their values as computed from the co-ordinates, pl a figure of regular shape shall be deduced directly from the sides an	provided that the area of	ю			
(2) Where co-ordinates are not used, the numerical data rec to be inconsistent when-	corded shall be deemed				
<ul> <li>(a) the misclosure of a data traverse computed roune exceeds 0.0001 p√n metres;</li> </ul>	nd the rectilinear figure				
(b) the area differs from the area of the rectilinear fig sides and directions or angles or more than 0.000012					
where "p" represents the length of the perimeter in metres and "n points of such rectilinear figure.	n" the number of corner				
(3) Notwithstanding the provisions of sub-regulations (1) an angles or directions of parcels may be adjusted by small amou maintaining regular shapes and existing data, where this is conside the Surveyor-General.	unts in the interests of				

**67.** (1) A general plan may be compiled by a Government Surveyor without further Compiled general plan survey from approved general plans, diagrams and survey records.

(2) The provisions of regulation 66 need not apply to a compiled general plan.

(3) The summation of the angles of a parcel on a compiled general plan need not be geometrically correct.

(4) Co-ordinates shall not normally be shown on a compiled general plan unless these are all on the same system, except that co-ordinates of beacons on the trigonometrical system may be shown.

# PART VII DIAGRAMSPART VII

#### DIAGRAMS

**68.** (1) A diagram shall be framed in such numbers and in such form and manner Form, quality, size of as the Surveyor-General may direct on one side of good durable paper or other material of a quality approved by the Surveyor-General.

(2) A diagram shall measure-

- (a) 297 millimetres by 210 millimetres; or
- (b) 297 millimetres by 385 millimetres; or
- (c) such other size as the Surveyor-General may direct.

(3) No writing or drawing shall encroach on the margins of a diagram, which shall be at least 25 millimetres wide along the left-hand or binding edge and 10 millimetres wide along the other edges:

Provided that the right-hand margin may be used for initialling alterations. (As amended by S.I. No. 156 of 1976)

Figure, scale, information and

general style

**69.** The ink used in the preparation of a diagram shall be black, best waterproof or other type of a quality approved by the Surveyor-General. Numbering and lettering may be done on a typewriter giving a sharp black permanent impression. The signature shall be in black ink of good quality.

**70.** (1) Land shall be represented on a diagram by a single figure drawn accurately to scale so that the misplotting of any beacon or boundary shall not exceed 1 millimetre.

(2) The provisions of regulations 47, 48, 50, 55, 56, 58, 59, 61, 62, 63, 64 and 65 shall apply to diagrams where relevant:

Provided that information deemed to be unnecessary by the Surveyor-General may be omitted.

**71.** (1) Each beacon or corner of a parcel of land depicted on a diagram shall be designated by an alphabetic letter, wherever possible, written outside the figure and as near as possible to the respective point on the diagram. In addition, the beacon names referred to in regulation 37 shall be recorded on the diagram, or they may be used in place of the alphabetic letters.

(2) Every diagram shall contain a clear verbal definition of the limits of the figure representing the parcel of land. In such definition shall be recited, in the order in which they occur, the letter or name by which each of the boundary beacons and corner points is designated, and a description of the curvilinear boundaries, if any. The starting point shall be repeated at the conclusion of the definition.

**72.** (1) When a general plan showing full data has been approved then a diagram Numerical data need only show the total area and such other data as the Surveyor-General may direct.

(2) When a general plan has not been approved then the provisions of regulations 51, 52, 53, 54, 57, 60, 66 and 67 shall apply to a diagram, except that the data shall be tabulated, unless otherwise agreed, by the Surveyor-General.

**73.** The official designation of a parcel of land allotted by the Surveyor-General official designations shall be quoted in the description and not written within the figure of the diagram.

**74.** The Province and District in which the parcel of land is situated shall be stated Geographical positions on a diagram and the map reference shall also be furnished, and in township surveys the name of the city, municipality or township as the case may be, shall also be stated.

**75.** Notwithstanding the provisions of regulation 69 the Surveyor-General may P authorise the use of copies made by approved photographic or other methods when more of than one copy of a diagram is required.

Photographic and other copies

# PART VIII MISCELLANEOUSPART VIII

# MISCELLANEOUS

**76.** (1) In addition to the survey records required under regulation 39, the following further documents, plans and data shall be sub-mitted to the Surveyor-General in respect of all surveys based partly or entirely on photogrammetric methods in terms of section *thirty-seven* of the Act:

Surveys from aerial photographs Cap. 188

- (a) calibration certificate in respect of the aerial camera;
- (b) report signed by the responsible photogrammetrist;
- (c) annotated aerial photographs showing all control points, both ground and those used in the aerial triangulation;
- (*a*) all computations, both manual and computer printouts;
- (e) diapositives, if required;
- (1) cover diagram;
- (g) any other documents or data as may be required by the Surveyor-General.

(2) The certificates on the working plan, general plan and diagrams shall be suitably amended to show the names of the contractors responsible for the aerial photography and photogrammetry and shall be signed by the responsible land surveyor.

**77.** (1) A land surveyor may employ unqualified assistants for taking observations Unqualified assistants and measurements which are recorded in the field book provided that-

- (a) no land surveyor shall employ more than two such assistants at one time without the approval in writing of the Surveyor-General;
- (b) all work carried out by such assistants shall be carefully supervised by the land surveyor and checked by him;

(c) detailed references shall be made to all such work in the field book and report.

(2) The Surveyor-General may require a land surveyor to furnish him with the names, academic qualifications and survey experience of unqualified assistants.

**78.** The Land Survey Regulations, 1963, and the Land Survey (Amendments) Regulations, 1965, are hereby revoked.

Revocation of Land Survey Regulations

# FIRST SCHEDULE

(Regulation 3)

# THE SURVEY CONTROL BOARD OF ZAMBIA

#### CERTIFICATE

This is to certify that .....

is licensed to practise as a Land Surveyor in the Republic of Zambia in accordance with the provisions of section 9 of the Land Survey Act.

Chairperson

Surveyor-General

Date.....19.....

SECOND SCHEDULE

(Regulation 6)

TARIFF OF FEES

PART I

BASIC CHARGE

#### 1. Charges Included in Basic Charge

Except where otherwise stated, the basic charge shall include the charges for the following:

- (a) provision of information in respect of previous surveys, data and co-ordinates of trigonometrical stations and reference marks;
- (b) location and verification of existing beacons, stations and reference marks where these have not been destroyed, obliterated or covered over;
- (c) field survey including connections to trigonometrical stations and reference marks, providing such connections do not exceed 1 kilometre, and preparation of survey records, but not including general plans and diagrams;
- (a) the cost of labour and materials, but not including the cost of new beacons, rebuilding of existing beacons and replacing of missing beacons;
- (e) the submission of survey records, general plans and diagrams to the Surveyor-General for examination and approval, and corrections of field work, survey records, general plans and diagrams when so directed by the Surveyor-General.

#### 2. Initial Fee

An initial fee chargeable once only in each survey and which shall be that applying to the largest group in a survey shall be charged as follows:

#### CLASS

# (Regulation 25)

For Parcels	А	В	С	
	Fee Units	Fee Units	Fee Units	
Under 1,000 m <sup>2</sup>	604	604	373	
Over 1,000 m <sup>2</sup>	604	604	604	

3. Area Fee

#### CLASS

#### (Regulation 25)

For Parcels	A	В	С
	Fee Units	Fee Units	Fee Units
Under 1,000 m <sup>2</sup>	249	196	107
Over 1,000 m <sup>2</sup>	382	311	222
Over 1 ha to 5 ha	498	436	329
Over 5 ha to 25 ha	604	569	471
Over 25 ha to 50 ha	822	764	604
Over 50 ha to 100 ha	1031	960	809
Over 100 ha to 200 ha	1209	1156	1013
Over 500 ha to 1,000 ha			1751
Over 1,000 ha to 2,000 ha			2427
Over 2,000 ha to 5,000 ha			3556

For areas not tabulated in this paragraph, the fees shall be as agreed with the client, or in default, as fixed by the Surveyor-General.

#### 4. Additional Boundaries

The area fee shall apply to parcels having not more than five boundaries and for each additional boundary above five the area fee shall be increased by 10 per centum:

Provided that the boundaries common to more than one parcel of land shal be included in each case in determining the number of boundaries of individual parcels but short lines from indicatory beacons to corner points shall not be regarded as separate boundries.

#### 5. Survey of Blocks of Parcels

There shall be a 25 per centum decrease of the area fee for 50 to 75 parcels in a block and a 50 per centum decrease of the area fee for 76 parcels or more in a block.

#### 6. Parcels of Irregular Shape

For parcels of irregular shape there shall be an increase of 10 per centum per each side in excess of four.

#### 7. Curvilinear Boundaries

- (a) For the survey by ground methods of irregular curvilinear boundaries, the charge shall be 56 fee units with an individual charge of 17 fee units per 100 metres or part thereof of curvilinear boundary. This additional charge shall be made once only, notwithstanding the number of parcels abutting on such boundary.
- (b) For the survey by aerial photographic methods, the charge shall be by agreement and shall depend on the amount of ground control required and whether existing or new photographs are used.
- (c) Where the information is obtained from a previous survey, the charge shall be 56 fee units per parcel.
- (a) For the survey of a circular curve, the chrge shall be 180 fee units.

#### PART II

BEACONS, GENERAL PLANS AND DIAGRAMS

#### 1. Beacons

For providing materials and erecting beacons, the charges shall be-

- (a) Standard Beacon-iron peg or pipe in concrete as prescribed in sub-regulations (1) and (2) of regulation 33 17 fee units
- (b) Standard Beacon-iron peg or pipe in concrete plus 200 mm cairn (or trench and mound) as prescribed in sub-regulations (1), (3) and (5) of regulation 33 33 fee units
- (c) Standard Beacon-iron peg or pipe in concrete plus 750 mm cairn (for trench mound and hardwood post) as prescribed in sub-regulations (1), (4) and (5) of regulation 33 50 fee units
- (a) Other beacons and repairs to existing beacons, as directed by the Surveyor-General.
- 2. General Plans

For each sheet of a general plan the charge shall be 278 fee units with an additional 6 fee units for each parcel.

3. Diagrams

(a) For each diagram framed having not more than five boundaries-

(i)	with co-ordinates for each additional boundary	28 fee units 3 fee units
(ii)	without co-ordinates for each additional boundary	17 fee units 3 fee units
(iii)	when a river forms a boundary with co-ordinates for each additional boundary	42 fee units 3 fee units
(iv)	when a river forms a boundary without co-ordinates for each additional boundary	28 fee units 3 fee units

(b) For copies of diagrams prepared by approved photographic or other methods the charge shall be as directed by the Surveyor-General.

#### PART III

#### MISCELLANEOUS WORK AND SPECIAL CHARGES

#### 1. Miscellaneous Work

The charge for services not specified in this Schedule such as discussions with the client, relocation of beacons, connection and alignment investigations, location of fixed area and fixed distance beacons, surveys for wayleaves, easements, railway strips, astronomical observations, mapping control, shall be at the rate of 67 fee units per hour and materials shall be charged at cost plus 50 per centum.

2. Line Clearing

A reasonable amount of clearing of grass and light bush shall be included in the Basic Charge under Part I of the Schedule. For the clearing of heavy bush an extra charge for labour may be made.

3. Special Charges

Notwithstanding any provisions to the contrary in this Schedule, the Surveyor-General may allow a departure from the prescribed standard charges in cases where peculiar or special circumstances appear to warrant such a departure.

#### 4. Connection Charges

The charge for connections to trigonometrical stations and reference marks shall be 33 fee units per each 100 metres in excess of 1 kilometre.

(As amended by S.I. No. 66 of 1996)

# THIRD SCHEDULE

(Regulation 8)

#### SURVEYOR-GENERAL'S CHARGES

#### 1. Land Surveyor's Licence

The fee for the issue of a land surveyor's licence in accordance with the provisions of section 9 of the Act shall be 278 fee units. The Surveyor-General may remit this fee for a licence issued to a land surveyor in the service of the Government but the fee shall become due should the land surveyor leave the Government service and continue to practice in Zambia.

#### 2. Taxing Accounts

For taxing a land surveyor's account, the fee shall be two and a half per centum of the account as taxed.

#### 3. Examination Fee

For the examination of survey records, genreal and working plans and diagrams the fee shall be 28 fee units for each stand, 28 fee units for each lot or farm in urban areas and 56 fee units for each lot or farm outside urban areas.

#### 4. Cadastral Drawing Charges

- (a) For certifying True Copies of plans and diagrams, the fee shall be 56 fee units for each certificate.
- (b) For calculations required for the compilation of general plans and diagrams where no field work is required, the charge shall be determined by the Surveyor-General.
- (c) For the drawing of general plans, where field work is not required the charge shall be 167 fee units.
- (a) For the preparation of sketch plans, the fee shall be 56 fee units.
- (e) For marking off the fees shall be 83 fee units per parcel of land marked off.

(As amended by S.I. No. 66 of 1996)

# THE NON-CADASTRAL SURVEY AND MAPPING FEES AND CHARGES NOTICE

Statutory Instrument 65 of 1996

#### Notice by the Minister

1. This Notice may be cited as the Non-Cadastral Survey and Mapping Fees and Title Charges Notice.

**2.** The non-cadastral survey and mapping fees and charges shall, with effect from 4th April, 1996, be as set out in the Schedule to this Notice.

Non-cadastral survey and mapping fees and charges

#### SCHEDULE

# The Laws of Zambia (Paragraph 3)

# 1. STANDARD SERVICES

(a) Printed Maps

2.

Prices payable by all map users within Zambia including other Government Institutions:

				Fe	ees Units	
Торо	graphic Maps			33	1	
Stree	et Plans			44		
ICAC	Charts			44		
Misce	ellaneous and Atlas Sheets:					
Int	ernational and regional			44		
Na	itional			33		
Price	s payable by all map users outside	Zambia				
All m	aps			US	S\$ 12	
Posta	age or freight			at o	cost	
(b)	Dyeline Prints					
Char	ges per square decimeter					
			Paper Fee Units		Ozala Film Fee Units	
	rials supplied by Survey Department	nt	17		5.7	
Mate	rials supplied by customer		0.6		2	
( <i>c</i> )	Photographic Products					
	Contact Prints			11	1	
	Paper P/DM <sup>2</sup>	Single Weight		2	2.2	
	Paper P/DM <sup>2</sup>	Double Weight		2	2.7	
	1M 3 1M	Single Weight		222		
<b>D</b> '	1M 3 1M	Double Weight		278		
•	ositives 25cm <sup>2</sup> P/DM <sup>2</sup>				8.3	
Mate In ac	rials supplied by client/customer ha			ed.	5.7 notograph used to cover the photograph	ny
(a)	Computer Printouts of Survey Dat	a				
	6.8 fee units per page					
NON	-STANDARD CHARGES					
non			Fee Units			
(a)	Computer utilization for data proc	essing				
(6)	including use of its periferals	and	69 per hou	r		
(b)	Utilization of a photogrammetrist photogrammetric equipment	and	611 per ph	otoa	rammetrist	
	priotogrammetrie equipment		per day per			
( <i>c</i> )	Utilizaion of cartographer and cartographic equipment					
			611 per cartographer per day per instrument			
(a)	Utilization of reprographer and	•			uument	
(4)	reprographic equipment		611 per rep	orogr	rapher	
			per day per instrument			
(e)	Materials and new aerial photogra	aphy	at cost			

(As amended by S.I. No. 65 of 1996)

# The Laws of Zambia Endnotes

# **1 (Popup - Popup)** 27th August, 1965.

2 (Popup - Popup) Also referred to as ``customary area". See meaning assigned thereto by section 2 of the Lands Act, Cap. 184.