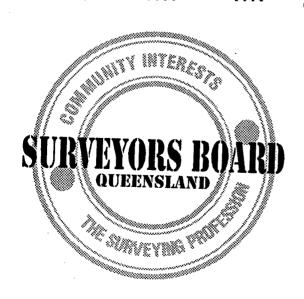


# **Operations**



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Published by:

Surveyors Board of Queensland

**Land Centre** 

Cnr Main and Vulture Streets Woolloongabba Qld 4102

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South Brisbane Qld 4102

Phone: 896 3032

# Design, Layout and Typesetting by:

Business Images 46 Acacia Drive Ashgrove Qld 4060

Phone: (07) 366 4295

# **INDEX**

Foreward by the President of the Surveyors board

Foreword by the Director General, Department of Lands

Contents of the Manual

# Introduction

The Board Operations Manual (BOM) was released in November 1992. The BOM is a dynamic and fluid document. This review and additions result from input received from individuals, feedback from workshops conducted across the State in February and March 1993, and the thrust to improve and expand on the information in the BOM.

Statements on High Water Mark and Non-Tidal Boundaries have been withdrawn, pending review of all requirements. Part F — Disciplinary Procedures — has been completed.

The next review is scheduled for November 1993. You can assist in this by providing your ideas and associated reasoning, in writing, on changes and additions to the Board.

July 1993

To:

# **Users Of The Operations Manual**

This first review of the Board Operations Manual, comes about as a result of input from the Manual's users. Without this important feedback, the Board Operations Manual would become a static document.

Surveying and the associated technology, continues to develop. The Board is cognisant of these changes and considers that the Board Operations Manual should also reflect the developments in technology.

The Board considers that the Manual should become a reference for all surveys. It is not a prescriptive document. Discussions with senior officers of the Department of Minerals and Energy, has provided a positive response on incorporating instructions on mine and mining lease surveys into the Manual. This should be available for the November, 1993 review.

Please be aware that this is a fluid document. If you become aware of areas in the Manual where change or additional material is required, please become involved and advise the Board of your thoughts and ideas.

E C COTTRELL

President

Surveyors Board Of Queensland

July, 1993



17 November 1992

#### DEPARTMENT OF LANDS

Office:
Director-General
Level 9
Department of Lands
Cnr Main & Vulture Sts
WOOLLOONGABBA

Postal: Locked Bag 40 COORPAROO DELIVERY CENTRE Q 4151 The President Surveyors Board of Queensland PO Box 477 WOOLLOONGABBA QLD 4102

Dear Sir

The Department of Lands endorses the initiative of the Surveyors Board of Queensland on the publication of a Board Operations Manual.

The Department has been pleased to assist with the production of certain sections of the Manual. I also applaud the support from the profession and the Department of Resource Industries in the development of the Manual.

I am certain that the Operations Manual will be a valuable reference for all surveyors, and it has my personal support.

Yours faithfully

Contact: Mr BG Wilson Director-General

Phone: (07) 896 3366

Fax: (07) 896 3697

BG Wilson Director-General

Roberta.



# **Contents**

## Part A

#### Introduction and Index

#### Part B

# Policy Statements, Notices and General Information

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Specifications for the various types of Technical Projects which candidates for registration can submit to the Surveyors Board as evidence of technical competence in the appropriate fields of surveying.

# Part D3 — Professional Assessment Project

Specifications for the Professional Assessment Project (PAP) which candidates for registration submit to the Board as evidence of professionalism, and Guidelines for Examiners.

# Part E

# Standards for Surveys

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Directions and Recommended Practices to assist surveyors in the performance of their work.

# Part E2 — Survey Plan Guidelines

Outlining the recommended drafting practices which the Surveyors Board considers will satisfy the requirements of the Registering Authorities — covers both Department of Lands and Department of Minerals and Energy survey plans.

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# **Disciplinary Procedures**

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How a complaint must be lodged, how it is assessed and dealt with, and guidelines on information required for a complaint by one surveyor against another surveyor.

# Part F2 — Investigation and Finalisation

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# **Surveyors Board Forms**

Specimen copies of all forms used by the Surveyors Board and approved by the Board under the Surveyors Regulation 1992.

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# Reserved for future use

# Part Y

# **Surveyors Act**

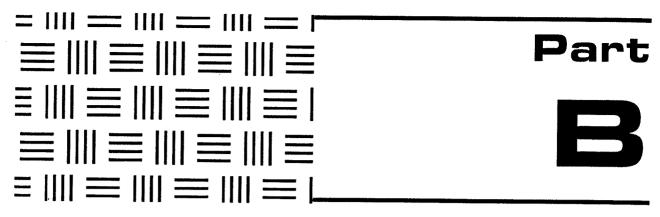
Use this Part to file your updated copy of the Surveyors Act obtained from the Government Printer - GOPRINT

# Part Z

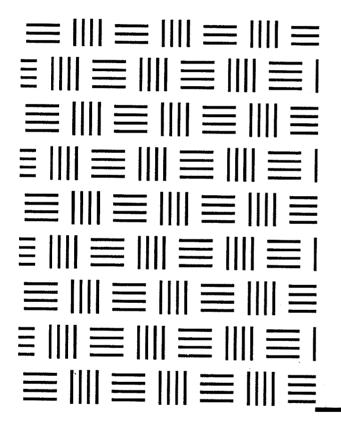
# **Surveyors Regulation**

Use this Part to file your copy of the Surveyors Regulation obtained from the Government Printer - GOPRINT

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# Policy Statements and Notices



Statements of Policy adopted by the Surveyors Board of Queensland from time to time,

**Notices to Registered Persons** 

and

**General Information** 

#### Published by:

Surveyors Board of Queensland

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South Brisbane Qld 4102

Phone: 896 3032

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# **General Information**

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# **Policies**

# Memoranda

# Memorandum No 1/93

# SUBJECT: Complaint by Registered Person Against a Registered Person.

The Board from time to time, receives complaints from Surveyors against other Surveyors. While the nature of the complaints vary, a considerable number relate to the accuracy of measurements and/or method of reinstatement of cadastral boundaries. The Board is bound to investigate all complaints received. This involves the commitment of considerable funds and resources.

In matters involving a difference between two Surveyors, the Board believes that where possible, every effort should be made to resolve the matter between the parties concerned. This also relates to disputes involving the Registering Authorities.

If a satisfactory resolution cannot be reached between the parties, then a complaint to the Board is appropriate. A complainant, when lodging a complaint to the Board, should ensure it is accompanied by a thorough report including plans, sketches and photographs detailing the facts.

While it is not intended to deter Surveyors from lodging complaints, the alternatives outlined above and within Part F of this Manual, should be first considered.

March, 1993

# Memorandum No 2/93

# SUBJECT: Body Corporate Registration.

The Surveyors Act 1977 at Section 47 provides for certain penalties for a person who holds out as a surveyor unless the person is registered as a surveyor under the Act. The section also prohibits the use of the words "registered", "licensed", "consulting", "consultant" in connection with the word "surveyor", unless the person is licensed or registered under the Act.

Section 47A of the Act provides for the steps to be taken by a person intending to practice surveying under a business name.

The Acts Interpretation Act 1954 provides the following meaning on "Person" or "Party" - Includes a body corporate;'. Further, the Act provides that every word in the singular number shall be construed as including the plural number, unless the contrary intention appears.

The Board will continue to monitor the operations of firms, especially where advertising and letterheads are concerned, to ensure that 'persons' are appropriately registered.

March, 1993.

# Memorandum No 3/93

# SUBJECT: Professional Behaviour By Registered Persons.

The Board continues to deal with Registered persons, who fail to maintain even the basic standards expected of professional surveyors. There is a demonstrated lack of professionalism displayed by a minority of practising surveyors, some with long standing experience. While these surveyors represent only a very small part of the profession, their performance is reflecting poorly on the profession as a whole.

The Board has resolved that it will move with firmness and determination in all cases of undesirable or unprofessional conduct brought to its attention. Matters of concern include:-

- (i) standard of survey work carried out in the field and the supervision thereof
- (ii) staffing and conduct of branch offices (often managed by unqualified personnel)
- (iii) non compliance with the provisions of the Surveyors Act and Regulation, with particular reference to the lodgement of plans for registration without the survey having been completed
- (iv) the apparent widespread practice of not lodging copies of Identification Surveys (vide Surveyor-General's memo to all Surveyors of 1988) and Direction 15.0 in Section E
- (v) an apparent lack of professional responsibility demonstrated by some surveyors appointed as examiners and assistant examiners for Professional Assessment Projects
- (vi) other matters that come to the attention of the Board from time to time.

The Board wishes to remind Surveyors that the continuation of the registration system depends largely on its being able to continually demonstrate that a high level of professionalism exists amongst registered persons. The continued support of all Surveyors is necessary to identify and address examples of unprofessional behaviour.

March, 1993.

# Memorandum No 4/93

# SUBJECT: Notice on charge of Section 41(3) Fee and Restoration Fee.

1. The Section 41(3) fee is to be charged for renewal of registration in cases where renewal has not been applied and paid for by the last day of November in each year as required by Section 41(2) and application for renewal is made within the 12 month period following the lapse of registration.

Except in cases where prior advice has been provided to the Board and the reasons submitted are acceptable to the Board, or where exceptional circumstances prevailed the Board may use its discretion. In these cases the Restoration Fee and normal Registration fee are charged.

2. The Restoration fee is to be charged in such instances where registration has been cancelled by the Board and application is being made to be restored to the register.

This fee is also to be charged in such instances where registration has been allowed to lapse for more than 12 months and application for restoration is made within a period of not less than 12 months nor greater than 2 years after the lapse of registration.

The restoration fee is charged in addition to the prescribed registration fee.

3. New Application If registration has been allowed to lapse and more than 2 years pass before restoration is again sought, new applications for registration must be submitted and these will be assessed by the Education Committee.

If in these cases the application is successful, the original registration number will be continued.

March,1993

# Memorandum No 5/93

# SUBJECT: Board Philosophy in Dealing with a Complaint.

The intent of the Surveyors Act 1977, at Part IVA, is that the Board considers the registration of persons to ensure that the public interest is protected in relation to surveys and persons carrying out those surveys. That is, a person is registered with the Board, in order to safeguard the public interest.

The Act has not been written to invoke disciplinary action of a punitive nature. Judge Morley in a Surveyors Disciplinary Committee hearing in August, 1991 said of the Surveyors Act 1977, 'the Committee's powers are not punitive powers but are powers which are protective of both the standards of the surveyors' profession and of the public interest in the maintenance of those standards'.

The powers under S61 are protective and the section sets out the disciplinary actions. Judge Morley went on to say that the generally accepted meaning of the verb "discipline" is "to bring under control..., to chastise....". As a substantive, "discipline" has the corresponding meaning of "the training of scholars and subordinates to proper conduct and action by instructing and exercising them in the same". The adjective "disciplinary" means "pertaining to or promoting discipline". See Shorter Oxford English Dictionary.

Within the context of the Act, both the expression "disciplinary action" in S54(c) and the powers defined by S61 as those able to be exerted by that "action" are parts of a law having a special application to the relationships between any given registered surveyor, his or her professional colleagues, those who seek the professional services of a surveyor or may do so, and that part of the public interest upon which the rendering of those professionals services will or may have an impact.

The Board for a number of years now, has approached its duties in relation to complaint resolution, along the lines that the public interest must be protected and not disadvantaged. Where there is an error in the survey, it must be corrected and the registered person should be appropriately re-educated and/or retrained.

Many investigations are able to be concluded through discussion and co-operation, as the registered person is able to provide appropriate answers or rectify the matter of concern. To this end, the Board considers that registered persons should assist the Board in the conduct of an investigation. The person against whom a complaint is laid is innocent and the Board's charter is to gather all the facts pertaining to a complaint. Co-operation from all parties who may have relevant information to a complaint, is essential in determining an appropriate outcome.

March, 1993.

# Memorandum No 6/93

# SUBJECT: Supervision

An increasing number of complaints against Surveyors received by the Surveyors Board can be traced to a lack of adequate supervision by the Registered person responsible for a survey performed by other technical staff. The Board, when carrying out its investigations, has discovered a wide range of interpretations by surveyors as to what was required in the Surveyors Regulations 1978, Part III - 'Conduct of Surveyors' and specifically Section 18, 'Duties and responsibilities of Surveyors'.

The Surveyors Regulation 1992, Section 18, 'Supervision', now clearly delineates the responsibility. The Board considers that the interests of the public must be protected and that the supervising surveyor must fulfil his professional responsibilities when supervising others.

The Surveyors Regulation 1992, has clarified what was stated in the 1978 Regulations and the surveyor shall continue to:-

- "(a) ensure that the survey is performed in accordance with the regulation and to the standard of accuracy prescribed;
- (b) ensure that any part of a survey that is not performed by the Surveyor personally is performed by persons for whose work the Surveyor accepts responsibility;
- (c) ensure that the survey is carried out under the immediate personal supervision of a Surveyor who shall attend in the field to the extent necessary to give effective supervision to the carrying out of the survey in accordance with the Regulation and any relevant Directions to Surveyors issued by the Board".

In considering an appropriate definition for the nature and extent of supervision, the Board was mindful of two recent findings. The first emerged out of a disciplinary hearing in Queensland presided over by Judge Morley in August, 1991.

In considering the nature of professional services offered to the public, Judge Morley commented that skills and professional services offered by surveyors are <u>personal</u> and that "the surveyor's vocation is a profession. The Surveyor's professional services are not business or trade services which are able to be performed by representatives, agents or employees."

The second relevant case involved the character and extent of supervision by a Surveyor, brought into question during an appeal hearing in the District Court of NSW against a decision by the Surveyors Board of NSW.

The appellant submitted that in relying upon the considered knowledge and experience of a person who was not a registered surveyor, he was taking reasonable precautions to verify the accuracy of a survey. He further submitted that he (the appellant) did not need to attend upon the land and did not need to give personal supervision to the field work. It was submitted that he was entitled to rely upon un-supervised field work in drawing the plan and certifying as to the accuracy of the survey.

These submissions were rejected by the presiding judge.

As part of the judgement it was stated that "...where a survey is not made by the surveyor himself, but is made under the supervision of a surveyor, Regulation 7 (of the NSW Act) fairly and squarely imposes upon the surveyor a requirement to personally attend on the land ("the ground") to be surveyed and to personally supervise ("exercise...immediate oversight and personal direction") the survey of that land. I cannot see how a surveyor could meet the requirements of Regulation 7 without attending on the land and supervising the survey of that land. I cannot see how a surveyor, if he or she did not make the survey himself or herself, could certify as to the accuracy of the survey without attending on the land and supervising the survey of that land".

Neild J.R. went on to say that he was satisfied that the appellant (a) failed to attend on the land; (b) failed to supervise the field work and that these departures plus other constituted misconduct in a professional respect.

The Surveyors Regulation 1992, provides for a definition of 'supervision' and at Section 18 the regulatory requirement. This now implements the policy developed by the Board and circulated to registered persons in September, 1991. The policy is reprinted hereunder.

# **SUPERVISION**

"Supervision means the immediate personal oversight by the responsible surveyor of the planning and execution of all surveys, including the method of measurement and placement of survey marks, the preparation of the plan of survey and, in the case of a cadastral survey, the examination of evidence of the limits of ownership relied on in the fixation of existing boundaries."

March, 1993

# Memorandum No 7/93

#### **SUBJECT:**

Guidance to surveyors for the Establishment of and Connection to a Co-ordinated Survey Framework

The Surveyors Board is conscious that the use of total stations and computerised drafting systems are now commonly used within the profession. As surveyors derive co-ordinates during a survey, these have a potential use in GIS applications.

Many organisations, including local authorities, are investing in information systems using GIS technology. The effective and efficient use of survey derived co-ordinates in land information systems will rely on survey data incorporating points which are spatially unique.

This requires the establishment of suitable standards and procedures for the determination of AMG & AHD values. Further, the placement and connection to suitable Permanent Survey Marks (PSM) and the presentation of co-ordinate values on the face of plans of survey are necessary, if the benefits of survey integration are to be fully realised. Many of these standards and procedures are already in place.

With respect to placement of and the connection to PSM's, the Board is working with the Department of Lands to develop a strategy, for the systematic introduction of a dense network of co-ordinated PSM's, particularly in rapidly developing urban areas. The establishment and recording of control mark information in a readily accessible data base is also part of this strategy. This will assist surveyors in gaining access to reliable and up to date information.

It is proposed that the strategy will be completed by 30 June 1993. Once implemented, it is the Board's intention to require strict compliance with the relevant provisions of the Survey Co-ordination Act 1952 and the Surveyors Act 1977 with respect to the establishment of and connection of surveys to PSM's.

In the meantime, GPS technology now provides the profession with the capacity to generate co-ordinated points effectively and efficiently. Standards and specifications that must be met are defined in the Board's Operations Manual, Publication No. 1 of the Intergovernmental Committee on Surveying and Mapping (ICSM) and the standards and specifications of the Department of Lands.

These publications also include details of suitable GPS field techniques, although these are soon to be republished, given the recent development in GPS "rapid-static" survey methods. Details of the appropriate method of publishing co-ordinate values on the face of a plan of survey are contained in the Survey Plan Guideline section of the Board's Operations Manual.

Where a PSM is to be co-ordinated, it should be done by a closed connection, to Class C standard (as per the ICSM publication) to at least two stations on the existing State control network. Where cadastral surveys are conducted using GPS techniques in accordance with the Surveyors Regulation, 1992, Section 29(1),

connection to the State Control Network is mandatory where existing control is within  $50 \mathrm{km}$ .

Despite the revolutionary and cost effective solutions that satellite technology offers, it should in no way compromise the traditional professional and ethical values that are fundamental to good survey practice. Independent self check, closure and calibration etc, still need to be a consideration, despite the techniques adopted.

With respect to surveys in areas lacking survey control, the Surveyors Board encourages the profession to undertake the establishment of a network of Permanent Survey Marks (preferably co-ordinated) to facilitate the introduction of survey integration and underwrite the best utilisation of Geographic Information Systems.

In summary, as the establishment of denser co-ordinated survey marks progresses, and access to information relevant to their currency, co-ordinated values and accuracy becomes more readily available, the Board will require surveyors to comply with the requirements of the Survey Co-ordination Act 1952 and the Surveyors Act 1977.

While the Board has not finalised its policy in these matters, the above conceptualises the current thinking.

February, 1993

# Memorandum No 8/93

# **SUBJECT:** Identification Surveys

Under the present Surveyors Regulation, a Licensed Surveyor, when carrying out a survey for the purpose of identifying or remarking boundaries of land (Section 26), is required to prepare a 'plan' and forward a copy of such plan to the Registering Authority within sixty days after the completion of the survey (Section 30).

Identification Survey plans must be endorsed with the standard Form 13 Certificate and signed by the Licensed Surveyor.

Despite amendments made to the Survey Plan Guidelines in 1992 to reflect this, the Board is finding increasing evidence that the Form 13 Certificate is not being used for Identification Surveys in many instances. Surveyors should ensure that all Identification Survey Plans are endorsed with the correct certificate.

The Board is further concerned that is some instances, accepted professional standards with respect to reinstatement, marking and plan presentation, are not being maintained by some Licensed Surveyors.

The Board continues to note an increase in reports, that plans of surveys effected under the Surveyors Regulation are not being deposited in accordance with the requirements of Section 30.

The Board has resolved to investigate these reports and to pursue disciplinary action against any Surveyor who has not complied.

June, 1993

# Memorandum No 9/93

# SUBJECT: Group Title Plans of Subdivision

The Surveyors Regulation 1992 set out the requirements for survey. Group Title Subdivisions are one type of survey. The surveyor has certain responsibilities and for GTP's, these include, amongst others:-

- 1. There is no difference between a Surveyor's responsibility for the performance of a Group Title Subdivision and the performance of any other cadastral survey.
- 2. It is acknowledged that the marking of some Lot corners on Group Title Subdivisions is not always feasible. However, it is important that sufficient recovery marks are placed in order to facilitate later reinstatement.
- 3. These may include surveyed connections to improvements situated on the land, at the time of survey.
- 4. Connections to Recovery Marks should be recorded in an appropriate manner.
- 5. The reinstatement of the external boundaries of the parcel must be recorded. (eg; by Identification Survey or Resurvey).
- 6. Encroachments are to be shown and they are to be dimensioned.

May, 1993

# **General Information**

# **Corporate Objectives**

#### Mission Of The Board

The Board ensures public confidence in surveying.

# **Objectives Of The Board**

EDUCATION To accredit educational and training programs to achieve the highest level of academic standard and professional competence in surveying.

**REGISTRATION** To implement a registration model that recognises multi-skilling and staged career path development.

STANDARDS To establish and monitor surveying standards which comply with national standards and which are directed toward assuring accountability to and protection for the public.

ARBITRATION To develop arbitration processes with the profession, to resolve disputes impacting on the community.

**DISCIPLINE** To implement effective investigatory and disciplinary procedures dealing with breaches of the Surveyors Act.

GOVERNMENT LEGISLATION To ensure that the enabling legislation is administered and proactive advice is provided to government on existing and proposed legislation impacting on surveyors.

RESOURCES To institute a funding model which reflects the beneficiaries of the Board's activities.

**April**, 1993

# **Qld Legislation Affecting Surveyors**

Short Title	Admin. Dept
	namm. Dept
Surveyors Act 1977	LANDS
Surveyors Regulation 1992	LANDS
Survey Co-ordination Act 1952	LANDS
Special Freeholding of Leases Act 1991	LANDS
Act 1962	LANDS
Building Units and Group Titles Act 1980	LANDS
Building Units and Group Titles Regulation 1980	LANDS
Acquisition of Land Act 1967	LANDS
Real Property Act 1961	LANDS
Harbours Act 1955	TRANSPORT
Water Resources Act 1989	DPI
Irrigation Act 1922 & Regs.	DPI
Irrigation Areas (Land Settlement) Act 1962	DPI
River Improvement Trust Acts 1940 & Regs	DPI
D 1 D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Beach Protection Act 1968	E & H
Canals Act 1958	E & H
Contaminated Land Act 1991	E & H
Property Law Act 1974	JAG -
Dividing Fences Act 1953	JAG
	0110
Workplace Health and Safety Act 1989	DEVETIR
Local Government Act 1936	HLGP
Local Government (Planning & Environment) Act 1990	
City of Brisbane Act 1924	HLGP
Only of Drisbatic Act 1024	HLGP
Coal Mining Act 1925	MINERALS
Mineral Resources Act 1989	MINERALS
Petroleum Act 1923	MINERALS
Miner's Homestead Leases Act 1913	MINERALS
Petroleum (Submerged Lands) Act 1982	MINERALS
Industrial Development Act 1963	BIRD

In addition to the above, there are a number of practices which are in existence in Queensland which may not be contained in the above. The onus is on all Registered persons to familiarise themselves with these practices, possibly by working with an experienced surveyor in the Queensland environment.

All Queensland Acts are available only from GOPRINT, 371 Vulture  $\,$  Street, Woolloongabba Q 4102  $\,$ 

TEL: 896 3654 or FAX: 896 3534

(see over for legend to Administering Departments)

Department of Business, Industry and Regional Development

**BIRD** 

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GPO Box 1141, BRISBANE Q 4001

TEL: 224 8568; FAX: 229 5289

Department of Minerals and Energy

MINERALS

Queensland Minerals and Energy Centre 61 Mary Street, BRISBANE Q 4000

TEL: 237 1435; FAX: 229 7770

Department of Lands

LANDS

Landcentre

Cnr Main and Vulture Streets, WOOLLOONGABBA Q 4102

Locked Bag 40, COORPAROO DELIVERY CENTRE Q 4151

TEL: 896 3111; FAX: 896 3275

Department of Housing, Local Government and Planning

HLGP

Queensland Minerals and Energy Centre

61 Mary Street, BRISBANE Q 4000 GPO Box 690, BRISBANE Q 4001

TEL: 227 7111; FAX: 224 5589

Department of Environment and Heritage

E & H

160 Ann Street, BRISBANE Q 4000 PO Box 155, NORTH QUAY Q 4002

TEL: 227 7111; FAX: 227 6485

Department of Employment, Vocational Education, Training and

**Industrial Relations** 

**DEVETIR** 

State Law Building

Cnr George and Ann Streets, BRISBANE Q 4000

GPO Box 69, BRISBANE Q 4001

TEL: 239 3111; FAX: 229 0445

Department of Justice and Attorney-General

**JAG** 

14th Floor, State Law Building

50 Ann Street, BRISBANE Q 4000

TEL: 239 3520; FAX: 239 3877

Department of Transport

TRANSPORT

Capital Hill Building

85 George Street, BRISBANE Q 4000

GPO Box 1549, BRISBANE Q 4001

TEL: 834 2011; FAX: 834 2022

Department of Primary Industries

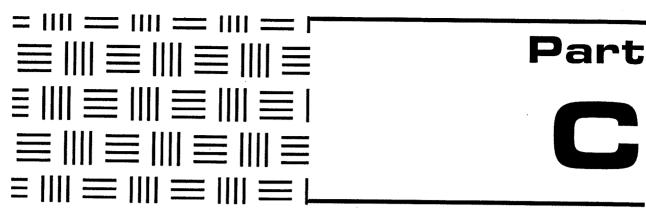
**Primary Industries Builling** 

80 Ann Street, BRISBANE Q 4000

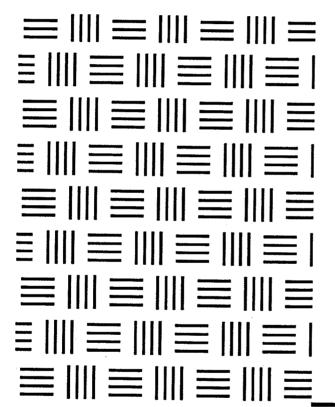
GPO Box 46, BRISBANE Q 4001

TEL: 239 3111; FAX: 221 2490

DPI



# Registration Requirements





C1 Registration of Individuals

C2 Registration of Bodies Corporate

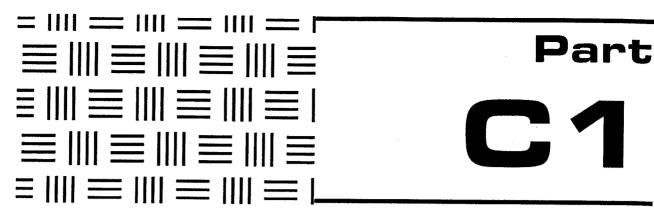
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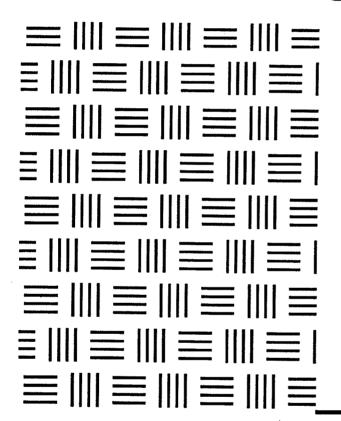
Land Centre Cnr Main and Vulture Streets Woolloongabba Qld 4102

P.O. Box 3211 South Brisbane Qld 4102

Phone: 896 3032



# Registration of Individuals





Requirements, Directions and Guidelines for Registration of Surveying Associates, Surveying Graduates and Surveyors and the Endorsement of Licensed and Consulting Surveyors.

Reciprocity

Published by:

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# **Appendices**

Sample Letter of Accreditation Statutory Declaration

# Requirements

Sections 1.0 to 5.0 should be read in conjunction with the relevant Sections of the Act and Regulation.

# 1. Associate — Section 38A — Section 6 (Regulation)

- 1.1 Associate Diploma in Surveying or equivalent.
- 1.1.1 QIT, OR
- 1.1.2 USQ (DDIAE) 2 years full time, 4 years external, OR
- 1.1.3 Completed a course of study acceptable to the Board and is the holder of a diploma, certificate or other qualification conferred after due examination by a prescribed educational institution.
  - —plus 4 years approved practical experience in any of the following areas, cadastral, engineering, topographic, or hydrographic surveying or some other type of surveying which in the opinion of the Board is appropriate for persons seeking registration.
  - A person is otherwise qualified if he has gained over a period of seven years practical experience and competence in cadastral, engineering, topographic or hydrographic surveying, or in some other type of surveying which in the opinion of the Board is appropriate for persons seeking registration. (See Directions E.)
  - 1.3 Further, the applicant must satisfy the Board as to his capacity to maintain a high level of performance in the technical aspects of the practice of surveying.
  - 1.4 An applicant shall complete Form 1 and such application shall be accompanied by the prescribed fee.

# 2.0 Graduate — Section 38 — Section 7 (Regulation)

- 2.1 Degree in Surveying or equivalent.
- **2.1.1** U of Q Bachelor of Surveying, 4 years full-time, OR
- **2.1.2** QUT (QIT) Bachelor of Applied Science (Surveying), 3 years full-time or part-time equivalent, OR
- 2.1.3 Appropriate qualifications from a tertiary education institution recognised under the reciprocating Boards arrangements within Australia and New Zealand.
  - 2.2 An applicant shall complete Form 2 and such application shall be accompanied by the prescribed fee.

# Section 37 — Section 8 (Regulation)

## 3.1 Academic Qualifications

- 3.1.1 Holds a degree in Surveying as set out in 2.1, and
- 3.1.2 Shall have gained practical experience in surveying and satisfactorily completed projects, sufficient to satisfy the Board of his/her capacity to maintain a high level of performance in all respects (ethical, administrative & technical) of the practice of surveying, OR
- 3.1.3 Shall have gained the Graduate Diploma in Surveying Practice from QUT., OR

# 3.2 Equal or Higher Qualifications

- 3.2.1 Shall satisfy the Board that he/she possesses academic qualifications that the Board considers to be equal to or higher than the academic qualifications referred to in Direction 3.1.1; and
- 3.2.2 Shall satisfy the Board that he/she has gained practical experience and satisfactorily completed projects in surveying that the Board considers to be equal to or greater than the requirements referred to in Direction 3.1.2 or 3.1.3; OR

# 3.3 Absence of Formal Qualifications

- Shall satisfy the Board that over a period of three years experience in the practice of surveying he/she has demonstrated a high level of competence and professionalism; and
- Shall, if required by the Board, pass such examinations (whether written or oral or both), and gain such additional practical experience and do such additional projects, as the Board considers to be sufficient for the purpose of qualifying him/her to be registered under the Act; OR

# 3.4 Reciprocity

- 3.4.1 Shall satisfy the Board that he/she is registered as a Surveyor with the Surveyors Board or other competent authority of a State or Territory of the Commonwealth, or of New Zealand, or that he/she is entitled to be so registered; and
- Shall, if required by the Board, pass such examinations (whether written or oral or both), and gain such practical experience or additional practical experience and do such additional projects, as the Board considers to be sufficient for the purpose of qualifying him/her to be registered under the Act.

## 3.5 Application

An applicant shall complete Form 3 and such application shall be accompanied by the prescribed fee.

# 4.0 Licensed Surveyor Section 42 — Section 9 (Regulation)

- 4.1 A person registered as a Surveyor or an applicant for registration as a Surveyor who seeks to have his/her registration in the Register of Surveyors endorsed to the effect that he/she may perform cadastral surveys:-
- **4.1.1** Shall satisfy the Board that he/she has completed a period of twelve months practical experience in cadastral surveying as set out hereunder.

The practical experience:-

- (i) shall be performed under the supervision of a licensed surveyor; and
- (ii) shall relate to cadastral surveying in both urban and rural areas; and
- (iii) shall include a professional assessment project in cadastral surveying; and
- (iv) may include, wholly or in part, cadastral surveying performed for the purposes of Directions A Practical Experience, B Projects and C PAP.

OR

**4.2** Shall have gained the Graduate Diploma in Surveying Practice from QUT.

OR

- 4.3 Shall satisfy the Board that he/she is licensed or otherwise authorised by the Surveyors Board or other competent authority of a State or Territory of the Commonwealth, or of New Zealand, to perform cadastral surveys; and
- 4.3.1 Shall, if required by the Board, pass such examinations (whether written or oral or both), and gain such practical experience or additional practical experience and do such additional projects, as the Board considers to be sufficient for the purpose of qualifying him/her to be licensed under the Act.
- **4.3.2** An applicant shall complete Form 4 and such application shall be accompanied by the prescribed fee.

# 5.0 Consulting Surveyor — Section 42A — Section 10 Regulation)

- A person registered as a Surveyor or an applicant for registration as a Surveyor who seeks to have his/her registration in the Register of Surveyors endorsed to the effect that he/she is a Consulting Surveyor shall satisfy the Board that he/she intends to provide survey services to the public for a fee.
- 5.2 A person who has completed the Graduate Diploma in Surveying Practice shall obtain 12 months appropriate experience after graduation before an application for endorsement as a consulting surveyor will be considered.

In circumstances where extensive practical experience of an appropriate nature is demonstrated, the Board may waive this requirement.

5.3 A person who has completed the Board's practical experience requirements, as set out in 3(i)(b), shall obtain 12 months appropriate experience after completion of the PAP, before an application for endorsement as a consulting surveyor will be considered.

In circumstances where extensive practical experience of an appropriate nature is demonstrated, the Board may waive this requirement.

- 5.4 An applicant shall take out and maintain professional indemnity insurance and public liability insurance policies to the value of:-
  - (i) professional indemnity insurance \$100,000; and
  - (ii) public liability insurance \$500,000.
- 5.5 An applicant shall complete Form 5 and such application shall be accompanied by the prescribed fee.

# **Directions**

# A. Practical Experience — Surveyor

- A.1.0 Before making application to the Board for registration as a Surveyor, every Surveying Graduate shall have gained under the supervision of a Surveyor all the practical experience on which he/she relies for the purposes of registration.
- A.2.0 Such practical experience shall be gained over a period of two years unless the Board in a particular case in the exercise of its discretion under Section 37 of this Act increases or reduces that period.
- A.3.0 All graduates and students should ensure that practical experience is gained under the supervision of a registered surveyor or in the case of cadastral surveying a licensed surveyor.
- A.4.0 The Surveyor supervising the practical experience being undertaken by a Surveying Graduate or student shall report thereon to the Board in Form 6. At the end of each period of experience or at the end of each six months, whichever is the lesser period.
- A.5.0 The Board may accept the practical experience gained by a Surveying Graduate or student or it may refuse to accept the whole or any part of the experience if the Board is of the opinion that such experience is in any respect unsatisfactory.
- **A.6.0** The Board may grant credit in respect of the practical experience required as follows:
  - (a) Up to 18 months to an applicant holding the degree of Bachelor of Applied Science (Surveying) from the Queensland Institute of Technology or its equivalent if the course was done in the sandwich mode;
  - (b) Up to six months to an applicant holding the degree of Bachelor of Surveying from the University of Queensland or its equivalent;
  - (c) Up to two years in particular cases where the Board is satisfied the applicant has obtained the appropriate experience.
- A.7.0 The minimum requirements for practical experience shall be a period of at least six months in urban and six months in rural cadastral surveying and at least six months in engineering and six months in another discipline of surveying.

#### **B.** Projects

- B.1.0 Before making application to the Board for registration as a Surveyor, every Surveying Graduate shall have substantially completed, to the Board's satisfaction, the projects set out in this Direction, prior to commencing the professional assessment project (PAP).
- **B.2.0** A Surveying Graduate may apply to the Board for acceptance of all or any of the projects completed by him/her as a student in lieu of all or any of the projects referred to in paragraph five.
- A completed project shall not be submitted to the Board for approval until after registration as a Surveying Graduate. In special circumstances the Board shall decide whether a project may be submitted prior to such registration.
- Each project shall be undertaken within a period of two years preceding an application to be examined in that project. Credits for projects passed will lapse after three years but the Board at its discretion may grant an extension of time.
- **B.5.0** Subject to paragraph (6), the projects shall comprise:

#### **B.5.1** Boundary survey

A boundary survey is a survey to reinstate the boundaries of a parcel of land which constitutes a moderate reinstatement challenge.

- B.5.1.1 A boundary survey of a country area of not less than 15 hectares, two boundaries of which shall coincide with and be reinstated from previous surveys, and one boundary of which shall be a water course or other natural feature, or an irregular road, and shall include a sun observation for meridian; OR
- A boundary survey of an urban area, suitable for lodgement with the appropriate authority, with occupation on or near the boundaries in such positions that at least one boundary must be determined by indirect methods, and shall include a sun observation for meridian; AND
  - **B.5.2** Engineering or Hydrographic
- B.5.2.1 The survey and design for a proposed road or railway not less than 500 metres in length, with the requisite digital terrain model, and calculations for earthworks and provision of drainage as required; or
- **B.5.2.2** A working chart of a hydrographic survey of about 2 square kilometres, including reduction of soundings and plotting of sounding locations; and
  - **B.5.3** Topographic
- A topographical survey of hilly country embracing an area of not less than 10 hectares, showing contours at height intervals appropriate to the scale and purpose of the survey; or

A map of a densely settled area of about 1,500 hectares or of a sparsely settled area of about 10,000 hectares, drawn to a suitable scale and plotted from a single photogrammetric model, with contours and heights appropriate to the scale of the map and the purpose of the survey; and

#### **B.5.4** Geodetic and Astronomy

- A survey for the establishment of geodetic control points of at least third order precision, requiring the establishment of at least four new points if the exercise involves a traverse, or at least two new points if the exercise involves a network, based on at least two existing points, and including planning, ground marking, field observations, computations and adjustments; and
- **B.5.4.2** An exercise to determine the AMG bearing of a line between two stations in the geodetic project above, using stellar observations to an accuracy of +/- 5 seconds.

#### B.5.5 Design

**B.5.5.1** A design of moderate complexity of an urban residential area covering about 16 hectares.

A significant part of the project is to be located in terrain where slopes are in excess of fifteen percent. The design with relevant topographic information is to be shown on a plan at an appropriate scale.

The plan is to be supported by a report which develops a rationale for the establishment of the development and presents discussions on environmental, engineering, economic and land use factors; OR

A design for a farming development to accommodate approximately 20 family units within an area ranging from about 200 hectares to 1,000 hectares. The proposal is to be expressed on plans which include relevant topographical information and details of vegetation and soil types, and illustrate the regional context of the proposed development, the existing and proposed roads and farm boundaries, water supply facilities and community amenities. The plan are to be supported by a report, which develops a rationale for the proposed development and presents a discussion on environmental, engineering, economic and land use factors.

#### **B.6.0** Alternate Projects

As an alternative to the projects referred to in paragraph (5), the Board may in respect of any Surveying Graduate approve a proposed list of projects and determine the requirements for such projects, in any case where the Board is satisfied that the completion of such proposed projects will enable the Surveying Graduate to achieve a level of performance acceptable to the Board.

Prior approval must be obtained by the Graduate from the Board.

#### **B.7.0** Application

An application in respect of the acceptance of the projects shall be made to the Board in Form 7. Such application shall be accompanied by the prescribed fee.

#### C. Professional Assessment Project

- **C.1.0** Before making application to the Board for registration as a Surveyor, a Surveying Graduate shall complete, to the Board's satisfaction, a professional assessment project (PAP).
- C.2.0 The professional assessment project shall not be commenced until the Surveying Graduate has substantially completed to the Board's satisfaction:-
  - (a) the projects prescribed by Direction B. Projects; and
  - (b) twelve months of the practical experience prescribed by Direction A. Practical Experience:

Provided that in special circumstances the Board may accept in lieu of the PAP, a project undertaken by an honours or post-graduate student during the course of his/her higher studies.

- C.3.0 The Board shall initiate a discussion with the graduate prior to commencing the PAP or as soon thereafter as possible.
- The professional assessment project shall be of moderate complexity, and sufficiently broad for the Surveying Graduate or student to adequately demonstrate his/her competence and professionalism in surveying.
- **C.5.0** The Surveying Graduate shall, prior to commencing work thereon, apply to the Board in Form 8 for approval of the proposed project. Such application shall be accompanied by the prescribed fee.
- The Board shall appoint an examiner who, where necessary, shall be assisted by an assistant examiner and, if the project is one in the category of cadastral surveying, both examiner and assistant examiner shall be Licensed Surveyors.
- **C.7.0** Both examiner and assistant examiner shall assess the competence of the Surveying Graduate by observing his/her performance of the project, and shall conduct such oral or practical examinations as they deem necessary.
- C.8.0 The Board may conduct such further oral or practical examination as recommended by the examiner or as it sees fit, either in the category of surveying chosen or in other categories of surveying.

#### **D.** Board Instructions

- **D.1.0** The Board may from time to time issue instructions in relation to the projects set out in Directions B and C.
- Such instructions shall be binding on all persons to whom they are issued unless in any case the Board upon application made to it has approved a departure from or variation of any such instruction.

#### **E.** Administrative Arrangements

**E.1.0** Administrative Arrangement for Registration of Surveying Associates

(Section 38A, Surveyors Act 1977 Section 6, Surveyors Regulation 1992)

Section 38A(a)(ii) of the Surveyors Act 1977 and Section 6(2) of the Surveyors Regulation 1992 require that the applicants for registration as a Surveying Associate have gained four (4) years practical experience, as well as having completed a course of study, or seven (7) years practical experience otherwise sufficient to satisfy the Board.

The Board's Direction on the practical experience requirement for registration as a Surveying Associate is that:

"Practical experience is to be at a level of competency sufficient to satisfy the Board of the applicants capacity to maintain a high level of performance in the technical aspect of the practice of surveying.

The verification that the applicant has attained such level of competency will be by:

- ➤ lodgement with the Board, during the period of supervision and training, of a training agreement between the candidate and supervising surveyor setting out the,
  - degree of supervision to be provided,
  - they type of survey work to be trained on, and
  - the standard of technical competence to be achieved.
- ➤ Lodgement at the end of the period of a certification by the supervising surveyor that the candidate has attained a suitable level of competence to be registered and supported by documentation of the facts of the training.

The Board retains the right to test such competence in some way should it be considered by the Board to be necessary in a case or cases.

### Reciprocity

#### 7.0 Reciprocal Registration —

Section 37(b) — Section 8(3)(c) Regulation)

For registration in Queensland as a Surveyor, of a person currently registered in another State or Territory or New Zealand, the applicant has to submit the following:

#### 7.1 Letter of Accreditation

A Letter of Accreditation, in the form attached hereto, from the Surveyors Board with whom they are currently registered.

To obtain a Letter of Accreditation, the applicant is required to provide information, covering a range of matters, in a format approved by the Reciprocating Boards.

This form is available form all Reciprocating Boards on request.

#### 7.2 Applications and Fees

Written application on the prescribed forms:

➤ Form 3 - Application for Registration as a Surveyor plus the prescribed fee, and

if the applicant seeks endorsement to perform cadastral surveys:

➤ Form 4 - Application for Endorsement to Perform Cadastral Surveys plus the prescribed fee, provide suitable evidence of cadastral surveying practical experience to support the application, and

if the applicant intends to provide survey services to the public for a fee:

➤ Form 5 - Application for Endorsement as a Consulting Surveyor plus the prescribed fee, evidence of practical experience considered suitable by the Board, and

#### 7.3 Supporting Documentation

The following documentation is required to accompany the applications:

- ➤ two (2) recent (within the last year) references to the applicants good fame and character,
- ➤ a completed Statutory Declaration in the form attached hereto, and

#### ➤ a certified statement that the applicant has studied:

- the Surveyors Act 1977;
- the Surveyors Regulation 1992;
- the Survey Co-ordination Act 1952;
- "Law Related to Land Boundaries and Surveying" by a A G Brown, and
- the legislation contained in the list set out in Part B General Information.

#### 7.4 Consulting Endorsement

If the applicant is seeking endorsement as a Consulting Surveyor they are required to hold:

- ➤ current Professional Indemnity Insurance to a minimum cover of \$100,000 and provide verification thereof, and
- ➤ current Public Liability Insurance to a minimum cover of \$500,000 and provide verification thereof.

#### 7.4.1 Letterheads

The applicant is further required to submit to the Board a copy of their letterhead, or proposed letterhead and invoices for the Board's approval.

#### SURVEYORS BOARD OF QUEENSLAND

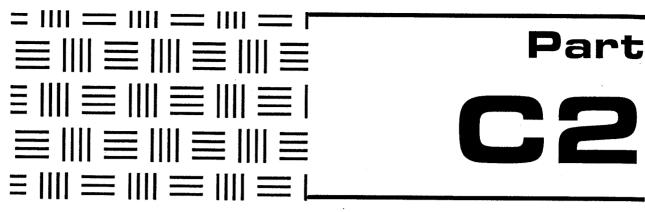
#### **SURVEYORS ACT 1977**

### LETTER OF ACCREDITATION

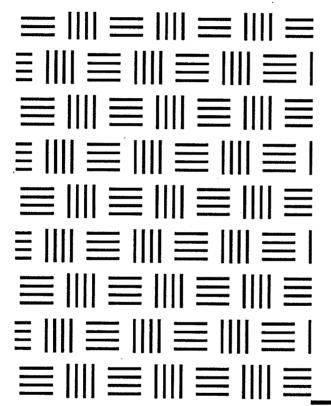
	TO THE SUR	VEYORS BOARD OF	(state to)		
This	is to certify that (Registrants na	me)			
(a)	is a (category of registration) (date of first registration).	who was first registered in	(State) on		
(b)	current registration expires on	(date of expiry).			
(c)	registration is endorsed for (ty	pe of endorsement).			
(d)					
(e)	The following conditions apply:				
	÷		·		
Date	d this day of	19			
			President		
(Attix	·				
			Secretary		

## SURVEYORS ACT, 1977 STATUTORY DECLARATION

1,	lo hereby so	lemnly and
sincerely declare that I will, to	the best of my	ability and
without partiality, favour or affe	ction, correctly	y survey and
delineate the boundaries of any l	and I may be in	nstructed to
survey, in strict compliance wit	h the Surveyors	Regulation
1992 and Directions in force for	the time being o	of the Board
constituted by the Surveyors Act 19	77.	
•		
	(Signe	d)
Declared the	day of	
19 before me.		
•		
	(Signed	)
	Justice of the	Peace



# Registration of Bodies Corporate





Requirements, Directions and Guidelines for Registration of bodies corporate as Surveyors and

the Endorsement of registered bodies corporate as Licensed and Consulting Surveyors.

#### Published by:

Surveyors Board of Queensland

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### Requirements

#### 1.0 Body Corporate —

Section 40 - Section 11 (Regulation)

1.1 Business Entity Providing Survey Services

A business entity which presents itself to the public as being a surveyor or in the business of providing survey services is required to be registered with the Board. The Board considers that the business entity which presents itself to the public is one and the same as the entity which is registered and/or licensed.

- **1.1.1** Any registered person being an individual, may practise under his or her own name with suitable designation eg, Licensed Surveyor or Consulting Surveyor.
- 1.1.2 Any registered person being a body corporate may practise under the name of that body corporate, or under another name in a manner approved by the Board. This applies to:
  - ➤ a sole practitioner who, for business reasons, is the employee of his own private trading company, which company has been registered with the Board; and
  - ➤ a company which wishes to use a business name of which it is the beneficial owner. It is a requirement that the name of the beneficial owner(s) of any business name, must be shown on all relevant stationery. Further, the names, qualifications and designations of the principals and/or directors of that entity must be shown. Where there are only two directors, one of whom is the spouse of the registered person (sole practitioner), the name of the registered person only is to be shown.
- **1.1.3** A group of registered persons trading as a body corporate, or a registered person with bona fide associates, are to ensure that the business entity is registered under the Act.

#### 1.1.4 In Summary

- ➤ The name of the entity must truly reflect the composition of that entity.
- ➤ The name of the beneficial owner(s) of the business name, if one is used, must be shown on all stationery.
- The name and qualifications of the registered person(s), principals and directors of the body corporate must be shown on all stationery

#### 1.2 Registration of Other Structures

#### 1.2.1 Partnerships etc

The present legislation does not allow the Board to register partnerships, Public companies limited by shares and Government organisations offering surveying services.

#### 1.2.2 Trusts

The Board has determined that for the public interest to be upheld, a prospective client should be able to readily ascertain the entity or individual with whom he is dealing in relation to surveys.

The manner in which trusts can be set up, does not provide this "open" view of the entity. To this end, the Board currently does not register entities set up as Trusts.

#### 1.3 Business Names

The Surveyors Act 1977 at Section 47 provides for certain penalties for a person who holds out as a surveyor unless the person is registered as a surveyor under the Act. The section also prohibits the use of the words "registered", "licensed", "consulting", "consultant" in connection with the word "surveyor", unless the person is licensed or registered under the Act.

Section 47A of the Act provides for the steps to be taken by a person intending to practice surveying under a business name.

The Acts Interpretation Act 1954 provides the following meaning on "Person" or "Party" - Includes a body corporate;'. Further, the Act provides that every word in the singular number shall be construed as including the plural number, unless contrary intention appears.

The Board will continue to monitor the operations of firms, especially where advertising and letterheads are concerned, to ensure that 'persons' are appropriately registered.

It is widely believed that once a business or company name is registered, that name is afforded some form of legal protection. This is not the case. Such registrations are not designed to give any such rights. They are an obligation of doing business and their intention is to protect consumers, not the registrant.

The Business Names Act 1962 defines "Business" as including a trade and profession and "Business name" means a name, style, title or designation under which a business is carried on. The Business Names Act 1962 provides for, amongst other matters, the registration and renewal of registration of business names.

The Corporations Law provides a similar mechanism, enabling company names to be registered.

#### 1.4 Body Corporate Names - Approval, Content, Stationery

**1.4.1** The body corporate must apply to the Board for prior approval of the proposed name and letterhead before making application for registration.

The following items should be adhered in a name:-

- ➤ a company name shall only contain names of registered persons,
- ➤ stationery shall only show the names of registered persons. The appropriate category of registration and qualification(s) is to be shown against each name,
- ➤ the name of a person who is holder of another qualification, may be shown on a letterhead, provided, the persons designation within the practice is also shown,
- ➤ a company (or business) name shall not include the term "and Associates" unless registered persons are actually carrying out such functions.
- 1.4.2 A body corporate name cannot include:
  - the name of a person who is not registered with the Board,
  - ➤ Surveyor, or Surveyors in the name or in association with Registered, Licensed, Consulting, or Consultant, or
  - ➤ the name of a Partnership or Trust.

(See examples in this Part).

- 1.4.3 The Letterhead of a body corporate is to include:-
  - ➤ the body corporate name and address, and if operating under a "trading" name, both the body corporate name and trading name must be clearly shown.'
  - ➤ where the body corporate is a Company registered with the Australian Securities Commission, the ACN number must be shown,
  - ➤ the names and qualifications of all directors who are registered persons or hold qualifications acceptable to the Board.

(See examples in this Part).

The names of unregistered persons who do not hold qualification acceptable to the Board cannot be shown.

#### 1.5 Body Corporate to be Registered

A body corporate is to be registered as a surveyor if it includes the name of a registered surveyor or words descriptive of the practice of surveying; and is a name which the Board considers desirable in relation to the practice of surveying.

#### 1.6 Directors to be Registered Surveyors

A majority of the Directors of the body corporate must be registered surveyors or where there are only two Directors at least one must be a registered surveyor and be the principal beneficiary with a minimum of 51% shareholding.

- 1.6.1 Where the body corporate intends to engage in cadastral surveys the registration is to be endorsed to that effect and the majority of Directors must be licensed surveyors or where there is only two Directors, the principal beneficiary must be a licensed surveyor.
- 1.6.2 A body corporate shall not practice or hold itself out as a consulting surveyor unless each of its Directors who is a registered surveyor is endorsed to the effect that he/she is a consulting surveyor.
- 1.6.3 Where a body corporate has only two directors and one of these directors is not a surveyor, that director shall submit a letter stating that in the event of the registered surveyor director no longer being able to carry out the survey functions from whatever causes, that he/she will take immediate steps to have the registered surveyor replaced with another suitably qualified director.

#### 1.7 Insurance

The body corporate must hold current insurance for:

- **1.7.1** Professional Indemnity Insurance cover to a minimum of \$100,000, and
- 1.7.2 Public Liability Insurance cover to a minimum of \$500,000

#### 1.8 Application for Initial Registration

Application for registration of the body corporate is to include:

- ➤ Form 3 Application for Registration as a Surveyor plus the prescribed fee;
- ➤ Form 4 Application for Endorsement to Perform Cadastral Surveys plus the prescribed fee;
- ➤ Form 5 Application for Endorsement as a Consulting Surveyor plus the prescribed fee;
- ➤ Form 10 Application for Registration as a Surveyor by a Body Corporate Solicitors Certificate;
- ➤ A list of current Directors and their qualifications;
- ➤ Evidence of the Professional Indemnity Insurance and the Public Liability Insurance and to the currency thereof;
- ➤ A copy of the certificate of registration of the company, or business name.

Form 4 and the associated fee is not required if the body corporate will not be engaged in and does not intend to engage in cadastral surveys.

#### 1.9 Annual Registration

The Surveyors Act 1977 at Section 41 provides for renewal of a person's registration. The re-registration period is set between 1 October and 30 November each year.

The Board will assist registered persons by posting to them a renewal notice by 30 September. The notice will set out the fee due and list the requirements for re-registration.

Where a registration has not been renewed by 30 November, a late notice shall be posted by 15 December. This notice will set out the fees due, including the late lodgement fee.

When a registered person has not paid the required fees by close of business on 31 December, the name of that person shall be removed from the register.

Restoration of a name to the register shall occur on receipt of all fees, and costs including the late registration and restoration fees.

#### 2.0 Body Corporate Name Styles

Acceptable	Unacceptable			
Thompson Surveys Pty Ltd	W A Thompson & Partners Pty Ltd			
Teerink & Thompson Pty Ltd (where both are registered persons)	Thompson Family Trust			
W A Thompson Pty Ltd (Trading as Thompson Surveys)	Thompson & Thompson Surveys Pty Ltd (where one is a registered surveyor and their spouse, who is not a registered person)			
W A Thompson & Associates Pty Ltd (& Associates is acceptable only where there are in fact Associates)	Thompson Surveying Pty Ltd			
Brisbane Survey Services Pty Ltd	W A Thompson Consulting Surveyor/s			
Survey and Mapping Services Pty Ltd	W A Thompson Registered Surveyor/s			
	W A Thompson Licensed Surveyor/s			
1	W A Thompson Surveyor/s			

Examples

# THOMPSON SURVEYS PTY LTD Consulting Surveyors

ACN 012 345 678 Shop 4, Land Centre, Woolloongabba. Qld 4102 Telephone (07) 987 6543

Principal: W A Thompson L.S., M.I.S. Aust

# THOMPSON SURVEYS PTY LTD Consulting Surveyors

ACN 012 345 678 Shop 4, Land Centre, Woolloongabba. Qld 4102 Telephone 07 987 6543

Principal: W A Thompson L.S., M.I.S Aust

# THOMPSON SURVEYS PTY LTD Consulting Surveyors

ACN 012 345 678 Shop 4, Land Centre, Woolloongabba. Qld 4102 Telephone 07 987 6543

Principals:

W A Thompson L.S., M.I.S Aust D M Thompson L.S., M.I.S Aust I F Mudd, B. Cart.(Hons)

# THOMPSON SURVEYS PTY LTD trading as SOUTH QUEENSLAND SURVEYS

**Consulting Surveyors** 

ACN 012 345 678 Shop 4, Land Centre, Woolloongabba. Qld 4102 Telephone 07 987 6543

**Principals:** 

W A Thompson L.S., M.I.S Aust D M Thompson L.S., M.I.S Aust I F Mudd, B. Cart.(Hons)

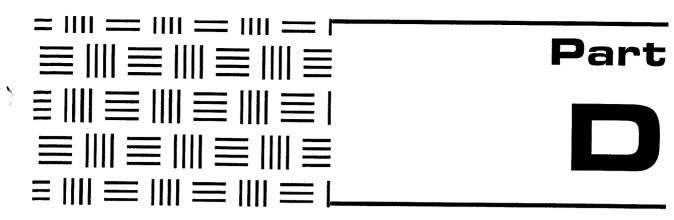
Examples

## THOMPSON SURVEYS PTY LTD

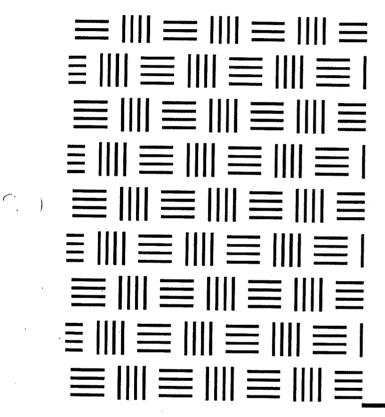
**Consulting Surveyors** 

ACN 012 345 678 Shop 4, Land Centre, Woolloongabba, Qld 4102 Telephone 07 987 6543

Principal: W A Thompson L.S., M.I.S. Aust



# Education and Practical Experience





D1 Experience Alternatives for Registration

D2
Project Specifications

D3 Professional Assessment Project

#### Published by:

Surveyors Board of Queensland

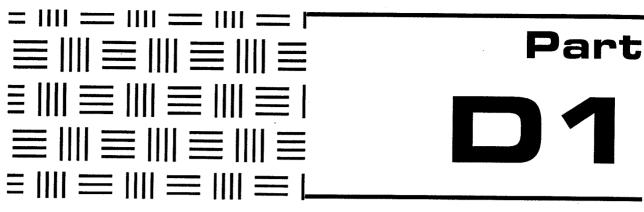
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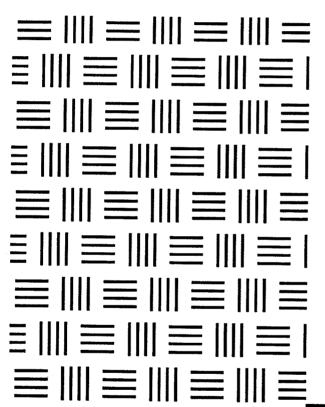
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# Experience Alternatives for Registration





Alternatives for obtaining the required practical experience for Registration

including

Project Options, Survey Practice Course, and registration without formal qualifications

Published by:

Surveyors Board of Queensland

Land Centre Cnr Main and Vulture Streets Woolloongabba Qld 4102

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#### 1.0 Introduction

One of the responsibilities of the Surveyors Board is to assess the competence and suitability of candidates for registration and licensing.

As part of this process, candidates are required to satisfactorily undertake the Graduate Diploma in Surveying Practice set out at item 2.0 or to complete the projects as set out in this section.

Graduates are strongly advised to give serious consideration to undertaking the Survey Practice Course. It was set up by the Board and the profession as a means of strengthening the education and training of surveyors. Graduates should seek further information from the Course Administrator. Many surveying organisations are now providing scholarships to assist graduates in doing the course, so this should be discussed with your employer.

In the case of the Professional Assessment Project, it is essential that the candidate establishes appropriate contact with the examiner from the onset of any project and ensures ongoing communication with the examiner. This manual sets out criteria for presentation, report writing and drafting requirements for all projects.

#### 2.0 Project Option

#### **2.1** Examples of Completed Projects

The Board holds a number of sample project submissions, covering the key project topics and the PAP. These samples are available for perusal, at the Board's office during normal business hours.

Candidates who are in doubt about aspects of registration and licensing, after reading this Manual, should contact either the Board's Office or the Convenor of the Education Committee. On aspects specific to the Board projects, the candidate should address the enquiry to the Board's Chief Examiner.

#### 2.2 Workshop on Registration

Every year the Board sponsors a seminar on its requirements for Registration/Licensing. Students and Graduates should be aware of this seminar and attend at least one. The seminar is usually held in September.

#### 2.3 Strategies for Completion of Projects

Students should plan well ahead so that they achieve registration/licensing with the Board with maximum efficiency in minimum time, yet meeting the Board's detailed requirements and demonstrating a high level of competence and professionalism.

#### 2.3.1 Experience

The experience component of the Board's requirements is two-years, however, the Board has the power (Sec 36) to increase or reduce such period as it thinks fit.

Normally the Board would require that experience to be under a registered/licensed surveyor and at a high level (post graduate). However, the Board will accept experience at an undergraduate level depending on the circumstances, e.g. external students, particularly Bridging Course and sandwich students.

Therefore students should plan to get as much experience as possible and have it certified and accepted prior to completing studies. Experience reports should be submitted to the Board at six monthly intervals.

#### 2.3.2 Projects

Similarly the projects may be attempted prior to completion of study is provided the work is done after the satisfactory completion of the subject(s) covering that topic.

#### 2.3.3 The PAP

The Professional Assessment Project ideally should be done last, i.e. after the completion of experience and technical projects. However, the Board takes into account the length of time needed for the completion of a PAP and the difficulty some graduates may have in finding a suitable project.

So the Board will accept a PAP proposal at any time after graduation, provided the graduate has made substantial progress towards registration. The Board considers each case on its merits when appraising the PAP application.

#### 2.4 Example Strategies

## 2.4.1 By studying full-time (directly from Grade 12) via B.App.Sc.(Surv) at QUT

- ➤ 18 week practical experience to be gained during the course (would likely be discounted to 9 by the Board depending on the level)
- ➤ complete the Geodetic/Astro in year 2/semester 2
- ightharpoonup complete the Topography/Mapping in year 3/semester 1
- ➤ complete the Urban Design in year 3/semester 2
- ➤ after graduation seek 95 weeks of broad experience. After one year complete the Cadastral and Engineering and by the end of the period have completed the PAP.

## 2.4.2 By studying the B.App.Sc.(Surv) at QUT with prior experience or by taking a sandwich option:

- ➤ practical experience would be discounted by about 1½ to 1 depending on level
- ➤ in Land Surveying 3 complete a practical which meets the Board's specifications for the Cadastral Project
- ➤ complete Geodetic/Astro in year 2/semester 2
- ➤ complete topography/Mapping in year 3/semester 1
- ➤ complete Urban Design in year 3/semester 2
- ➤ depending on prior experience and competence, Engineering may be done during the sandwich period
- ➤ after graduation complete practical experience (suggest minimum of 6 months cadastral) and complete PAP

#### 2.4.3 By the Bridging Course and final year at QUT:

- ractical experience would be discounted depending on level
- ➤ complete the Engineering, Topography, Geodetic/Astro after the Associate Diploma (provide practical experience is sufficient) whilst studying the Bridging Course
- > complete the Urban Design in the final year at QUT
- ➤ complete the cadastral and PAP as soon as possible after concluding the degree.

#### 2.5 Suggested Programme

The table on the following page illustrates a suggested programme for completing the Board Pojects required for registration through the Projects Option.

Project		QUT Degree		USQ
Urban Cadastral (can be done in L.S.3)	After	Land Surveying 3 (incl. Astro)	After	77410 - Trig & Astro
or	and	Land Administration 3	and	70408 - L.I.S. I
Rural Cadastral	After	Land Surveying 3 (incl. Astro)	After	77410 - Trig & Astro
	and	Land Administrtion 3	and	70408 <b>-</b> L.I.S. I
Engineering	After	Land Surveying 2	After	77025 - Road design & Lo
	and	Engineering Science 2		77401 – Survey Comps I 77413 – Surveying III 77416 – Auto Surv System
Hydrographic	After	Land Surveying 5		
OR				
Topographic (can be done in LS. 5)	After	Land Surveying 5	After	77401 – Survey Comps 77413 – Surveying III 77416 – Auto Surv System
Mapping can be done in Photo 2)		Photogrammetry 2	After	Photogrammetry 2
Geodetic/Astro (can be done in L.S. 4)	After	Land Surveying 4	After	77404 - Precise Survey
(can be done in L.S. 4)	and	Land Surveying 4 (incl Astro)		Equipment & Methods 77408 – Survey comps II 77410 – Trig & Astro
Urban Design (included in L.D.P. 2)	After	Land Development Prac 2	After	Land Development Prac 2
OR				
Rural Design	After	Land Development Prac 2	After	Land Development Prac 2
Alternative Projects				
Underground Mine	After	Land Surveying 6	After	77415 - Mine Survey
Open Cut Mine	After	Land Surveying 4	After	77415 - Mine Survey
Detail Survey	After	Land Surveying 2	After	77415 – Mine Survey
Other Alternatives	After t	he theoretical subject matte	r has be	en covered

#### 2.6 Project Timetables

Completion of a degree in surveying, and thus being able to proceed to registration as a Surveying Graduate, is only the first step in moving toward registration as a Surveyor.

The surveying graduate on completion of the degree, is in a position similar to other professionals such as accountants and lawyers, in that the profession has established requirements for professionalism and competence. In order to achieve these requirements, a number of projects must be completed at a satisfactory level and within a reasonable time frame.

The Board considers that the projects, including the professional assessment project, should be capable of being completed in a two year period.

Candidates need to plan the finalisation of their projects, in line with their work commitments and a dedication and purpose to finalising their professional status. The Board recognises work pressures and the like, however, it considers that the two year period is adequate provided a realistic commitment is made by the candidate. The candidate is required to lodge his timetable for completion of projects and the PAP at the time he seeks registration as a surveying graduate.

Where a candidate becomes aware that the timetable set cannot be adhered to, due to extenuating circumstances, this should be set out in writing to the Board, together with the reasons. An amendment timetable should also be lodged for Board consideration.

Consideration will be given to granting credit for projects completed towards obtaining a Degree in Surveying provided that the application for credit is submitted within twelve months from the completion of the Degree. Credit where granted in those cases will be taken as having been granted as at the date of completion of the Degree.

Credit for projects may lapse after three years from date granted in cases of projects completed after registration, or from the date of completion of the Degree.

A project may not be more than 2 years old when lodged with the Board.

Credit for any technical project or Professional Assessment Project will automatically lapse four (4) years after the date the Board awarded credit for that project, unless all technical projects and the Professional Assessment Project have been completed.

Candidates should note that the Board will review project credits on an annual basis. Where a candidate is not meeting project submission in line with the timetable and within the 2 year time frame, consideration will be given to the withdrawal of credits for projects.

The Board, at its discretion, may grant an extension of credit for up to an additional twelve months.

#### 2.7 Resubmission of Projects

The Board has noted that some candidates resubmit the Technical and Professional Assessment projects a number of times, until eventually, the project meets an acceptable standard. This is tantamount to Examiners conducting a correspondence course.

Projects are set to enable candidates to demonstrate an acceptable level of competence, rather than an absolute level of expertise. Examiners assess projects on this basis. To this end, where a candidate is not able to display an acceptable level of competence with minor additions to a project, then the candidate needs to obtain additional training.

Projects submitted for appraisal and found to be deficient in minor areas, may on the recommendation of the Examiner, be resubmitted once by the candidate.

A re-lodgement fee applies in this instance.

Where the resubmitted project does not receive a "Pass", it will be recorded as a failure. In these cases, the candidate will be required to submit a new project.

#### 2.8 Recognition of Post Graduate Studies

Where candidates have completed a Degree in Surveying (Honours), a Masters or a Doctorate in a relevant field, exemptions from projects may be considered by the Board.

The practical experience requirements for these candidates will continue to apply, with the post-graduate period being included in the practical experience period.

#### 2.9 Discussion with Candidates Approaching Registration

It is the policy of the Board to request candidates, who are approaching registration, to meet with the Education Committee. It is the intention to have a discussion with all candidates who have substantially completed their technical projects, but preferably before they commence their Professional Assessment Project (PAP).

The purpose of the discussion is to open lines of communication between the Board and the candidate. In the majority of cases the candidates only communication with the Board would have been with the Secretary and possibly with some of the examiners of the technical projects.

These discussions are not formal interviews or oral examinations. They are also not linked to the interview process that is part of the PAP. A discussion would usually not exceed thirty minutes.

The graduate has spent at least three years in a tertiary institution, exposed to the theoretical and practical aspects of the practice of surveying (ethical, administrative and technical). Further, the graduate has gained practical experience under the supervision of a registered/licensed surveyor for at least two years or an equivalent

period. During this period, or where credit has been given for practical projects associated with Surveying courses, the graduate has completed the required technical projects.

The Graduate is at the stage where he/she has satisfied the education and training requirements of the Board and this discussion should now determine the individuals attitude, administrative capacity and ethical outlook to the profession of surveying.

As it is not practical to have country based candidates come to Brisbane for these discussions, the Board has directed that where appropriate, a discussion be held with the candidate in a country centre by:

- (a) two Board members, or
- (b) one Board member and a respected local surveyor, or
- (c) two respected local surveyors.

These discussions are arranged through the Board's secretary.

## **3.0** Graduate Diploma in Surveying Practice

#### 3.1 Introduction

The Graduate Diploma in Surveying Practice, referred to as the Survey Practice Course, is a joint venture of the Surveyors Board of Queensland, the Association of Consulting Surveyors and the Queensland University of Technology.

#### 3.2 Entry Requirements

#### 3.2.1 Normal Entry

To be eligible to enrol in the course leading to the Graduate Diploma in Surveying Practice, an applicant shall;

(a) hold from the Queensland University of Technology the degree of Bachelor of Applied Science (Surveying);

OR

(b) hold from the University of Queensland the degree of Bachelor of Surveying;

OR

(c) hold from another tertiary institution a degree acceptable to the Surveyors Board of Queensland and considered by the Head of School of Surveying to be at least equivalent to the degree of Bachelor of Applied Science (Surveying) of this University.

#### 3.2.2 Qualifying entry

Applicants who do not meet the requirements for normal entry but who hold a tertiary qualification in a technological field or other equivalent qualification may be required to complete such pre-requisite surveying and other subjects as may be determined by the Head of School of Surveying prior to enrolment in the course.

#### 3.2.3 Prior Practical Experience

At least one year field experience following graduation in the practice of Surveying is desirable prior to entry into the Survey Practice Course.

#### 3.3 Course Objectives

- ➤ To provide surveying graduates with a period of intensive education and training so that they will reach the standard of competence required for licensing by the Surveyors Board of Queensland;
- ➤ To impart practical skills in surveying procedures and develop the ability to apply them without difficulty;
- ➤ To assist students to recognise their own limitations and make use of other professions when appropriate;
- ➤ To enhance the ability to communicate effectively

#### 3.4 Course Structure

The course was prepared in conjunction with industry and is designed to replace, in part, a system in which surveying graduates receive their training from practising surveyors. Over a period of two years the training is tested by the Surveyors Board of Queensland on the basis of projects submitted for assessment. On satisfactory completion of all the required projects the Board will grant a licence to practice when it is satisfied that the applicant is competent.

The Survey Practice Course replaces this arrangement with systematic training and education by the most able practitioners available. On graduation, students are licensed by the Board and, following a year as an employed surveyor, are eligible to practice on their own account, subject to the Board's requirements for consultancy.

The program extends over two semesters of 18 weeks duration including a mid-semester break of one week in each period. There is also a two week break between semesters. Total contact time amount is 1292 hours which is allocated between field and office time including lectures, workshops, discussions and project work.

Approximately nine weeks of the course is devoted to actual field survey work, some of which is in a camp environment. This enables the students to gain confidence in accepting responsibility for logistic and personnel matters as well as communication and management skills. The times allocated to each subject are shown in Table 1. It should be noted that there is some educationally desirable overlap between several of the subjects. For example, the techniques learned in subjects such as Survey Computing, Office Operations, Engineering Surveying and Detail Surveys can be applied in several of the other subjects.

Survey Practice Course — Hours in each subject by type of activity					
	Lect.	Field	Office	Total	
Semester 1					
Cadastral Surveying	27	138	191	356	
Survey Project Management	24	-	.76	100	
Office Operations	45	-	45	90	
Survey Computing	8	-	39	47	
Practice Law	17		13	30	
Professional Practice	4	-	4	8	
Semester 2					
Cadastral Surveying	6	87	154	247	
Engineering Surveying	32	95	83	210	
Mapping	30	-	46	76	
Building Control Surveys	14	12	12	38	
Surveys for Government	19	-	19	38	
Detail Surveying	3	14	13	30	
Innovations & Systems Develop.	12	-	10	22	
Total Hours	241	346	705	1292	

#### 3.5 Text and Reference Books

Lecture Notes and Practice Papers, which have been prepared specifically for the course by the profession, are made available to the students at cost price.

Students are required to purchase copies of certain statutes and texts that will be the basis of their professional library. These are recommended by the practising surveyors, who include reference texts in lecture notes where applicable.

#### 3.6 Teaching Methods and Assessment

Instruction is offered by professional practitioners, from both the public and private sectors, chosen from amongst the most competent and experienced in each subject area. Considerable emphasis is placed upon application of theory and the problems experienced in practice.

In general, students receive a short period of instruction in each subject followed by experience on real surveys under the direction and guidance of these practitioners. Emphasis is given to the planning, managing and costing of each task.

As the course is project orientated students complete tasks, under practice conditions, that are comparable to those performed in practice, thereby making the course relevant to current surveying practice and maintaining a high professional standard. Files on each job are opened and maintained by individual students throughout the duration of the course.

In this way they develop systematic methods of dealing with each job and of carrying it through to completion. Such records are expected to help students when they apply for positions after graduation.

Students are provided with practice notes and specimen files in respect of each topic that is discussed. Subsequently, exercises are followed by further discussion and assessment. Discussions and exercises are conducted and overseen by practising surveyors. These surveyors provide case studies and prepare practice papers as part of their appointments.

Assessment is continuous and is partly by the practising surveyors and partly by the full-time staff of QUT. Both written work and field performance is assessed.

#### 3.7 Dress

Students are required to be attired in a professional manner. The Course Administrator specifies dress requirements for both office and field work.

#### **3.8** Further information

Further information can be obtained from:

The Course Administrator, Survey Practice Course School of Surveying QUT - Gardens Point Campus GPO Box 2434 (2 George Street) BRISBANE 4001

Telephone: (07) 864 2804/3 Fax No: (07) 864 1809

## 4.0 Registration — Absence of Formal Qualifications

#### 4.1 Introduction

Where an applicant for registration does not meet the criteria of Section 37(b)(i)(A) (prescribed academic qualifications), the Board shall assess the documentation required to accompany an application under Section 8(3)(c) of the Surveyors Regulation 1992.

Applications for registration under Regulation 8(3)(b) are referred to the Board's Education Committee for a recommendation. The Board has approved the approach taken by the Committee as set out below.

#### 4.2 Assessment

In assessing the eligibility of candidates who apply under 8(3)(b) the Education Committee deals with each application on its merits rather than following precedents, for each case is different.

Matters considered include the following but are not limited to them:

The intention is to establish the level of practical experience gained by the applicant. The Board will in all such applications, assess the person through the conduct of a Professional Assessment Project, to determine the person's overall competence. Professional Assessment Projects (PAP's) may be conducted over a broad range of subject matter and can include discussion papers, technical papers, field work, interviews, examinations and so on.

Whether the knowledge of the candidate is similar to that expected of a Surveying Graduate.

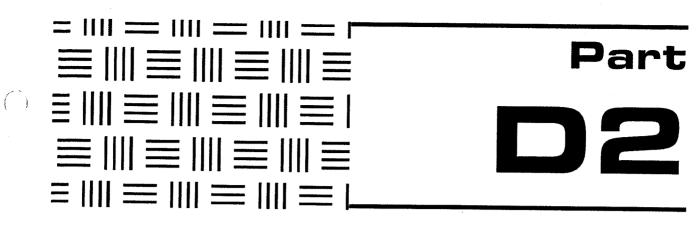
Whether the candidate has kept up to date. The nature of the candidates work; for example; has the candidate occupied positions and undertaken the duties and responsibilities normally accorded a qualified professional; has the candidate undertaken work across the range of activities expected of a graduate; and other like matters. The Committee endeavours to assess whether the knowledge and experience of the candidate is comparable to a formally qualified applicant.

The candidate is required to submit a submission and provide appropriate documentation, including a curriculum vitae and copies of relevant projects in which the candidate has been involved.

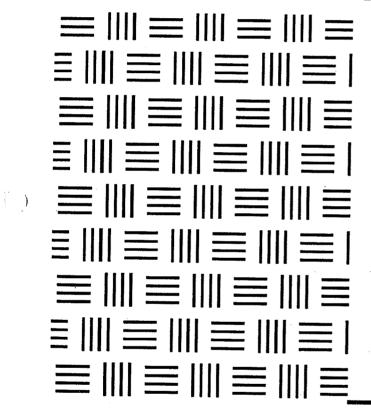
The committee normally seeks evidence of the types of work undertaken by the applicant and references as to the candidate's capacity, ability and suitability for registration as a professional. The committee endeavours to assess whether the applicant would be a fit and proper person to be registered as a surveyor.

#### 4.3 Recommendation

The Board expects a rigorous investigation to be made of each case and only people of exceptional ability to be recommended.



## Project Specifications





Specifications for the various types of Technical Projects which Candidates for registration can submit to the Surveyors Board as evidence of Technical Competence in the appropriate fields of surveying

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# 1.0 Rural Cadastral Survey - Project 5(a)(i)

#### 1.1 General

This practical exercise is designed to satisfy the requirements of a boundary survey:-

"a boundary survey of a country area of not less than 15 hectares, two boundaries of which shall coincide with and be reinstated from previous surveys, and one boundary of which shall be a water course or other natural feature, or an irregular road, and shall include a sun observation for meridian."

The above statement is interpreted to mean that the candidate must actually survey the surround of the country area of not less than 15 hectares.

It includes the planning, field observations, computations and plan drafting necessary for the lodgement of a cadastral survey with the appropriate registering authority.

A candidate must apply to the Chief Examiner for a variation in this interpretation if exceptional circumstances appear to warrant such action.

All phases of the project are to be performed personally by the candidate, with any necessary assistance for field work.

The drafting work should comply with the requirements of the Survey Plan Guidelines, as set out under Section F-2 of the Board's Operations Manual. It should be drawn by a computer driven plotter using a recognised software package and is to be in ink and is to be on the appropriate plan form.

It may be done manually and in that case a fine point writing pen is acceptable with the quality of the penmanship not being a consideration when testing the project, however, the work must be neat and legible. The candidate may elect to have the work done by a draft-sperson but if so should prepare a complete brief to the draftsperson and submit this brief to the Examiner as part of the project.

The entire exercise must be carried out in a professional manner, especially with respect to observation, documentation and computation. Reference should be made to the authorities quoted at the end of this specification.

Candidates should note that although a plan may be registered by the registering authority, it does not mean that it would be awarded a pass for the Boards purpose of assessing an applicant.

#### 1.2 Selection Of A Project

It is important to give considerable thought to the selection of a project so that it adequately reflects the ability and skill of the applicant.

Suggested criteria should be:

- meets the stated specification above:
- ➤ the survey should represent a moderate re-instatement challenge; and
- ➤ there should be alternative solutions to the positioning of the boundaries so that the project represents a reasonable re-instatement challenge.

# 1.3 Planning

In general candidates may perform the survey in any area that conforms with the requirements of the Board. The candidate shall determine the objectives of the survey and shall carry out the necessary search.

It is a good idea to document a survey history of the area as detailed by the succession of plans in the search. Title details should also be documented. This should be done prior to field work.

#### 1.4 Field Work

Field work is to be carried out personally by the candidate in accordance with generally accepted practices. All work should comply with the Surveyors Act 1977 and Surveyors Regulation 1992.

All equipment should be calibrated.

#### 1.5 Documentation

Field records shall be submitted for this project, and shall be in such a form that a plan can be drawn from them without the need for further information.

### 1.6 Computations

All appropriate computations shall be carried out and submitted. If a computer program is used for any computation, full details of the hardware and software utilised should be given.

Results of all computations shall be submitted as part of the field records.

#### 1.7 Report

The survey shall be accompanied by a comprehensive report. The report should outline the intention of the survey and give a detailed account of the reinstatement and any other relevant matters.

# 1.8 References

- ➤ The Surveyors Act 1977.
- ➤ Surveyors Regulation 1992.
- ➤ Survey Co-ordination Act 1952.
- ➤ Surveyors Board of Queensland Operations Manual

Section E-1 - Directions and Recommended Practices for Surveys 1992.

Section E-2 - Survey Plan Guidelines 1992.

# 2.0 Urban Cadastral Survey - Projects 5(a)(ii)

#### 2.1 General

This practical exercise is designed to satisfy the requirements of a boundary survey:

"a boundary survey of an urban area, suitable for lodgement with the appropriate authority, with occupation on or near the boundaries in such positions that at least one boundary must be determined by indirect methods, and shall include a sun observation for meridian."

It includes the planning, field observations, computations and plan drafting necessary for the lodgement of a cadastral survey with the appropriate registering authority. Identification surveys are acceptable, provided they meet the requirements of being a reasonable reinstatement challenge.

All phases of the project are to be performed personally by the candidate, with any necessary assistance for field work.

The drafting work should comply with the requirements of the Survey Plan Guidelines, as set out under Section F-2 of the Board's Operations Manual. It should be drawn by a computer driven plotter using a recognised software package and is to be in ink and is to be on the appropriate plan form. It may be done manually and in that case a fine point writing pen is acceptable with the quality of the penmanship not being a consideration when testing the project, however, the work must be neat and legible. The candidate may elect to have the work done by a draftsperson but if so should prepare a complete brief to the draftsperson and submit this brief to the Examiner as part of the project.

The entire exercise must be carried out in a professional manner, especially with respect to observation, documentation and computation. Reference should be made to the authorities quoted at the end of this specification.

Candidates should note that although a plan may be registered by the registering authority, it does not mean that it would be awarded a pass for the Board's purposes of assessing an applicant.

#### 2.2 Selection Of A Project

It is important to give considerable thought to the selection of a project so that it adequately reflects the ability and skill of the applicant.

Suggested criteria should be:

- right meets the stated specification above:
- ➤ the survey should represent a moderate re-instatement challenge; and

➤ there should be alternative solutions to the positioning of the boundaries so that the project represents a reasonable re-instatement challenge.

# 2.3 Planning

In general, candidates may perform the survey in any area that conforms with the requirements of the Board. The candidate shall determine the objectives of the survey and shall carry out the necessary search.

It is a good idea to document a survey history of the area as detailed by the succession of plans in the search. Title details should also be documented. This should be done prior to field work.

#### 2.4 Field Work

Field work is to be carried out personally by the candidate in accordance with generally accepted practices. All work should comply with the Surveyors Act 1977 and Surveyors Regulation 1992.

All equipment should be calibrated.

Where radiations are used the filed records should show clearly the checks that are made to verify such measurements.

#### 2.5 Documentation

Field records shall be submitted for this project, and shall be in such a form that a plan can be drawn from them without the need for further information.

# 2.6 Computations

All appropriate computations shall be carried out and submitted. If a computer program is used for any computations, full details of the hardware and software utilised should be given.

Results of all computations shall be submitted as part of the field records.

#### 2.7 Report

The survey shall be accompanied by a comprehensive report. The report should outline the intention of the survey and give a detailed account of the reinstatement and any other relevant matters.

# 2.8 References

- ➤ The Surveyors Act 1977.
- ➤ Surveyors Regulation 1992.
- ➤ Survey Co-ordination Act 1952.
- ➤ Surveyors Board of Queensland Operations Manual

Section E-1 - Directions and Recommended Practices for Surveys 1992.

Section E-2 - Survey Plan Guidelines 1992.

# 3.0 Engineering Survey And Design - Projects 5(b)(i)

#### 3.1 General

The submitted project should demonstrate the candidate's understanding of surveying and of engineering design principles and their application in a specific set of circumstances in order to satisfy the requirements of an engineering survey and design:

"the survey and design for a proposed road or railway not less than 500 metres in length, with the requisite digital terrain model, and calculations for earthworks and provision of drainage as required."

#### 3.2 Field Information

Field information necessary to complete the design is to be presented in accordance with the standards of a relevant Constructing Authority (to be nominated). References to several such Authorities are included at Item 7.0.

# 3.3 Design

As a guide to candidates the following factors are typical of those to be considered:

#### 3.3.1 Road

traffic volumes; design speed and pavement width in relation to function; curve widening, superelevation and sight distance in relation to design speed; limiting grades; a reasonable balance of earthworks (or an alternative earthwork arrangement); pipe or culvert size in relation to catchment area, rainfall and runoff.

#### 3.3.2 Railway

ruling grade and minimum curvature of the line; grade compensation on curves; minimum interference to other services; flood levels where applicable; drainage; minimum resumption requirements; local traffic requirements; a reasonable balance of earthworks (or an alternative earthwork arrangement).

#### 3.4 Presentation

Irrespective of the contents of the accompanying report, all information necessary for the construction of the scheme is to be presented on the plans which are used as working documents by construction personnel.

The drafting work should comply with the requirements of the main supervising authority. It should be drawn by a computer driven plotter using a recognised software package and is to be in ink and is to be on the appropriate plan form. It may be done manually and in that case a fine point writing pen is acceptable with the quality of the penmanship not being a consideration when testing the project, however, the work must be neat and legible.

The candidate may elect to have the work done by a draftsperson but if so should prepare a complete brief to the draftsperson and submit this brief to the Examiner as part of the project.

#### 3.5 Plans

Plans should show the following information as appropriate:

- ➤ scheme location; typical cross-section with dimensions and pavement details; tabulated curve widening and superelevation details; (in the case of railways) connections to the existing line and centre-line distance equalities; services crossing and closely paralleling the proposed centre-line and proposed modifications to these services;
- ➤ design details including horizontal and vertical alignment; drainage details; watershed areas; earthwork quantities; proposed property resumption boundaries;
- ➤ digital terrain model;
- ➤ description of bench marks and datums; references to field books and other plans.

# 3.6 Report

The report should cover the candidate's assumptions and reasons for the adoption or rejection of certain design principles (for example, the requirements of a Constructing Authority) for a particular set of circumstances, the method of applying those principles and any conclusions drawn.

The report is to include all calculations including those for earthworks, pavement volumes, drainage work and grading.

#### 3.7 References

- ➤ Queensland Department of Transport Engineering Survey Manual
- ➤ National Association of Australian State Road Authorities Policy for Geometric Design of Rural Roads, 1976
- ➤ Queensland Department of Transport

Railway Survey Design and Drafting Manual: Chief Engineers Publication No. 5

Railway Engineering Survey Manual: Chief Engineers Publication No. 3

Surveys for Electrification of Brisbane Suburban Railway Network

Survey Design Manual: Electrification, Brisbane Suburban System: Chief Engineers Publication No.8

Turnouts and Crossings: Setting Out Manual, Chief Engineers Publication No. 15

- ➤ Local Government By-Laws and Regulations
- ➤ Other Equivalent Publications

# 4.0 Hydrographic Survey - Projects 5(b)(ii)

# 4.1 General

The submitted project should demonstrate the candidate's understanding, knowledge and awareness of all aspects of preparation, execution and reporting of a Hydrographic Survey in a marine environment to satisfy the criteria:-

"To produce a working chart of a Hydrographic Survey of about two (2) square kilometres, including the reduction of soundings and plotting of sounding locations".

#### 4.2 Field Information

Field information is to be collated under three main headings:

- ➤ Establishment of Vertical Datum
- ➤ Establishment of horizontal Control
- ➤ Offshore Operations
  - (i) Basic Seamanship
  - (ii) Instrumentation
  - (iii) Calibration
  - (iv) Data Acquisition

#### 4.2.1 Vertical Datum

The establishment of Vertical Datum should contain a degree of understanding of tidal planes and datums. The adoption of an existing tide board or automatic tide recording gauge is not sufficient.

An example of minimum understanding of tidal planes and tidal datums could be a short technical discussion or a tidal datum transfer by mathematical or graphical means over a minimum three day recording period.

Tide boards and recorders established during the course of the survey should have their zero's connected by levelling at Fourth Order Standard to at least one bench mark with values established for Chart Datum (CD) Lowest Astronomical Tide (LAT) and Australian Height Datum (AHD).

#### 4.2.2 Horizontal Control

Horizontal Control should be established to achieve a Class C standard as per the IGSM Standards and Specifications for Control Surveys, July 1990.

Methods used for the establishment of Horizontal Control may be:

- ➤ Closed and adjusted traverse from existing co-ordinated AMG Control Stations.
- ➤ Braced quadrilateral be triangulation or Trilateration (or both) from existing co-ordinated AMG Control Stations.
- ➤ Static Differential GPS measurements on new stations with observed baselines.

Computation and adjustment sheets are to be presented in the report but not necessarily show hand worked solutions.

# 4.2.3 Offshore Operations

### 4.2.3.1 Basic Seamanship

This will entail a demonstrated awareness of the basic concepts of the regulations for operating vessels for commercial activities (including hydrographic surveying) and the selection of a suitable vessel for the particular survey task.

A demonstrated awareness of mechanical and safety precautions to be taken prior to embarking upon the survey project should also be shown.

#### 4.3.3.2 Instrumentation

The offshore operation should be controlled using electronic position fixing methods. Optical methods of position fixing are not acceptable unless it can be demonstrated that such method is the most suitable for the particular task.

Position fixing will therefore most likely be carried out by one of the following methods:

- ➤ Bearing/Range
- ➤ Range/Range
- ➤ Real time Differential GPS

Other methods may be acceptable but should first be verified with the examiner.

#### 4.2.3.3 Calibration

Calibration procedures should be documented and executed. Certified records of calibrations should include:

- ➤ Pre Survey calibration of position fixing system and daily stability checks.
- ➤ Daily calibrations of echo sounder by standard methods.
- ➤ Daily checks on automatic tide recorder.

- ➤ Calibration of EDM or instrumentation used for Horizontal Control.
- ➤ Determination of squat of survey vessel.
- ➤ Determination of transducer and antenna offsets.

#### 4.2.3.4 Data Acquisition

Data acquisition may be accomplished by fully automated, semi automated or manual methods.

If fully or semi automated methods are used, adequate description of the processes, acquisition rates and data logged must be provided.

Diagrams of operational computer screens, selectable menues and printouts of raw and processed data should be provided.

Description and samples of initial data input for survey area, line format and navigation control should also be provided. Annotated analogue records from echo sounders, tide gauges and other sensors should be provided to support logged digital data.

Pre plotted deck sheets and field annotations on all records should be provided and include positions of fixed objects, shorelines, navigation marks and obstacles, weather and sea conditions.

If manual methods are used, field plotting and navigation should be shown on the deck sheets and adequate field books or recording sheets kept of positioning data.

It should be noted that scale selection should provide for maximum line separation of 1 cm as a general rule. Position fixes should be at no greater distance than 4 cm apart and cross check lines spaced no more than 7.5 cm apart at plan scale.

#### 4.3 Presentation

The final plan should indicate soundings at less than line interval except in the case of a regular bottom where spacing can be increased. The plan may be contoured. All relevant data should be shown, e.g. navigation aids, wharves, piles, leads, beacons, buoys, designed channel widths, approaches, berths. Description of bench marks, datums, grid system, north point, legend, references to field books and other plans should also be shown.

Drafting should comply with recognised standards i.e. either Admiralty or Department of Transport, Division of Marine and Ports. Figure style, decimal point and sign convention should be nominated and noted in the Title Block. Automated or hand drafted plans are acceptable. The plan should be drafted in ink on stable film.

The quality of penmanship is not a consideration when testing the project, however, the work must be neat and legible. The candidate may elect to have the plan drafted by a draftsperson but if so, should prepare a complete brief to the draftsperson and submit this brief to the Examiner as part of the project.

### 4.4 Report

The report should indicate the overall briefing for the project, the client's particular requirement, the planning, deployment of personnel and their responsibilities, execution, safety precautions, time costs and any additional explanations that would indicate to the Examiner the Candidates competence.

The Report should also contain technical descriptions and data as specified in Sections 2 and 3 above and should clearly show the application of tide reductions and other calibrations.

The Report should also include diagrams, Station Summary sketches and photographs where applicable.

The Report should accompany the fair drawn plan/chart and covering letter.

#### 4.5 References

- ➤ Admiralty Manual Hydrographic Surveys Volume I and Volume II
- ➤ Admiralty Tidal Handbook Datums for Hydrographic Surveys (and other related subjects)
- ➤ Standard Reference Charts Chart 5011, Chart D6067 (Published by Hydrographic Department, Taunton, U.K.)
- ➤ IGSM, Standards & Specifications for Control Surveys, July, 1990.

# 5.0 Topographic Survey - Project 5(c)(i)

# 5.1 General

This project is designed satisfy the requirements on:

"a topographical survey of hilly country embracing an area of not less than 10 hectares, showing contours at height intervals appropriate to the scale and purpose of the survey."

While this leaves the candidate some choice in the matter, it is likely that such a survey would be performed for the planning of a facility such as a school or an industrial complex and that a scale of 1:500 with 1 metre contours would be appropriate.

# 5.2 Planning

The candidate may perform the survey in any area but should bear in mind the constraints of ease of access to the land and equipment and convenience of supervision. The purpose of the survey suggests open country on the outskirts of urban development, and the term "hilly" in an area of 10 ha, implies that significant parts of the area will be at a grade of 1 in 10 or more.

#### 5.3 Control

The survey is to be controlled by marks co-ordinated on the A.M.G. and heights on A.H.D. The accuracy and distribution of control should be appropriate to the purpose of the survey and only one mark need be of a semi-permanent nature (See Geodetic and Astronomy Project) and referenced and recorded accordingly. This mark should have sufficient observations recorded to ensure re-orientation of the survey.

# **5.4** The Topographical Survey

Field records should be properly kept and will form part of the project report. The presentation of the survey should be in graphic form and the appropriate parts of the specifications mentioned below will apply. The accuracy requirements of the graphical presentation (which will be those in the specification applicable to orthophotos i.e. Part D, Para. 2.2) will be the governing parameter for the whole of the survey.

#### 5.5 Presentation

The drafting work should comply with the requirements of the principal Government agency. It should be drawn by a computer driven plotter using a recognised software package and is to be in ink and is to be on the appropriate plan form.

It may be done manually and in that case a fine point writing pen is acceptable with the quality of the penmanship not being a consideration when testing the project, however, the work must be neat and legible.

The candidate may elect to have the work done by a draftsperson but if so should prepare a complete brief to the draftsperson and submit this brief to the Examiner as part of the project.

### 5.6 Report

The survey should be accompanied by a comprehensive report on the above aspects of the survey.

#### 5.7 References

- ➤ Department of Administrative Services, Australian Survey Office. Specifications for Photogrammetric Consultant Services Part B excluding paras. 2.3 and 2.4.
- ➤ Administrative Services (Q-build) Department, Standard Specifications, B8 Contour & Detail Survey.

# 6.0 Mapping Project - Projects 5(c)(ii)

#### 6.1 General

This project is designed to satisfy the requirements on:

"a map of a densely settled area of about 1500 hectares or of a sparsely settled area of about 10,000 hectares, drawn to a suitable scale and plotted from a single photogrammetric model, with contours and heights appropriate to the scale of the map and the purpose of the survey."

The project involves the photogrammetric plotting of a single model that will test the photogrammetric knowledge and skill of the applicant. Machine plots with enhancements at a reasonable cartographic standard will satisfy the Board. The provision of control in the field and field completion, are not included in the specification. The candidate may obtain control data from appropriate sources.

The project should be performed in accordance with the "Photogrammetric Specifications" issued by the Department of Lands. Academic or other staff involvement in the project will be limited to the provision of advice and supervision.

# 6.2 Planning

Candidates should select an appropriate area for the survey and search at the Department of Lands or other organisation for suitable photography, following which prints, diapositives and control data will then have to be obtained. The following scales and contour intervals are suggested as appropriate:

### 6.2.1 Closely Settled Areas:

Mapping at 1:10,000 with 5 metre contours. This may be performed on an appropriate stereo plotter from photography at an appropriate scale.

### 6.2.2 Sparsely Settled Areas:

Mapping at 1:50,000 with 10m - or 20m contours - depending on the terrain and using suitable photography. This can be performed on an appropriate plotting machine.

Since the Board intends that a single model be plotted, it should be ensured that the area of overlap is sufficient to fulfil the requirements of the Project.

# 6.3 Plotting

Photogrammetric plotting is to be done on stable transparent drawing material in ink or pencil. The sheet dimensions and preparation, plotting, and completion should be in accordance with the reference specification except that colours, as deleted from that specification, should be used. Where original plotting is in monochrome pencil,

coloured inks or pencil should be used for completion, and the accuracy checks specified shall apply after this completion.

#### 6.4 Presentation

The drafting work should comply with the requirements of the Survey Plan Guidelines, it should be done in ink (fine point writing pen is acceptable) and is to be on the appropriate plan form. The quality of the penmanship is not a consideration when testing the project, however, the work must be neat and legible.

The candidate may elect to have the work done by a draftsman but if so he should prepare a complete brief to the draftsman and submit this brief to the Examiner as part of the project. The plan may alternatively be drawn by a computer driven plotter using a recognised software package.

### 6.5 Report

A comprehensive report shall accompany the mapping project.

#### 6.6 References

#### ➤ Department of Lands

Photogrammetric Specifications

Instructions for Photogrammetric Mapping at 1:25,000

# 7.0 Geodetic Control And Astronomy - Project 5(d)

#### 7.1 General

This practical exercise is designed to satisfy the requirements on:

"a survey for the establishment of geodetic control points of at least Class C standard, requiring the establishment of at least four new points if the exercise involves a traverse; or at least two new points if the exercise involves a network based on at least two existing points, and including planning, ground marking, field observations, computations and adjustments";

and

"an exercise to determine the AMG bearing of a line between two stations in the geodetic project above, using stellar observations to an accuracy of +/-5 seconds."

The exercise can be considered as minor control and includes planning, ground marking, field observations and computations associated with fixing:

➤ 4 (four) new control stations if the exercise is a traverse

OR

➤ 2 (two) new control stations if the exercise is a geometric network;

AND

➤ a stellar observation between any 2 (two) new control stations.

Consideration should be given to using daylight stars.

At least two stations from the Queensland or Australian Geodetic Surveys must be adopted. These stations will have known A.M.G. and A.H.D. values and are to be considered error-free. In the case of traverses azimuth checks on control are required at each end.

Approximate A.H.D. heights are to be obtained for the new stations by an appropriate method.

All phases of the project are to be performed personally by each candidate. Logistical support for field work may be utilised.

The entire exercise must be carried out in a professional manner, especially with respect to observation, documentation and computation.

# 7.2 Planning

In general, candidates may select any area in which to work, although if work is to be effected on private property, owners must be informed and permission obtained. Special permission is required if

clearing is necessary. Candidates may be directed to a particular area.

In choosing an area and the measurement techniques to be adopted, regard must be had for the limitations imposed by available equipment, particularly if the work is effected by E.D.M.E.

Planning will also include consideration of network or traverse geometry.

# 7.3 Ground Marking

Under no circumstances are marks to conform to Department of Lands specifications for marking, unless the exercise is being effected under instruction by Department of Lands or a Registered Surveyor.

Marking must be of sufficient durability to ensure that selected stations remain recoverable for a period of at least 6 months unless instructed otherwise by Department of Lands.

Sufficient reference marks should be connected to enable the station position to be relocated. Recovery marks should not be placed.

#### 7.4 Field Observations

Field observations are to be carried out in accordance with standard practices for geodetic control surveys.

Equipment used for the exercise must be capable of achieving Class C standard.

All equipment is to be calibrated.

#### 7.5 Computations

Any computing facilities may be used for computation of the exercise subject to the limitations described:

#### 7.5.1 Reduction of Observations

All angular and linear measurements are to be reduced by applying appropriate corrections and reduced to the main station if eccentric stations are used.

All slope distances are to be reduced to the spheroid using appropriate formulae.

If reductions are performed on programmable calculators or computers, then one such reduction should be performed manually (non-programmable calculator) in a manner which illustrates the method of use and application of the reduction formulae.

The computations are to be carried out clearly and concisely. Any suitably recognised method of adjustment of the observations may be applied, provided that the residuals resulting from the adjustment method can be examined and assessed.

Where standard error ellipses are calculated within a computer program, the major axes of such ellipses must lie within a circle having a radius equal to (20.D)mm where D is the distance in km of the station to the nearest fixed point.

# 7.6 Report

The report of the exercise must include full documentation, including plans and diagrams for all stations occupied and observed.

All original field notes or booking forms, together with calculations relating to obtaining the final co-ordinates and azimuth are to be included in the report.

The report must include reasons for the use of the particular instruments and observation techniques applied. Details and records of calibrations of equipment are to be provided - particularly in respect of E.D.M.E.

Where computer programs are used, an explanation of the computations performed by the program are to be included in the report.

The adjustment technique adopted is to be explained and arguments advanced in support of the adopted method.

#### 7.7 References

- ➤ Robbins, A.R. (1976) Field and Geodetic Astronomy, Ministry of Defence, U.K.
- ➤ Mackie, J.B. Astronomy for Surveyors, 7th Ed., Blackie, London.
- ➤ Department of Lands, "Recommended Procedures for Minor Control."

# 8.0 Urban Design Survey - Projects 5(e)(i)

#### 8.1 General

The purpose of this project is to enable candidates to apply sound engineering and design principles to varying terrain when confronted with man-made constraints and legal requirements in urban land development so as to satisfy the requirements on:

"(i)A design of moderate complexity of an urban residential area covering about 16 hectares.

A significant part of the project is to be located in terrain where slopes are in excess of fifteen percent. The design with relevant topographic information is to be shown on a plan at an appropriate scale.

The plan is to be supported by a report which develops a rationale for the establishment of the development and presents discussions on environmental, engineering, economic and land use factors".

In accordance with the aims of the Department of Housing and Local Government the project should also demonstrate the candidate's familiarity with the Australian Model Code for Residential Development (AMCORD) Edition # 2.

#### 8.2 Design

#### 8.2.1 Site Selection

The site selected should have a variable topography with at least twenty percent of the area having slopes in excess of fifteen percent.

#### 8.2.2 Road System

The road system shall conform to a nominated standard for geometric road design.

#### 8.2.3 Allotment Design

Allotment design should demonstrate a flexible approach to creating environmentally acceptable living areas and conform to a nominated Local Authority's Subdivisional By-laws.

#### 8.2.4 Drainage And Sewerage Pattern

The drainage and sewerage pattern should be shown on the plan, but may take the form of overlays if desired.

#### 8.2.5 Application Of Amcord

At least 2.0 hectares of the site shall be designed in accordance with AMCORD Edition # 2, incorporating some terrain having slopes in excess of fifteen percent.

#### 8.2.6 Presentation

The design plan shall be drawn at a scale of 1:1,000 with one metre contours and be to a standard suitable for presentation to the nominated Local Authority

OR

the candidate may elect to produce a comprehensive drawing showing all the required detail which together with a minimum brief could be suitably enhanced by a draftsman to fulfil the nominated Local Authority's specifications. This drawing should be of such a standard that there will be no confusion as to the intent of the design and so enable the Board readily to assess its merit.

# 8.3 Report

The text of the report shall include:

- ➤ the rationale for the establishment of the development
- ➤ discussion of the physical and social environment, engineering and economic considerations and the provisions of services for the development
- ➤ discussion of any legal requirements and constraints that affect the development
- ➤ discussion on the particular application of AMCORD Edition #2, eg. distribution of allotment sizes, variation in road alignment, etc.

The report is to be presented on A4 paper, preferably typed in double spacing, and should include all documentary evidence needed to verify the standards adopted in the design.

# 9.0 Rural Design Survey - Project 5(e)(ii)

#### 9.1 General

The purpose of this specification is to enable candidates to satisfy the requirements on:

"A design for a farming development to accommodate approximately 20 family units within an area ranging from about 200 hectares to 1,000 hectares. The proposal is to be expressed on plans which include relevant topographical information and details of vegetation and soil types and illustrate the regional context of the proposed development, the existing and proposed roads and farm boundaries, water supply facilities and community amenities. The plans are to be supported by a report, which develops a rationale for the proposed development and present a discussion on environmental, engineering, economic and land use factors."

#### 9.2 Data Collection

All the data necessary for the completion of a satisfactory design is to be collected and presented in map form (preferably a base map with overlays at the same scale). All of this data should be available from published material (including aerial photography) and the need for field inspection should be minimal. The data collected should include:

- ➤ A location map showing communications, services and regional content
- ➤ A base map showing topography by contours.
- ➤ Overlay to base map scale showing the remaining five physical land parameters using standard classification systems, viz. Geology, Soils, Geomorphological process, Vegetation and Climate.
- ➤ An overlay showing tenures, the present cadastral configuration and improvements.

### 9.3 Data Manipulation

A series of criteria are to be developed which when applied to the basic data above highlight areas of constraint and opportunities for the proposed farming activity.

Using the above criteria sieve maps can then be drawn. (Standard systems may be used if considered appropriate i.e. The Land Capability System).

#### 9.4 Design Criteria

Criteria are to be established for:

➤ The efficient functioning of the development as a whole, e.g. roads, communications, services, etc.; and

➤ The satisfactory management of each individual farm, i.e. area requirements for various land types, optimum paddock sizes on each land type, soil and water conservation considerations, access, building sites, yards, etc.

# 9.5 Design

A map is to be drawn showing the proposed cadastral boundaries.

Other information may be added to this map as considered relevant or to highlight some feature of the design.

A plan, at an appropriate scale, is to be drawn showing the layout of a typical farm unit.

#### 9.6 Presentation

The work is to be presented for assessment as a written proposal supplemented by maps and supported by an approximate estimate of engineering costs and potential farm incomes. It is to be of a professional standard and at a stage ready for printing and cartographic enhancement.

The quality of the penmanship is not a consideration when testing the project, however, the work must be neat and legible. The candidate may elect to have the work done by a draftsman but if so he should prepare a complete brief to the draftsman and submit this brief to the Examiner as part of the project. The plan may alternatively be drawn by a computer driven plotter using a recognised software package.

# 9.7 Report

The report should include a discussion of the main features of the design and an assessment of the degree to which design criteria have been satisfied.

# 10.0 Alternative Projects

#### 10.1 Introduction

Direction 6.0 provides that:

"As an alternative to the projects referred to in paragraph (5), the Board may in respect of any surveying graduate approve a proposed list of projects and determine the requirements for such projects, in any case where the Board is satisfied that the completion of such proposed projects will enable the surveying graduate to achieve a level of performance acceptable to the Board."

# 10.2 Underground Mine Survey - Project 5(f)

#### 10.2.1 General

This project involves a survey of a small mine or part of a larger mine and should comprise a surface survey, the transfer of meridian and height through at least one vertical or near vertical opening and an underground survey.

The candidate should assume that future development will be carried out based on the result of the azimuth transference. He should then traverse another shaft and close his survey. If an incline to the surface is used for closure then the co-ordinate on the surface should be treated as the single plumb wire. The traverse should then be adjusted by the first try, then after suitable corrections have been made by the second try, showing the full calculations involved.

#### 10.2.2 Planning

The candidate may perform the exercise in any mine to which he has access and with whose regulations he is familiar.

Equipment used on the project should be suitably calibrated.

#### 10.2.3 Field Work

The project should involve:

- ➤ A surface traverse connecting with all mine openings used and the co-ordinate network.
- ➤ Transfer of meridian and position between levels or from surface to any level with suitable verification by traverse to another shaft and closing on a single wire or known position.
- ➤ Transfer of Reduced Levels between mine levels closing levels on known point.
- ➤ Typical pick up of plan, cross-sections detail and profile of a 30m section of tunnel.
- ➤ Correlation of the survey into AMG and/or the mine co-ordinate system.

### 10.2.4 Report

The report should include:

- ➤ A plot of underground detail showing walls, timbers, supports etc. at a scale of 1:500.
- ➤ A plot of all traverse information at a scale of 1:1000.
- ➤ A plot of the field work in plan and cross-sections at five metres intervals and a profile a scale of 1:250.
- ➤ Field notes and calculation of all traverses, closes, Weiss quadrilaterals etc.
- ➤ A report on all aspects of the project including the closure errors aimed for and achieved. (1 in 5000 in plan and +/- 20mm in any level loop should be the minimum sought).

The drafting work should comply with the requirements of the Survey Plan Guidelines, as set out under Section E-2 of the Board's Operations Manual or those set by the principal registering body.

It should be drawn by a computer driven plotter using a recognised software package and is to be in ink and is to be on the appropriate plan form. It may be done manually and in that case a fine point writing pen is acceptable with the quality of the penmanship not being a consideration when testing the project, however, the work must be neat and legible.

The candidate may elect to have the work done by a draftsman but if so should prepare a complete brief to the draftsperson and submit this brief to the Examiner as part of the project.

#### 10.2.5 Notes

#### **Horizontal Control**

In actual practice after the azimuth transfer, development would commence on survey peg lines. This survey is called the working survey and is carried out using sag and convergence corrections only.

As the survey progresses and development continues, a second survey called a "check survey" is carried out. This survey commences at the base established by the azimuth transfer and uses all necessary corrections and procedures to ensure that any error is kept to a minimum. It is this survey that is finally connected to another known point and then adjusted.

#### Level Control

Level traverses follow the development in the same manner as the horizontal control above. Similarly check level traverses are carried out to lessen the chance of accumulating errors that may occur when only very short sections are levelled. It is not unusual for ten more of these short level traverses to be used to effect breakthrough.

#### 10.2.6 References

- ➤ Mineral Resources Act 1989
- ➤ Mines Regulation Act 1964
- ➤ Survey Co-ordination Act 1952
- ➤ Usually each mine has its own requirements except those specified in 10.2.5

# 10.3 Open Cut Strip Mining - Project 5(g)

#### 10.3.1 General

This project involves a complete survey of a small open cut mine or part of a larger open cut mine operation and should comprise the following:

- 10.3.1.1 A complete plan control survey involving either a traverse with at least two cross connections, or a hybrid triangulation/trilateration engineering control survey.
- 10.3.1.2 A level network height survey of the major height control stations surrounding the open cut mining operation to third order levelling accuracy specifications.
- 10.3.1.3 Both plan and height surveys are to be adjusted by an appropriate method applicable to the accuracy of the survey under consideration. For a traverse the order of accuracy of all loops should be at least 1:20,000. All level loops must close to third order specifications. Least squares techniques can be used to adjust both plan (Variation of Co-ordinates) and height (Level network adjustment) control traverses.
- 10.3.1.4 A complete topographic survey of at least three open cut bench platforms within the bounds of the control survey area. An alternative in drag line operations would be a complete topographic survey associated with the actual drag line see 3.3 below.
- 10.3.1.5 The appropriate volumes surveys associated with the extraction of mineral ore from these three bench platforms or drag line.
- 10.3.1.6 The location of mineral extraction equipment and structures pertinent to the mining operation, e.g. Drag lines, Crushers, Storage bins etc. and the reasons for such locations.
- 10.3.1.7 Candidates attempting this subject should be aware of the Board of Examiners Mines Regulations regarding qualified persons working on a mine site.

#### 10.3.2 Planning

The candidate may perform the exercise in any mine to which the candidate has access and with whose regulations the candidate is familiar. All equipment used on the project must be suitably calibrated.

#### 10.3.3 Field Work

The project should involve:

- 10.3.3.1 A plan control survey connecting into either the mining cadastral lease boundaries or the normal cadastral system in at least two locations.
- 10.3.3.2 A level network survey of the surround of the open cut mining operation, involving level control being established on each respective bench in at least two locations. This includes the floor of the open cut operation. If the height differences are considerable accurate trigonometrical heighting techniques may be used.
- 10.3.3.3 A cross section detail survey of at least three benches over a distance of 50 metres. Appropriate volumes surveys after mining and extraction are required. With drag lines involving only one bench the distance of topographic detail should be approximately 150 metres.
- 10.3.3.4 Correlation of the survey into AMG and/or the mine survey co-ordinate system. With the height survey correlation into either AHD and/or the mine datum survey system.
  - 10.3.4 Computations, Computers And Programmable Calculators

If a computer or programmable calculator is used to reduce or adjust any observed survey information; the candidate must demonstrate a knowledge of the internal operations of the formulae involved. Showing typical worked examples applicable to the actual project undertaken.

### **10.3.5** Report

The submission should include:-

10.3.5.1 A plot of the open cut mining operation showing all control and topographic detail including contours at an appropriate contour interval applicable to the project.

The suggested scale is 1:500; however, if this scale is found unsuitable for relevant practical reasons stated by the candidate the scale may be varied.

- 10.3.5.2 An overlay control plot at the same scale.
- 10.3.5.3 All original field notes and initial control information.
- 10.3.5.4 All calculations associated with the project. If computer programs are used or programmable hand calculators are used, clear concise example calculations applicable to the candidates survey must be submitted.
- 10.3.5.5 A report on all aspects of the project including the initial accuracies to be achieved in plan and height (1:20,000 in plan and third order levelling in height) and the actual results obtained. Key information in the form of tables and diagrams (results, typical examples etc.)

should be cited in the main area of the report, while bulk computations, field notes etc. should be placed in the appendices.

10.2.5.6 The drafting work should comply with the requirements of the Survey Plan Guidelines, as set out under Section E-2 of the Board's Operations Manual or those set by the principal registering body. It should be drawn by a computer driven plotter using a recognised software package and is to be in ink and is to be on the appropriate plan form.

It may be done manually and in that case a fine point writing pen is acceptable with the quality of the penmanship not being a consideration when testing the project, however, the work must be neat and legible. The candidate may elect to have the work done by a draftsman but if so should prepare a complete brief to the draftsperson and submit this brief to the Examiner as part of the project.

#### 10.3.6 References

- ➤ Mines Act and Regulations.
- ➤ Survey Co-Ordination Act and Regulation.
- ➤ Usually each mine has its own requirements except those specified in 10.2.5.1 and 10.2.5.2.

# 10.4 Topographic Survey - Project 5(h)

#### 10.4.1 General

This project is designed as an alternative to that specified under projects 5(c)(i).

"a detail and level survey of part of a redevelopment site of moderate complexity in a built-up environment and upon which a significant development is planned."

The survey is to be of an area intended for redevelopment of not less than 1000 sq.m showing contours or reduced levels at intervals appropriate to the scale and all detail suitable for purpose of the survey.

While this leaves the graduate extreme latitude of choice in the matter it would appear that such a survey would most likely be performed for the planning of a new development such as a multistorey building or an industrial facility or commercial complex and that a scale of 1:200 with 0.5m contours or spot heights would be appropriate. Surrounding detail external of the site boundaries would be essential.

#### 10.4.2 Planning

The candidate must select an area which is sufficiently difficult to demonstrate the ability to produce sufficient information to allow a new development to be designed with confidence i.e. in the knowledge that significant redesign should not be necessary due to insufficient information being supplied. It is assumed that the location and description of underground services will form a significant part of this survey. Candidates will therefore need to consult the following authorities:

Local Council Engineering Section, Gas Company, Telecom, SEQEB, etc.

and to research and consult the relevant industrial safety requirements particularly in relation to investigating sewers and stormwater drains. Also the Departments of Transport has specific safety requirements in relation to surveys involving facilities under their control.

#### 10.4.3 Control

It is assumed that the survey will be connected to boundaries and that levels will be on AHD. For the purposes of this project there is no requirement to carry out a full cadastral reinstatement.

# 10.4.4 The Detail Survey

The survey may be performed in any efficient and economical manner. Field records should be properly kept in accordance with good survey practice, and will form part of the project report. If the data recorded is in a computer form the graduate should be required to demonstrate an understanding of the process.

The presentation of the survey should be in graphic form and the appropriate parts of the specification below will apply. The accuracy requirements of the graphical presentation will reflect the amount and significance of the information to be shown.

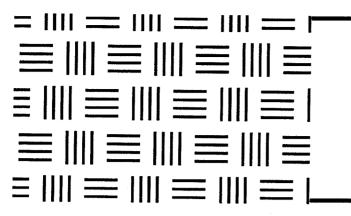
The drafting work should comply with the requirements of the Survey Plan Guidelines, as set out under Section E-2 of the Board's Operations Manual. It should be drawn by a computer driven plotter using a recognised software package and is to be in ink and is to be on the appropriate plan form.

It may be done manually and in that case a fine point writing pen is acceptable with the quality of the penmanship not being a consideration when testing the project, however, the work must be neat and legible.

The candidate may elect to have the work done by a draftsman but if so should prepare a complete brief to the draftsperson and submit this brief to the Examiner as part of the project.

#### 10.4.5 Report

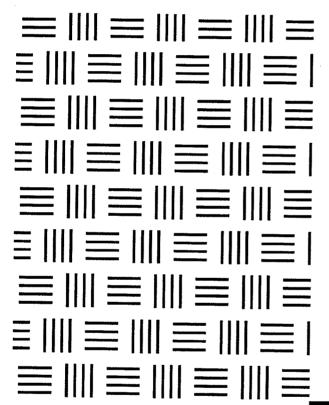
The survey should be accompanied by a comprehensive report on the above aspects of the survey. This report should cover the purpose of the proposed development, difficulties encountered in the survey, and details of the information available on underground services etc. The standard of information supplied by the relevant authorities and their record keeping and retrieval process should also be noted.



Part

03

# Professional Assessment Project





Specifications for the Professional Assessment Project (PAP) which Candidates for Registration submit to the Board as evidence of Professionalism

and

**Guidelines for Examiners** 

Published by:

Surveyors Board of Queensland

**Land Centre** 

Cnr Main and Vulture Streets Woolloongabba Qld 4102

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# **Specifications**

# 1.0 General

A professional assessment project may be undertaken in any category of surveying. A person seeking to become a licensed surveyor is required by the Surveyors Regulation Section 9 to undertake the project in cadastral surveying. The project should ordinarily embrace work undertaken in the normal course of business of the firm or authority in which the applicant is employed.

# 2.0 Examiners

- 2.1 The Board shall appoint an Examiner who, where necessary, shall be assisted by an Assistant Examiner and, if the project is one in the category of cadastral surveying, both Examiner and Assistant Examiner shall be Licensed Surveyor. The Assistant Examiner shall, whenever possible, be the surveyor who supervises the applicant in his normal place of work.
- The Examiner, Assistant Examiner and applicant shall consult together to plan the project. The Assistant Examiner shall observe the performance of the applicant, each day if possible. The Examiner shall consult with the Assistant Examiner and observe the performance of the applicant, each week if possible.

# 3.0 Application to Proceed

- Before submitting his application for approval of a proposed professional assessment project (Form 8), the applicant shall, in consultation with the Examiner, make all arrangements necessary for the performance of the project.
- The applicant shall describe on Form 8 the nature of the project proposed and by giving a brief description of the category of surveying to be undertaken, the objectives of the project and the methods to be adopted to achieve the objectives, the locality of the survey, and shall nominate the Assistant Examiner.
- 3.3 The Assistant Examiner proposed by the applicant shall support the application with a statement of his intention to perform the necessary supervision of the project.

# **4.0** Report Content

The candidate in the performance of the project, should consider the ethical, administrative and technical aspects and report on the following:

- > the discussions which determine the objectives of the project,
- in planning of the work,

- ➤ obtain all consents necessary,
- make a full search of relevant existing data,
- > personally perform the surveys and calculations,
- > supervise the drawing of plans or maps,
- > prepare a costing statement,
- range lodgement of the results of the project,
- ➤ and submit a report to the Examiner on each of the actions above

# 5.0 Examiners Reports

- 5.1 The Assistant Examiner shall report to the Examiner on the performance of the applicant throughout the project and on the candidate's ethical, administrative and technical performance aspects as these pertain to the project.
- **5.2** On completion of the project, the Examiner shall report on the performance of the applicant and recommend whether the Board should accept the project.

# **Guidelines for Examination**

# 6.0 Assessment

- **6.1** The Examiner's attention is drawn to the following directions and in particular to the provisions for the conduct of an oral or practical examination.
- 6.1.1 Both Examiner and Assistant Examiner shall assess the competence of the surveying graduate by observing the candidate's performance on the project and shall conduct such oral or practical examinations as they deem necessary.
- 6.1.2 The Board may conduct such further oral or practical examination as recommended by the Examiner or as it sees fit, either in the category of surveying chosen or in other categories of surveying.
- **6.2** The Examiner and Assistant Examiner shall take into consideration the check list set out hereunder.

The check list refers specifically to a cadastral project; a number of its headings will apply equally to a project in some other branch of surveying, others will not. The Examiner of the latter type project will need to take this into account. The Examiner may see fit to introduce alternative components to meet particular requirements.

The check list is to be regarded as a guide and should not be converted into a quantitative marking scheme by the allocation of marks to the components or sub-components.

# 7.0 Checklist

# 7.1 Objectives

Discussion with client; identification of purpose of the survey. Completion date to meet clients needs.

## 7.2 Planning

Instruments and other equipment; personnel; travelling and accommodation; notice of entry; time schedule; cost estimate; ascertain the relevant land tenure, encumbrances, reservations, etc.; administrative process adopted.

# 7.3 Approvals

Correspondence and discussion with client and planning authority and/or the Department of Lands on consent matters such as zoning. The assessment of conditions of approval and their relevance.

# 7.4 Search

Location map; search of Department of Lands and Department of Minerals and Energy documentation (plans, field notes, PSM sketches, proclaimed survey area data, etc.)

# 7.5 Field Work and Calculations

Datum; reinstatement; field procedures; meridian; marking; survey records; calculations; report on field survey.

# **7.6** Plan

Supervision of draftsman; compliance with Survey Plan Guidelines; suitability for proposed action.

# 7.7 Costing Statement

Charge out rates in accordance with contractual arrangements, explanation of unforeseen costs.

# 7.8 Lodgement of Results

Endorsement of plan by surveyor, registered proprietor, Local Authority, Surveyor-General (if required), lodgement of plan and any other supporting documents with the registering authority.

# **8.0** Professional Aspects

The candidate's professional approach to the project in terms of compliance with the code of ethics and relationships with the client, statutory bodies and other professionals.

# **9.0** Report Of The Examiner

As the Board's eyes and ears, the Examiner and the Assistant Examiner offer judgements and opinions on the candidate's performance. This is so that (in the words of Section 37 of the Act) the candidate can "Satisfy the Board of his capacity to maintain a high level of performance in all aspects (ethical, administrative and technical) of the practice of surveying."

In order to be "satisfied" the Board seeks from Examiners a full report which, as well as commenting on the points listed, discloses all doubts or deficiencies about the candidate's performance and offers opinions on any matter connected with the project or resulting from discussions with the candidate.

So as not to disadvantage candidates and to allow the Board sufficient time to digest their reports properly, Examiners are requested to submit their reports on the project at least ten (10) days before a Board meeting.

# 10.0 Board Philosophy on the Professional Assessment Project

The purpose of the Professional Assessment Project is to make a final check on the fitness of the candidate for registration. The Board has from time to time adopted certain views on how it may be used for this purpose. The candidate has demonstrated their technical ability by the projects completed. These are reckoned to constitute a demonstration at a reasonable (not specialist) level of that ability.

The Professional Assessment Project is expected to be "...sufficient to satisfy the Board of the candidate's capacity to maintain a high level of performance in all aspects (ethical, administrative and technical) of the practice of surveying." (Section 37 of the Act)

The Board demands continued technical ability - hence it needs some field survey, but not necessarily as demanding as that in the technical projects.

The administrative ability is assessed by the way the Examiners see the candidate's performance in discussion and negotiation with the client, the Local Authority, other bodies which may have to be consulted in a case of a PAP in private sector environment. If the project is within the public sector, similar negotiations would be assessed with respect to the client department, the intricacies of the home department's activities and of course, other authorities that might have an interest in the project.

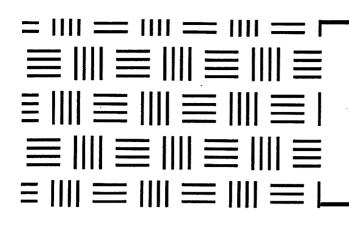
These examples are not exhaustive but provided there is a significant administrative input, an assessment can be made.

Sometimes the negotiating process breaks down at an advanced stage and the candidate may feel a need to start again on a new project.

The Board believes this is not necessarily so. If, for example, the process stops due to unwillingness of the clients to accept Council conditions, the Examiners can proceed from that point by discussion with the candidate on what their advice would be and how they would proceed with an appeal or whatever the succeeding steps might be. The Examiner, could if necessary observe the candidate in the field on another job to assess the field aspect.

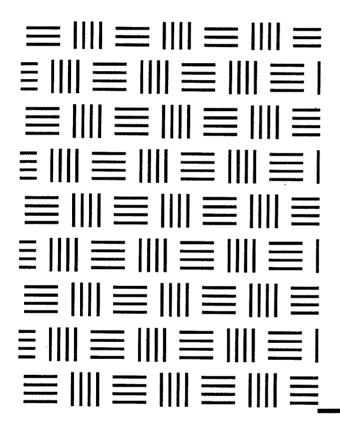
The Board's attitude is that provided it can be satisfied under Section 37 by the candidate through advice from the Examiners, it should allow the process to be as smooth as practicable.

The Board also believes that by the time the candidate is presenting a Professional Assessment Project a candidate should have a good understanding of their role and responsibility in the community and in relation to their fellow professionals; Examiners may well initiate discussion on this and other aspects of professionalism.



# Part

# Standards for Surveys





E1
Directions and Recommended
Practices for Surveyors

E2 Survey Plan Guidelines

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Surveyors Board of Queensland

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Cnr Main and Vulture Streets Woolloongabba Qld 4102

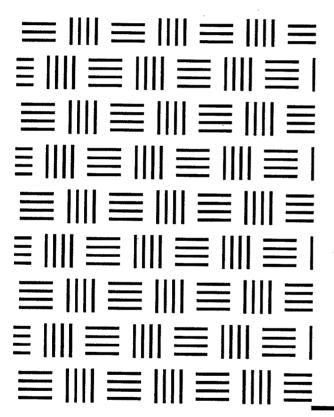
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Part

# Directions and Recommended Practices





Directions and Recommended Practices

to assist surveyors in the performance of their work

Published by:

Surveyors Board of Queensland

Land Centre

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# Introduction

# 1.0 Legislation

The Surveyors Act 1977 as amended provides for:

- ➤ the constitution of the Surveyors Board of Queensland.
- ➤ the qualifications of persons for registration as surveyors, surveying graduates and surveying associates.
- ➤ the constitution of a Surveyors Disciplinary Committee.
- ➤ the regulation of the practice of surveying.

# 2.0 Authority For Directions

- 2.1 Section 77(1)(fa) of the Surveyors Act 1977 states that the Governor-in-Council may make regulations not inconsistent with the Act providing, with respect to the powers of the Board relating to securing compliance with the regulations, the issue by the Board of directions to surveyors in relation to the performance of surveys and the achievement of the prescribed standards of accuracy;
- **2.2** Section 5 of the Surveyors Regulation 1992 provides for the issue of those directions.

# "Board's directions

- **5.(1)** The Board may issue directions to surveyors in relation to the performance of surveys and the achievement of the standards of accuracy specified in this regulation.
- (2) Without limiting subsection (1), directions may be given in relation to the storage, transfer and use of electronic survey data.
- (3)A surveyor must comply with the directions of the Board".

# 3.0 Review

These Directions will be under constant review and the Board would appreciate constructive comment in writing to ensure that the purpose of the Directions is at all times legitimate.

The Board will be constantly reviewing all survey legislation to ensure that professional integrity is promoted. The Board is ever conscious of the need to prevent the introduction of restrictive clauses that inhibit professional practice.

# **4.0** Departure From Directions

A surveyor may use any method and/or equipment in performing a survey where it can be demonstrated that such method and/or equipment is capable of achieving the purpose of the survey.

Where a surveyor uses methods and/or equipment which involve a significant departure from any Direction, the surveyor shall submit with the survey records sufficient information to identify the methods and/or equipment used.

# 5.0 Definitions

Relevant definitions have been sourced from appropriate publications.

"AMG" means the Australian Map Grid specified in the Australian Geodetic Datum Technical Manual of the Australian Survey and Land Information Group; (Surveyors Regulation 1992).

"bed and banks" with reference to a watercourse or lake means land over which the water of that watercourse or lake normally flows or that is normally covered by that water whether permanently or intermittently: The term does not include land abutting or adjacent to the bed or banks that is from time to time covered by flood water: For the purposes of this definition "bed" means the relatively flat and "banks" the relatively steep portions of the first mentioned land; (Water Resources Act 1989).

"cadastral survey" means any process of determining, mapping or planning the boundaries of a piece of land or waters required or authorised -

(a)under any Act dealing with the alienation, leasing, and occupation of Crown lands or with mining, or affecting titles to land; or

(b)by the proprietor, lessee or mortgagee under any Act affecting titles to land; or

(c)by the owner, proprietor, lessee, mortgagee or occupier of, or any person holding a registered interest in, any land for the re-establishment of, or identification of, or adjustment of any boundary of such land; or

(d)under any Act to be made or certified by a licensed surveyor; (Surveyors Act 1977).

"encroachment" means encroachment by a building, including encroachment by overhang of any part as well as encroachment by intrusion of any part in or upon the soil; (Property Law Act 1974).

"high water mark" means the ordinary high water mark at spring tides (*Harbours Act 1955*).

"identification survey" means a cadastral survey carried out for the purpose of identification, re-establishment, marking or remarking of existing boundaries of a piece of land or waters; (Surveyors Act 1977). "natural feature" means a topographical feature suitable for use as a boundary in a cadastral survey, and includes -

- (a) a mountain range; and
- (b) a cliff; and
- (c) a river; and
- (d) a watercourse; and
- (e) a seashore; (Surveyors Regulation 1992).

"occupation" means a permanent improvement situated on or near the boundary of land, and includes -

- (a) a building; and
- (b) a fence; and
- (c) a wall; (Surveyors Regulation 1992).

"plan" includes any survey plan, sketch for identification survey, map, aerial photograph or description made or obtained as part of any survey or surveys; (Surveyors Act 1977).

"State Control Survey" - A survey of high precision being carried out at the direction of the Surveyor-General for the purpose of establishing permanent marks to enable surveys throughout the State to be co-ordinated. (Survey Co-ordination Act 1952).

"supervision", in relation to a survey, means the immediate personal oversight of the planning and execution of the survey, including:

- (a) the method of measurements; and
- (b) the placement of survey marks; and
- (c) the preparation of the plan of survey; and
- (d) in the case of a cadastral survey, the examination of evidence of ownership relied on when fixing an existing boundary; (Surveyors Regulation 1992).

"survey" means the act or process of determining the form, contour, position, area, height, depth or any other similar particulars of the earth's surface, whether on land or water, or of any natural or artificial features on, below or above any part of that surface or planning the position or the length and direction of the bounding lines of any part of that surface, or of any such natural or artificial features thereof and includes the making or obtaining of a plan or plans thereof; (Surveyors Act 1977).

"survey mark" means a mark of the prescribed form used for the purposes of a survey; (Queensland Surveyors Act 1977).

"survey records" means the documents necessary to adequately record every aspect of the survey. (Queensland Surveyors Regulation, 1992).

# **Directions**

# 6.0 Accuracy (Board Forms 12 & 13)

Part of the certification used in Forms 12 & 13 "that the plan is accurate" implies a declaration that the plan is correct in every detail, is in accordance with the standards of accuracy specified in the Surveyors Regulation 1992 and is suitable for the intended action.

# 7.0 Survey Records (Section 33 Surveyors Regulation 1992)

The Survey records include field notes, field sketches, calculations, astronomical observations, field reports, signed statements from owners concerning encroachment and significant change in ambulatory boundaries, electronic data and any other documents relevant to the survey.

Sufficient Survey records shall be lodged with the plan to ensure that a complete record of the survey is available to the Registering Authority.

# 8.0 Easement Surveys (Section 24 Surveyors Regulation 1992)

### 8.1 General

- **8.1.1** Easement surveys are cadastral surveys and shall be carried out in accordance with the Surveyors Regulation 1992.
- 8.1.2 Where a Constructing Authority is resuming or negotiating easement requirements, the surveyor shall consult with that Authority before preparing the necessary plans of the lots affected by the easement. The surveyor shall consult with the Constructing Authority to ensure that appropriate and timely plans are preapred.

Since the time taken to negotiate compensation details with different owner can vary significantly, it is important that consideration be given to the number of plans to be prepared so that individual easement registrations can proceed without delay.

- **8.1.3** An acceptable severance closure between the easement and lot boundaries is required to meet the accuracy provisions of Section 31 of the Surveyors Regulation 1992.
- 8.1.4 Connections shall be made to structures within the easement and the descriptions and identification numbers of the structures should be recorded. Where a definite point on a structure is available or can be placed on a structure as a survey reference mark, a reference connection shall be made and recorded.

In the case of transmission lines, a connection shall be made to steel towers and to wooden poles.

A well defined mark on the steel tower, such as the head of a bolt or a drill hole or screw placed midway between a tower leg and the edge of the concrete surrounding that leg is ideal.

It is to be noted that electricity authorities advise that inserting nails or spikes into power poles is a dangerous practice.

- 8.1.5 Survey marks placed to define an easement boundary shall be branded with an "E" as identification.
- 8.1.6 Where the easement survey is carried out before clearing of the easement or construction of easement structures, reference marks shall be sited so as to be safe from clearing or construction activities. If reference trees are taken they shall be outside of the strip to be cleared in the easement.
- 8.1.7 New easements are required to be intersected and marked on existing lot boundaries.

# 8.2 Deemed Tramway Easements

These easements are created in law and are defined by Section 41 - "Sugar Experiment Stations Act and Another Act Amendment Act of '1948" To this end, they are different from other easements.

The standard of survey and marking to be adopted should provide for:

- **8.2.1** Accurate positioning of the centreline relative to property boundaries. (There is no requirement to mark the limits of the easement on the ground).
- **8.2.2** Placement of recovery marks at the intersection of centrelines with property boundaries.
- **8.2.3** Placement of recovery marks at tangent points and centreline traverse points on curves.
- 8.2.4 Preparation of a suitable plan recording the bearings and distances for straights and chords, the radii of curves, areas and recoveries placed. (Refer Survey Plan Guidelines for sample plan.)

# 9.0 Unmarked Corners And Boundaries (Section 27 Surveyors Regulation 1992)

- 9.1 Where a surveyor is satisfied that a corner or boundary under survey should not be or cannot be marked, the following procedures shall apply:
- 9.1.1 Sufficient control shall be established as would permit any unmarked corner or boundary to be readily marked or reinstated at a future date from that control;
- 9.1.2 The accuracy of the unmarked boundary as calculated through the control is shown to be of the same accuracy as is required of the whole survey or a higher accuracy;

- 9.1.3 Corners and boundaries left unmarked are clearly shown as such in survey records and on the plan.
- 9.2 Where a surveyor is required to mark any previously unmarked corner or boundary, Section 26 shall apply.

# 10.0 Designed Boundaries Of Crown Land (Section 24 & 27 Surveyors Regulation 1992)

- **10.1** For the survey of other than freehold land, where a design of the proposed boundaries is provided, it is the responsibility of the surveyor to maintain the intention of the design as evidenced by occupation (buildings, fences, etc), topography, natural features, dimensions, etc.
- 10.2 Where any major divergence from the design is necessary or where there are incompatible design specifications, approval of the relevant authority shall be obtained.
- Where an existing fence is to be adopted as a new boundary, fence posts at the angles shall be adopted as corners or bends where possible and the straight line between these fence posts surveyed as the boundary. The practice of establishing corners by placing pegs adjacent to fence posts shall be avoided.

# 1 1.0 Accretion And Erosion (Section 26 Surveyors Regulation 1992)

Additional land shall not be included in a parcel on resurvey unless there is evidence of slow and imperceptible accretion by natural means. As a result of common law principles, land that forms by gradual and imperceptive degrees, accretes to the adjoining land. Similarly, land that erodes by gradual and imperceptible degrees (erosion) is lost to the adjoining land.

Where accreted land is claimed, an application, accompanied by a plan of resurvey and supporting evidence, shall be made to the Lands Department for correction of title under Section 9(2) of the Land Act.

There will be occasions when approved works (reclamation, bridge construction, etc) accidentally cause accretion. Provided that the approved works were not in any way intended to cause the accretion, a claim may be made for the accreted land.

# 12.0 Unsurveyed Railway Boundaries (Section 26 Surveyors Regulation 1992)

- Prior to 1914, surveys of railway land were not normally carried out unless the land was being resumed from a surveyed portion held under leasehold or freehold tenure.
- 12.2 Section 92(1)(3) of the Railway Act 1914 vested in the Commissioner of Railways, all Crown Land within railway fences. It is generally accepted that this applied only to land fenced in prior to 1914.

As there is usually no conclusive evidence as to the age of the fences it is normally sufficient, where vacant crown land or roads abut railway land, to adopt the fences as the boundary of the railway land.

# **13.0** Resumption Boundaries

(Section 24 Surveyors Regulation 1992)

- 13.1 Where a survey is required of land to be resumed, the plan(s) shall show the boundaries of the land to be resumed and the balance of the lots affected by the resumption.
- 13.2 Resumption lines shall be marked where they intersect the common boundaries of parcels held under one ownership with separate titles or under consolidated titles.
- 13.3 Where permanent fencing has been erected along a resumption boundary prior to the survey, the surveyor, unless otherwise advised, must consult with the resuming authority to confirm that the fence should be adopted as the resumption boundary.
- Where a resumption plan indicates that an area of road is available for closure, sufficient survey shall be carried out to enable the road to be closed if required or to remain open if application for closure is not forthcoming.
- 13.5 Where land is being taken by resumption, boundaries shall be cleared and marked except where unnecessary damage to cultivation or the environment would result, in which case concurrence of the Constructing Authority should be obtained.

# **14.0** Roads

# 14.1 Opening and Closure

- 14.1.1 Roads in freehold land are normally dedicated by the registered proprietor. However, land can also be resumed by a Constructing Authority for road purposes and subsequently dedicated for road by that authority.
- 14.1.2 Where road closure is required in conjunction with the opening of a new road, application should be made to the Department of Lands and the plan drawn to enable a new deed of grant or lease to be issued.
- 14.1.3 It is not essential that the intersection of a new road and road to be closed be surveyed, provided that the surveyed status of the amended road system and any affected land is maintained.

### 14.2 Reservations

Crown reservations in a Deed of Grant or a Certificate of Title may be defined in a particular location on the face of the original plan of survey or be undefined in respect of location.

### 14.2.1 Defined Reservations

Not all areas reserved for road in a defined location are deemed to be road.

The surveyor, on behalf of his client, should contact the regional office of the Department of Lands to determine the status of the reserved road.

# 14.2.2 Deemed to be Road

If the area is deemed to be road and is required as road, the area can be surveyed in its defined location and dedicated as road on that plan.

There will be instances where the reserved road appears to be already surveyed. When in doubt contact the regional office of the Department of Lands for confirmation.

Since the area is already deemed to be road, the area does not have to be purchased from the Crown.

If the area is deemed to be road and is not required as road, e.g. it does not conform to the proposal for land subdivision, an application can be made to the Department of Lands for closure of the area deemed to be road.

The applicant will be required to pay the Crown the market value for the area of road being closed.

# 14.2.3 Reservation in Title

If the area is deemed to be a reservation in title, it may be dealt with under the provisions of Sections 358 or 359 of the Land Act, which means that

- (a) The Crown can resume possession of the area specified in the reservation, for road purposes. The only compensation the Crown is required to pay to the owner of the land is for improvements or developmental works effected on the area specified.
- (b)If the area specified in the reservation is no longer required for road purposes, the Crown can sell the area to the owner of the land. Alternatively where the Crown considers it desirable, the owner, in lieu of purchasing the area can surrender to the Crown other freehold land which is equal in value to the purchasing price of the area specified in the reservation.

Where the area is deemed to be a reservation in title, the owner does not have freehold title to that area but does have occupation rights.

If the specified area is required to be dedicated as road as part of a private land subdivision, the area must be purchased from the Crown.

# 14.2.4 Undefined Reservations

# Required For Future Use

When the reservation is required for future use by the Crown, the Department of Lands will provide the applicant with a letter authorising the allocation of the reservation to a lot or lots on the new plan of survey.

Prior to lodgement of the plan for registration, the appropriate allocation notation should be added to the plan.

The allocation notation should then be endorsed by the nominated officer of the Department of Lands regional office.

A copy of the letter of authority must accompany the endorsed plan when it is lodged for registration.

### Purchase

If the reservation is no longer required, the owner may purchase the reservation from the Crown.

There is an urgent purchase option available to ensure minimal delay in subsequent land dealings.

Early application for purchase should be made to the regional office of the Department of Lands, because purchase involves Section 9 surrender of the existing title to the land and subsequent issue of a Deed of Grant for the land to include the reservation area.

Where the reservation is the only area exclusion from the existing title, a compiled plan for issue of the new Deed of Grant is not required.

### Non Purchase

If the reservation is no longer required and the owner does not apply for purchase of the reservation, the Crown will consider involving Section 360 of the Land Act which allows the Crown to acquire the reservation area in any part of the lot and deal with it under the Land Act.

This action could cause significant delays to registration of the new plan and may even necessitate drawing a further plan.

# 14.2.5 Advice to Client

In every case, the surveyor should give the client timely notice that a reservation exists, so that land transactions are not unduly delayed.

The surveyor should also advise the client of the several options that may exist to deal with the reservation.

# 15.0 Survey Plans

(Section 30 Surveyors Regulation 1992)

- 15.1 Lodgement of plans shall conform to the requirements of the Registering Authorities.
- 15.2 Sample plans for a variety of land actions are contained in the Survey Plan Guidelines.

# 16.0 Confused Boundaries

Where a surveyor identifies a survey problem that is of such a nature that a client should not be expected to rectify the problem, a confused boundary area may exist.

During the course of a survey, where early indications suggest that significant problems exist, the surveyor must decide whether or not in the circumstances the client should be expected to pay for the resolution of the problem.

If the surveyor believes a confused boundary area exists, he should refer the matter to the Regional Director of the Department of Lands for investigation and advise his client accordingly.

# **17.0** High Water Mark (HWM)

(Section 24 Surveyors Regulation 1992)

(This section is under review)

# **Recommended Practices**

# 101.0 Introduction

### 101.1 Guidelines

The Board considers that in the interest of the surveying profession, it should publish a set of Recommended Practices that may assist surveyors in the performance of their work.

In this respect, the Recommended Practices can be considered as guidelines for performance for all persons practising within the profession.

The Surveyors Regulation 1992 provides the basis on which professional practice and associated responsibility focuses in order to obtain the necessary quality results and outcomes.

A historical section has been included at the end of the recommended practices as both a guide and reference.

### **101.2** Review

These Recommended Practices will be under on-going review and the Board would appreciate constructive comment in writing to ensure that the Recommended Practices are of assistance to practising professionals.

# 101.3 Departure From Recommended Practices

Recommended Practices are guidelines only and should not be construed as restricting a surveyor's performance or practice.

# 102.0 Supervision

(Section 18 Surveyors Regulation 1992)

A Registered and Licensed Surveyor's professional responsibility includes judgemental factors and the ability to interpret the appropriate level of supervision that is required for each cadastral survey. This includes supervision of both employees and registered persons who are contracted to carry out work.

The extent of supervision will depend on the complexity of the work being performed and the qualifications, experience and competency of the person performing the task.

Appropriate levels of supervision shall be carried out by a Registered or Licensed Surveyor when accepting responsibility for the work of a Registered Person.

This supervision shall be fully documented as part of the quality control procedures and shall form part of the survey records.

# **103.0** Disagreements Between Surveyors (Section 23 Surveyors Regulation 1992)

If two or more surveyors, or a surveyor and the registering authority, are unable to agree that a survey has been performed in accordance with this regulation or the Board's directions, a person who is independent of the disagreement and acceptable to all parties could be asked to mediate/arbitrate a solution so as to avoid the disagreement being referred to the Board as a complaint for investigation.

# 104.0 Connection Of Surveys

(Section 21 Surveyors Regulation 1992)

Where surveys, such as telecommunication sites, are effected in isolated areas and the cost of connecting those surveys by traditional means to existing surveys is prohibitive, one method of determining such position is by use of GPS equipment.

# 105.0 Encroachment

(Section 26 Surveyors Regulation 1992)

The following definitions are from S183, Property Law Act 1974.

"building" means a substantial building of a permanent character: the term includes a wall;

"encroaching owner" means the owner of land contiguous to the boundary beyond which an encroachment extends;

"adjacent owner" means the owner of land over which an encroachment extends:

"boundary" means the boundary line between contiguous parcels of land;

"owner" means any person entitled to an estate of freehold in possession:

- (a) whether in fee simple or for life or otherwise;
- (b) whether at law or in equity;
- (c) whether absolutely or by way of mortgage, and includes a mortgagee under a registered mortgage of a freehold estate in possession in land under the Real Property Acts;

"subject land" means that part of the land over which an encroachment extends;

Either an adjacent owner or an encroaching owner may apply to the Court for relief under the Property Law Act in respect of any encroachment.

Surveyors have a professional responsibility to disclose matters of encroachment.

# **106.0** Easement Surveys

(Section 24 Surveyors Regulation 1992)

### 106.1 General

- 106.1.1 It is recommended that the intersection of existing easement and new lot boundaries be marked. Land owners have a right to know where the boundaries of easements are positioned.
- 106.1.2 Where an easement boundary is positioned close to a surveyed boundary or corner, a connection should be made to that surveyed boundary or corner.
- 106.1.3 Where appropriate and particularly in large rural holdings, connections should be taken to substantial fencing, significant structures or improvements, unusual topographic features or vegetation and adequate descriptions of the improvements or features recorded.
- 106.1.4 Where an engineering survey has been carried out along the easement, connections should be made to marks placed on that survey sufficient to relate the two surveys to each other.
- Where surveys of extensive easements are required, such as major powerline easements, the surveyor should be conscious of the opportunity to co-ordinate all existing surveys intersected by the easement by establishing accurate control over new easement boundaries and existing lot boundaries.

# 106.2 Visible evidence

- 106.2.1 Where there is clear evidence of the purpose of the easement, such as power poles or towers, electricity transmission lines, water trunk mains, the easement may be surveyed by traversing the line of structures or line of engineering centre line pegs and marking the secants at each bend.
- 106.2.2 Where there is intermittent evidence of underground easement structures, such as manholes and valves, connections should be taken and appropriate descriptions recorded.

# **107.0** Traverses

(Section 24 Surveyors Regulation 1992)

- 107.1 Traverse stations should be marked and referenced in such a way that they can be readily reinstated in the future.
- Where it is considered appropriate, traverse station pegs or alternate marks should be driven flush with the ground or pavement surface.
- On traverses of natural features such as watercourses, the tree nearest to each unreferenced traverse station should be blazed with three horseshoe marks with the centre mark facing the station, except where difficulties may be experienced with vegetation protection orders.

# 108.0 Meridian Determination

# 108.1 Australian Map Grid - AMG

# 108.1.1 Surveys on AMG

The meridian of each survey should be established on AMG by reference to:

- (a) Co-ordinated permanent marks
- (b) Solar or stellar observations or
- (c) previous or adjoining surveys

The practice of describing the meridian of a survey in terms of the meridian of a previous or adjoining survey which has not been referred to either true meridian, AMG or CAM, should be discouraged.

# 108.2 Integration of Surveys

The Board fully supports the principles of co-ordination of surveying activities, and to facilitate the integration of survey data, it is recommended that where the meridian can not be accurately related to AMG, then a local meridian between permanent survey marks be adopted.

The local meridian may be referenced in accordance with Regulation 32.(1). The use of permanent survey marks, in preference to less substantial reference marks, will allow the meridian to be maintained over a longer period. All types of surveys should be related to such local datums.

It is intended that pockets of "integrated surveys" will develop, and future correlation to the Australian Map Grid, could be achieved by determining the co-ordinates of these permanent marks, possibly by GPS.

Hence, it is recommended that such permanent marks be selected, and/or placed, giving due regard to their role in the integration of survey data.

# 108.3 Large Projects

Many sizeable projects such as major water storage facilities and resumptions, residential staged development, etc are currently established on the AMG co-ordinate system.

# 108.4 Professional Responsibility

Based on the premises and assumptions already made, AMG co-ordination will allow surveyors to operate with more accuracy, efficiency and confidence, with a perceived saving to the community that pays for work to be done.

It is essential therefore that all surveyors actively participate in the ongoing discussion.

If the geodetic densification is to proceed, the survey profession should ensure that the geodetic control is established on a 'needs' basis.

When such control is readily available, the cost to the small consumer can be justified.

# 108.5 Extensive Surveys

In extensive surveys, unless GPS equipment or sufficient co-ordinated marks are available, observations should be taken as necessary to confirm meridian stability.

# 108.6 Future Reinstatement of Meridian

Opportunities should be taken to read accurate bearings from stations on the survey to beacons on control survey marks and to precisely identifiable parts of buildings or other structures to assist future reinstatement of meridian.

# 108.7 Survey in Separate Parts

Where a survey consists of separate parts, the same meridian should be used for the parts. The common meridian can be obtained by observation or by connection.

# 109.0 Non Tidal Boundaries

(This section is under review)

# 110.0 High Water Mark

(This section is under review)

NOTE: Pages 21 - 24 have not been replaced by this Revision

# 111.0 Permanent Marks (Section 29 Surveyors Regulation 1992)

- 111.1 It is preferable to place new permanent marks in close proximity to the survey rather than to make lengthy connections to existing marks.
- 111.2 Where local conditions preclude the placement of permanent marks, an explanatory report should be included in the survey records.
- 111.3 Every opportunity should be taken to make connections to existing permanent marks in close proximity to the survey, particularly those not previously connected to cadastral surveys. Details of permanent marks that have been previously connected to cadastral surveys are shown on survey plans. Sketches of permanent marks are available from the Department of Lands Regional Offices.
- 111.4 A search should be made for permanent marks installed during the construction of roads, railways, etc. Some of these may be indicated by a finder post while others may be found in concrete structures associated with the project.
- 111.5 All Form 6 and updates on the information shown thereon, should be lodged with Regional Offices.

# 112.0 Marking Boundaries (Section 27 Surveyors Regulation 1992)

- 112.1 Pegs should be used to mark corners and boundaries of land.
- 112.2 Lot numbers should be marked on corner pegs.
- 112.3 For rural surveys, where a fence post is used as a corner it should be branded with a broad arrow and the lot number except where a reference tree is taken.
- 112.4 For rural surveys, alternate marks such as a survey post, a galvanised iron pipe or star picket may be placed at corners where circumstances so dictate, provided such marks are identifiable as survey marks.
- 112.5 New boundaries should be cleared and marked sufficiently to enable the boundary to be readily and unambiguously discernible on the ground at the completion of survey.
- 112.6 Where clearing is required, scrub, undergrowth and small trees should be removed without unnecessarily disturbing or destroying native flora and fauna.
- 112.7 Unless fencing is to proceed immediately, trees standing nearest to the line should be blazed with a horseshoe shaped mark cut into the heart-wood on opposite sides of the tree in such positions that the marks face along the survey line.

- 112.8 Trees through which the boundary line passes should be double blazed on opposite sides so that the marks face along the boundary line.
- 112.9 Where corner pegs are not intervisible, line pegs should be placed.

# 113.0 Reference Marking

(Section 28 Surveyors Regulation 1992)

### 113.1 Iron Pin

The positions and depths at which pins are placed should be decided by the surveyor so as to minimise the chance of disturbance from any cause and the depth at which the pin is placed should be recorded if the depth is excessive.

Where original iron pins are found, the depth of the pin, should be recorded, where the depth is excessive.

### 113.2 Rural Areas

In rural areas, reference marks include reference trees (where there is little likelihood of the tree being destroyed in the foreseeable future), buried iron pins, and other appropriate marks.

# 113.3 Urban Areas

In urban areas, reference marks include iron pins, screws/nails in kerbing or manhole surrounds, star bars, corners of shop or buildings and street signposts.

# 113.4 Estate Development

In residential estate development, it is essential that an adequate number of reference marks are deployed to allow reinstatement of lot boundaries at reasonable cost.

A variety of surface and sub-surface marks (mark in kerb, pin, etc) should be placed to minimise the destruction of reference marks by machinery and earthworks and maximise future reinstatement.

Permanent marks should be placed to facilitate future co-ordination and reinstatement.

# 114.0 Photogrammetric Surveys

The Registering Authorities are able to accept the use of photogrammetry for some types of cadastral survey. Features of a photogrammetric survey are:

➤ the survey is over sufficiently large distances to enable computed bearings and distances to meet accuracy standards (Section 31), and

- ➤ boundaries are clearly identifiable on the ground, eliminating the need for marking (Section 27a), and
- ➤ the photogrammetric survey connects to and supports field survey (Section 21).

Photogrammetric surveys are appropriate where the boundary can be readily identified on the ground and on the aerial photograph. This implies that the boundary will follow an existing structure (eg fence) or a prominent natural feature such as a ridge or water course.

The accuracy required will determine the minimum scale of photography to be used. In many cases suitable photography may already be available from the Department of Lands or private operators.

Clearly identifiable points on the photographs are measured in the field and connected to the local cadastral survey datum, generally through the AMG co-ordinate system to provide control for the photogrammetry.

Photogrammetric measurement and computation must be undertaken by a suitably qualified person.

# 115.0 Historical Marking (Section 26 Surveyors Regulation 1992)

During survey, consideration shall be given to historical marking.

Survey legislation prior to 1977 provided for the following types of marking:

# 115.1 Pointer Pegs

Adjacent to portion and road corners in country lands, split hardwood pegs, free of sap wood, twelve inches (300mm) long and one and a half inches (40mm) square, were driven level with the surface of the ground. These pegs were aligned with the theodolite in the direction of the boundaries, and driven at exact distance of twenty links (4.023m) from corner posts.

Pointer pegs first appeared in the Queensland General Directions of 1878. They continued in use up till the 1950's (not placed by all surveyor's) and did not appear in the 1964 Rules and Directions for the guidance of Surveyors.

### 115.2 Reference Tree

Reference trees were used for the early surveys in Queensland from 1839 onwards but it was not until 1898 that surveyors were required to cut a bench mark at the base of the tree for a traverse connection to a property corner. Prior to 1898, surveyors took connections to the shield on the tree.

Reference trees are still considered to be excellent reference marks, particularly in rural areas without extensive closer settlement. Surveyors should be aware of Vegetation Protection Orders, environ-

ment considerations and in particular the ecology balance for mudflats, mangroves and the like.

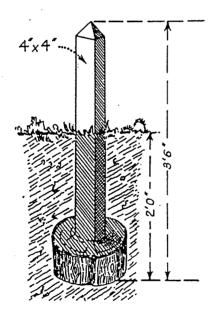


When reinstating corners, if the reference tree appears to have been destroyed, decayed or burnt, a diligent search must be made for the butt of the tree or remains of the tree.

When a tree is used as a reference mark, the bark should be removed in the form of a shield about 1.5 metres from the ground and exactly facing the corner. On this barked space a broad arrow and the lot number are cut into the heart-wood. The bearing and distance should be observed from the corner to a chisel cut in the centre of a bench mark cut well into the heart-wood at the base of the tree and exactly facing the corner.

As of 1975, surveyors reverted to references from corners to trees and not from trees to corners.

# 115.3 Survey Post



A survey post was cut from hardwood, three feet six inches (1.05m) long and dressed to no less than four inches (100mm) square, with a butt six inches (150mm) long and the full round size of the timber left on the bottom of the posts and the top pointed as indicated in the diagram.

Survey posts are still acceptable for marking corners, particularly in rural areas where there is no immediate likelihood of the fencing of boundaries proceeding.

When reinstating a corner where a survey post had originally been placed but now appears to be gone, a diligent search must be made for the butt or remains of the survey post below ground level.

Corner Post. Country Portion showing butt.

Survey posts came into general use on country portion surveys by 1870. before this "large stakes" were in use.

# 115.4 Lockspits

The word 'lockspit' derives from the ancient terms for whole ('lock') and turf ('spit').

The principal corners of the portions were marked by corner posts. Outside a fifteen inch (375mm) radius from the posts, lockspits three

feet (900mm) long and six inches (150mm) deep were dug in the direction of boundary lines.

On very stony lands, rows of stones placed in the direction of the surveyed line were substituted for dug-out lockspits. In dense scrubs, or where soils were of such a nature that lockspits quickly filled up and consequently were useless as permanent indicators of direction of survey lines, they were omitted.

Lock spits first appeared in the New South Wales Instructions for Marking Crown Land by Government Surveyors in 1853 but have been used long before this in New South Wales and overseas as marking for boundaries. The first appearance of them is in the 1878 Queensland General Directions and they were used up until the 1950's but were not included in the 1964 Rules and Directions (They were rarely used in the 1940's and 1950's).

# 115.5 Line Pegs

At distances not exceeding ten chain (201.168m) apart, and always so situated as to be visible one from the other, split hardwood pegs one foot six inches (450mm) long and two inches (50mm) square, clear of sap wood, were aligned with the theodolite and driven fourteen inches (350mm) into the ground.

Line Pegs first appeared in the 1878 General Directions of Queensland and their use continues right up to present time.

# 115.6 Fence Traverses - Grazing Farms

The survey legislation of 1964 (Rules and Directions) detailed the method of traversing and marking fences that were used as the boundaries of Grazing Farms.

In the survey of Grazing Farms, fences were traversed only and suitable fence posts (preferably strainer posts), adopted as corners or corner pegs or posts placed near or under the fence. The straight lines between corners were computed and adopted as boundaries, care being taken that the distance of the fence from the computed boundary nowhere exceeded about 20 links (4m) and that the corners were not more than 80 chains (1600m) apart.

The fence posts so adopted were marked with a broad-arrow, and, if no tree was available, marked with the portion number also; iron pins were placed in accordance with Clause 58 of the Rules and Directions.

As it was desired to preserve traverse lines along fences forming portion or road boundaries in grazing area, such traverses were marked by placing a hardwood peg two inches (50mm) square and eighteen inches (450mm) long under or beside the fence opposite each picket, the chainage and offset in each case being recorded in the field notes and the nearest convenient tree blazed on three sides.

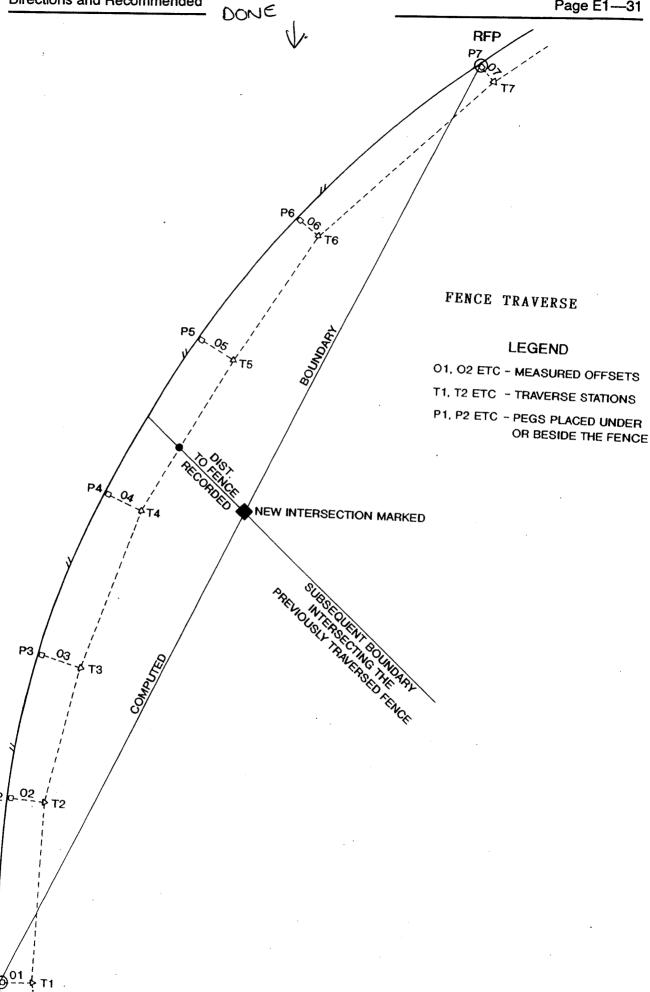
As some uncertainty seemed to exist among surveyors as to the method of traversing and pegging fences to be adopted as boundaries of Grazing Farms, the following rules were to apply:

- 115.6.1 As the fence is the actual boundary, the computed lines between corners were to be kept as close to the fence as possible so that areas were not greatly affected;
- 115.6.2 The traverse lines were to be kept reasonably close to the fence to facilitate the placing of pegs under (or beside) the fence;
- 115.6.3 Pegs two inches (50mm) by two inches (50mm) by eighteen inches (450mm) were to be placed under the fence square off pickets not more than 20 chains (400m) apart;
- 115.6.4 A corner peg 3 inches (75mm) by 3 inches (75mm) by 18 inches (450mm) was to be placed under the fence where there was a definite bend, or, the strainer post adopted, but otherwise corners were to be established not more than about 80 chains (1600m) apart;
- 115.6.5 In order that the traverse lines could be easily re-established, a careful offset was to be taken from the traverse line to each peg and recorded in the field notes. (No attempt was to be made to place intermediate pegs on the computed through line);
- 115.6.6 The computed line, fence and pegs were shown in the centre column of the field book the traverse lines on the relative side;
- 115.6.7 When intersecting of commencing on a previously traversed fence, the traverse line was to be established and the corner placed on the original computed line;
- 115.6.8 When fence traverses and intersections as above were required by instructions of even date the post or peg was to be placed under the fence and used as a corner when computing the boundaries along the fence line.

It is important for surveyors to realise that pegs found under or beside such fences were not necessarily on the boundary which is the straight line computed between the adopted corners.

The relationship between the pegs found and the computed boundary can be calculated from the information supplied by the surveyor in his field book.

See Diagram at right



**RFP** 

# 116.D Location Certificates

The Board recognises the need for services to be available to the public, which do not require precise reinstatement and measurement of boundaries.

These services can be provided by surveyors, who have both the training and expertise in surveying, through a "Location Certificate".

Field investigations associated with location certificates do not include the placement of survey marks.

# 116.1 Location Certificates are designed to ensure:

- ➤ Land described in any transfer or other legal document, actually is the parcel which a purchaser wishes to buy;
- ➤ Improvements being transferred or dealt with are within the boundaries so described; and
- ➤ There are no registered encumbrances such easements, affecting the land that the purchaser is not aware of.
- ➤ There are no unregistered encumbrances such as encroachments on or by the land.

# 116.2 Consulting Surveyors Queensland provides an information paper on this subject as part of the Technical Publications Series.

# **117.0** Stakings

"Staking" or marking the approximate location of the position of the boundary or corner of a parcel of land is not permissible unless it is part of the process in carrying out the subdivision of new parcels of land. If it is to be used, it must be as an integral part of the procedure required during subdivision.

"Staking" to indicate proposed boundaries in a new subdivision prior to final marking is acceptable as an aid to construction or other works involved in the new subdivision, but not otherwise.

A new subdivision process terminates with the registration of the survey plan.

CHECK

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# TABLE OF THE COUNTIES OF QUEENSLAND

Showing the COUNTY VARIATION and the Location (with Latitude and Longitude) of the INITIAL POINT for each.

Trigonometrical Station shown \* Astronomical Station shown †

Revised to 1st August, 1963.

1. Bench Mark, Survey Office, Brisbane—Longitude 153° 01′ 29′-6 E. Latitude Station shown ‡ Š. NOTE: -- DATUM FOR LONGITUDE:

TABLE OF COUNTIES, WITH THE COUNTY VARIATION AND INITIAL POINT FOR EACH—CONTINUED

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	on Rc I, tow Block ition II tion I trow goon	rrow of the state	South-west corner portion 1, par Tree marked broad-arrow over Vest corner portion 1, parish of Bundaberg † Tree marked broad-arrow over Gast corner portion 2, parish of West corner Drumduff Holding Carpentaria Downs Head Statio North-west corner portion 10v, South-west corner R. 60, parish Mount Howitt Head Station Currawilla Head Station, at tree	4, parrtion 3 tion I north 9v, pa
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**************************************	Durham Downs Head Station  Nurdah Out Station, at tree marked broad-arrow over I over XXXII  North-west corner portion 4, parish of Fairlight	Station 126 (En. 62) on south boundary portion 9, parish of Eddington  Tree marked broad-arrow over L. over L. over 2, at north-east corner Fiery Block  North corner portion 2, parish of Halium  Surat †  South-west corner Esmeralda Holding  North-west corner portion 19 (School Reserve), parish of Bumba  Tree marked broad-arrow over A over 81, on east boundary Feu East Block  North-west corner portion 10v, parish of Busthinia  North-west corner Glengyle Holding	ara†  triced broad-arrow over Z over XV  vale†  rked broad-arrow over A over 25,  thead Station  ape Lighthouse*	North-west corner portion 1, parish of Clare South-west corner Alderley Holding Georgetown 4 South-east corner Camping Reserve (R. 34), parish of Barratta North-west corner portion 1, parish of Behool Tree marked broad-arrow over G over D7, at corner rabbit fence, at north-west corner Doval Block Tree marked broad-arrow over C over G on Yappa River, at north-east corner	Cowabunya block  Eromanga †  Tree marked broad-arrow over P over I, at south-east corner Highbury Holding  South-west corner portion 3, parish of Listowel  South-west corner portion 5, parish of Melinda  Landsborough's marked tree, marked broad-arrow over RTR over N 10 over 1862, on Gregory River, in Riversleigh Holding  Station 34 (Ge. 13) on north boundary portion I, parish of Whitula  South corner section VII, town of Pentland  Grosvenor Downs †  North-west corner portion 2, parish of Kinrara
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TABLE OF COUNTIES, WITH THE COUNTY VARIATION AND INITIAL POINT FOR EACH—continued

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County			Initial Point	.5	Latitude S.	s,	Longi	Longitude E.		County Variation
Haddon Hamilton Hann Herbert Hilalong Hodgkinson Humboldt Humeburn		::::::::::::::::::::::::::::::::::::::	No. 1 Well, near Meeba Downs Station, in Westby Holding Hamilton Tank Musgrave Telegraph Station Bowen † Station 5 (Hln. 16) on east boundary portion 1, parish of Tiverton South-west corner R. 4, parish of Thornborough North-west corner portion 7, parish of Smithburne North-west corner allotment 1, section VI, town of Blackwater North-east corner allotment 6, parish of Narraport	° 22 24 22 23 24 23 24 23 24 23 24 24 24 24 24 24 24 24 24 24 24 24 24	, 44 46 00 00 01 13 19	33 35 50 50 18.4 10.1 18.9	2 141 2 144 144 144 144 144 144 144 144	27 18 36 08 30 07 14 51-4 19 43-0 00 13-3 52 14-6 00 14-6	40%07-9	。
Iffley	•	<del>-</del>	Iffley Head Station	18	52	- 61	141	12 25		4
Jardine		<del></del>	McDonnell Telegraph Station (Disused)	=	38	51	142 2	26 54		4
Kalkah	: ::	: ::	Tree marked broad-arrow over Y over 13, at south-east corner Minka Holding, on Coleman River Station 61 (Ki. 4) on south boundary portion 5, parish of Beling North-west corner Meta Downs No. 4 Block, at tree marked broad-arrow over RES	7 65	54 14	38 01·1 15	142 9	56 22 43 07-4 58 00	4	ν 44
Kennedy Killarney Kimberley King Koodatah Kyabra Kyabra Kynuna Kyrunda		::::::::::	over MD4 Station 4 (Ke. 41) on west boundary portion 7, parish of Wallan Collaroy † Duaringa † West corner Strathleven No. 1 Block West corner Strathleven No. 1 Block West corner Strathleven Strvey (M51.99), west of Warrego River 10 mile post on Border Survey (M51.99), west of Warrego River Station 21 (Kb 4) on west boundary portion 2, parish of Cooloo South corner allotment 9, section XI, town of Kynuna North-east corner portion 3v, parish of Norley	75 75 75 75 75 75 75 75 75 75 75 75 75 7	34 25 25 25 25 25 25 25 25 25 25 25 25 25	17.1 12.9 54.6 54.6 54.0 00.0 48.0 55.1	741 742 743 743 743 743 743 743 743 743 743 743	40 48 116 52: 12 53 51 14: 17 06:	48.6 08.5 22.2 51 51 14.2 114.2 113.9 06.5	rrrv4&vv&
Labouchere Lamington Landsborough Langlo Langlo Lennox Leura Leibig Liebig Lukin	:: :4:::::	:::::::::::	Taroom † Tree marked broad-arrow over C, at north-east corner Yapparton Holding South-east corner portion 2, parish of Goorala North-west corner portion 19 (School Reserve), parish of Bumba South-west corner portion 2v, parish of Langlo Kilkivan † North-east corner portion 1, parish of Defarge Marlborough † Rockhampton † Tree marked broad-arrow over RES over B3, on Edward River, at south corner	223 28 28 28 28 28 28 28 28 28 28 28 28 28	844 50 4 50 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	26.2 20.2 25.7 20.5 20.1 28.3 28.3 28.3 28.3 28.3	149 149 149 149 149 149 149 149	200 24 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	255 585 586 337-1 445 4430 4430	∠ 4 4 N 0 ∞ L ∞ ∞ 4
Lynd Lyndhurst Lytton	::::	::::	Bathwick No. 3 Block 11 miles 40 chains on Etheridge Railway, on bridge over Tate River Crossing of Peninsula Developmental Road (Main Roads plan 43399) over Einasleigh River, near Lyndhurst Head Station Jandowae †	26	28 12 46	35.9 13.0 58.7	44. 44. 12.	22 22 86 33 E. 23	25.0 13.2 36.5	v.v. ∞
Mackenzie Malwa Maneroo Manfred	::::	::::	Gayndah † South-east corner Eton Vale No. 2 Block West corner portion 10v, parish of Evesham South corner portion 3, parish of Lara	2222	37 48 11 12	37·3 40 34·5 46·6	151 140 143 141	37 37 37 37 37 37 37 37	41.5 33.9 43.2	∞4 <i>∿</i> √

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rrow over over over over over over over over	:::::	over Ch	: th boundary	over D over B1, at junction Duffer Creek and Styx River rabbit fence, at north-east corner Whippa North Block, row over RP own of Urandangie arish of Woodbine
North-east corner portion 1, parish of Manuka  North-west corner Mentana No. 23 Block, near tree marked broad-arrow West corner portion 3, parish of Dromore  Maryborough †  South corner Staaten River Holding, near tree marked broad-arrow over Inglewood ‡  Dunham Towers Out Station, in Carcara Holding  Adavale †  Cape Bowen  Mount Gammie *  Selwyn Railway Station  South-west corner portion 9v, parish of Burgoyne South-west corner portion 4v, parish of Thornleigh  Tree marked broad-arrow over I over XXI, on Mackhara Waterhole West corner Rocklands No. 6 Block, near tree marked broad-arrow over Crossing of telegraph line over Kennedy River, at tree marked broad-arrow over Host-west corner Adavale Block, near tree marked broad-arrow over Host-over HPS  South-west corner Adavale Block, near tree marked broad-arrow over HPS  South-east corner Adavale Block, near tree marked broad-arrow over AV  Over HPS	:::::	Cairns †  North-west corner Chad Holding, near tree marked broad-arrow o Iron pin, near north-west corner section III, town of Tego Hawkwood †  Tree marked broad-arrow over C, on Cliffdale Creek, at crossing of South-east corner P.P.I, parish of Gunnadorah South-east corner north severance portion 2, parish of Malta South-west corner portion 3v, parish of Weelamurra Tree marked broad-arrow over K over B over B, near Teeballah corner Kiandra Block	at 56 miles 52 chains over XI, on Burdekin River, on north t, parish of Mills for, parish of Hood	Duffer C. corner W
ar tree mar tree marked iing iing iing iing iing iing iing iin	illa inan 	Cairns †  North-west corner Chad Holding, near tree marked broad-a Iron pin, near north-west corner section III, town of Tego Hawkwood †  Tree marked broad-arrow over C, on Cliffale Creek, at cros South-east corner P.P.I, parish of Gunnadorah South-east corner north severance portion 2, parish of Malta South-west corner portion 3v, parish of Weelamurra  Tree marked broad-arrow over K over B over B, near Tee corner Kiandra Block Normanton †	Umpadib ns ekin Rive	vale Head Station Vale Head Station 17 (G. 250.238) on rabbit fence, at north-east a marked, broad-arrow over RP orner section III, town of Urandangie ner portion 44v, parish of Woodbine wn † ch † ch † est corner section IV, town of Southwood
North-east corner portion 1, parish of Manuka North-west corner Mentana No. 23 Block, near tre West corner portion 3, parish of Dromore Maryborough † South corner Staaten River Holding, near tree mai Inglewood ‡ Dunham Towers Out Station, in Carcara Holding Adavale † Cape Bowen Mount Gammie * Selwyn Railway Station South-west corner portion 9v, parish of Burgoyne South-west corner portion 9v, parish of Thornleigh Tree marked broad-arrow over 1 over XX1, on Mac West corner Rocklands No. 6 Block, near tree ma Crossing of telegraph line over Kennedy River, at South-west corner portion 9, parish of Drylands South-west corner Adavale Block, near tree market South-west corner Adavale Block, near tree market	portion 7v, parish of Orkadilla portion 1, parish of Yunnerman portion 1, parish of Robey ion 1, parish of Silsoe	Cairns †  North-west corner Chad Holding, near tree marked Iron pin, near north-west corner section III, town of Hawkwood †  Tree marked broad-arrow over C, on Cliffdale Creek South-east corner P.P.I, parish of Gunnadorah South-west corner north severance portion 2, parish of South-west corner portion 3v, parish of Weelamurra Tree marked broad-arrow over K over B over B, n corner Kiandra Block	d-arrow over U over 12, on U Station, at 56 miles 52 chains id-arrow over XI, on Burdek portion 1, parish of Mills portion 46v, parish of Hood	Vando Vale Head Station Station 17 (G. 250.238) on rabbit fence, at north at tree marked, broad-arrow over RP North corner section III, town of Urandangie East corner portion 44v, parish of Woodbine Burketown † Longreach † Longreach † South-west corner section IV, town of Southwood
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Mentana No. 23 on 3, parish of Di ter. River Holdin Dut Station, in Calation portion 9v, parish portion 4v, parish portion 4v, parish line over Kel portion 9, parish line over Kel portion 9, parish Adavale Block, r	on 1, p	Cairns †  North-west corner Chad Holding Iron pin, near north-west corner s Hawkwood †  Tree marked broad-arrow over C, South-east corner P.P.I, parish of South-east corner north severance South-west corner north severance South-west corner portion 3v, par Tree marked broad-arrow over K corner Kiandra Block Normanton f	arked broad-arrow over alked broad-arrow over all Railway Station, at 5 arked broad-arrow over no Block ast corner portion 1, parast corner portion 46v,	arked broad-arrow over D Vale Head Station  17 (G. 250.238) on rabbit be marked, broad-arrow over roor portion III, town of river portion 44v, parish of own the content section IV, tow west corner section IV, tow
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Initial Point	South-west corner portion 7v, parish of Windah South-ast corner section 1, town of Wyandra North corner portion 6v, parish of Ewen, county of Liebig South-west corner portion 8, parish of Bowen Downs Bayley Point North-west corner portion 1, parish of Bierbank West corner portion 52, parish of Scoria Station 8 (G. 250.199) on rabbit fence, at north-west corner Ben Castle Block Tree marked broad-arrow over RES over MD4, at north-west corner Meta Downs No. 4 Block	North-west corner portion 28, parish of Annandale Station 54 (Rw. 309) on north-east boundary R. 68, parish of Rawbelle Richmond † South-west corner Leadmore No. 5 Block, near tree marked broad-arrow over L5 over R12 South-west corner portion 2v, parish of Collier South-west corner portion 2v, parish of Collier Junee Head Station North corner Town Reserve, town of Birdsville South-west corner portion 6, parish of Matahma South-east corner portion 1, parish of Onay Richmond † North-east corner portion 2, parish of Moonda Station 22 (Ru. 1) on south boundary portion 1, parish of Mendip	Bobawaba Railway Station, at 47 miles 6,970 links Sandringham Head Station North-west corner Malpas Holding, near tree marked broad-arrow over Z over XVII Station 220 (Sx. 7) in portion I, parish of Bowpark Mount McConnel + Malbon Railway Station, at 31 miles 7,234·5 links Middle Peak Angle of Northern Telegraph Line, about 1 mile southerly from Stewart River Port Douglas † Paterson * No. 1 State Bench Mark, Survey Office, Brisbane Tree marked broad-arrow over HP over B, at south-west corner Boongalee Block	North-east corner Strathleven Holding, at tree marked broad-arrow over TI over P3 South corner Staaten River Holding, near tree marked broad-arrow over W over 21 Tree marked broad-arrow over T over 4, at west corner Table-top No. 4 Block Croydon †
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140 141 142 142 143 143 143 143 143 143 143 143	7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	44 44 88 138	143	143	148 148 145 143	44 14 14 14	153 143 139 139 138	138 139 148 143	139
03 07.2 29.3 54.0 44 47.5 47.7 06	48·3 30 07·48 57·5	03·7 17·7 58	12	25	36 31·32 47·8 00	17·6 27	50 24 48.6 50 50 6 50 6 50 6 50 6 50 6 50 6 50 6	40 49 31:2 50	58·3 08 45·43
23 123 124 124 124 134 136 137 138	22 13 35 58	27 03 21	50	80	25.45 25.45 25.45 25.45 25.45 26.45	48 13	222224868	24 44 70	<b>484</b>
255 228 228 228 228 228 228	227	27 27 19	23	19	18 26 121 16	22	22222 172222 172222 173222	2222	25 22
Tree marked broad-arrow over ND2 over D, at south-west corner Endymion Holding North-east corner R. 29, parish of Lilyvale Station 16a (Td. 12) on north boundary portion 2, parish of Merindee North corner portion 4, parish of Hawick. Tree marked broad-arrow over C over 70, on Cooper's Creek, at north-west corner Reerongooloo Holding Mount Surprise Railway Station, Tangent point at 0.m. 7,233-4 links Tree marked broad-arrow over ED1, on south boundary Cresfield No. 2 Block North-east corner portion 1, parish of Moothandeila Tree marked broad-arrow over A over XXI, on Arcadia Creek, in Arcadia Holding South-west corner Saltaire Block Tree marked broad-arrow over L over 18, on Linda Creek, near west corner Idamea Lakes No. 11 Block	South-west corner portion 2, parish of Tongy	North-west corner portion 11v, parish of Midlothian  South-east corner portion 2, parish of Lomax  Tree marked broad-arrow over R over XIV, on Thornton River, on north-west boundary R. 1, parish of Narah	Tree marked broad-arrow over K over XXX, on Vergemont Creek, near north	Tree marked broad-arrow over G over XXVI, at junction Percy and Gilbert Rivers	Crossing of Ingham road over Burdekin River, near Oakhills Head Station  Roma † South-east corner portion 2, parish of Aberfoyle The marked broad-arrow over N over XXIX, at junction Brown Creek and Mitchell	North-west corner portion 16, parish of Chaunsit Tree marked broad-arrow over C over XXIII, on south-east boundary Clarendon	Mount Tamborine * Mount Tamborine * Mount Tamborine * South-east corner Kalkah No. 6 Block, at tree marked broad-arrow over K6 South-west corner portion 6, parish of Ogilvie East corner portion 2, parish of Moonah Tree marked broad-arrow over B over XXVI, on Wenlock River Sweers Island (Inscription Point) Eulo † Tree marked broad-arrow over L over 11, on Lagoon Creek, near crossing of Darwin	Road South-east corner Grayshall Block Remains of Cacoory Station, near Cacoory Waterhole on Gilmour Creek North-east corner portion 21, parish of Simmie Tree marked broad-arrow over BR over 1, at north-east corner Big River No. 1	Block, on wenlock Kiver Hawkwood † North-east corner portion 304, parish of Argentine Boulia †
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	::::	:::	:	:	::::	::	:::::::	::::	:::
o a	Tomoo	Uanda Ularunda Undilla	Vergemont	Victor	Wairuna Waldegrave Walker	Warbreccan Warburton	Ward Wanner Warrong Waverley Wellesley Wellington Wentworth	Weramo Weringa Westgrove Weymouth	Wicklow Wilkie Gray Wills

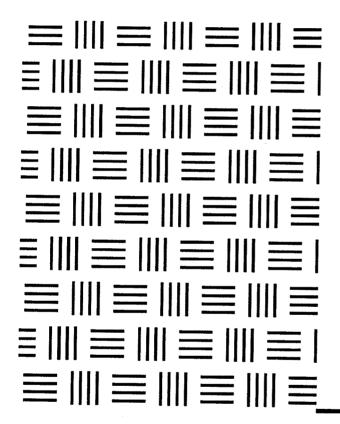
County Variation 18 21.0 48.7 36.9 31.2 9 Longitude E. 51 25243 28.34.42% EE2.14 22 143 **4444444** 14 2523 2523 2524 2524 2524 2524 08.2 TABLE OF COUNTIES, WITH THE COUNTY VARIATION AND INITIAL POINT FOR EACH—CONTINED Latitude S. 83 28888 8 82 32382 82 ::: over : : Iron pin, near north-east corner section 1, town of Prairie

Tree marked broad-arrow over G over MD, at north-east corner Wrotham Park North-east corner Blacktown Block, near tree marked broad-arrow over B over 11. Tree marked broad-arrow over 37, near junction Wyaaba Creek and Staaten River South-west corner portion 11, parish of Buricigh Station 16 (Yl. 453) on north boundary portion 1, parish of Dalgangal Merluna Head Station Intersection north boundary portion 1, parish of Galah, and Prairie Creek South-east corner Boonal Block, near tree marked broad-arrow over E over CXXI North corner portion 10v, parish of Eyerah Station 29 (G. 250.238) on rabbit fence, near tree marked broad-arrow over T North-east corner Zenoni Block, at post marked broad-arrow over S Lass collict polition 19, patish of definedate Tee marked broad-arrow over S over H, at Shotover Head Station 24, on Dingera Creek, near south-east corner O'Hea Block West corner portion 6, parish of Cathay North-east corner portion 1v, parish of Montes Nebo 7
South-east corner R. 1, parish of Nuken
South-east corner portion 17, parish of Bimera North-west corner portion 3, parish of Bellalie nitial Point East corner portion 1v, parish of Berriedale Noranside Station, at well Nebo + : : : County Windeyer Windsor Windula Wodehouse Wokingham Wolseley Wongalee Wonomo Woodstock Woolgar Wooroolah York Youranigh Woura .. Wrotham Wooroona : Wondoola agoonya appar .. Wilson .. (arrol Wyara ork

Part

**E2** 

# Survey Plan Guidelines





Outlining the recommended drafting practices which the Surveyors Board believe will satisfy the requirements of the Registering Authorities

Covers both
Department of Lands and
Department of Minerals &
Energy survey plans

Issued By: The Surveyors Board Of Queensland

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South Brisbane Qld 4101

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PROVISIONAL EDITION 1978
FIRST EDITION 1983
AMENDMENTS ISSUED 1984
SECOND EDITION 1988
AMENDMENTS ISSUED MAY 1989
AMENDMENTS ISSUED AUGUST 1989
THIRD EDITION 1992

# **PREFACE**

These Guidelines outline the recommended drafting practices which the Surveyors Board of Queensland believe will satisfy the requirements of the Registering Authorities.

The Guidelines indicate drafting procedures that will ensure:

- > plans submitted are suitable for the purpose of the survey
- ➤ the property is accurately and unambiguously described so that tenure documents based on the plan will be correct
- ➤ the survey data can be incorporated into archives as a resource for future surveys
- > survey marks placed by the survey are accurately recorded
- ➤ the plans can be reproduced on a reduced scale without loss of clarity and quality.

These procedures support Section 30 of the Surveyors Regulation 1992 and are directed towards achieving consistency in the recording of Surveys and Survey Data.

President, Surveyors Board Of Queensland

# **GENERAL**

The amendments to these Guidelines are made by replacement of the applicable page(s). Each amendment page when issued is identified by a revision number and an updated copy of the Revision Log Page will indicate all the amendments.

These Guidelines cancel and replace the previous 1988 Survey Plan Guidelines and the Amendments issued 1989.



President, Surveyors Board of Queensland

Date

Refer to the Revision and update instructions in the Introduction section of this Manual

# General Requirements

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	Wotonehada

# 1.1 Abbreviations - General

For use where space prevents use of full word.

A limit of three consecutive letters is preferred eg. Cen.face S.F.P. or C. face S.F.P. (Not C.F.S.F.P.)

The full stops denoting an abbreviation may be omitted.

A L 4	41 /
About	
Addition	
Alignment Spike	
Alluvial Mining Claim	
Application PostApp	
Approximately	
ARCADE	
Australian Geodetic Datum	. A.G.D.
Australian Height Datum	A.H.D.
Australian Map Grid	A.M.G.
Avenue	Ave.
Balance	Bal.
Bank	
Bitumen	
Block	
BOULEVARD	
BOUNDARY	
Brick	
BROADWAY	
Brook	
Building	
Building Unit Plan	_
Business Area	
Dusiness Area	D.A.
Calculated	Calc.
Centre	
CHANNEL	` '
CHASE	
CIRCLE	
CIRCUIT	
CLOSE	
Coal Mining Lease	
Concrete	Cona
Connection	
Construction.	
Continued	
Country	
COLUMN:	
COURT	
Creek	
CRESCENT	
CROWN PLAN	C.P.

$\mathbf{r}$	
Datum Post	
Dead	Dd
Deep Driven Mark	D.D.M.
Department of Lands	D.O.L.
Department of Minerals & Energy	
D.M.E. Plan	M P
Departmental	
Developmental	
Diagram	
Distance	
Disturbed	
Dog Spike	
Dredging Area	
Dredging Claim	
Dredging Lease	D.L.
Drill Hole (& Wing)	D.Hole,D/H. or D/H. & W.
DRIVE	
_	
Easement	
East	
Electric Light Pole	E.L.P.
ESPLANADE	ESP.
Exploration Permit	E.P.
Coal	E.P.C.
Minerals	
Petroleum	
EXPRESSWAY	FYDWV
Extended	
	Dest 2
	Extd
	Extd
Fence Posts:	
Fence Posts: Round Fence Post	R.F.P.
Fence Posts: Round Fence Post Square Fence Post	R.F.P.
Fence Posts: Round Fence Post	R.F.P.
Fence Posts: Round Fence Post  Square Fence Post  Square Concrete Fence Post	R.F.PS.F.PConc.S.F.P.
Fence Posts: Round Fence Post	
Fence Posts: Round Fence Post	R.F.P. S.F.P. Conc.S.F.P. either Steel F.P. or G.I.F.P.
Fence Posts: Round Fence Post	R.F.P. S.F.P. Conc.S.F.P. either Steel F.P. or G.I.F.P. Cor S.F.P.
Fence Posts: Round Fence Post	R.F.P. S.F.P. Conc.S.F.P. either Steel F.P. or G.I.F.P. Cor S.F.P.
Fence Posts: Round Fence Post	R.F.P. S.F.P. Conc.S.F.P. either Steel F.P. or G.I.F.P. Cor S.F.P. cen R.F.P. ace S.F.P. (C.Face S.F.P.)
Fence Posts: Round Fence Post	R.F.P. S.F.P. Conc.S.F.P. either Steel F.P. or G.I.F.P. Cor S.F.P. Cen R.F.P. ace S.F.P. (C.Face S.F.P.)
Fence Posts: Round Fence Post	R.F.P.  S.F.P.  Conc.S.F.P.  either  Steel F.P.  Or  G.I.F.P.  Cor S.F.P.  Cen R.F.P.  ace S.F.P. (C.Face S.F.P.)
Fence Posts: Round Fence Post	R.F.P.  S.F.P.  Conc.S.F.P.  either  Steel F.P.  or  G.I.F.P.  Cor S.F.P.  Cen R.F.P.  ace S.F.P. (C.Face S.F.P.)  FWY
Fence Posts: Round Fence Post	R.F.P.  S.F.P.  Conc.S.F.P.  either  Steel F.P.  or  G.I.F.P.  Cor S.F.P.  Cen R.F.P.  ace S.F.P. (C.Face S.F.P.)  FWY
Fence Posts: Round Fence Post	R.F.P.  S.F.P.  Conc.S.F.P.  either  Steel F.P.  or  G.I.F.P.  Cor S.F.P.  Cen R.F.P.  ace S.F.P. (C.Face S.F.P.)  2B.1P  FWY  Ft
Fence Posts: Round Fence Post	R.F.P.  S.F.P.  Conc.S.F.P.  either  Steel F.P.  or  G.I.F.P.  Cor S.F.P.  Cen R.F.P.  ace S.F.P. (C.Face S.F.P.)  FWY  Ft  Galv.
Fence Posts: Round Fence Post	R.F.P.  S.F.P.  Conc.S.F.P.  either  Steel F.P.  or  G.I.F.P.  Cor S.F.P.  Cen R.F.P.  ace S.F.P. (C.Face S.F.P.)  2B.1P  FWY  Ft  Galv.  Galv.
Fence Posts: Round Fence Post	R.F.P.  S.F.P.  Conc.S.F.P.  either  Steel F.P.  or  G.I.F.P.  Cor S.F.P.  Cen R.F.P.  ace S.F.P. (C.Face S.F.P.)  2B.1P  FWY  Ft  Galv.  G.I.  G.F.H.
Fence Posts: Round Fence Post	R.F.P. S.F.P. Conc.S.F.P. either Steel F.P. or G.I.F.P. Cor S.F.P. Cen R.F.P. ace S.F.P. (C.Face S.F.P.)  2B.1P FWY Ft Fd Galv. G.I. G.F.H.

Group Title PlanG.T.P.
GROVEGR.
Gully TrapG/T
HeadwallHdwll
Hectaresha.
HIGHWAYHWY
High Water Mark H.W.M.
HoldingHldg(H.)
Identification
Identification SurveyI.S.
InstructionInst.
Intersection
Iron Pin
ISLANDIS.
Work
Kerb
Kilometre (s)
LANELA.
Leaning Leang
Learning Lea
Licensed Gem Claim
Line PegL.P.
Local Government
Low Water Mark
LOW 11 GOOT 11 LAT 12 L. 17 .
ManholeM/H
Manhole
•
Market Garden Area
Market Garden Area
Market Garden Area M.G.A.  Mark Measurement Mmt
Market Garden Area M.G.A.  Mark Measurement Mmt  Metre (s) m.
Market Garden AreaM.G.A.MarkMkMeasurementMmtMetre (s)m.Mineral ClaimM.C.
Market Garden Area         M.G.A.           Mark         Mk           Measurement         Mmt           Metre (s)         m.           Mineral Claim         M.C.           Mineral Development License         M.D.L.
Market Garden Area         M.G.A.           Mark         Mk           Measurement         Mmt           Metre (s)         m.           Mineral Claim         M.C.           Mineral Development License         M.D.L.           Miners Homestead         M.H.           Miners Homestead Lease         M.H.L.           Miners Homestead Perpetual Lease         M.H.P.L.
Market Garden Area         M.G.A.           Mark         Mk           Measurement         Mmt           Metre (s)         m.           Mineral Claim         M.C.           Mineral Development License         M.D.L.           Miners Homestead         M.H.           Miners Homestead Lease         M.H.L.
Market Garden Area         M.G.A.           Mark         Mk           Measurement         Mmt           Metre (s)         m.           Mineral Claim         M.C.           Mineral Development License         M.D.L.           Miners Homestead         M.H.           Miners Homestead Lease         M.H.L.           Miners Homestead Perpetual Lease         M.H.P.L.
Market Garden AreaM.G.A.MarkMkMeasurementMmtMetre (s)m.Mineral ClaimM.C.Mineral Development LicenseM.D.L.Miners HomesteadM.H.Miners Homestead LeaseM.H.L.Miners Homestead Perpetual LeaseM.H.P.L.Mining LeaseM.H.P.L.Mining Title Freehold LeaseM.T.F.L.MountMt
Market Garden AreaM.G.A.MarkMkMeasurementMmtMetre (s)m.Mineral ClaimM.C.Mineral Development LicenseM.D.L.Miners HomesteadM.H.Miners Homestead LeaseM.H.L.Miners Homestead Perpetual LeaseM.H.P.L.Mining LeaseM.L.Mining Title Freehold LeaseM.T.F.L.
Market Garden AreaM.G.A.MarkMkMeasurementMmtMetre (s)m.Mineral ClaimM.C.Mineral Development LicenseM.D.L.Miners HomesteadM.H.Miners Homestead LeaseM.H.L.Miners Homestead Perpetual LeaseM.H.P.L.Mining LeaseM.L.Mining Title Freehold LeaseM.T.F.L.MountMtMountainMt
Market Garden AreaM.G.A.Mark.MkMeasurementMmtMetre (s)m.Mineral ClaimM.C.Mineral Development LicenseM.D.L.Miners HomesteadM.H.Miners Homestead LeaseM.H.L.Mining Homestead Perpetual LeaseM.H.P.L.Mining LeaseM.L.Mining Title Freehold LeaseM.T.F.L.MountMtNails:
Market Garden AreaM.G.A.MarkMkMeasurementMmtMetre (s)m.Mineral ClaimM.C.Mineral Development LicenseM.D.L.Miners HomesteadM.H.Miners Homestead LeaseM.H.L.Mining Homestead Perpetual LeaseM.H.P.L.Mining LeaseM.L.Mining Title Freehold LeaseM.T.F.L.MountMtMountainMtNails:Galv. Iron NailG.I.Nail
Market Garden Area M.G.A.  Mark Measurement Mmt  Metre (s) m.  Mineral Claim M.C.  Mineral Development License M.D.L.  Miners Homestead M.H.  Miners Homestead Lease M.H.L.  Miners Homestead Perpetual Lease M.H.L.  Mining Lease M.H.P.L.  Mining Title Freehold Lease M.T.F.L.  Mount Mt  Mountain Mtn  Nails:  Galv. Iron Nail G.I.Nail  Lead Head Nail L.H.Nail
Market Garden AreaM.G.A.MarkMkMeasurementMmtMetre (s)m.Mineral ClaimM.C.Mineral Development LicenseM.D.L.Miners HomesteadM.H.Miners Homestead LeaseM.H.L.Miners Homestead Perpetual LeaseM.H.P.L.Mining LeaseM.L.MountMtMountMtNails:Galv. Iron NailG.I.NailLead Head NailL.H.NailRamset NailRam.Nail
Markt         Mk           Measurement         Mmt           Metre (s)         m           Mineral Claim         M.C.           Mineral Development License         M.D.L.           Miners Homestead         M.H.           Miners Homestead Lease         M.H.L.           Mining Homestead Perpetual Lease         M.H.P.L.           Mining Title Freehold Lease         M.T.F.L.           Mount         Mt           Mountain         Mt           Nails:         Galv. Iron Nail         G.I.Nail           Lead Head Nail         L.H.Nail           Ram.Nail         Ram.Nail           Round Head Nail         R.H.Nail
Market Garden Area         M.G.A.           Mark         Mk           Measurement         Mmt           Metre (s)         m.           Mineral Claim         M.C.           Mineral Development License         M.D.L.           Miners Homestead         M.H.           Miners Homestead Lease         M.H.L.           Miners Homestead Perpetual Lease         M.H.P.L.           Mining Lease         M.T.F.L.           Mount         Mt           Mountain         Mt           Nails:         Galv. Iron Nail         G.I.Nail           Lead Head Nail         L.H.Nail           Ram.Nail         Ram.Nail           Round Head Nail         R.H.Nail           Spring Head Nail         S.H.Nail
Market Garden Area         M.G.A.           Mark         Mk           Measurement         Mmt           Metre (s)         m.           Mineral Claim         M.C.           Mineral Development License         M.D.L.           Miners Homestead         M.H.           Miners Homestead Lease         M.H.L.           Mining Lease         M.H.P.L.           Mining Title Freehold Lease         M.T.F.L.           Mount         Mt           Mountain         Mt           Nails:         Galv. Iron Nail         G.I.Nail           Lead Head Nail         L.H.Nail           Ramset Nail         Ram.Nail           Round Head Nail         R.H.Nail           Spring Head Nail         S.H.Nail           No O.Mk
Market Garden Area         M.G.A.           Mark         Mk           Measurement         Mmt           Metre (s)         m.           Mineral Claim         M.C.           Mineral Development License         M.D.L.           Miners Homestead         M.H.           Miners Homestead Lease         M.H.L.           Mining Lease         M.H.P.L.           Mining Title Freehold Lease         M.T.F.L.           Mount         Mt           Mountain         Mt           Nails:         Galv. Iron Nail         G.I.Nail           Lead Head Nail         L.H.Nail           Ramset Nail         Ram.Nail           Round Head Nail         R.H.Nail           Spring Head Nail         S.H.Nail           No O.Mk.         Noth
Market Garden Area         M.G.A.           Mark         Mk           Measurement         Mmt           Metre (s)         m.           Mineral Claim         M.C.           Mineral Development License         M.D.L.           Miners Homestead         M.H.           Miners Homestead Lease         M.H.L.           Mining Lease         M.H.P.L.           Mining Title Freehold Lease         M.T.F.L.           Mount         Mt           Mountain         Mt           Nails:         Galv. Iron Nail         G.I.Nail           Lead Head Nail         L.H.Nail           Ramset Nail         Ram.Nail           Round Head Nail         R.H.Nail           Spring Head Nail         S.H.Nail           No O.Mk

Oblitanatad	01141
Obliterated	
Occupation	
Old	
OriginalOr	- , ,
Original Iron Pin	
Original Line Peg	
Original Peg	
Original Permanent Mark	
Original Pointer Peg	
Original Reference Tree	
Original Survey Post	
Overhead	O/H
PARADE	PAR.
PARKWAY	
PATHWAYP	
Peg	
Permanent	
Permanent MarkPerm Mk	
Petroleum Lease	` '
Petroleum Well Location	
Pipeline license	
PLACE	
Placed	
PLAZA	
Plinth	
Pointer	
Portion	
Power Pole	
PROMENADE F	
FROMENADE	'ROM.
QUAY	QY
RAILWAY	RLV
Ranged OnlyRgc	
Reads	
Recreation	
Redundant Catalogue Plan	
Registered Plan	
Reinstated	
Remarked	
Removed	
Renewed	
Reset	
Reserve	
Reserved	
Residence Area	
Restricted Mining Claim	
Restricted Mining Purposes Claim	
Right Bank	
Right of AccessR	. of A.

Right of Way R. of W.
RIVERRIV.(R.)
ROADRD
SectionSec.
SheetSh.
South
Special Bauxite Mining Lease
Special Coal Mining LeaseS.C.M.L.
Special Gem Claim
Special Mining Lease
Special Perpetual Mining Purposes Lease
SpikeSpk.
Split
StandardStand
Star Picket
Station Stn
StraightenedStrghd
Strainer Stnr
STREET ST
StumpStp
SuburbanSubn
SurfaceSurf.
Surface Area
SurveyedSurvi
Surva Surva
Tailings AreaT.A.
Telegraph Pole T.P.
TERRACE TER
Traverse Trav.
II. J
UndergroundU/G
Warred Co. T. 1
Vacant Crown Land
Very OldV.Old
Water HoleW.H.
Water RightW.R.
Watershed
WestW.

If Upper and Lower case is used for a word to be abbreviated, then use Upper and Lower case for abbreviation eg:RAILWAY - RLY; Railway Fence - Rly fence;
CHANNEL - CHNL; Kerb and Channel - Kerb & Chnl

# 1.2 Abbreviations - Common Trees

Bauhinia	Bauh.	Mahogany	Mahog.
Beefwood	Beefwd	Mangrove	Mgrove
Blackbutt	Bkbutt	Messmate	Mmate
Blackwood	Blackwd	Milkwood	Milkwd
Bloodwood	Bldwd	Moreton Bay Ash	M.B. Ash
Bollywood	Bollywd	Nutwood	Nutwd
Bonewood	Bonewd		
Bottle Brush	Bot. Brush	Peppermint	Pmint
Bottle Tree	Bot. Tree	Pepperwood	Pepperwd
Boxwood	Boxwd	Poplar Gum	Pop. Gum
Brigalow	Brig.		•
		Quandong	Qdong
Cabbage Gum	Cab. Gum		, 0
Camphorwood	Camphwd	Rosewood	Rosewd
Candlenut	Candnt		
Cheesewood	Cheesewd	Saffron Heart	Saf. Heart
Coachwood	Coachwd	Sandalbox	Sandbox
Coolibah	$\operatorname{Coolbh}$	Sandalwood	Sandwd
Corkwood	Corkwd	Sassafras	Sasfras
Cottonwood	Cottonwd	Satinwood	Satinwd
Cypress Pine	Cy. Pine	Scrubtree	Scrub
		Scrubwood	Scrub
Dead Finish	Dd Fin.	Silkwood	Silkwd
		Spotted Gum	Sp. Gum
Fibrewood	Fibrewd	Stringybark	Stybk
Gum Topped Box	G.T. Box	Tallowwood	Tallowd
11	O. I. Don	Tulipwood	Tulipwd
Ironbark	Ironbk	Turpentine	Turp.
Ironwood	Ironwd		rurp.
,		Whitewood	Whitewd
Johnson River Hardwood	J.R. Hardwd	- Table Wood	Willio Wu
		Yellowjacket	Y Jacket
Kurrajong	Kjong	Yellowwood	Yellowd
	J	20101111000	1 enowa
Lancewood	Lancewd	· ·	

(Other tree names are generally shown in full)

# 1.3 Accuracy

1.3.1 Under the Surveyors Regulation 1992 "the word "accuracy" has the commonly understood meaning - precise, exact, correct in accordance with a standard - and so has a wider meaning than that frequently used by surveyors when referring to accuracy of measurement."

Certification of the words used in Form 13 of the Surveyors Regulation 1992 (Section 25 and 30) - "that the plan is accurate" implies a declaration that the plan is correct in every detail and is in accordance with the standards of accuracy specified in the Surveyors Regulation 1992 and is suitable for the intended action.

For Section 25 compiled plans, the word "accurate" also applies to the available information from which the plan is compiled, regardless of the surveyed status of that available information.

Vide Direction 6 of the Directions to Surveyors 1992.

See also "PLOTTING" 1.50 and "SCALE OF PLANS" 1.58

# 1.4 Adjoining Description

**1.4.1** All adjoining information will be shown in sloping hairline.

See also "STYLES" 1.62.3

**1.4.2** For all Registering Authorities the latest adjoining registered descriptions and relevant catalogue numbers are to be shown as follows:-

#### Sample

#### NOTE:

- ➤ P12345 is never shown show RP123456 regardless of status for plans of Freehold lands.
- ➤ County Prefixes, eg. SL, WD etc., no longer form part of the Catalogue Number for new plans of Crown Tenure. These have been replaced by a generic C.P. (Crown Plan) which will form part of the Catalogue Number and shall be shown as such for adjoining descriptions. (See above example.)

Ongoing surveys involving several plans should show the most recent adjoining descriptions pertinent to that survey (i.e. show the new description created on the survey as adjoining information).

See also "PLAN FORMS" 1.49

## 1.4.3 Adjoining Easements

## Sample

Sample

A G SL20657 RP213175

➤ Show existing Easements and Registered Plan numbers that abut the subject boundary.

See also "EXISTING REGISTERED EASEMENTS" 1.29.3

## 1.4.4 Adjoining Railways

- ➤ Show Railway Name in all cases
- ➤ For Land held by the Commissioner of Railways in a Certificate of Title, the full RP. Description must also be shown.

Vide Direction 12 of the Directions to Surveyors 1992.

## 1.4.5 Adjoining Building Units Or Group Title Plans

➤ In addition to adjoining Lot on Plan descriptions the adjoining registered Building Units Plan Number or adjoining registered Group Title Plan Number must also be shown.

BUP 6418

GTP5942

2

RP264 458

RP238671

This information is obtainable from the reverse side of the plan form and/or a search of the D.O.L. Computer Inventory of Survey Plans (CISP) and DOL Office Working Maps.

# **1.4.6** Adjoining Dept. Of Resource Industries Descriptions (For D.M.E. Plans Only)

- ➤ All existing and underlying Tenures are to be shown.
- ➤ Provided the Mining Tenure can be described by reference to a "Lot on Plan", then the "Lot on Plan" description only will suffice.

See also "D.M.E. SPECIMEN PLANS 1 & 2"

# 1.5 Alignment Offsets

Offset lines should be avoided if possible.

Offset marks should be referenced as a direct connection from corners.

See also "CORNER REFERENCES" 1.21.6

# 1.6 Alterations/Additions/Amendments

- 1.6.1 For Plans "deposited" in D.O.L. Regional/District Offices or "lodged" in the Department of Minerals & Energy
  - ➤ Before a plan is "Endorsed" (D.O.L) or "Registered" (D.M.E) any alterations will be effected by erasure and corrections and additions shown in black. In most cases this will entail the return of the plan to the Surveyor.
  - ➤ Once the plan is "registered" any alterations or additions will be effected by "crossing out" and amending in red. In these cases the plan will be suitably endorsed with a qualifying statement signed by the designated Officer.

See D.O.L. Work Instruction SUR/999/044.

- 1.6.2 For Plans Which Have Been "lodged" For Registration In The D.O.L. (i.e. entered in the Unregistered Dealings System URDS).
  - 1.6.2.1 Before a plan is registered any amendments will either entail return of the plan to the Lodger for amendment by the Surveyor, or amendment of the plan by the Surveyor in the Department of Lands.

If after requisition, the context or intent of a plan is altered significantly, a fresh dated signature of the Registered Proprietor and a fresh Local Authority consent are required and the plan should be withdrawn and re-entered.

Eg. — alteration to the number of lots, alteration to the intent of road dedication, radical change to shapes or areas of lots or new roads.

A certificate of amendment will be endorsed on the plan by the Licensed Surveyor in black.

Sa	m	p	le
----	---	---	----

Amendments by me on ... (Date) ......

Licensed Surveyor

**1.6.2.2** Amendments to the Surveyor's Certificate are covered by the amendment certificate on the face of the plan.

No part of an incorrect Surveyor's Certificate should be deleted. If necessary, a new correct Surveyor's Certificate should be endorsed on the back of the plan, or face of the plan above the present Certificate if space permits.

1.6.2.3 In the case of an amendment being made by a Body Corporate registered as a Surveyor, the amending certificate must be signed by the Surveyor who must specify that the person is a "Licensed Surveyor and Director".

1.6.2.4 Where a company has signed a plan, the amendments to the front of a plan should be signed by a Licensed Surveyor-Director with the following certificate:-

#### Sample

Amendments by .. (Company Name) .. on .....

Licensed Surveyor, Director.

No seal is required.

1.6.2.5 Where a company has changed its name after signing a plan, the certificate for amendment should be as follows:

#### Sample

Amendments by .. (Company Name) .. on ...... formerly ... (Former Company Name) ...

Licensed Surveyor, Director

1.6.2.6 No corrections or amendments are to be made to any plan, by any Surveyor other than the Surveyor who signed the plan (or another Licensed Surveyor so authorised in writing).

Subject to Section 76(a) of the Surveyors Act 1977.

1.6.2.7 Amendments of a minor nature may be made by the plan examiner under the patent error provisions, or by way of entry in the Surveyors Book.

# 1.7 A.M.G. Connections

Whenever any survey has been connected to a co-ordinated point on the Australian Map Grid (AMG), the co-ordinates may be tabulated.

AMG co-ordinates are to be computed in accordance with The Australian Geodetic Datum Technical Manual - Special Publication Number 10.

See also - "CO-ORDINATES" 1.2

See Also - "CORNER INFORMATION DIAGRAMS A & B"

## 1.8 Areas

A calculated area is preferred. In the case of Balance lots, a balance area may be acceptable if that lot does not close within the prescribed limits, or where otherwise appropriate.

Eg. — A remaining lot bounded by a watercourse which has not been re-traversed during the course of survey.

See D.O.L. Work Instruction SUR/999/044

#### 1.8.1 Calculated

Parcels of land which are to exhibit a calculated area will be deduced by closure and adjustment (preferably Bowditch) and shown -

- 1.8.1.1 In square metres to the nearest square metre where the parcel is less than one hectare. This includes Access Restriction Strips.
- 1.8.1.2 In hectares to four significant figures.
- 1.8.1.3 Where land is of very small extent (less than one square metre) and of high value (inner city area), the area may be shown to not more than one decimal point.

#### See also "METRIC DOCUMENTATION" 1.43

### **1.8.2** Example Involving Multiple Line Areas:

**1.8.2.1** By computation and adjustment, information from the computer is:

gross area	184.4746378 ha
and road area	20.5822597 ha
by subtraction the nett area is	163.8923781 ha

Plan presentation will be 184.48 ha 20.58 ha Rd

163.9 ha

NOTE: The "Gross" is an addition of the "Nett" and Road, rounded as above.

#### 1.8.2.2 If the road was existing and

- in imperial units, say 50ac 3r 17p
- calculate gross area as in 1.8.2.1
- conversion of imperial road area

(vide 1.19 - Page 28) gives 20.5808 ha
— calculation provides a 'nett' area of 163.8938378 ha

Plan presentation will be 184.4808 ha 20.5808 ha Rd 163.9 ha

NOTE: The "Gross" is an addition of the "Nett" and Road.

#### 1.8.3 Balance

Where a balance area may be adopted, the new nett area is determined by SUBTRACTING the surveyed area (rounded as prescribed) FROM THE EXISTING NETT AREA of the parcel.

**NOTE:** There is no rounding of this resulting area.

1.8.3.1

Rd

85.1.17 · 4.3.11

## **Examples Involving Multiple Line Areas**

existing plan shows

		80.2.6	3	100
	by survey lot 4 is created:	4.19	ha	
	convert existing imperial areas to metric	34.5425	ha	
	(vide 1.19)	1.9501	ha	Rd
		32.5924	ha	
	by subtraction the new nett deduces	28.4024	ha	
	plan presentation will be	30.3525	ha	
		1.9501	ha	Rd
		28.4024	ha	Bal
	Note: The "Gross" is an addition of the "Balan	ce" and Roa	ad.	
1.8.3.2	existing plan shows	158.534	ha	
		2.134	ha	Rd
		156.4	ha	
•	by survey lot 4 is created:	1234	$m^2$	
	by subtraction the new nett deduces	156.2766	ha	
	Plan presentation will be	158.4106	ha	
	•	2.134	ha	Rd
		156.2766	ha	Bal

Note: The "Gross" is an addition of the "Balance" and Road.

## 1.8.4 Imperial Exclusions

Where the area of original exclusions (surveyed roads, reserved roads or road reservations etc.) are imperial, these are converted to the nearest square metre.

# 1.8.5 Crown Resumptions (Main Road, Railway, Channel etc)

Prepare the plan as a normal plan of subdivision, describing the resumed area as a lot and showing the area of the remaining lot as a "Balance" area.

See also DOL Example Plan 4

See also "CONVERSIONS" 1.19

See also "VINCULUM" 1.68.4

#### 1.8.6 "About" Areas

Show to 3 significant figures

See also "DOL EXAMPLE PLAN" No. 7

## 1.9 Bearings

- 1.9.1 Bearings are shown upright on face of plan, sloping in all tabulations & in a clockwise direction for completed blocks.
- **1.9.2** Bearings to be shown in degrees, minutes & seconds, rounded off as appropriate & reduced to the meridian of the survey.
- **1.9.3** It is preferable that the following use of '0' be adopted.

eg. 270°0', 270°03', 270°00'30"

Note that 270°00'00" is to be avoided.

See also "DIMENSIONS" 1.27

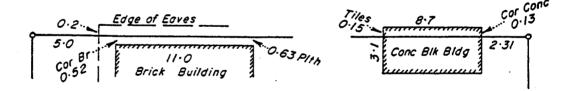
See also "RANGED ONLY & READS BEARINGS" 1.52

See also "ORIGINAL DIMENSIONS" 1.47

## 1.10 Buildings

**1.10.1** Encroachment must be clearly illustrated and may be shown as follows:-

#### Sample



See also Section 26.2 of the Surveyors Regulation 1992.

- **1.10.2** When classified as a reference mark (immovable object), connections thereto may be shown "on face" or tabulated in required manner.
- **1.10.3** Other improvements such as bridges, dams, mine shafts, etc., may be shown if connected to in the course of survey.

See also "BUILDING UNITS & GROUP TITLES PLANS" 2.1

See also "CORNER REFERENCES" 1.21.6

# 1.11 Calculated Lines

- 1.11.1 Calculated lines are those lines derived by computation from survey information. A calculated line is generally between surveyed corners on a "Deposited"/"Lodged" plan.
- **1.11.2** Show as broken lines (abt 12mm long) with computed bearings and distances, and the word "Calc". Show "Calc Orig" on successive plans.
- 1.11.3 If appropriate to tabulate, show 'Calc' outside column.

See also "EASEMENTS" 1.2 See also "LINEWORK" 1.38.9

## 1.12 Cancelled Boundaries

- 1.12.1 These are boundaries rendered redundant by the new survey and are shown by broken lines of about 6mm lengths, where necessary.
- **1.12.2** Once cancelled they are no longer shown on future plans.

D.M.E. — Shown with all dimensions on face or tabulated in "TRAVERSES ETC" column – original indicated.

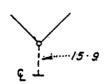
See also "LAPSED BOUNDARIES" 3.11 See also "LINEWORK" 1.38.8 See also "TRAVERSES" 1.67

# 1.13 Centre Lines

## 1.13.1 Road Centre Lines

When shown indicate as follows:-

## Sample



## 1.13.2 Railway Centre Lines

Connections to "Rly  ${\cal L}$ " are to be shown either on face or by tabulation in the "TRAVERSES ETC" column.

## 1.14 Certificates

The Surveyor's CERTIFICATE is to be in accordance with Form 13 or Form 18 under either Section 25 or 30 of the Surveyors Regulation 1992 and is valid for twelve months from the date of signature.

If the date of signature lapses, the plan will be re-certified utilising Form 17.

Vide Section 76(a) of the Surveyors Act, 1977.

#### Sample Certificate — Licensed Surveyor

(Form 13) 1.14.	I, John William Brown hereby certify that I have surveyed the lan comprised in this plan, that the plan is accurate, that the said survey wa performed in accordance with the Surveyors Act 1977 and the Surveyor Regulation 1992 and that the said survey was completed on 20/6/92			
		Licensed Surveyor		
	Date : 30/6/92			

# Sample Certificate — Licensed Surveyor Supervising Licensed Surveyor

I, John William Brown hereby certify that I have surveyed the land comprised in this plan by Robert Ellis Junior, Licensed Surveyor for whose work I accept responsibility, that the plan is accurate, that the said survey was performed in accordance with the Surveyors Act 1977 and the Surveyors Regulation 1992 and that the said survey was completed on 20/6/92

Licensed Surveyor

Date: 30/6/92

# Sample Certificate — Licensed Surveyor supervising Registered Person

Date: 30/6/92

[Form 13] 1.14.3

I, John William Brown hereby certify that I have surveyed the land comprised in this plan by Paul Mark Smith, Registered Surveyor \* for whose work I accept responsibility, and that the plan is accurate, that the said survey was performed in accordance with the Surveyors Act 1977 and the Surveyors Regulation 1992 and that the said survey was completed on 20/6/92

Licensed Surveyor

(\*) Substitute Surveying Graduate or Surveying Associate where applicable.

## Sample Certificate — Company as Licensed Surveyor supervising Licensed Surveyor

(Form 13) 1.14.4

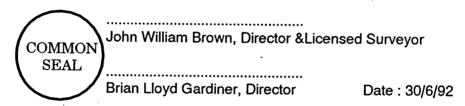
J W Brown Surveys Pty Ltd hereby certify that I/the Company has surveyed the land comprised in this plan by Robert Ellis Smith, Licensed Surveyor for whose work the Company accepts responsibility, that the plan is accurate, that the said survey was performed in accordance with the Surveyors Act 1977 and the Surveyors Regulation 1992 and that the said survey was completed on 20/6/92

	COMMON SEAL	John William Brown, Director &Lice	ensed Surveyor
,		Brian Lloyd Gardiner, Director	Date : 30/6/92

## Sample Certificate — Company as Licensed Surveyor delegating supervision to Licensed Surveyor who supervises another Registered Person

J W Brown Surveys Pty Ltd hereby certify that the Company has surveyed the land comprised in this plan by Robert Ellis Smith, Licensed Surveyor and Paul Mark Smith, Registered Surveyor\* for whose work the Company accepts responsibility, that the plan is accurate, that the said survey was performed in accordance with the Surveyors Act 1977

and the Surveyors Regulation 1992 and that the said survey was completed on 20/6/92



(\*) Substitute Surveying Graduate or Surveying Associate where applicable.

## Sample Certificate — Licensed Surveyor

(Form 18) 1.14.6

I, John William Brown hereby certify that I have made this plan pursuant to Section 25 of the Surveyors Regulation 1992, and that the plan is accurate and compiled fromMP 20261 in the \* Department of Minerals & Energy, Brisbane.

Licensed Surveyor Date: 30/6/92

(\*) Substitute or add "Department of Lands" where applicable.

### Sample Certificate — Company As Licensed Surveyor

(Form 18) 1.14.7

J W Brown Surveys Pty Ltd hereby certify that the Company has made this plan pursuant to Section 25 of the Surveyors Regulation 1992, and that the plan is accurate and compiled from CP842126 and RP181275 in the Department of Lands.\*



John William Brown, Director & Licensed Surveyor

Brian Lloyd Gardiner, Director

Date: 30/6/92

Date: 30/6/92

(\*Substitute or add "Department of Minerals & Energy, Brisbane" where applicable).

#### Sample Recertification — Licensed Surveyor

#### (Form 17)

1.14.7A I, John William Brown hereby certify that this plan is accurate at this date of recertification.

John William Brown, Licensed Surveyor

- 1.14.8 Surveyors name must be shown in full. The Surveyor should be registered at time of survey and signing of the plan.
- 1.14.9 If the Surveyor signs his responsibility for another person, the qualifications of that person must be shown eg. Registered Surveyor, Surveying Graduate or Surveying Associate.

See Section 30 (2) of the Surveyors Regulation 1992.

1.14.10 If responsibility for survey is accepted by a company, the plan must be signed under the Company Seal by two directors, one of whom must be a Licensed Surveyor. The designation of the signatories should be shown and their names printed below the signature.

See Section 14(2)(b) of the Surveyors Regulation 1992.

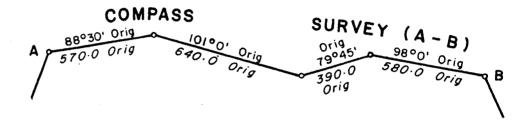
- 1.14.11 The date of signature must not precede the survey completion date. The plan must be signed and dated prior to lodgement for sealing with the Local Authority.
- **1.14.12** All Notations Including The Amendment Certificate Etc And Signatures Must Be In Black Ink.

See also "INK" 1.35 See also "D.M.E. REQUIREMENTS" 3.3

# 1.15 Compass Survey

When parts of the boundary of a block have been previously surveyed by compass, these boundary lines should be noted by the term "COMPASS SURVEY" on face.

#### Sample



See also "WATERSHEDS" 1.70

# 1.16 Computer Assisted Drafting

- **1.16.1** This method of plan preparation must follow the same guidelines as set out in this manual.
- **1.16.2** The presentation of lettering styles may vary to those recommended in 1.62 to accommodate the commercial C.A.D. packages available.
- **1.16.3**. The size and boldness of the text however must comply with the objective for clarity of information when the plan is reproduced at a reduced scale.

See also "SCALE OF PLANS" 1.58 See also "STYLES" 1.62

# 1.17 Connections To Distant Points

"Reads" Bearings to Lighthouses, Beacons, T.V. Towers etc. can be shown on face or entered in the "TRAVERSES ETC." column if the plan is crowded.

See also "RANGED ONLY & READS BEARINGS" 1.52

#### **Consolidated Title** 1.18

#### **Definition:**

A Consolidated Title contains a number of individual parcels of land for which separate Titles can issue upon request.

See also "D.O.L. EXAMPLE PLAN No 3" See also "D.M.E. REQUIREMENTS" 3.6

## 1.19 Conversions

Conversion factors to be adopted are as follows:-

Links to Metres:

LKS x 0.201168

Distances to be converted to 3 decimal places

Perches to Square Metres:

Per. x 25.29285264

Perches to Square Metres:  $M^2 = (P \times 625) \times 0.201168^2$ Acres to Hectares:

Acre  $\times 0.40468564$ 

Acres to Hectares:

 $H = (A \times 10) \times 0.201168^2$ 

Acres to be converted to the nearest square metre

(40 perches = 1 rood; 4 roods = 1 acre)

See also "AREAS" 1.8

See also "METRIC DOCUMENTATION" 1.43.7 See also "ORIGINAL DIMENSIONS" 1.47

## 1.20 Co-ordinates

AMG co-ordinates are to be computed in accordance with The Australian Geodetic Datum Technical Manual - Special Publication Number 10.

#### **Co-ordinated Corners** 1.20.1

Co-ordinates for corners of the subject lot may be shown on a plan provided that the origin of those co-ordinates (ie. Permanent Mark shown on DOL Form 6 or Control Station Summary) together with a connection to that Permanent Mark are shown. Plans showing co-ordinates for lot corners must provide a statement of heights used to determine the co-ordinates.

#### 1.20.2 Co-ordinates - Permanent Marks

All co-ordinates (except those scaled) shown on the face of Survey Plans must clearly identify the origin station/s.

1.20.2.1 A.M.G. Co-ordinates result from a Geodetic Adjustment of Australia - AGD 84 - PRIMARY.

> Supplementary Section from: Surveying and Land Information Group (eg ZZQLD001) and Department of Lands (eg BRISCON)

- 1.20.2.2 Provisional A.M.G. Co-ordinates result from a suitable adjustment technique applied to a local control system, the position and orientation of which has been established by connections to control stations with A.M.G. co-ordinates.
- 1.20.2.3 Derived A.M.G. Co-ordinates result from simple un-adjusted connections, traverses, radiations etc. from existing control stations with A.M.G. or Provisional A.M.G. co-ordinates.
- 1.20.2.4 Approximate A.M.G. Co-ordinates are co-ordinates that have not been obtained by computational methods but by careful scaling from a Pubished Map, or from a point position determined by satellite observation.

#### **1.20.3** Presentation Of Co-ordinates

Co-ordinates may be presented in a panel on the face of the plan as illustrated hereunder.

The accuracy should be tabulated for AMG co-ordinates shown on the face of plans. This should be shown as Class or Order as defined in the Inter-Government Advisory Committee on Surveying and Mapping Standards and Specifications for Control Surveys, July 1990, IGACSM Publication No. 1.

#### 1.20.3.1 A.M.G. Co-ordinates

## Sample:

A.M.G. CO-ORDINATES - A.M.G. - 84

STATION	EAST	NORTH	ZONE	ORDER
GRAVATT SM 40337	455 031.799	7 019 023 527	56	,

#### 1.20.3.2 Provisional A.M.G. Co-ordinates

#### Sample:

PROVISIONAL A.M.G. CO-ORDINATES - A.M.G.-84
CAIRNS - CORMORANT PASS REEF MAPPING

STATION	EAST	NORTH	ZONE	ORDER	CLASS
PM 46307	439 572 - 255	7 256 243 • 661	56		C

#### 1.20.3.3 Derived A.M.G. Co-ordinates

#### Sample:

DERIVED A.M.G. CO-ORDINATES - A.M.G. - 84

STATION	EAST	NORTH	ZONE	CLASS
PM 21899	500 301 · 361	6 974 239 · 173	56	0

#### 1.20.3.4 Approximate A.M.G. Co-ordinates

#### Sample:

#### APPROXIMATE A.M.G. CO-ORDINATES

STATION	EAST.	NORTH	ZONE
PM 20657	457 200	7 624 520	56

1.20.4 For provisional and derived A.M.G. co-ordinates the descriptions and values of the points from which these co-ordinates were generated, together with the associated computations (including height determinations) should form part of the survey record.

See also "A.M.G. CONNECTIONS" 1.7
See Also "CORNER INFORMATION" 1.21 - DIAGRAMS A & B

## 1.21 Corner Information

1.21.1 Corner information deals with the method of presentation on the face of the plans for:-

#### ➤ Corner Marks

i.e. ORIGINAL Corner Marks and NEW Corner Marks

#### ➤ Corner References

i.e. ORIGINAL Reference Marks (& Occupation) and NEW Reference Marks (& Occupation)

#### ➤ Notations

Vide Section 17 of Recommended Practices for Surveyors and Direction 9 of Directions to Surveyors 1992.

#### 1.21.2 General Guidelines

1.21.2.1 Information marking the corner (ie Monument at the corner) should be written first, and information referring to Reference Marks and/or Occupation should be written in order of proximity after the corner mark.

#### See Diagrams "A" and "B" following

- 1.21.2.2 It is preferred that Occupation references are determined "square" from the principal lines run (eg. Stn 3 Diagrams "A" & "B"); except where a bearing and distance is required to avoid ambiguity. (eg. Stn 23 Diags. "A" & "B")
- 1.21.2.3 Corner information should generally be shown as in Diagram "A" (ie "on face") provided the plan can be reproduced at a reduced scale without loss of clarity, otherwise the Tabulated method as in Diagram "B" should be used. A mixture of "on face" and Tabulated presentation is to be AVOIDED.
- 1.21.2.4 The word "found" (fd) written after a mark eg. *Peg fd, Pin fd* etc. denotes a mark at a surveyed position with no origin or cadastral connection shown on a Registered Plan, Identification Survey, Re-

dundant Catalogue Plan, sketch in a Registered Document, or Alignment Marking Files lodged in a Registering Authority.

1.21.2.5 The methods of presentation are influenced by the priority to ensure clarity of information is maintained upon reduction and reproduction of the plan.

#### 1.21.3 Corner Marks

1.21.3.1 Refers to Survey marks and/or Branded Occupation recovered, placed or adopted at the corner eg. Pegs, Pins, Survey Posts, Star Pickets or Survey Marks recovered or placed in occupation at the corner to represent the corner.

#### Sample

Nail in Cen RFP; Ramset in Br Wall; Screw in Conc.

(The type of nail can be shown if indicated in the survey records eg. Clout, Ramset, Spring Head etc).

## 1.21.4 Original Corner Marks

1.21.4.1 When the **origin** of the mark recovered at the corner is **known** (ie recorded on a previously registered survey or a lodged Identification Survey or lodged Redundant Catalogue Plan), the mark is classified as "original" and shown by the abbreviation "O".

#### Sample

OP; OSP; O Nail in Cen RFP; OP(1.5.2345)
O Ramset in Br Wall; O Screw in Conc;
O Nail in Conc (R.C.800361)

etc.

**NOTE:** The decision to utilise corner marks shown on Identification Survey and Redundant Catalogue plans for reinstatement purposes rests with the Surveyor.

1.21.4.2 When the origin of the mark recovered at the corner is known, the mark may be identified by the addition of the catalogue number of the plan of origin.

See also Diagrams "A" and "B" following

1.21.4.3 When the origin of the mark recovered at the corner is unknown (ie no previous cadastral connection on a registered plan, Identification Survey or Redundant Catalogue Plan) the mark should be classified as being "found".

## Sample

Peg fd ; Screw in Conc fd

etc.

Sample

1.21.4.4 When there is no original survey mark or evidence of any type remaining at the position of the previously surveyed corner, the term "No O Mk" is used.

#### See also "NEW CORNER MARKS" 1.21.5

The term "No Mk" is never shown on a plan.

1.21.4.5 When the original corner mark has become inaccessible since the original survey and hence is not able to be connected to, then the term "not fd", suitably qualified is used.

OP not fd OD/H not fd (in deep fill) (under conc)

1.21.4.6 When remains of a survey mark or evidence of a survey mark position is found at the corner, the following terms may be used where applicable.

Sample

Remns OP; OP hole; Remns OSP; OSP hole

etc.

See also "NEW CORNER MARKS" 1.21.5

1.21.4.7 When an existing survey mark is found disturbed and that same mark is reset in the original corner position, the following terms may be used where applicable.

Sample

Sample

OP distd OSP lying out Reset Reset etc.

The term "replaced" should NOT be used.

1.21.4.8 When an existing survey mark or remains thereof is removed at time of survey, and is replaced by a new mark of the same type, the Term "renewed" is used.

Remns OP , OP burnt , Butt OSP , Peg pld renwd ; OP 0:145; 0:05W Remvd etc.

The term "replaced" should NOT be used.

1.21.4.9 When an existing survey mark or remains thereof is removed at time of survey, and is replaced by a new mark of a different type, the term "removed" is used and the new mark quoted.

Sample

OP remvd
Post pld

etc.

Butt OSP remvd
Peg pld

etc.

1.21.4.10

When an existing survey mark or remains thereof has been disturbed at the time of construction works (fencing, retaining wall) and the occupation is adopted at the corner, indicate as follows:

Sample

G.I. Nail in RFP OP at ft O·25 W

etc.

1.21.5 New Corner Marks

1.21.5.1 When there is no survey mark or the existing survey mark is removed, and a new mark placed at the **original** corner, the new mark is quoted and the term "placed" is used.

Sample

OSP hole S Pkt pld

etc.

Note: "Peg pld" and "Survey Post pld" etc are only shown on face of plan when placed at an **original** corner. These pegs are included in the listing of "New Pegs" shown in the statement on face of plan even though they are placed at an original corner.

Sample

Peg placed at Stns 3-9, 11-15 and 19

Peg placed at all new and original corners unless otherwise stated

etc.

Eg.For extensive estate development where a significant number of original corners are reinstated.

See also "NOTATIONS" 1.21.9

**1.21.5.2** When the survey establishes new corners, the survey marks placed at these corners are shown by statement on face.

(vide Section 19 (1) & (2) of the Surveying Regulation 1992)

Sample

etc.

If new survey marks placed are **branded**, this information must also be quoted in statement on face.

Sample

Branded Peg placed at all new corners

Survey Post branded (A 3) placed at Stns 1-4,5,9 and 13

etc.

1.21.5.3 Variations such as "Peg pld in cairn of stones, Peg driven flush, Plastic or Concrete Peg placed, Star Picket pld" etc must be indicated either "on face" or by statement.

The term "No Mark pld" suitably qualified may be used if appropriate.

## Sample

etc.

**1.21.5.4** Occupation adopted as new corner. (When impracticable to place a Peg or Post)

If a new corner is established at which occupation exists, eg. Fence Post, Walls, Buildings, Poles, Man Holes or any such immovable object, the position of the occupation is referenced from the corner.

## Sample

etc.

1.21.5.5 When Nails, Screws etc are placed as a new survey mark in occupation to establish the corner, the occupation is referenced.

## Sample

(shown at corner on face)

(statement on face)

etc.

**1.21.5.6** If occupation is adopted as the new corner and is branded, this must also be quoted.

## Sample

(shown at corner on face)

(statement on face)

## 1.21.6 Corner References (Reference Marks)

- 1.21.6.1 Refers to Reference Marks (eg. Iron Pins, Permanent Survey Marks, Spikes, Nails, Screws, Star Pickets, Broad Arrows, Drill Holes, Pointer Pegs, Marks on Poles, Branded Trees, MR/Bench Marks etc) or Occupation (eg. Fence Posts, Walls, Buildings, Poles, Man Holes, Gully Traps or any such immovable objects) which are placed or connected to in the course of the survey.
- 1.21.6.2 These marks are in addition to the monument denoting the corner. all connections will be from the corner to the reference mark or occupation.

1.21.6.3 Reference Marks may be shown on the face of the plan. Where space does not permit, references may be shown by diagram or in the "REFERENCE MARKS" Column.

#### Exception:

Permanent Marks: Show in separate column headed "PERMANENT MARKS".

See also Diagrams "A" & "B" following

## 1.21.7 Original Reference Marks & Occupation

1.21.7.1 When the origin of the Reference Marks recovered at the corner is known (ie recorded on a previously registered survey or a lodged Identification Survey or lodged Redundant Catalogue Plan, enabling the true position of the existing corner to be re-established) the mark is classified as "Original" and shown as such by the abbreviation "O". Occupation as evidence of ownership should be recorded.

See Section 26(1)(a) and 26(1)(f) of Surveyors Regulation 1992.

#### Sample

OIP; ORT; ONail in Cen RFP; OScrew in Conc; OIP(LS.1568)

etc.

NOTE: The decision to utilise Reference Marks shown on Identification Surveys and Redundant Catalogue Plans for reinstatement purposes rests with the surveyor.

1.27.7.2 When the origin of the mark recovered away from the corner is unknown, the mark should be described by "found".

#### Sample

Pin fd : Nail in Bit fd

etc.

1.21.7.3 When it is evident the original reference mark is missing or destroyed, the following terms are used.

#### Sample

OIP gone

ORT gone (burnt out)

etc.

Connections are shown on the plan if recorded in the field records.

1.21.7.4 When the original reference mark has become inaccessible since the original survey, and hence is not able to be found, the term "not fd" suitably qualified is used.

#### Sample

OIP not fd O Nail in Cen RFP not fd (under conc) (in Dam)

etc.

1.21.7.5 When the remains of an original reference mark or evidence thereof is found, the following terms are used.

## Sample

ORT hole Remns OIP (burnt out) ; (rusted out)

etc.

1.21.7.6 When the existing reference mark is found disturbed or out of position, and that same mark is reset in the original position, the following terms are used.

## Sample

OIP distd OS Pkt lying out reset reset

etc.

1.21.7.7 When an original reference mark is removed at the time of survey, and is replaced by a new mark of the same type, the term "renewed" is used.

## Sample

OIP distd OPM damaged renwd renwd

etc.

The term "replaced" should NOT be used.

1.21.7.8 When an existing reference mark is found disturbed or out of position and the same mark is re-referenced, the following terms are used.

## Sample

OIP distd OIP distd (New Ref) ; 180°0' 1.008 (New Ref)

etc.

1.21.7.9 When the origin of a Reference Mark is known, the mark may be identified by the addition of the catalogue number of the plan of origin - either on the face of the plan or in the Reference Marks column.

See also Diagrams "A" and "B" following

1.21.7.10 When an original reference mark is removed at the time of survey and replaced by a new mark of a different type, the term "removed" is used and the new mark quoted.

## Sample

OIP remvd . O Ptr remvd PM pld ? Pin pld

etc.

1.21.7.11 When an existing reference mark is found and connected to a new corner of the survey, show as a new connection.

#### Sample

OIP ORT Stp New Conn New Conn

Note: In addition to the connection to the new corner, a connection to the original corner should also be shown in the usual manner.

## 1.21.8 New Reference Marks & Occupation

1.21.8.1 When new Reference Marks are placed or established during the course of the survey, the new Reference Marks are shown either on face or tabulated in the "REFERENCE MARKS" Column.

#### Exception:

New Permanent Marks: Show in separate column headed "PERMANENT MARKS".

The new references to Occupation are shown on face unless a survey mark has been placed in or on the Occupation.

## Sample

In these cases the survey mark (ie. Screw, Nail) takes priority over the occupation and is thus treated as a Reference Mark.

1.21.8.2 When showing New Reference Marks by the method of tabulation, no reference to mark is shown on face.

#### 1.21.9 Notations

1.21.9.1. Notations on face of plan are used in situations where

➤ A Survey establishes new corners.

#### See also "NEW CORNER MARKS" 1.21.5

- > Space for clear presentation of information "on face" is limited.
- ➤ When the marking of a number of corners have been treated in the same manner.

#### 1.21.9.2

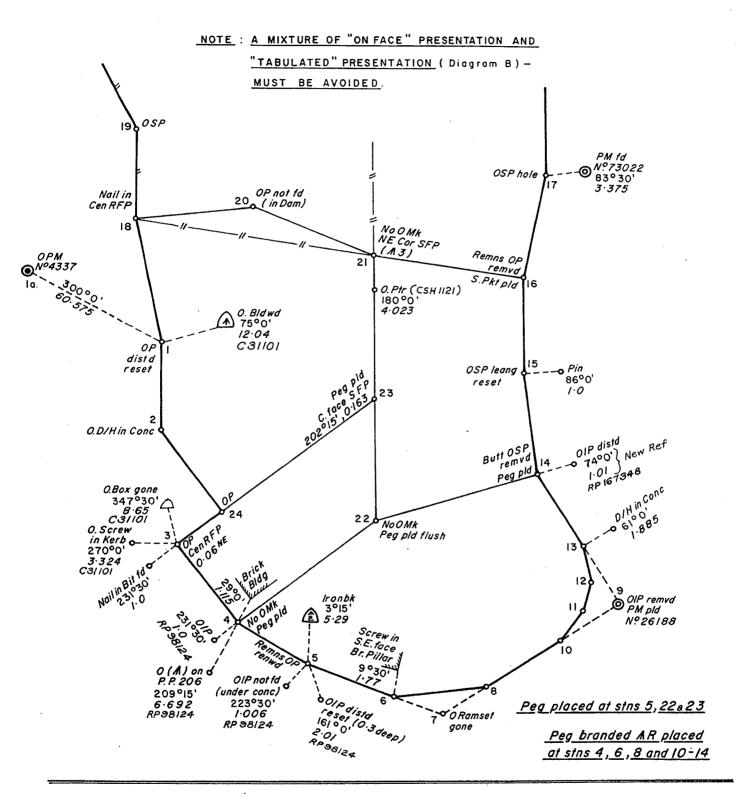
## Samples

<u>Peg_placed_at</u> <u>Stns 3-9,    -     5</u>	Survey Post branded (MR) placed at all new corners.
Peg branded (A 4) placed at all new corners	Cen RFP (A R) at Stns 2,3,5-9 & 12
Nail in Conc placed at Stns 1,4,6,9-12	<u>Iron Pin placed at</u> <u>Stns 1-7,9-12</u>

etc.

## Diagram A

(On face presentation)



<u>PERMANENT MARKS</u>: When co-ordinates have been established, these may be treated as follows for 'On face' presentation:

Example.....

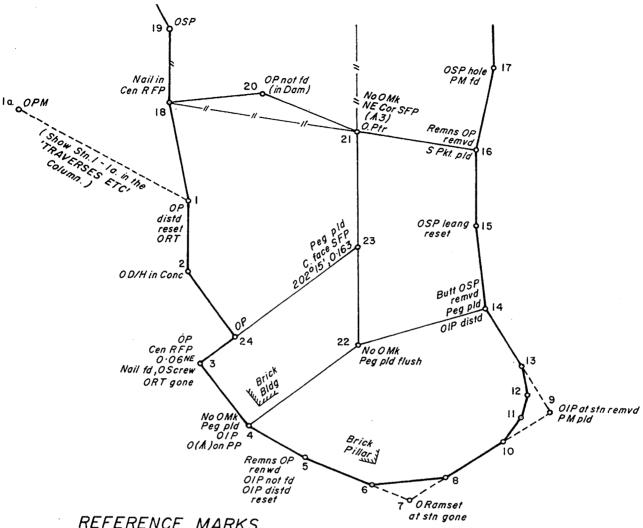
AM.G.CO-ORDINATES (AM.G.84)

		•		
STN	EAST	NORTH	ZONE	ORDER
ОРМ4337	723 659.96	7 657 837.81	57	2

(Enter in 'A.M.G. CONNECTIONS' tabulations.)

## Diagram B

#### (Tabulated presentation)



## REFERENCE MARKS

STN	ТО	ORIGIN	BEARING	DIST
1	O.Blowd (A.)	C3/10/	75°0′	12.04
3	Nail fd in Bit		231.30'	1.0
	O Screw in Kerb	C31101	270°0′	3.324
	O Box Gone	C31101	347°30′	8.65
4	OIP	RP98124	231°30′	1.0
	Cor Br Bldg		29° 0′	1.115
	O A on P.P.206	RP98124	209°15′	6 · 692
5	OIP not fd under conc	RP98124	223°30′	1-006
	OIP reset 0.3 deep	RP98124	161°0′	2· 01
	Ironbk A2		3°15′	5.29
6	Screw in SE face BR Pillar		9°30′	1.77
13	D/H in Conc	i	61°0′	1-885
14	OIP distd (New Ref)	RP167348	74° 0′	1-01
15	Pin		86° 0′	1-0
21	O Pir	CSHII2I	180° 0′	4.023

## Peg branded AR placed at stns 4 , 6 , 8 and 10-14

#### Peg placed at stns 5,22 & 23.

#### PERMANENT MARKS PM BEARING DIST Nº station 1a - OPM 4337 9 - PM station 26/88 3.375 73022

( NOTE: For Tabulations - listings are consecutive, showing all marks referenced from the station. All reference marks for a station MUST BE KEPT TOGETHER and shown listed at their progressive distances from the station.)

#### PERMANENT MARKS :

When co-ordinates have been established, these may be treated as follows for Tabulated presentation:

PERMANENT MARKS	AM.G.CO-ORDINATES	[ A.M.G.84 ]

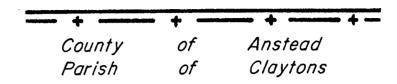
PM	BEARING	DIST	STN	EAST	NORTH	ZONE	ORDER
Ia - OPM	at sta	l ition	OPM4337	723 659.96	7 657 837.81	57	2
Add to	l o existing '1	I Perm. M	ı IARK' tabu	ı Lation in a sui:	table format.)	•	'

# 1.22 County Boundary

**1.22.1** County boundaries are shown outside and as close as possible to the subject block and are never broken for dimensions.

## Sample

4



- 1.22.2 County boundaries are not to be shown in the middle of the roadway if both sides of the road are shown.
- 1.22.3 If the opposite side of the road is not shown, the County boundary may be shown in the road, as close as possible to the subject block, but not within the subject block.
- 1.22.4 Show County boundary in middle of Creek or River if space permits. Show County boundary on opposite side of Creek or River to the subject block if space is limited.

See also "LINEWORK" 1.38.11

See also "STYLES" 1.62.0 & Example Plans.

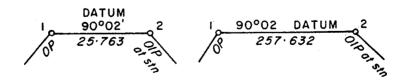
## 1.23 Curved Boundaries

Curved Boundaries are not normally accepted by D.O.L. for new Cadastral boundaries. Curved boundaries may be acceptable to define features to be adopted as cadastral boundaries such as Canal walls etc.

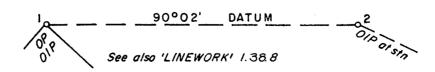
## 1.24 Datum

Show thus

#### Sample

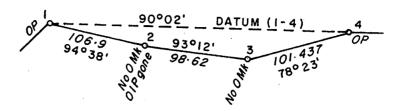


**1.24.1** For cancelled boundary or traverse.



**1.24.2** Where there are insufficient marks for a datum on one line, the following may be adopted.

#### Sample



- **1.24.3** When datum is an offset line, show "DATUM" on boundary if offset line can be omitted.
- 1.24.4 When datum is obtained by observation for meridian, show "DATUM BY OBS" on appropriate line.
- 1.24.5 When more than one plan is drafted from the one set of survey records (eg new estates) and the DATUM line is located on one plan only, the following note should be shown on all plans.

## Sample

This is one of ...... plans (.... Catalogue N.'s.....) from the one survey. For DATUM see plan.....

See also "PLAN FORMS" 1.49

# 1.25 Description Of Country

For DOL:

Description of country should be shown for surveys in rural areas.

For DME:

Not required except for natural features

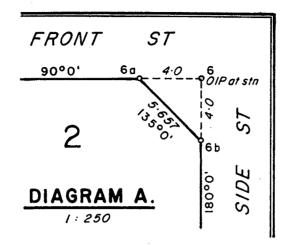
See also "FEATURES" 1.31 See also "SPECIMEN PLAN" See also "SYMBOLS" 1.6

# 1.26 Diagrams

- ➤ On face of plan show eg. SEE DIAGRAM A
- ➤ Lot number repeat on diagram.
- ➤ Roads and Streets, if subject on plan, are shown hairline on diagram.
- ➤ Enclose all diagrams in a border to separate from rest of plan (straight lines preferred).
- ➤ Diagrams should be drawn to scale if possible.

➤ Where more than one diagram is shown on the one plan they should be labelled consecutively A, B, C etc.

#### Sample



Note: 6-6a and 6-6b will be tabulated as required.

1

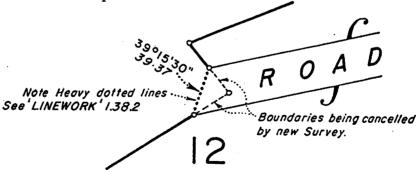
## 1.27 Dimensions

- 1.27.1 Complete dimensions must be shown on the face of plan, preferably in a clockwise direction, for each parcel for which a title can issue from the subject plan.
- 1.27.2 "Through" distances shall be shown on the plan as necessary in order to "dimension" boundaries of land parcels, or groups of land parcels, over which tenure is to issue.

"Through" distances (shown in brackets) can be totals of survey values from the new survey, or a combination of new and original survey information.

1.27.3 Dimensions, across roads, which will form boundaries of subject parcels shall be direct connections, and where applicable, exclude as much internal road as practical so that the dimensions of the parcel are in the simplest form.

## Sample



See also "BEARINGS" 1.9

See also "CONVERSIONS" 1.19

See also "DISTANCES" 1.28

See also "METRIC DOCUMENTATION" 1.43

See also "ORIGINAL DIMENSIONS" 1.47

See also "ROADS" 1.57

See also "VINCULUM" 1.68

## 1.28 Distances

Distances are shown as per survey records.

- **1.28.1** Distances are shown sloping on face of plan and in all tabulations.
- 1.28.2 Always shown inside block.
- **1.28.3** The balance distance shall be deduced from the plan from which the title or deed was issued.

Where the dimensions of the balance are found to be imperfect, or a calculated area is to be adopted, the Licensed Surveyor can then derive data from any registered survey in order to determine the boundaries of the block.

**1.28.4** Each severance within the subject land should be fully dimensioned if surveyed.

See also "ROADS" 1.57

#### 1.28.5 Brackets

When intermediate distances are shown, the "through" distance is to be shown with brackets.

Station numbers should be used for clarity.

See also "DIMENSIONS" 1.27 See also "METRIC DOCUMENTATION" 1.43 See also "ORIGINAL DIMENSIONS" 1.47

## 1.29 Easements

## 1.29.1 Plan Of Easement Only

Boundaries are broken

## Sample

See LINEWORK 1.38.6

1.29.1.1 Dimensions of the complete surround of Easement are required in a clockwise direction.

The dimensions of the block of which the subject Easement is within, need not be completed. However a bearing and distance to at least one corner of the subject block **must** be shown.

- 1.29.1.2 The Easement must be shown to scale on the plan form. In addition, a diagram being not to scale may be utilised if required.
- 1.29.1.3 Where Easement boundaries are Calculated, they must be shown as "Calc" on plan.

See also "CALCULATED LINES" 1.11.3

- 1.29.1.4 Where more than one Easement or Proposed Easement is surveyed in the one tenure, each shall be named with a different letter.
- 1.29.1.5 Where more than one Easement is created on the one plan, they should be named consecutively i.e. "C", "D", "E" etc.
- **1.29.1.6** The use of letters "I", "O" & "Q" is discouraged when describing Easements.

#### See also DOL EXAMPLE PLAN No.11

Vide Section 8 of the Recommended Practices for Surveyors and Direction 8 of the Directions to Surveyors 1992

#### 1.29.2 Plan Of Easement With Subject Block

- 1.29.2.1 Easement Diagram (usually "Not to Scale") to be utilised. This is to 'divorce' the easement information from that of the subject block.
- 1.29.2.2 Where an Easement envelopes an entire parcel/Tenement, an Easement plan is not necessary. The block is encumbered by tenure document only. However, if the Easement is restricted in height or depth (ie. in Strata), then a plan of the Easement is required.

#### See also DOL SPECIMEN PLAN No.2

#### 1.29.3 Existing Registered Easements

1.29.3.1 Existing Easements, together with their descriptors and plan number (or dealing number with easments shown on sketch only), shall be accurately plotted on the Subject Lot.

#### **Exceptions:**

- 1.29.3.2 Easements within parcel being resumed by the Crown.
  (Existing Easements or part thereof are automatically extinguished in the Crown Resumption Process.)
- 1.29.3.3 Plans of parcels over which it is intended to issue new Deeds of Grant. In these cases the following statement shall be shown on the face of the plan:

#### Sample

"For Survey of Lot A (Proposed Easement) in Lot 6 see plan CP12345".

#### 1.29.4 For Department of Minerals & Energy

No provision exists to register an Easement over a Mining Lease under the Mineral Resources Act.

See also "ADJOINING EASEMENTS" 1.4.3 See also "DOL REQUIREMENTS" 2.6 See also Example Plans 11, 12 & 13.

# 1.30 Electronic Lodgement Of Plans

(This matter is under review)

## 1.31 Features

Both DME and DOL plans require natural features such as gullies, mountain ranges, etc. to be shown if located in the course of survey.

See also "DESCRIPTION OF COUNTRY" 1.25 See also "SYMBOLS" 1.65

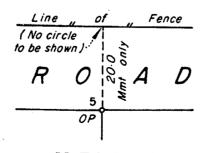
## 1.32 Fences

- 1.32.1 Type of fence to be shown if possible eg. 2PIB, Netting etc.
- 1.32.2 "Read" bearings may be shown on fences that are existing on previous boundary lines.

If useful, "Read" bearings may be shown on internal fences.

1.32.3 Connections across roads to fence lines to be treated as follows.

#### Sample



(No Tabulation)

TRAVERSES ETC			
LINE	BEARING	DIST	
5 - Fence	Mmt only	20.0	

(With Tabulation)

See also "RANGED ONLY AND READS BEARINGS" 1.52

## 1.33 High Water Mark

(This matter is under review)

## 1.34 Identification Surveys

For D.M.E. Requirements see 3.10

For D.O.L.

When an Identification Survey is carried out, a copy of the plan or survey records shall be deposited in the office of the Registering Authority witin 60 days of completion of the survey.

(Section 30 of the Surveyors Regulation 1992)

A copy of the plan shall be certified by the Licensed Surveyor in accordance with Form 13 of the Surveyors Regulation 1992 (Section 30).

#### See also "CERTIFICATES" 1.14

The profession has become aware of the need to use disclaimers that are not an abrogation of professional responsibility but rather a notification of the restricted use of the information. The Surveyors Board has accepted a common format for Identification Surveys and plans are to be legible and conform with A3 or A4 size.

#### For plans in this format see EXAMPLE PLAN No 17

The full description is shown on the subject lot and in the title of the plan. Departmental Map references should also be shown.

Identification surveys will not be registered nor examined at the time of lodgement. However, if a surveyor requires an identification survey to be examined, on payment of the examination fee the survey shall be examined and if suitable, endorsed by the DOL.

Identification surveys shall be catalogued under the I.S.....numbering system, noted on the Departmental administrative working map and recorded in the Computer Inventory of Survey Plans (CISP). On surveyors own sketches, provision should be allowed for the Identification number and map reference to be shown on the plan.

See also EXAMPLE PLANs Nos 16, 17 See also ORIG CORNER MARK 1.21.4.1 See also ORIG REFERENCE MARK 1.21.7.1

## 1.35 lnk

The ink used for drafting, signing (black ink only), amending and noting plans shall be of a permanent and water-proof variety.

Biros and felt pens etc. will not be considered acceptable.

## 1.36 Insets

This method of plan presentation is to be avoided.

See also "NOT TO SCALE" 1.45 See also "SCALE OF PLANS" 1.58

# 1.37 Line Pegs

## **1.37.1** New Line Pegs:

When survey records not lodged, new Line Pegs shall be shown on the plan.

Placement of line pegs will be indicated by one of the following methods.

1.37.1.1 Statement eg.

Line Peg placed at intervals of 200.0 from Stns 1,3,6,12 & 15

1.37.1.2 Tabulation eg.

	LINE PEGS			
STN	BEARING	DIST.		
2	180°42' 180°42' 180°42'	203 · 53 406 · 22 600 · 3		
.5	272°33' 272°33'	201·42 400·63		

1.37.1.3 On face of plan eg.

## 1.37.2 Original Line Pegs

Show .... "OLP" on face

Measured distances shown in survey records which serve to fix position of OLP, are to be shown on face of plan.

Approximate distances are not shown.

Note: If intermediate pegs are not shown on the plan, survey records showing the position of these pegs must be lodged.

Kilometre Pegs are treated in the same manner as Line Pegs. If branded, indicate "on face" or tabulate.

1.38	Linework		
1.38.1	Boundaries of Subject Land	,	
1.38.2	Boundaries of Subject Land ac (these to be direct connections		•
	See also "DIMENSIONS" 1.2"	7.3	
1.38.3	D.M.E. Surface Areas, Right of Right of Way	f Access	
1.38.4	Adjoining Background Tenures (D.M.E.)		
1.38.5	Lapsed Boundaries (D.M.E.) Original Portion Boundaries (	D.O.L) · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
1.38.6	Easements and Leases:		·
	Subject Adjoining		, 12 mm
1.38.7	Traverse, Secants etc.		<u>* 3mm</u>
1.38.8	Cancelled Boundaries		<u>6 mm</u>
1.38.9	Unsurveyed Line, or Calculated Line		<u>12 mm "م</u>
.38.10	Parish Boundary		
.38.11	County Boundary	+	- + +
.38.12	State Boundary	X	- x x

The above is a recommended format for line thickness.

Line length and thickness may be varied if clarity of plan will benefit.

# 1.39 Locality

For D.O.L. plan forms, the "TOWN/LOCALITY" segment in the Title Block should state the name of the City, Town, Suburb or District or describe the location of the survey in relation to a permanent feature on a published map. However, if where the original description referred to a gazetted city/town eg. Allotments of Section of Town, then that city/town MUST be shown.

For D.M.E. provision exists for the office insertion of the latitude and longitude of the centre of the plan form by scaling if necessary when more accurate information is not available. The stated co-ordinates are strictly for location purposes.

## 1.40 Lots

- 1.40.1 Lot numbers are generally shown on Street frontages for urban lands and approximately 1/3 from the top boundary of the Lot for rural lands.
- 1.40.2 The lot number for the Balance of a block or for an amended block should retain the original numerical identifier.
- **1.40.3** The numbering of **newly created lots** can be at the discretion of the Licensed Surveyor provided the numbering is:
  - ➤ Unique on a plan
  - ➤ Avoids repetitive use of numbers 1 and 2
  - ➤ Not similar to numbers of adjoining lots
  - ➤ Limited to a number of three digits

# 1.41 Measurement Only

Show as required on face of plan or tabulated in the "TRAVERSES ETC" column.

## 1.42 Meridian

It is preferable that all surveys be related to AMG.

Vide Section 10 of the Recommended Practices for Surveyors.

**1.42.1** The meridian of every survey should be indicated as follows.

#### Sample

Vide Plan WD4829

Vide Plan RP801576

Detail is generally shown in the Meridian Box however where space is limited the Meridian information should be shown directly above the Title Block.

#### Sample

MERIDIAN: Add 6°11' for AMG Vide Plan W31639

1.42.2 If observations are taken, details should be tabulated on face of plan.

## Sample

	MERIDIAN	
LINE	PLAN BEARING	A.M.G. BEARING
4-3	15°38'50"	21° 26' 50"
A	DD 5048' for A.	M.G ZONE 55
		C.A.M. BEARING
4-3	15°38'50"	16°35'50"
4	100 0°57 for C.	A.M.

**1.42.3** It would be advantageous for continuous surveys to be on the one meridian.

## 1.43 Metric Documentation

1.43.1 The symbol "m" will NOT be shown following a length

Eg. 20·115 not 20·115 m

- **1.43.2** The decimal point is to be **prominently** shown at the mid height of the figures where possible.
- **1.43.3** Numbers should be grouped in threes right or left from the decimal point, and a space should be used instead of a comma.

Eg. 65 093.762 13 not 65,093.76213

However, except in tabular work (eg. co-ordinates), the space may be omitted in groups of only four figures.

Eg. 4076•3012

**1.43.4** A space should be left between the numeral and the unit or unit symbol.

Eg. 2076 m <u>not</u> 2076m Eg. 5•273 ha not 5•273ha

- **1.43.5** No full stops will follow symbols.
- **1.43.6** Use of "zeros."
  - 1.43.6.1 Where the figure is less than one, use a zero before the decimal point.

Eg. 0.745 not .745

1.43.6.2 For whole numbers, a zero will be shown as the last character of length to the right of the decimal point.

Eg. 4.0, 51.0, 200.0 not 4.00 or 501.20 or 67.530

However, when showing (1) Road widths or (2) Areas, the above procedure is NOT to be adopted

Eg. ROAD 60 WIDE not ROAD 60.0 WIDE Eg. 12 ha not 12.0 ha

## **1.43.7** Rounding

When rounding the fewer digits than the total number available, the following procedure is adopted.

1.43.7.1 Where the digit immediately following the last digit to be retained is less than 5, that digit should be left as is.

Eg. 7.62425 to four digits = 7.624

1.43.7.2 When the digit immediately following the last digit to be retained is 5 or greater, that digit should be increased by one.

Eg. 4.62451 to four digits = 4.625

1.43.7.3 If the digit to be discarded is exactly 5 and there is no indication of what the following digits might be, the last digit retained should be rounded to the nearest even digit.

Eg. 5:4665 rounded to 3 decimals becomes 5:466 5:4655 rounded to 3 decimals becomes 5:466

#### NOTE:

It is essential that the decimal point be shown as clearly and prominently as possible.

See also "AREAS" 1.8 See also "DIMENSIONS" 1.27 See also "DISTANCES" 1.28 See also "ORIGINAL DIMENSIONS" 1.47

## 1.44 North Point And Data Orientation

North Point is not shown unless a plan is turned. When it is necessary that a plan be rotated through 90°0′ then 270°0′ becomes 0°0′.

When a plan is turned, all information is shown orientated accordingly ie. to the North Point. (this includes tabulations and statements). There should be no circumstances where a plan needs to be turned upside down to read any data.

## 1.45 Not To Scale

Use with discretion. Break line for each block affected. Advantageous to plot this work to 'some scale' for sake of proportional representation. The wording "Not to Scale" is to be shown on appropriate line or lines.

See also "INSETS" 1.36 See also "SCALE OF PLANS" 1.58

#### NOTE:

New surveyed lines of subject blocks are drawn in an uninterrupted manner to the scale as shown in the title.

## 1.46 Offsets

Not shown on plan in normal circumstances.

If sufficient connections to the boundary line have been made, all information is to be related to the boundary line.

If there are insufficient connections, offset will be shown.

# 1.47 Original Dimensions

1.47.1 Shown with "Orig" written in conjunction with each bearing and distance. "Bal" to be used for subtraction. "By Addn" can be used for additions.

## Sample

NOTE: The term "Bal Orig", "Bal by Addn" are not used.

**1.47.2** Original distances to be converted to metric are to be shown to three decimal places.

See also "CONVERSIONS" 1.19 See also "METRIC DOCUMENTATION" 1.43.7

**1.47.3** When utilising original information, an endorsement is required stating the source of this information.

## Sample

 $\frac{Original\ information\ compiled\ from\ plan\ SL1234\ in\ the\ Department}{of\ Lands}$ 

OR

from MP10537 in the Department of Minerals & Energy, Brisbane.

When a number of plan sources are used for original information, the statement is as follows:

## Sample

Original information compiled from plans RP213546 and CP808763 in the Department of Lands and from MP10537 in the Department of Minerals & Energy, Brisbane.

1.47.4 The word "Original" is not shown on Section 25 compiled plans.

See also "DIMENSIONS" 1.27 See also "DISTANCES" 1.28

See also "METRIC DOCUMENTATION" 1.43

See also "WATERCOURSES" 1.69

## 1.48 Parish Boundary

## Sample

Show outside subject block and as close to line as possible. Parish boundary is never broken by dimensions.

Subject to same conditions as "COUNTY BOUNDARY" 1.22

See also "LINEWORK" 1.38.10

## 1.49 Plan Forms

**1.49.1** For surveys to be lodged in the Department of Minerals & Energy the official D.M.E. plan form shall be used.

See also "PLAN FORMS" 3.15

**1.49.2** For cadastral surveys lodged in the Department of Lands the common prenumbered plan form shall be used.

With the exception of the "ENDORSED" box all other information at the bottom of the plan form together with the relevant Certificates, particulars of previous Title/Portion Allocations etc. on the reverse side of the plan form shall be completed prior to lodgement of the plan. (Surveyors reference may be shown in the File Reference box together with any Departmental file reference.)

Vide Direction 15 of the Directions to Surveyors 1992.

## 1.49.3 Availability

Plan forms can be purchased from the following locations:

Secretary, Association of Consulting Surveyors 1st Floor, Silverton Place 101 Wickham Tce BRISBANE QLD 4000 Phone: (07) 831 6668 Fax: (07) 832 6398

#### For DOL:

Department of Lands Regional and District Offices throughout the State. See DOL Requirements for Locations, Addresses etc.

#### For DME:

Department of Minerals & Energy GPO Box 194 BRISBANE QLD 4001

## 1.49.4 Surveys Involving Several Plan Forms

## 1.49.4.1 A Survey Through A Number Of Land Parcels

When a number of plans are drawn for a continuing survey of a Road, Railway, Easement etc. through a number of land parcels, each plan shall be autonomous.

Each plan shall depict the survey in a particular land parcel or parcels in an unbroken manner and be complete with its Tabulations, Diagrams, Statements etc. (ie. treat as individual surveys.)

See also "ADJOINING DESCRIPTION" 1.4. See also "DATUM" 1.24.

#### 1.49.4.2 A Survey Of Large Lot Or One With Intricate Detail

When a number of plan forms are required to show details of a very large lot or a lot with intricate detail, the following shall be adopted:

➤ The subject lot shall be plotted to scale on one plan form showing information as scale will permit, but shall include the Lot number, area, adjoining property descriptions, action statements and metes and bounds. In cases of extreme density, metes and bounds may be tabulated or shown via diagrams on supplementary plan forms. Sufficient station numbers shall be shown to enable identification of detail on accompanying plan forms, as well as notations on the relevant parts of the first plan referring to the appropriate supplementary plans.

Eg. See Plan RP830156 Sh 1

#### NOTE:

Prior approval is to be obtained from the local DOL Operations Manager Titling & Land Information for preparation of DOL survey plans in this format.

(See "DOL Requirements" for locations, addresses, etc)

➤ Each plan form shall show the same title

Eg. Lot 6 cancelling Lot 6 on CP804167 (For DOL) Eg. ML1234 (For DME)

➤ Each plan form will have the same Catalogue Number

Eg. RP830156 Sheet 1, RP830156 Sheet 2 etc

with the main or first plan being catalogued as Sheet 1.

➤ All plan forms of the survey shall be noted with the following statement

Eg. SHEET 1 OF 5 SHEETS, SHEET 2 OF 5 SHEETS etc

#### 1.49.4.3 A Survey Involving A Large Number Of New Lots

When a number of plan forms are required to show a survey containing a large number of new lots (eg new estates), these plans shall be autonomous.

The plans are to be presented similar to any other individual survey on a single plan form, except for the following variations.

Eg. A survey involving 4 plans of subdivision cancelling a lot/s in total.

➤ A statement to be shown on each plan :

"This is one of four plans from the one survey RP800100 to RP800103" For DATUM see RP800100

- ➤ The cancelling clause on three of the above plans will cancel "part of Lot\_\_\_ on RP\_\_\_\_" and the 4th plan will cancel the "Balance of Lot\_\_\_ on RP\_\_\_\_".
- ➤ Being an ongoing survey involving several plans, new descriptions created by the survey are shown appropriately as adjoining descriptions on the accompanying plans.

See also "ADJOINING DESCRIPTION" 1.4.2 See also "DATUM" 1.24.5 - Page 41

## 1.50 Plotting

Plots shall be accurately drawn to scale to within a minimum of 1 part in 150.

The co-ordinate system of accuracy control should be used where necessary to achieve the required standard.

See also "SCALE OF PLANS" 1.58

# 1.51 Proclaimed Survey Areas

Proclaimed Survey Areas are established under Section 12(2)(b) and 12(3) of the Survey Co-ordination Act 1952-89 and Section 29(1) of the Surveyors Regulation 1992.

Surveys within or adjoining a Proclaimed Survey Area should connect to two established Permanent Survey Marks.

PSA's should be identified by statement on the face of the plan directly above the Title Block.

# 1.52 Ranged Only And Reads Bearings

Show as follows:

Sample

See also "CONNECTIONS TO DISTANT POINTS" 1.17 See also "FENCES" 1.32

# 1.53 Reserved Esplanade

- 1.53.1 The landward boundary of the esplanade is fixed at the time of survey for a Deed of Grant to issue.
- 1.53.2 The seaward boundary is subject to accretion and erosion.

See also "ROADS" 1.57

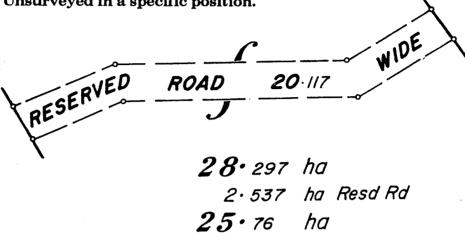
## 1.54 Reserved Roads

#### NOTE:

Reserved Roads and Esplanades may not always be dedicated to public use or provide access. If in doubt refer to local DOL Operations Manager Titling and Land Information for advices. (See "DOL Requirements" for locations, addresses, etc)

Unsurveyed in a specific position.

## Sample



Note method of showing area.

See also "ROADS" 1.57

## 1.55 Resurvey

When a resurvey is carried out with a view to correction of or issue of title or instrument of lease, the normal plan requirements shall apply.

The title of the plan shall be:

Eg. Lot 15, being Resurvey of Lot 15 on RP135694 Cancelling Lot 15 on RP135694.

See also "DOL REQUIREMENTS" EXAMPLE PLAN No 25 See also "DME REQUIREMENTS" 3.10

## 1.56 Road Reservation

Area reserved for road purposes in no specific location.

**1.56.1** Area shown eg.

## Sample

**1.56.2** When subdivision occurs involving a block containing a road reservation, an application for purchase or allocation of the reservation should be lodged with the DOL Regional Director. When advised by

the Department of Lands that the sale or allocation has been approved, then the required statements should be drafted on plan to allow Endorsement by the Minister for Lands or his Delegate.

#### For Allocation

#### Sample

The area ....... ha reserved for road purposes in Lot ..... on plan ...... may be allocated to Lot .... as shown hereon.

Date .....

for Program Director, Land Use

#### NOTE:

The wording of this statement will be supplied by the Department of Lands for each Action.

#### For Sale

When an offer to purchase a Road Reservation is accepted a Section 25 Compiled Plan may be necessary (See E.1.14).

Where a plan is prepared, a statement shall be shown on the face of the plan as follows:

#### Sample

Lot 5 includes the area of former Road Reservation in Lot 5 on RP 230646.

## 1.57 Roads

- **1.57.1** The present name of Roads, Streets and Esplanades shall be shown and be in accordance with the relevant Local Authority nomenclature.
- **1.57.2** Refer to Department of Transport Main Roads Gazette for correct HIGHWAY and MAIN ROAD name.
- **1.57.3** Where only one side of road has been surveyed, calculated distances on unsurveyed side are not normally shown.
- **1.57.4** Esplanades are shown and treated in the same manner on plans as for roads.

#### See also "RESERVED ESPLANADE" 1.53

- 1.57.5 Dimensions and widths for internal roads are shown for complete blocks. Use "Orig" where applicable.
- **1.57.6** For roads forming boundaries of subject blocks, the width, when opposite side is shown must be indicated and plotted to scale

Eg. ROAD 60.35 WIDE

**1.57.7** For classification of road based on width eg PATHWAY, LANE etc. See Section 35 of the Local Government Act 1990

1.57.8 For roads in an unsurveyed state see EXAMPLE PLAN No 6.

See also "DIMENSIONS" 1.27.3 See also "DOL EXAMPLE PLANS Nos 26 — 32" See also "DME REQUIREMENTS" 3.17

## 1.58 Scale Of Plans

- 1.58.1 Plans shall be drawn accurately to a scale that will allow all details and annotations being clearly shown on an A4 second generation copy of the original. This requirement should assist in determining the selection of the appropriate plan scale.
- **1.58.2** A complete plot of the subject block or blocks is drawn on the plan in an uninterrupted manner to the scale as shown in the Title.
- 1.58.3 Diagrams drawn either
  - ➤ to another suitable scale; and/or
  - ➤ 'Not to scale' may be used for clarification.
- **1.58.4** It is suggested that plans and diagrams be drawn to one of the following scales, or multiples to the power of 10 thereof:

	Suggested Pla	n Scales	
1:1	1:2	1:4	1:7.5
1:1.25	1:2.5	1:5	1:8
1:1.5	1:3	1:6	

See also "NOT TO SCALE" 1.45 See also "PLOTTING" 1.50

## 1.59 Secants

Dimensions of secants are shown "on face" or tabulated in the "TRAVERSES ETC" column.

See also "DIMENSIONS" 1.27 See also "LINEWORK" 1.38.7 See also "TABULATIONS" 1.66 See also "TRAVERSES" 1.67

# 1.60 State Boundary

Sample

31

# —x——x——x——x—— NEW SOUTH WALES

See State Boundary Agreement Act, 1983.

Subject to same conditions as "COUNTY BOUNDARY" 1.22

See also "LINEWORK" 1.38.12

## 1.61 Station Numbers

Station numbers are to be shown upright in as simple a format as possible. ie. 1,2,3, with 1a, 1b etc. for secants and close proximity work only.

Adequate station numbers should be shown on the plan to describe survey lines, qualify action statements and other "on face" statements.

See also SPECIMEN PLANS Nos 1 and 2

## 1.62 Styles

- 1.62.1 The use of mechanical guides and computerised drafting equipment will produce styles that may vary from those shown in this segment. The use of this equipment to produce plans is acceptable provided -
  - ➤ That the end result displays the information in a clear and concise manner.
  - ➤ That variable pen sizes, lettering heights, etc. are used to indicate the information in an unambiguous manner, attempting to demonstrate the guidelines contained within the pages of this manual.
  - ➤ That the plan can be reproduced at a reduced scale to enable microfilming to take place.
- **1.62.2** Subject Lot, Mining Tenure (where used as legal property descriptions), Easement, Island and Diagram

Sample

ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234567890 1.62.3 Adjoining Style of 1.62.2 above and their catalogue numbers. Adjacent (non-adjoining) Road, Street, Railway, Channel & Drainage Area. All distances and all column headings and entries. Statements & Endorsements. Corner Information, Plan Title (where applicable), Features (Gully, Bldg, 2B 1P fence etc.), Read and Ranged Only Bearing, Area (right of decimal).

#### Sample

# ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 1234567890

1.62.4 Subject Road, Street, Lane, Pathway, Drain and Channel Area, Railway, Highway, Expressway, Freeway and Plan Title (where applicable).

## Sample

# ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234567890

**1.62.5** Subject Bay, Sea, Ocean, River, Creek. Area (left of decimal), Plan Title (where applicable), Adjoining State eg. N.S.W

# Sample ABCDEFGHIJKLMNOPQRSTUVWXY 1234567890 abcdefghijklmnopqrstuvwxy

**1.62.6** Adjacent (non-adjoining) River, Parish Name (Upper and Lower Case), Bay, Ocean, Sea

#### Sample

## ABCDEFGHIJKLMNOPQRSTUVWXYZ

**1.62.7** Adjoining County Name, Adjoining or Internal Creek NOTE: For Capitals use style 1.62.6

## Sample

# abcdefghijklmnopqrstuvwxyz

1.62.8 Subject Holding, Parish Name on face (when applicable).

## Sample

# ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234567890 abcdefghijklmnopqrstuv

1.62.9 All bearings (except Column entries and Reads), Station Numbers

## Sample

# 1234567890 abcdefghijklmnopqrstuvwxyz

**1.62.10** ➤ Lapsed Lease description for D.M.E. PLANS ONLY

➤ Previous property descriptions on face when entire parcels have disappeared as a result of Crown Resumptions for new Road, Rly etc for D.O.L. plans only.

## Sample

# ABCDEFGHUKLMNOPQRSTUVWXYZ 1234567890

## 1.63 Survey Records

When additional data is lodged in support of the survey eg. creek traverse offsets, this information shall be indicated in the appropriate box on the face of the plan.

#### ie. YES/NO SURVEY RECORDS DEPOSITED

If survey records for a number of plans are in the one book, one plan number should be chosen to be shown on the front of the Field Book and on the front of each plan in the Survey Records Box.

Where the reinstatement of a survey is complex or there are significant differences from either original or other surveys, a report in a Field Book cover should be lodged with the plan.

Where the present definition of High Water Mark (HWM) differs significantly from original HWM, a report in a Field Book cover should be lodged with the plan.

See also DME "FIELD NOTES" 3.8

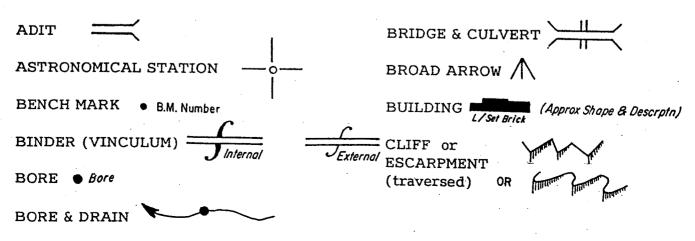
## 1.64 Surveys In Strata

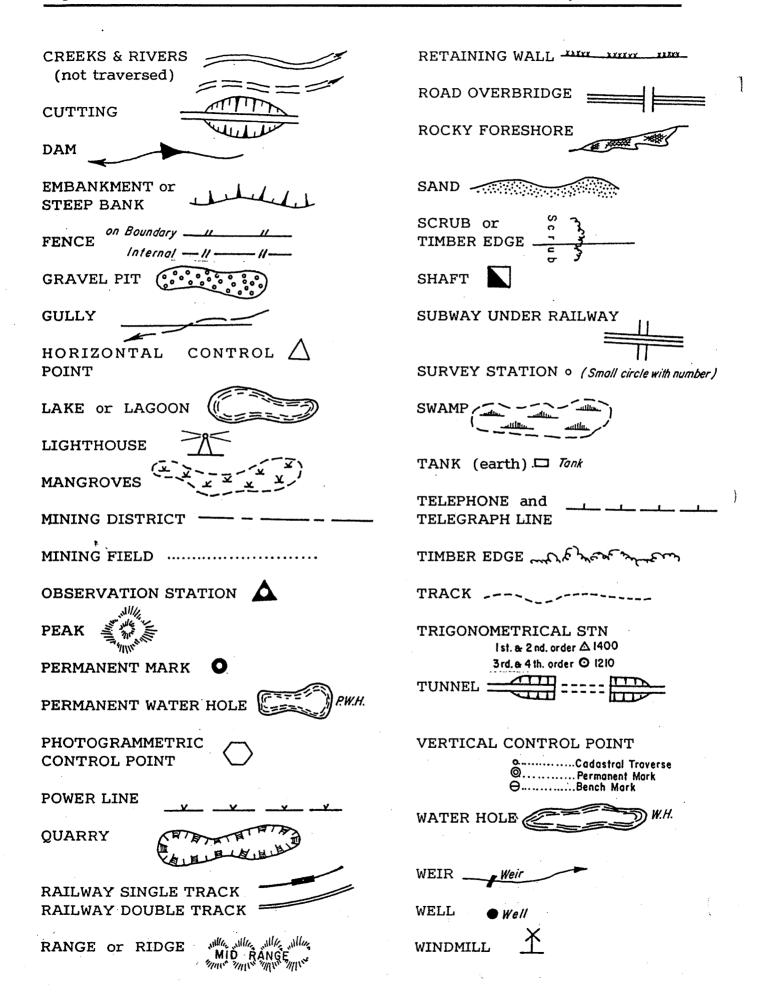
- 1.64.1 Parcels of land with height or depth restrictions shall be fully defined on the face of the plan and shall be described as Lot....... or Easement........... (In Strata) in the Title Block.
- 1.64.2 If a Lot or Easement being created or cancelled has a depth or height restriction, that Lot or Easement shall be described as "In Strata" ie Lot 6 (In Strata), Lot A (Proposed Easement In Strata) in the Title Block. The full depth or height restriction information shall be shown on the face of the plan.

Heights shall be in terms of the Australian Height Datum and be referred to a Permanent Survey Mark of known Reduced Level which is stated on the face of the plan and connected if applicable.

See also DOL EXAMPLE PLANS Nos 12, 13, 37, 38 See also DME "DEPTH RESTRICTIONS" 3.12.5

## 1.65 Symbols





## 1.66 Tabulations

When a plan has been 'turned', tabulations are to be treated likewise so as to facilitate easy reading of plan.

See also "CORNER INFORMATION" Diag. B See also "NORTH POINT & DATA ORIENTATION" 1.44 See also "TRAVERSES" 1.67

## 1.67 Traverses

- 1.67.1 Extraneous field traverse information is generally not shown.
- **1.67.2** When traverse lines are shown, dimensions are shown on face or tabulated in the "TRAVERSES ETC" column.

When tabulation is adopted, numerical order is preferred.

## Sample

	TRAVERSES ETC			
LINE	BEARING	DIST		
1-2	180007'	/3 · /3		
3-4	236° 43'30"	105.26		
5 - 5a	355°32'40"	20.117		

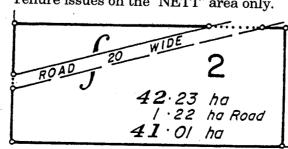
1.67.3 Where a traverse has been run to establish a new boundary along an inaccessible tract (cliff, etc.) the traverse is shown in the normal manner and the boundary shown calculated.

Vide Section 24 of the Surveyors Regulation 1992 and Section 9 of the Recommended Practices for Surveyors.

See also "DATUM" 1.24.1 See also "LINEWORK" 1.38.7 See also "OFFSETS" 1.46 See also "WATERCOURSES" 1.69.2

## 1.68 Vinculum

- 1.68.1 Vincula 'bind' two or more land segments, separated by road, railway etc, to form a single tenement which is usually designated by one property description.
- 1.68.2 When in a surveyed state, an area for the exclusion from the tenement (Road etc) is to be shown on the plan. This results in a "3 (or more) line area" depending on the number of exclusions.
- **1.68.3** Tenure issues on the "NETT" area only.



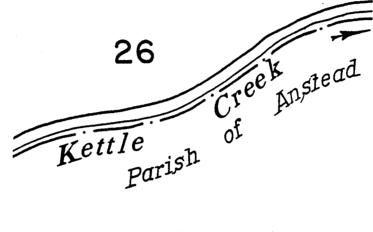
1.68.4 Vincula can be carried forward on alienated land though cannot be created except for resumptions by constructing authorities eg Department of Transport.

See also "AREAS" 1.8.2 & 3 See also "DME REQUIREMENTS" 3.22

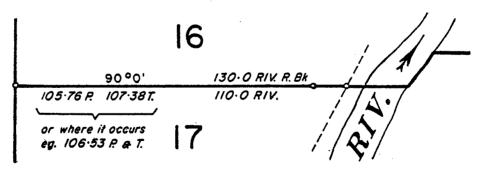
## 1.69 Watercourses

1.69.1 Show opposite bank of watercourse if practicable. It is not always necessary, however, to show information on the otherside of watercourse forming boundaries except for adjoining Parish and County names.

## Sample



- **1.69.2** Distances on the boundary terminating at a watercourse are to include distance to:
  - ➤ Post or Peg.
  - ➤ Traverse.
  - ➤ Bank or Watercourse Boundary (Ck, Riv, etc).



- **1.69.3** Survey records must be lodged showing the watercourse traverse, measurements to the bank and area calculations.
- 1.69.4 An arrow indicating "downstream" ONLY must always be shown.
- 1.69.5 While traverses of watercourses are to be indicated on plan when run, there is no necessity to show when original. The original catalogue number shown along the watercourse will suffice.

# **1.69.6** Where original traverses of watercourses are used to obtain a new area of a lot, it is required that the original traverse dimensions be shown on the plan.

A statement indicating origin of original offsets is also to be shown.

For cases involving vast original traverse data, the original plan number shown along the watercourse boundary will suffice, provided survey records are lodged.

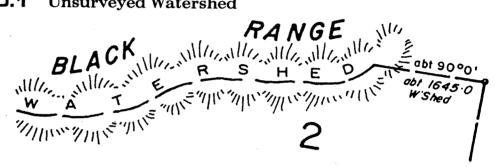
Vide Section 11 of the Recommended Practices for Surveyors.

## 1.70 Watersheds

When "WATERSHED" is the boundary, the following guidelines should apply:

## 1.70.1 Unsurveyed Watershed

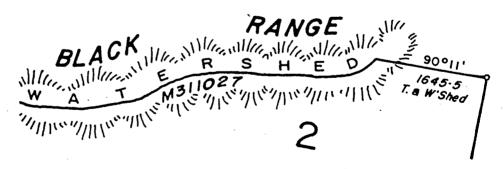
## Sample



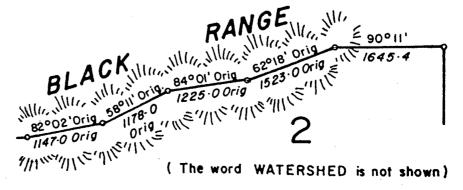
## 1.70.2 Surveyed Watershed

1.70.2.1 Eg.

## Sample

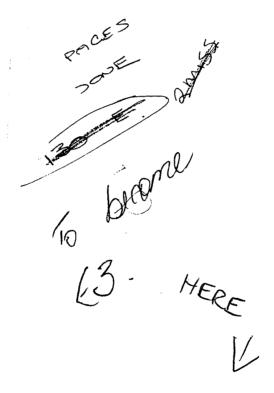


1.70.2.2 If traverse lines have been adopted as the boundary and corners have been marked, then right lines are shown.



- **1.70.3** If in doubt as to which of the above methods is to be used, a search of the original tenure document should be made.
- 1.70.4 Relevant boundaries are labelled "COMPASS SURVEY" as required.

See also "COMPASS SURVEY" 1.14



# Requirements of the Department of Lands

# **Department of Lands**

Cnr Main & Vulture Streets PO Box 40 WOOLLOONGABBA Q 4102

## **Regional And District Offices**

Brisbane *#	South Coast
G.P.O. Box 1401	P.O. Box 1164, M.C.
BRISBANE Q 4001	BEENLEIGH Q 4207
Phone: (07) 227 8225	Phone: (07) 826 0030
Fax: (07) 227 6790	Fax: (07) 826 0079
P.O. Box 864	P.O. Box 5096
IPSWICH Q 4305	BUNDALL Q 4217
Phone: (07) 810 0034	Phone: (075) 885 124
Fax: (07) 810 0068	Fax: (075) 885 133
Central #	Sunshine Coast
P.O. Box 1762	P.O. Box 1080
ROCKHAMPTON Q 4700	CABOOLTURE Q 4510
Phone: (079) 319 995	Phone: (074) 900 015
Fax: (079) 223 673	Fax: (074) 95 7758
Darling Downs	
P.O. Box 962	P.O. Box 573
TOOWOOMBA Q 4350	NAMBOUR Q 4560
Phone: (076) 319 153	Phone: (074) 414 677
Fax: (076) 326 627	Fax: (074) 41 7473
Far North	West
P.O. Box 120	P.O. Box 350
CAIRNS Q 4102	ROMA Q 4455
Phone: (070) 523 226	Phone: (076) 201 027
Fax: (070) 510 851	Fax: (076) 224 516
Mackay	Wide Bay
P.O. Box 63	P.O. Box 212
MACKAY Q 4740	MARYBOROUGH Q 4650
Phone: (079) 518 763	Phone: (071) 237 747
Fax: (079) 573 747	Fax: (071) 224 007
Northern #	
P.O. Box 5318	P.O. Box 1167
TOWNSVILLE Q 4810	BUNDABERG Q 4670
Phone: (077) 221 436	Phone: (071) 538 103
Fax: (077) 714779	Fax: (071) 531 307

<sup>(\*) =</sup> Crown Registering Office - Brisbane

<sup>(#) =</sup> Freehold Registering Offices - Brisbane, Rockhampton, Townsville

# **2.0** Requirements Of The Department Of Lands

This document has been implemented in the Quality Assurance program of the Department of Lands.

## General:

The copies of plans on pages 85 to 131 are examples of the actions necessitating lodgement of cadastral plans in the Department of Lands.

The majority of the examples are copies of original plans held in the DOL which have been suitably adapted to represent specific actions. As such, these examples may not necessarily conform in every respect to all guidelines stated in this manual. For DOL Specimen Plans, see pages 82 to 84.

The Department of Lands Regional Senior Surveyor should be contacted for enquiries concerning surveys that may not be included in the following examples. See Page E2—68 for Regional Office listings.

# Mining Residential Tenures (MHL, MHPL etc)

Conversion to Freehold Tenure of these leases is presently being implemented. The majority of actions affecting these Tenures have therefore been omitted from this edition.

## **Integration Of Departments**

Integration of the former Department of Lands, Geographic Information and Freehold Land Titles into the new Department of Lands has enabled a certain uniformity of standards and requirements to be achieved.

The majority of surveys are performed for the following reasons:

- ➤ Subdivision of existing tenure
- ➤ Addition to existing tenure
- ➤ Excision from existing tenure
- ➤ Creation of new tenure

Examples in this segment are representative of the above integrated processes.

As new DOL Legislation evolves, further standardisation and simplification of Departmental requirements will be implemented in this section of the Guidelines.

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# 2.1 Building Units & Group Title Plans

## 2.1.1 General

See Building Units and Group Titles Act and Regs 1980.

See also Department of Lands publication entitled "Manual of Registration Requirements" - 2nd Edition.

If part of the common property of a GTP or BUP is to be dedicated as New Road, a survey plan of resubdivision should be lodged over the original parcel. The original description shown on the GTP or BUP is then cancelled by this plan.

Where Common Property in a Building Unit Plan or a Group Title Plan is subdivided, the Title on the plan should read:

Eg. Lots 1 and 2
Cancelling Lot 1 on RP123456.

Easements in Common Property are to be shown as:

Eg. Lot A (Proposed Easement) in Common Property on BUP (or GTP) No.1234

## See also EXAMPLE PLAN No 13

In acquisition of additional Common Property the cancelling clause should refer to the original description of the parcel prior to the registration of the Building Unit Plan or Group Title Plan and the description of the area to be added.

A re-survey should be lodged prior to the BUP or GTP if the dimensions of the subject land do not agree within limits of accuracy.

## 2.1.2 Building Units Plans

Adjoining information on a Plan referring to a registered Building Units Plan should also show the Lot description of the parcel on which the Building Units Plan is registered.

Adopt a sequential numbering system to describe the lots in a Building Unit Plan. When in doubt, number sequentially in a clockwise fashion.

## 2.1.3 Group Title Plans

The requirements for the contents of sheet 2 are set out in Section 9(2)(a); (b); (c); (d); (e) and Regulation 8 (1); (c); (e) and (g) of the Building Units and Group Titles Act and Regulations 1980.

Where a Lot consists of separate parts, each part should show the Lot number underlined with the abbreviation "(pt)" and the area of each part. The total area should be shown on the prime part underlined with the word "(total)".

## Sample

$$\frac{5}{(part)}$$
  $\frac{5}{(part)}$   $\frac{5}{m^2}$   $\frac{215 m^2}{(Total)}$ 

The corners of each Lot where a peg has not been placed should be numbered and marks placed should be shown in table form. If there is sufficient space the marks may be shown on the face of the plan. Any buildings, walls or occupation at or near the Lot corners should be referenced.

Internal recovery marks may be shown on Sheet 2, preferably in table form.

Where Lots are surrounded entirely by Common Property, connections to two original corners which have been reinstated from previous surveys should be shown.

Where Sheet 2 consists of more than one sheet at least two connections should be shown between the Lots on each Sheet.

Amendments to survey content may be shown on the plan before or after the plan is lodged. All amendments to the plan are in black ink and require certification by a Licensed Surveyor in the usual manner.

Group Title Plans are subject to consent by the Beach Protection Authority if in a Coastal Management Area.

They are subject to consent by the (Water Resources Commissioner) if in a Catchment, Irrigation or Channel Area.

# 2.2 Canals

Canals are given Lot numbers and the word "CANAL" should be shown in the Lot on the face of the plan and not in the description.

# 2.3 Cancelling Clause

It is imperative that the "CANCELLING CLAUSE" together with the "ORIGINAL PORTION / SECTION / M.H.L. / M.H.P.L." number be correctly completed in the appropriate box in the Title Block.

This will enable plans to be entered (and cross referenced) in the D.O.L. Computerised Plan Registry System (CISP) and to facilitate the update of the Digital Cadastre Data Base.

For plans of Freehold Tenure, the new plan to be lodged shall cancel the whole or the part of the Lot on the Registered plan upon which the present Title was issued. (The original Portion/Lot description shall be that description upon which the original alienation was based).

Original

For plans of Crown Tenure, the new plan to be lodged shall cancel the latest examined plan of land even though Tenure may not have issued from that plan. (ie. the new plan will cancel the latest plan of that lot recorded in CISP).

## Samples:

	Por/Sec/MHI/MHPL
Lot 4: Lot 4 on RP188633	Por 59
Lot 35: Lot 35 on plan FL4023	Por 35v
Lot 905: Lot 905 on plan D2707	Allot 5 of Sec 9
Lot 266: Lot 266 on plan D35245	R.41
Lot 170: Lot 4871 on plan PH224	9 RUN4871
Lot 296: Lot 1 on MPH22850	Sec 1
Lot 347: Lot 347 on MPH34956	MHL335
Lot 351: MHL5601 on MPH1016	2 MHL5601
Lot 62: Vacant Crown Land	

# 2.4 Compiled Plans (Plans without Field Survey)

## 2.4.1 (Section 25 of Surveyors Regulation 1992)

**Previous Description** 

Where appropriate, use may be made of the Section 25 compiled plan for the balance/s of affected land parcel/s resulting from your survey action. This procedure will:

- > simplify drafting procedures
- ➤ unclutter plans and enhance reproduction and archiving capabilities
- ➤ commit the survey plan as a permanent record of the survey action only.

## 2.4.2 Compilations Involving Surveyed Parcels

- 2.4.2.1 As a guide, it is inappropriate to prepare a Section 25 plan if the surrounding search indicates that boundary dimensions misclose or conflict with Deed dimensions or if there is evidence of building encroachments.
- 2.4.2.2 It does not appear to be good practice to utilize a compiled plan and then carry out an Identification Survey for any following action be it a Building Unit Plan or Group Title Plan.
- 2.4.2.3 Compiled surveys are subject to the following:
  - ➤ All corners have been previously marked.
  - ➤ Bearings, distances and areas should be compiled from the original plans only for the Lots being cancelled or other information in accordance with Section 24(5) & 25 of the Surveyors Regulation.

➤ If the original areas are imperial they should be added then converted to the nearest square metre.

# **2.4.3** Compilations Involving Leasehold Land (Surveyed and Unsurveyed)

## 2.4.3.1 See Example Plans Nos 5 to 8

See also "CERTIFICATES" 1.14.4

## 2.5 Definitions

## 2.5.1 Deposited Plan

A plan or copy of the plan deposited with the DOL for the purpose of endorsement as being correct in respect of survey content. (Includes plans lodged for pre-examination, endorsement, and Crown plans which are deposited for passing and recording for use in future dealings).

## 2.5.2 Endorsed Plan

A plan which has passed survey examination and has been officially endorsed by the DOL.

## 2.5.3 Lodged Plan

A plan which has been lodged with the DOL for the purpose of registration as an instrument to give effect to a dealing(s) and recorded in the Unregistered Dealings System (URDS).

## 2.5.4 Registered Plan

A lodged plan which has proceeded to registration with or without accompanying documentation and is now contained within the Land Titles Register of the DOL.

## 2.5.5 Redundant Catalogue (R.C. Plan)

Is that catalogue of plan copies (other than Identification Survey plans) which are submitted to the Registering Authority under Section 30 (1) of the Surveyors Regulation 1992. These copies are held as a record of survey data only and as the original survey plans are lodged the copies are removed from the file and destroyed. Plans currently in this file are known as "Red Cats" and their status shown in the relevant databases by the prefix "RC".

# 2.6 Easements - Proposed

- 2.6.1 Generally easement plans do not require Local Authority consent. However Local Authority approval is required for an Easement Document which is for access for vehicles to a Road.
- 2.6.2 Separate Easements are required for each segment of land.
- **2.6.3** The word "Proposed" shall appear in the plan title and not on the face of the plan.
- 2.6.4 Electricity Authority Easements, which are permitted to be shown by sketch in the Easement Document, need not have the word "Proposed" inserted as they are already established Easements.
- **2.6.5** Proposed Easements which are not implemented by documentation are automatically cancelled by a subsequent Plan of Subdivision.
- **2.6.6** Overlapping Easements are allowable. The second Easement plan should show the first Easement plotted in adjoining style.
- 2.6.7 In intersecting Easements, the intersections do not need to be located and marked. Marking would be required if the intersection is coincident with the corner of the easements involved.
- **2.6.8** An Easement can only by extinguished by "Surrender", "Merger" or "Resumption" or "Absorbed" by the dedication of New Road over the Easement.
- **2.6.9** Sketch plans in the Easement Document are allowed only for transmission lines. They are to be shown on subsequent subdivisions of the land with Easement letter and dealing number.
- 2.6.10 Subdivisions with New Easements in the new Lots should be described individually. However, the description of subdivisions with new Easements in the new Lots may be abbreviated where necessary.

## Sample

Lots 14 to 18 and Lot A (Proposed Easement) in Lot 14, Lot B (Proposed Easement) in Lot 15, Lot C (Proposed Easement) in Lot 16 and Lot D (Proposed Easement) in Lot 17. Cancelling Lot 191 on RP123456.

## Sample

Lots 1 to 8 and Lots A to H (Proposed Easements) in Lots 1 to 8 respectively.

Cancelling Lot 1 on RP 123456

## See also EXAMPLE PLAN No 11

2.6.11 The Proposed Easement should be described separately in the case of subdivision creating New Lots and at the same time creating a NEW Proposed Easement over an adjoining Lot.

## Sample

Lot 1 and 2 Cancelling Lot 14 on RP123456 and Lot A (Proposed Easement) in Lot 15 on RP123456.

## 2.6.12

Resurveys with an Easement in the same parcel should also be described separately.

## Sample

Lot 24 being Resurvey of Lot 24 on RP123456, cancelling Lot 24 on RP123456, and Lot A (Proposed Easement) in Lot 24

**2.6.13** The Proposed Easement should be described separately in the case of a Resurvey of a Lot and at the same time, a Resurvey of an Easement in an adjoining Lot.

## Sample

Lot 217 being a Resurvey of Lot 217 on RP123456, Cancelling Lot 217 on RP123456, and Lot A (Proposed Easement) in Lot 218 on RP123456.

- 2.6.14 A plan of any Proposed Easement that contains height restrictions should:-
  - > show the height restrictions on the face of the plan
  - ➤ be on AHD Datum
  - ➤ show the PM to which they are related and its reduced level on AHD.

## Samples

Lot A is limited to that part of the land which lies between RL 29.2 AHD and RL 33.6 AHD and is related to PSM 12345 RL 95.641 AHD.

Lot A is limited to that part of the land which lies above RL 22.3 AHD and is related to PSM 12345 RL 12.631 AHD.

Lot A is limited to that part of the land which lies below RL 37.2 AHD and is related to PSM 12345 RL 24.685 AHD.

Lot B is limited to that part of the land which lies above the plane(s) of varying heights as shown in Diagram(s) A & B.

**2.6.15** See Example Plan No 12 for treatment of surveys affecting existing easements.

See also EXAMPLE PLAN No 13

# 2.7 Erosion (Correction of Title)

When a plan is lodged for correction of title, the plan should show a lot for the subject land and a lot for the area eroded. The eroded lot may surrendered to the Crown.

## 2.8 Estates

## 2.8.1 For Freehold Land

See Specimen Plan No.2

## 2.8.2 For Crown Land

Treat as for a plan of subdivision.

➤ Indicate by action statement for any areas of New Road.

Eg. Road to be Opened (2-4-7-8).......651m

➤ For Industrial Estates the name is to be shown boldly just above the Title Block.

## Eg. STANTHORPE INDUSTRIAL ESTATE

## 2.9 Leases

## 2.9.1 Leases In Freehold Land

2.9.1.1 If leases are shown on a Registered Plan, then the plan should comply with all the requirements of a normal plan of subdivision.

See also EXAMPLE PLAN No 20

- 2.9.1.2 Leases of land being part of a Certificate of Title should have therein a sketch properly drawn to scale, showing the scale thereon and the direction of the North Point, with bearings and distances and where necessary connection to the title boundary.
- 2.9.1.3 Leases of part or parts of a building should have therein a sketch properly drawn to scale, showing the scale thereon and the direction of the north point. The parcel of land on which the building stands should be plotted in full and should show the position of the building in relation to the boundaries of the land and the layout of the part or parts of the floor/s to be leased by showing all the internal dividing walls particularly with reference to the external walls. No measurements are required and the area should be shown in square metres.

The area to be leased should be hatchured.

Part of a building could be leased by excluding parts thereon so long as the exclusion is part of the Operative and clearly indicated by a sketch.

See also EXAMPLE PLAN No 20

### 2.9.2 Plans Of Leases

Crown Land—See Example Plan No 21

Vested Areas (eg Harbour Boards) — See Example Plan No 22

# 2.10 Local Authority Consent

Local Authority Consent is required for all subdivisions and amalgamation plans of freehold land whether by Compilation or Survey except -

- > Resumptions
- ➤ Actions under Section 5.3 (12) of the Local Government (Planning and Environment) Act 1990.
- ➤ Subdivisions under the Property Law Act Part XI Section 185(1)(b). Order of Supreme Court for relief in respect of encroachment.
- ➤ Easement Plans (Local Authority consent is required for some access Easements, however the Consent is endorsed on the Document and not on the plan).

Plans are to be lodged with the Department of Lands within 6 months of Local Authority Consent, except G.T.P.'s and B.U.P.'s for which there is no time limit.

# 2.11 Memoranda (Requisitions) to Surveyors

Surveyors may appeal against any Memoranda to the Department of Lands Regional Office.

On an individual survey basis, licensed surveyors may authorise in writing in an appropriate manner, other licensed surveyors to attend to the memoranda.

# 2.12 New Road by Freehold Subdivision

Any Freehold subdivisional plan must contain at least one (1) new Lot as a plan cannot contain New Road only.

A plan containing New Road only with an Undescribed Balance will not be accepted.

The Total Area of New Road should include any classified road ie. Pathway, Lane etc. See Section 35.4 of the Local Government Act for road classification and width.

## See also SPECIMEN PLAN No 2

The dedication of New Road takes place when the plan is registered.

Vide Section 5.3 (11) of the Local Government (Planning and Environment) Act 1990.

# 2.13 Undescribed Balances

A plan of a Lot fully covering an Undescribed Balance eg. as a result of stage development, may be compiled.

A compilation of a previously Undescribed Balance Area under Section 25 of the Surveyors Regulation 1992 shall be compiled from the plan of excision and the plan or plans from which the title was issued or other relevant information vide Section 24(5) and 25 of the Surveyors Regulation 1992.

Any plan of the Undescribed Balance requires Local Authority's Consent whether the plan is compiled or surveyed.

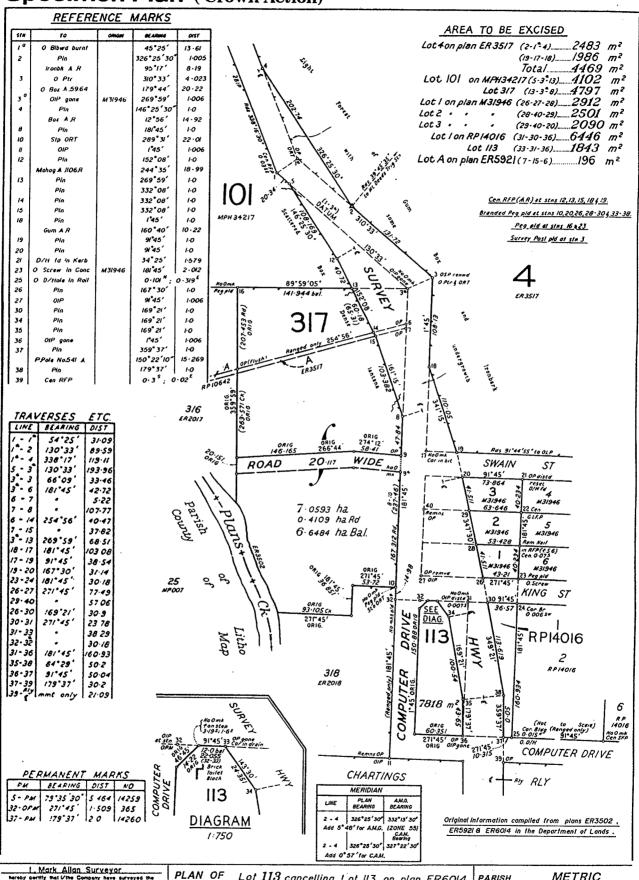
The description should include the word "Balance".

Sample

Lot 123 Cancelling Balance of Lot 123 on RP123456.

See also EXAMPLE PLAN No 9

# Specimen Plan (Crown Action)



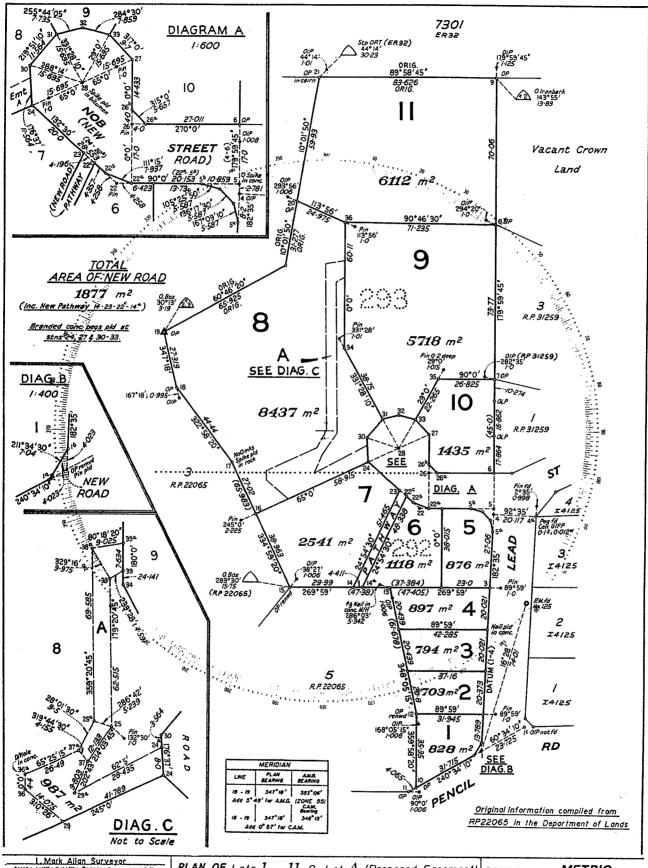
1 Mark Allan Surveyor
hereby certify that L'the Company have surveyed the
land comprised in this plan either personally ex-by-
for whose work hithe Company accept responsibility .
and that the pien is accurate , that the said survey was

Masurveya

PLAN OF Lot 113 cancelling Lot II3 on plan ER6014, Lot 317 cancelling Lot 317 on plan ER3502, and Road in Lots I - 3 on plan M31946 (Orig Sec 4), Lot I on RPI4016 (Orig Sec 5),Lot 101 on plan MPH34217(Orig MHL1017) and in Lot 4 on plan ER3517

92 Obensed Surveyor/	ORIGINAL	L PORTIO	N 317 8	R.3	YES. SURVEY	RECORDS DEPOSITED
Director Director 9.7.92	MERIDIAN As	MAP REF 9541-21134	SCALE 1: 000	FILE REF	ENDORSED	REGISTERING DIST
Deto 2.1.76	Snown	2021104	1. 000	SL29654		BRISBANE

# Specimen Plan (Subdivision Action)



hereby certify that I/the Company have surveyed the land comprised in this plan other personally on by	PLAN					Easement) RP22065.		<b>METRIC</b> Eraser	·••
for whose work if the Company access responsibility and that the plan is accurate, that the said survey was performed in accordance with the Surveyors Act 1977 and the Surveyors Regulations 1992 and that the said		257	o on our	ig E013 1	G 2 011	111 22000.	LOGAL AUTHORITY	MAP. TAPLE S.C.	
Manager Surveyor/	ORIGINA	PORTIC	ON 292 8	<i>2</i> 93	YES SURVEY	RECORDS DEPOSITED		····	••••
	MERIDIAN As Shown	MAP REF 9541-21134	SCALE 1: 000	FILE REF	ENDORSED	REGISTERING DIST BRISBANE	SPECIM	EN 2	

Dated this day of 19  Mayor or Chairman Town or Shire Clerk    19	
I/We	
(Names in full)  • as Proprietor/s of this land. • as Lessee/s of Miner's Homestead agree to this plan and dedicate the new road as shown hereon to public use.    PORTION ALLOCATIONS   LOTS   PORTION   I - 6   292   7 \frac{3}{8}   292 \frac{3}{5}   293   9, IO\frac{3}{5}   II   293   293   9, IO\frac{3}{5}   II   293   29	
This survey has been examined and may be used for land dealings.  Surveyor G	ieneral
Date	
Lot Vol. Fol. Lot Vol. Fol. Lot Vol.	Foi.
Lodged by Received	
Fees Payable  Postal fee and postage  Logt. Exam. & Ass.  New Title  Entd. on Deeds	
File Ref. Particulars entered in Register Book Photo Fee	
Deposited / / Vol. Folio Total Audited / / Short Fees Paid	·
Survey Records: File/Field Notes Charted / /	- 1

## **Addition of Crown Land**

## (Including Road Closure)

	REFERENCE	MARKS	<del>,</del> 1		AVERSES E					VT MARK	****
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Peg	branded A 4	placed at stn	10.	A .	on to be	dad to 1	at 1 a-	p.r	741071		
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				Δr	ea tò be aa	ded to I	ot I on	RP?	63011		
					-11-6-8).						
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	•										

# I. Mark Allan Surveyor hereby certify that I/the Company have surveyed the land comprised in this pina teither personally ac-byfor whose work I/the Company assest responsibility), that the pian is accurate, that the sald survey was performed in accordance with the Surveyors Act and the Surveyors Regulations and that the sald survey was completed on 5/2/92.

was completed on 5.72/32.

Naturally Diseased Surveyor/
Diseased Surveyor/
Diseased Surveyor/
Diseased Surveyor/
MERIDIAN MAP REF
City of
Cab Vide
Diseased 16/2/92
Plan TII8642
Townsville Sh4

PLAN OF

Lots 1 and 4

Cancelling Lot I on RP3245I and Lot 4 on RP4276I.

 ORIGINAL
 SECTIONS
 135
 8
 266

 MERIDIAN
 MAP
 REF
 SCALE
 FILE REF

 CAM
 Vide
 City of
 1:
 000
 SL.43617

 Float 1166421
 Townsville Sh4
 1:
 000
 SL.43617

YES SURVEY RECORDS DEPOSITED

F ENDORSED REGISTERING DIST

BRISBANE

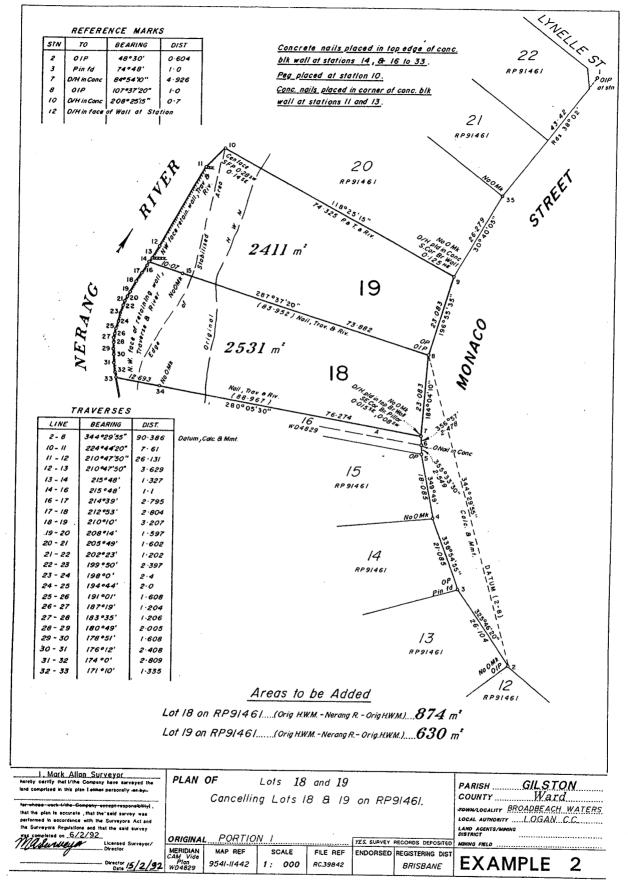
PARISH COONAMBELAH COUNTY Elphinstone TOWNSYILLE

TOWN-LOCALITY CITY, OF TOWNSYILLE.
LOCAL AUTHORITY TOWNSYILLE...C.C..
LAND AGENTB/ARRING
DISTRIOT
MENNO FIELD

EXAMPLE 1

- 1. Action stgatements on face of plan indicating purpose of survey and full description of land involved
- 2. Parcels retain their previous numerical identifier as the new description for the amended lots

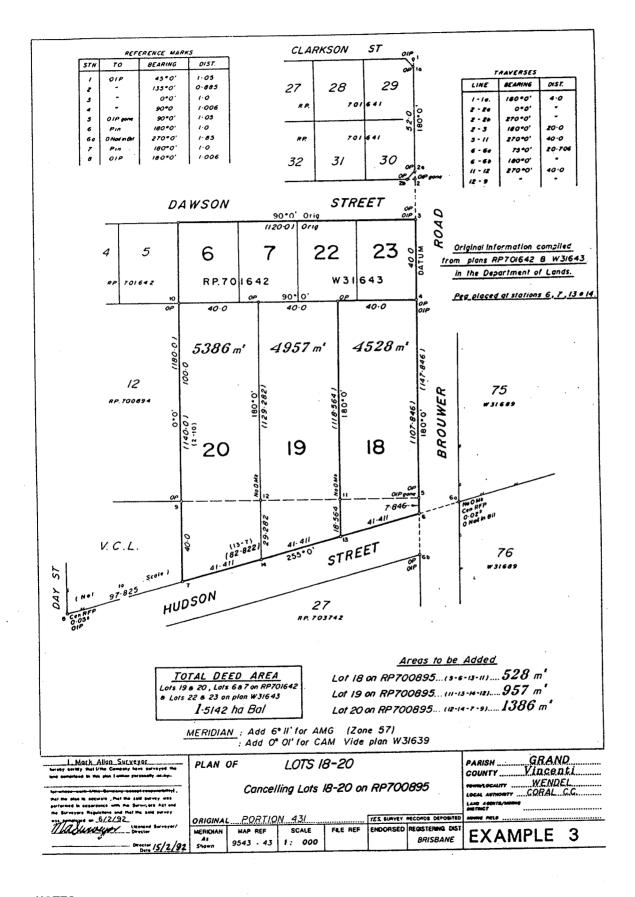
# Addition of Crown Land (Reclamation)



- 1. Description of areas being added in Action statement and full description of land involved
- 2. Description of new and original ambulatory boundaries on the plan
- 3. In this particular instance, the Retaining Wall, River and Traverse are co-incident
- 4. Parcels retain their previous numerical identifier as the new description for the amended lots

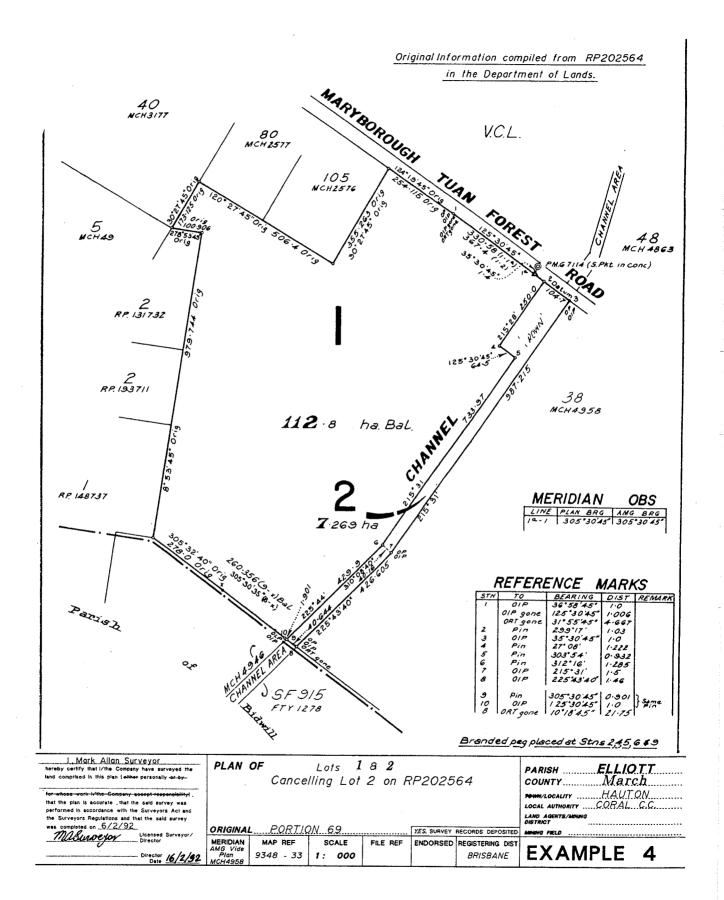
## Addition

## (Crown Land to Freehold Consolidated Title)



- 1. Bordered statement for indicating "TOTAL DEED AREA" of new Consolidated Title. (NB. Lot 18 is not part of this Title).
- 2. Action statements and full description of land involved.
- 3. Parcels retain their previous numerical identifier as the new description for the amended Lots.

## Channel/Drain



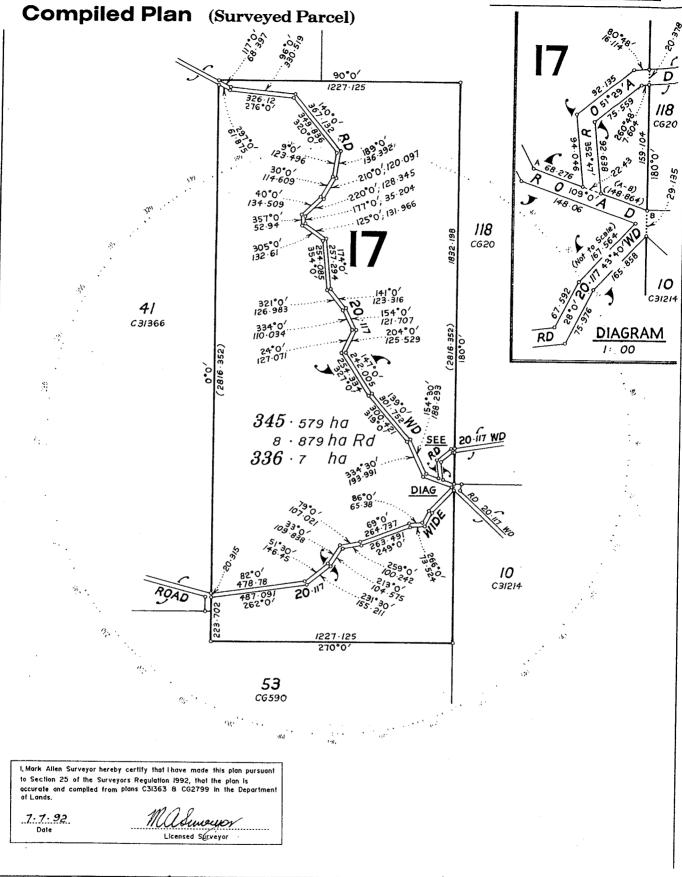
- 1. Channels/Drains are required by the Queensland Water Resources Commission.
- 2. Channels/Drains are described as such on the face of the plan (Do not designate as Area or Reserve).
- 3. The parcel retains its previous numerical identifier.

					<del></del>						
Council of the that all the requirements of this Cou Laws have been complied with and			1	us Title 5009 - 18050	105 Resu	L mptic	ot 2 on Lot	2 R	P 20.	2564 the Cro	PWA
Dated this	day of	19 Mayor or Chairman Town or Shire Clerk									
I/We			1								
as Proprietor/s of this land.     as Lessee/s of Miner's Homestea agree to this plan and dedicate the		ublic use.									
Signature of • Proprietor/s • Le • Rule out which is inapplicable.	ssee/s										
AS CONSTRUCTING AUTHORITY RESOURCES APPROVES THIS I		ER	This su	rvey has bee	n exami	ned and i	nay be used	for land	l dealings		
DATED AT BRISBANE THIS (r)	DUTY TO ALL DAY OF JUNE	1992								Surveyor C	General
	•								Date		
7-1			Lot	Vol.	Fol.	Lot	Vol.	Fol.	Lot	Vol.	Fol.
SECRETARY TO THE COMMISSI	IONER OF WATER RESOURCES.										
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		_	Vew Title								
				Ente	d. on Dee	ds					
File Ref.	Particulars entered in Reg	gister Book	1	P	hoto Fee						
Deposited / /	Vol. Folio				Total						
Audited / / Passed / /				Shor	t Fees F	Paid					
Survey Records: File/Field Notes Charted / /											
Original Grant	at										
						EX	AMF	LE	4		İ
•	REGISTRAR OF TI	TLES					1				

# Compiled Plan (Surveyed Parcel)

## **Notes**

- 1. Metes and bounds shall be shown for internal roads, railways etc.
- 2. For heavily congested plans, metes and bounds need not be shown for internal roads, railways etc. provided all plan catalogue numbers from which this data can be obtained are shown in lieu thereof.
- 3. Plan catalogue number for Creek Traverse to be shown.
- 4. Parcel retains its previous numerical identifier as the new description for the amended Lot.



hereby certify that I/the Company have surveyed the land comprised in this plan (either personally by							PARISH MONSILDALE COUNTY CADDING
for whose work I/the Company account responsibility!, that the plan is accurate, that me said survey was performed in accordance and the Surveyors Act and the Surveyors Regulatins and that the said survey			-	·			TOWN/LOCALITY SWANSON LOCAL AUTHORITY MORETON S.C. LAND AGENTB/MINNED
was completed o	ORIGINAL	L PORTION	1.7		.NO SURVEY	RECORDS DEPOSITED	
Director Date	MERIDIAN of Plan C3/363	MAP REF 9344 - 14	SCALE 1: 000	FILE REF RC35412	ENDORSED	REGISTERING DIST	EXAMPLE 5

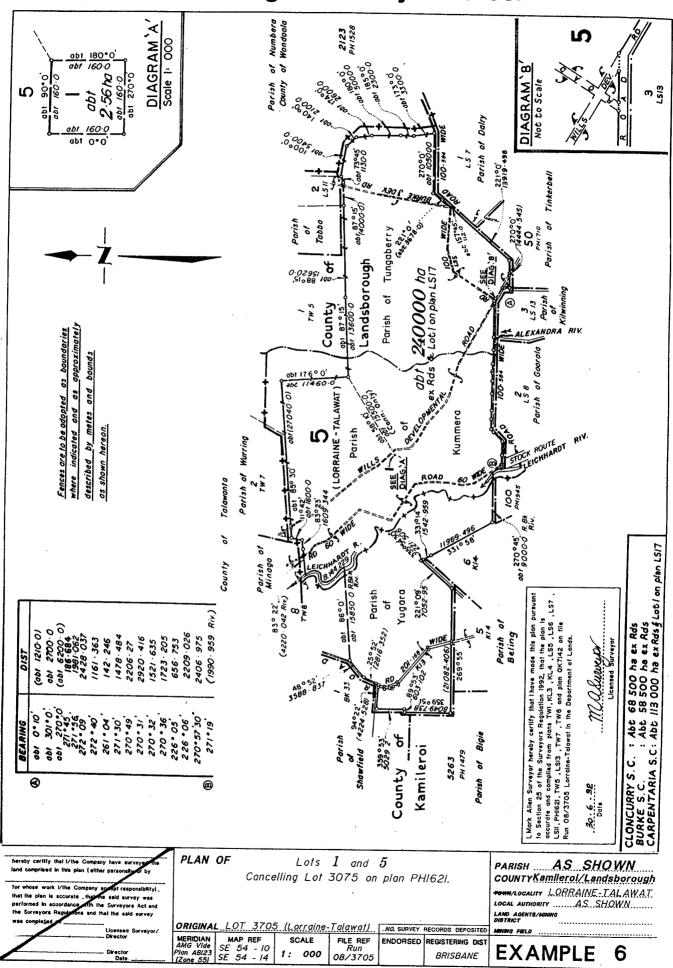
# Compiled Plan Of Large Unsurveyed Parcel

## **Pastoral Holding/Grazing Farms**

## Notes

- 1. The name of the Station/Holding to be shown under the Subject Lot Number on the face of the plan and in the Title Block as a "LOCALITY".
- 2. Areas appropriated to relevant Local Authorities to be shown on face.
- 3. Roads within the Lot, shown as dotted lines on Departmental working maps are by legislation 60 metres wide unless otherwise specified.
- 4. Roads surveyed or unsurveyed are to be shown as a series of double straight lines.
- 5. Statement concerning "Fences to be adopted as boundaries" etc is to be shown if applicable.
- 6. Plan is compiled by collating the latest available data surrounding the Lot. This may vary from surveyed information to "scaling" and approximating information from published maps, sketches on Lands Department Files etc. The plan is NOT drafted purely by tracing or digitising from a published map.
- 7. Additional information eg. maps, aerial photography, sketches, reports etc. that is used in the compilation process is to be incorporated into the Form 13B certificate for cadastral plans.
- 8. This type of plan may be the basis for "upgrading" the accuracy of existing mapping.
- 9. See notes with Example Plan No 8 for accuracies of Metes and Bounds & Areas.

# **Compiled Plan of Large Unsurveyed Parcel**



## Compiled Plan Unsurveyed Parcel (Located)

## **NOTES:**

- 1. There are no strict guidelines for the accuracy of the Metes and Bounds or Areas for unsurveyed Section 25 compiled plans.
- 2. Bearings, Distances and Areas should be shown to an accuracy which would reasonably reflect the "Control" from which this data is approximated.
- 3. The following scale of accuracies may be utilised as a guideline when approximating metes and bounds:

### **BEARINGS**

: Nearest 0° 15'

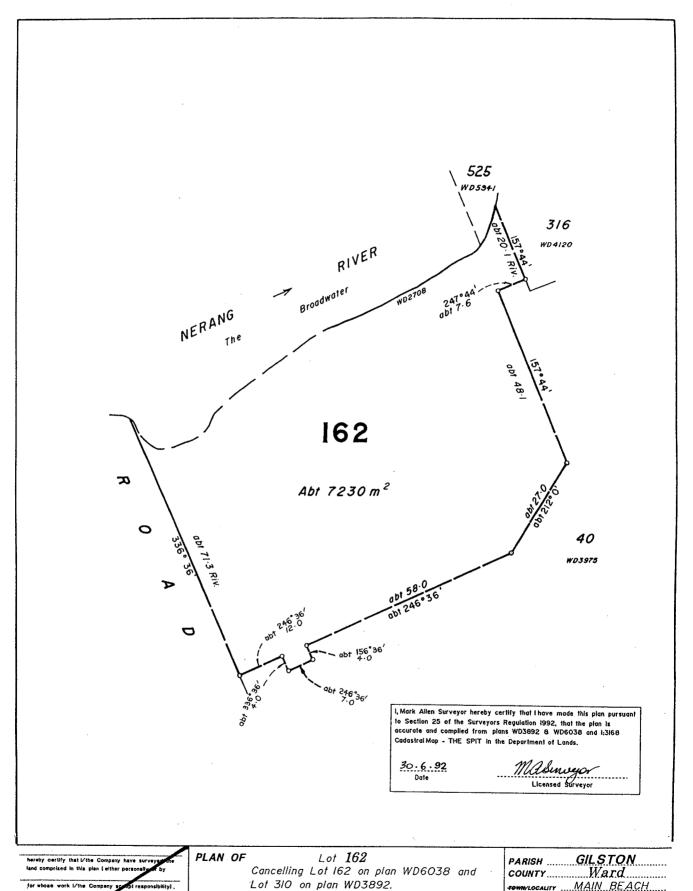
DISTANCES	(According to Scale of Plan)
UP to 1:1250	Nearest 0.5 metres
1:1500 to 1:2500	Nearest 1.0 metres
1:3000 to 1:8000	Nearest 2.0 metres
1:10000 to 1:25000	Nearest 10.0 metres
1:30000 to 1:80000	Nearest 20.0 metres
1:100000 to above	Nearest 50.0 metres

## CLOSE RATIO:

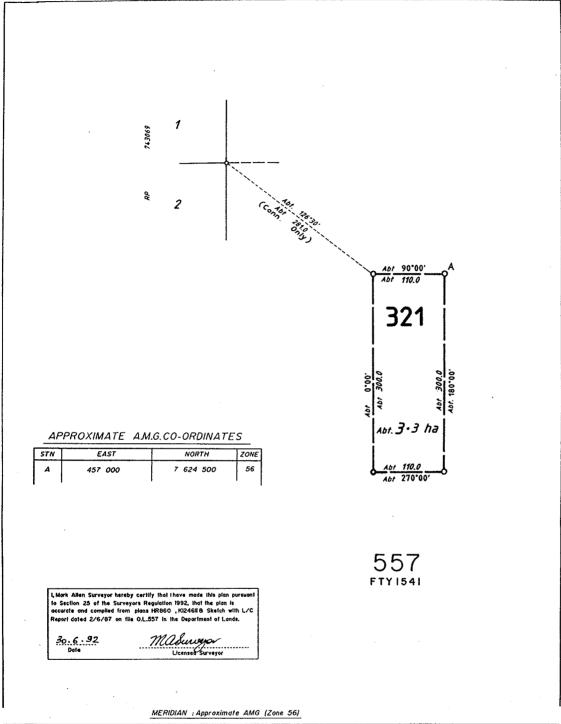
It is desireable that a close ratio of not less than 1:2000 be achieved when compiling plans of Lots with unsurveyed boundaries.

- 4. Generally "Abt" areas are to be shown to no greater accuracy than three significant figures.
- 5. Parcel retains the most recent numerical identifier as the new description for the amended Lot.
- 6. Additional information eg. maps, aerial photography, sketches, reports etc. that is used in the compilation process is to be incorporated into the Form 13B certificate for cadastral plans.

# Compiled Plan Unsurveyed Parcel (Located)



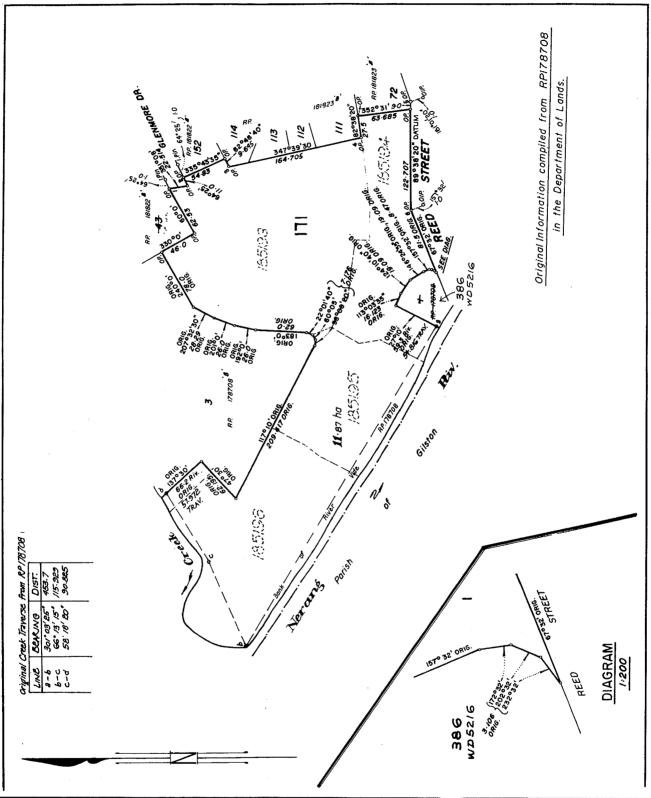
# Compiled Plan Unsurveyed Parcel (Isolated)



# hereby certify that I/the Company have surveyed that comprised in this plan ( either personally by for whose work I/the Company surplif responsibility), that the plan is according in the Surveyors Act and the Surveyors Regulations and that the sald survey was performed in according Regulations and that the sald survey was completed | Consider the Surveyors Regulations and that the sald survey was completed | Consider the Surveyors Regulations and that the sald survey was completed | Consider the Surveyors Regulations and that the sald survey was completed | Consider the Surveyors Regulations and that the sald survey was completed | Consider the Surveyors Regulations and that the sald survey was completed | Consider the Surveyors Regulation and Surveyo

- 1. Connection required to a Cadastral point for "location" of Lot 321 for mapping purposes.
- 2. Approximate A.M.G. co-ordinates may be used to "locate" the land parcels.
- 3. Information given in the Surveyor's Certificate is to include all relevant compilation material used eg. Sketch with Report, Approval, Offer etc. (show date also) and DOL File Reference etc.
- 4. See notes with Example Plan No 7 for accuracies of Metes and Bounds and Areas.

# Creek Traverse (Details from Previous Lot used for New Lot)

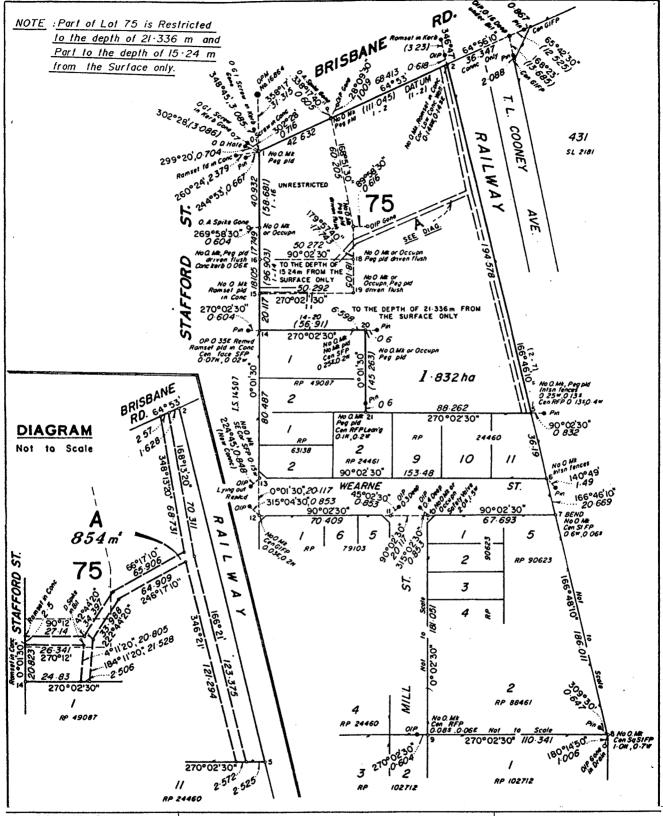


I. Mark Alian Surveyor hereby certify that I/the Company have surveyed the	PLAN	OF	Lot	171			PARISH	NERAL	
fend comprised in this plan ( either personally or by-		Cancelline	a balance	of Lot 2	on RP	178708	COUNTY	Ward	<b>1</b>
for whose work I/the Gompany accept responsibility)		00,,,00,,,,,,	,				TOWN/LOGALITY	SOUTHP	QRT
that the plan is accurate , that the said survey was	İ						LOCAL AUTHORITY .	GOLD. GOA	STC.C.
performed in accordance with the Surveyors Act and the Surveyors Regulations and that the said survey							LAND AGENTS/MINING DISTRICT		
was completed on 6/2/92  Museum Licensed Surveyor/ Director	ORIGINAL	L PORTION	32		YES, SURVEY	RECORDS DEPOSITED	MINING FIELD	*****	
Director	MERIDIAN	MAP REF	SCALE	FILE REF	ENDORSED	REGISTERING DIST			_
Director /5/2/92	of RP178708	Town Map Southport Sh 4	1: 000			BRISBANE	EXAM	PLE	9

## NOTE:

1. Area calculated using creek traverse information from previous plan

# **Depth Restrictions** (Title to Varying Depths)



I Mark Allan Surveyor
hereby certify that in the Company have surveyed the
land comprised in this plan i either personally ex-byfor whose won lither Company except responsibility!
that the plan is accurate, that the said survey has
performed in accordance with the Surveyors Act and
the Surveyors Regulations and that the said survey
was completed on 5./2/92
Licensed Surveyor/
Director

PLAN OF Lot 75 in Strata and Lot A (Proposed Emi) in Strata in Lot 75 cancelling Lot 2 on RP24456 (To the Depth of 15.24m from the surface only), Lot 3 on RP2457 (To the Depth of 21.336m from the surface only), Lot 2 on RP2458 (To the Depth of 21.336m from the surface only), Lot 2 on RP24459 (To the Depth of 21.336m from the surface only), Lot 18 375 on RP44829 (To the Depth of 21.336m from the surface only), and Lot 2 on RP44829.

ORIGINAL PORS 374,375,376 8 382 YES SURVEY RECORDS DEPOSITED MINING FIELD

MERIDIAN MAP REF SCALE FILE REF ENDORSED REGISTERING DIST BRISBANE

OF RP44829 9543 - 43 1: 000 BRISBANE

PARISH IPSWICH
COUNTY Stanley

\*\*\*POWN\*\*LOCALITY BLACKSTONE
LOCAL AUTHORITY IPSWICH C.C.
LAND AGENTE/MINING
DISTRICT
MINING FELD

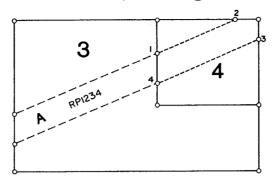
### Note:

1. Demarcation of change in depth restriction to be marked on the surface

1	of certifie cuncil, the Local Government Acts and all By- lid approves this Plan of Subdivision day of 19 Mayor Chairma Town of Shire Cle	or an	ious Title Allocation Yolume	Folio	Lots	70	the der	Lot	ts Allo:	<u> </u>		
I/We												
as Proprietor/s of this land.     as Lessee/s of Miner's Homeste agree to this plan and dedicate the	e new road as shown hereon to public use.											
Signature of • Proprietor/s • L • Rule out which is inapplicable.	essee/s						•					
		This s	urvey has bee	n exami	ned and	may be use	d for land	d dealing	s.			
								Date	Surveyor	General		
		Lot	Vol.	Fol.	Lot	Vol.	Fol.	Lot	Vol.	Fol.		
·												
		Lodg	ed by				R	Rec Registra	eived r of Titles	<u>                                     </u>		
			Fees Payable  Postal lee and postage  Logt. Exam. & Ass.  New Title									
	Γο			on Deed	ds							
File Ref.  Deposited / / Audited / / Passed / / Survey Records: File/Field Notes Charted / /	Particulars entered in Register Bool Vol. Folio			noto Fee Total Fees P	aid				·			
Original Grant	at											

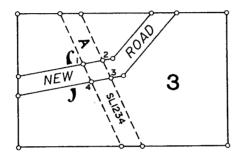
## Plan Requirements For Actions Affecting Easements

Area Resumed by The Crown (lot 4) in Freehold or Crown Land (including Main Road Resumptions)



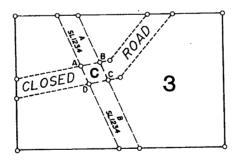
Area to be Excised <u>from</u>
Lot A on Plan RP1234
(1-2-3-4).....0000 m

Road To Be Opened (including area to be excised) at the Instance of Local Authority in F'hold & Crown Land



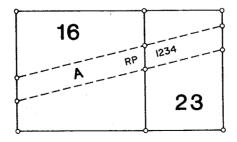
Area of Lot A on plan SL1234 affected (1-2-3-4)......000m

Road To Be Closed (including Area To Be Added)



Plan required of Lot C (Proposed Easement) (A-B-C-D) to reinstate easement right over the old road.

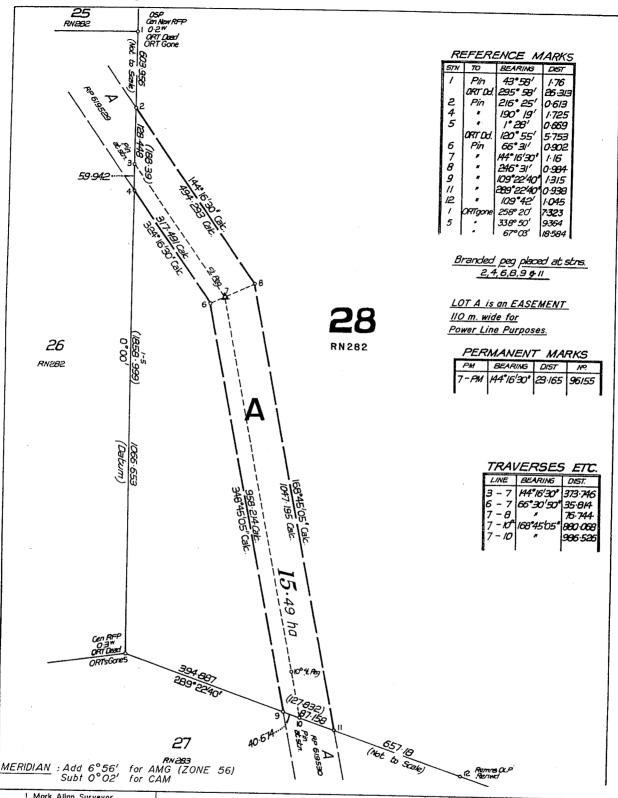
Subdivision (Freehold And Leasehold Land)



## NOTES:

1.If the same type of Tenure is to issue over the Lot being sold (Lot 23) no new Easement or Easement action is required. 2.If an absolute surrender of Lot 23 to the Crown has taken place and a new lease of a different type is to issue thereover, then a new plan of easement is required in both Lots 16 and 23.

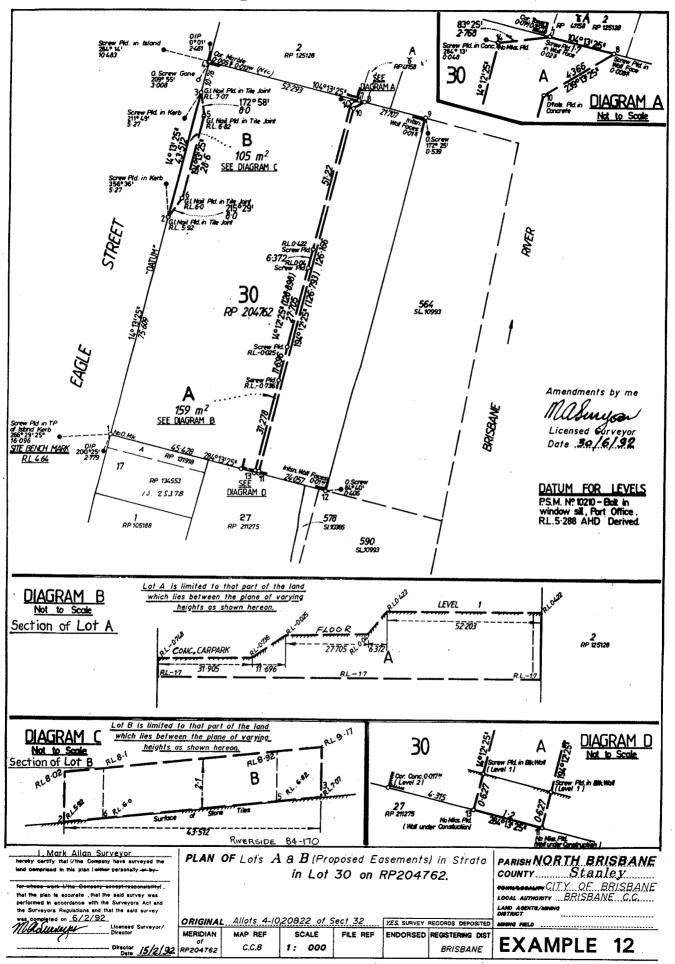
# **Easements**



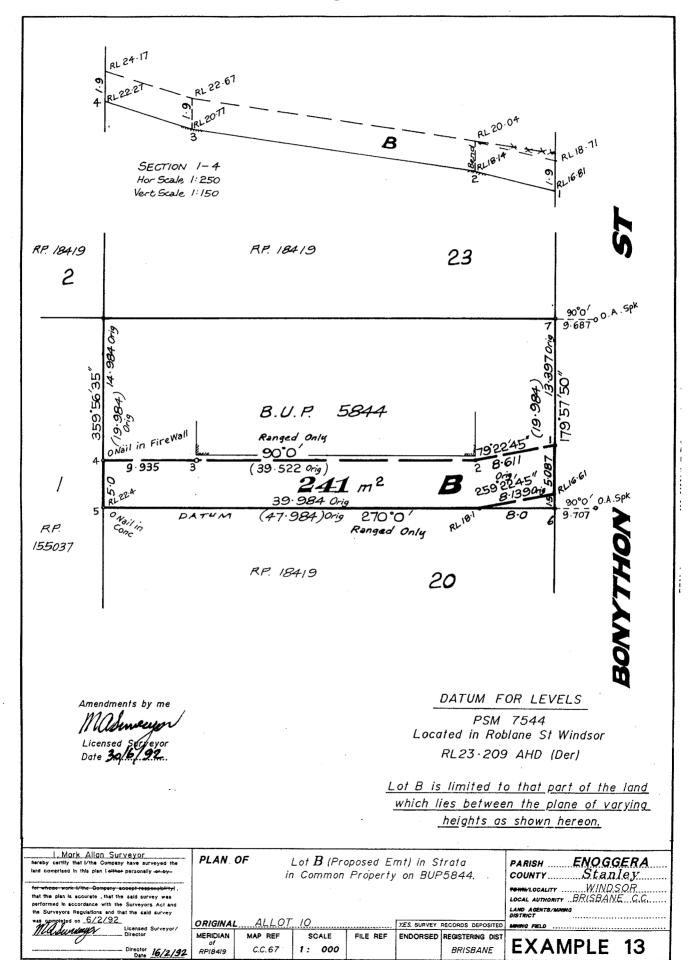
1. Mark Allan Surveyor hereby certify that I/the Company have surveyed the land comprised in this plan ( either personally or by	PLAN		of A (Pro	PARISH GELOBERA				
for whose work I/the Company social responsibility! that the plan is accorder, that the said survey was performed in accordance with the Surveyors Act and		****	Lot 28 a	n pian Ki	V282.		COUNTY Ragian  TOWNTO CALITY M.M. MORGAN LOCAL AUTHORITY M.T. MORGAN S.C.	
the Surveyors Regulations and that the said survey was supplied on 6/2/92 Licensed Surveyor/ Director	ORIGINAI MERIDIAN	PORTION				RECORDS DEPOSITED	LAMO AGENTS/MUNING DISTRICT MINING FIELD	
Director 15/2/92	As Shown	MAP REF 8950 - 2	1: 000	FILE REF F35/8749		REGISTERING DIST BRISBANE	EXAMPLE 11	

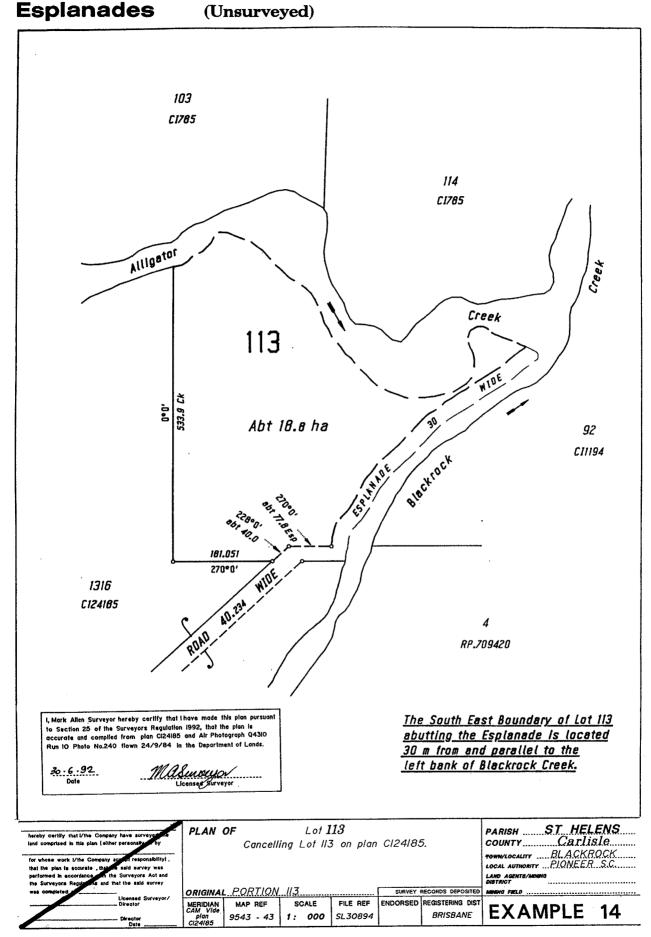
- 1. Width & Purpose of Easement may be shown on face of plan.
- 2. The wording in the Title Block and full description are shown on the face of the plan.
- 3. Surveyed or deduced distances must be shown to a cadastral corner when the Easement crosses a subject boundary.
- 4. Alpha descriptors should not be repeated in any one parcel.

# **Easement with Height Restrictions**



# **Easement in BUP with Height Restriction**





- 1. Statement on face of plan for location of Esplanade boundary.
- 2. Refer to Surveyors Regulations and Recommended Practices for Survey Procedures.
- 3. See also notes with Example Plan No 7

### **Excision** (From Crown Tenure added to Crown Tenure) AREA TO BE EXCISED FROM LOT 2 on plan C25516 and REFERENCE MARK ADDED TO LOT 3 on plan C25519 BEARING DIST (7-3-4-6).... 1400m² 4.109 0.87 1.0 RP 614659 PM BEARING DIST 1-OPM 334° 15' 70385 3.056 No O Mk Cen GIFP (1-04mm,0-715m) TRAVERSES SLIDER BEARING 30·17: 2 1.39 ha 3 3680 m² Branded Peg placed at stations 3,6 and 7. C255/9 MALVERN Original Information compiled from plans C25516 and C25519 in the Department of Lands . I. Mark Alian Surveyor by certify that I/the Company have surve comprised in this plan (either personally c PLAN OF Lots 2 & 3 PARISH KHOSH BULDUK COUNTY Talbot Cancelling Lot 2 on plan C25516 and Lot 3 on plan C25519 . CAPELLA WLOCALITY . LOCAL AUTHORITY PEAK DOWNS S.C. ed on 6/2/92 Malenezgo PORTION YES SURVEY RECORDS DEPOSITED ORIGINAL

#### NOTES:

1. Wording of Action Statement and full description of land involved.

MERIDIAN CAM VIde

2. Parcels retain their previous numerical identifier as the new description for the amended Lots.

MAP REF

8551 - 44342

FILE REF Res 1900 - 66

ENDORSED REGISTERING DIST

BRISBANE

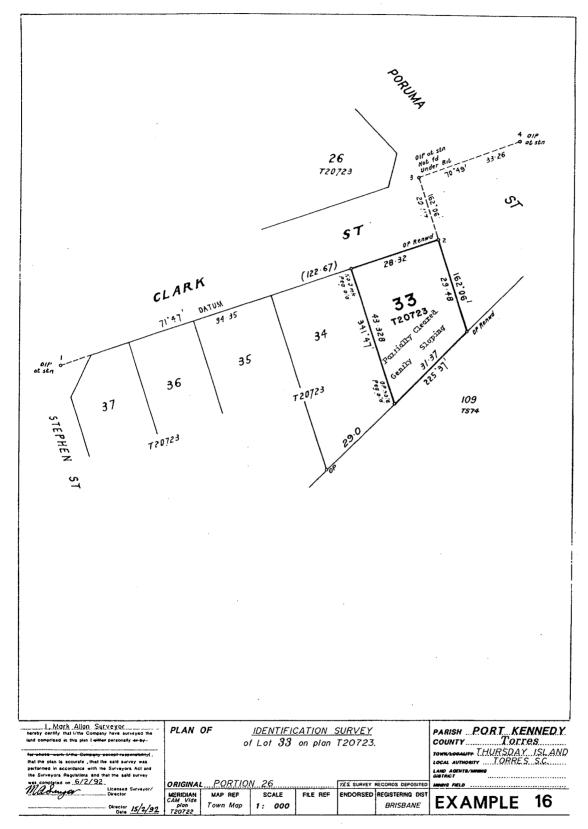
SCALE

1: 000

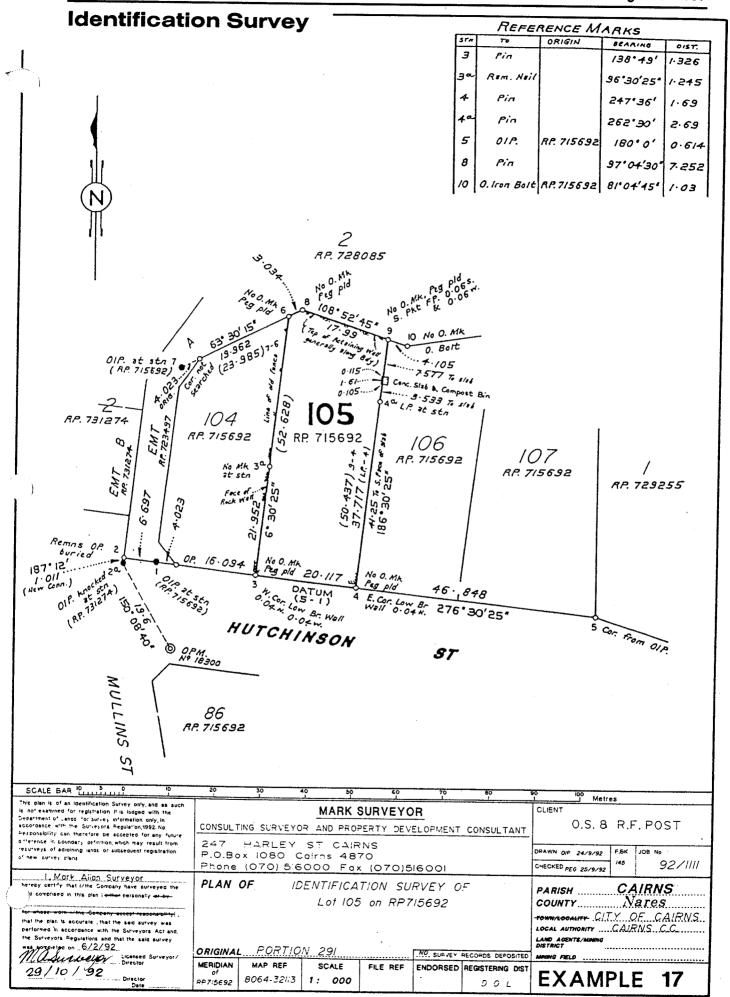
15

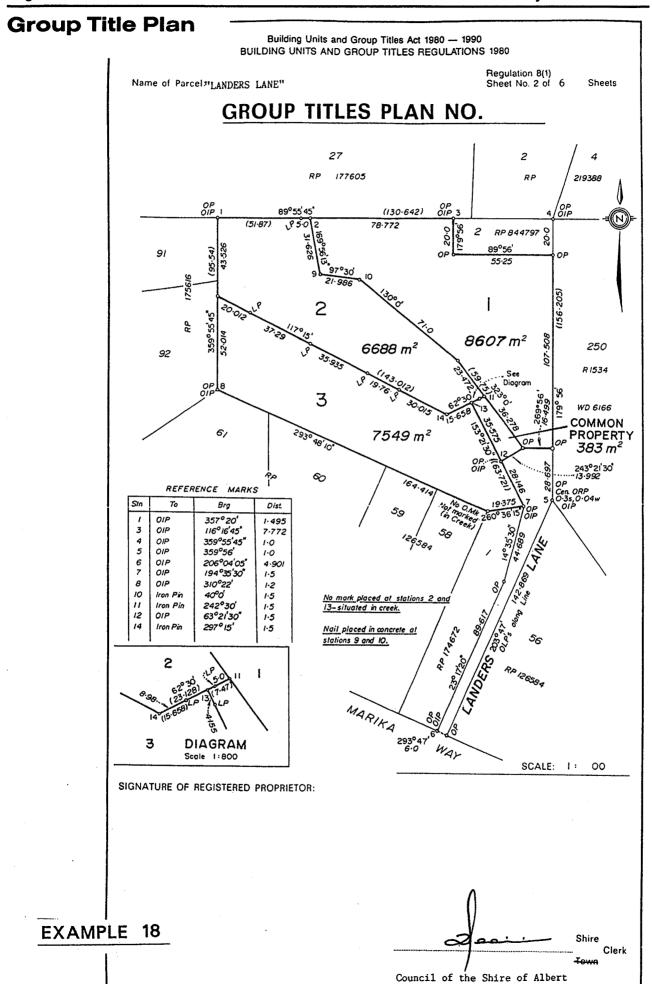
**EXAMPLE** 

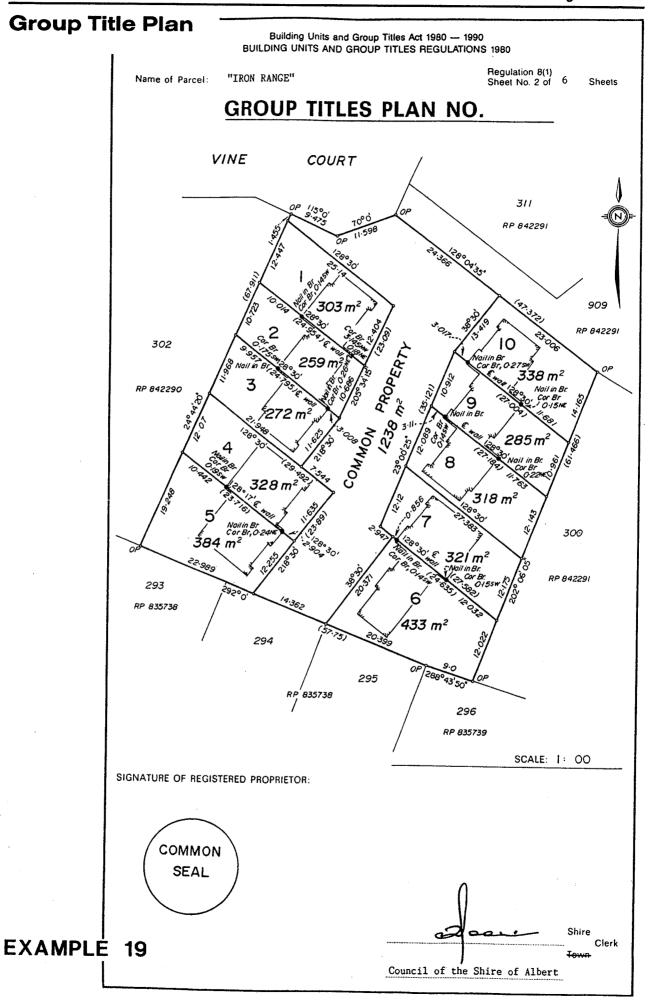
# **Identification Survey**



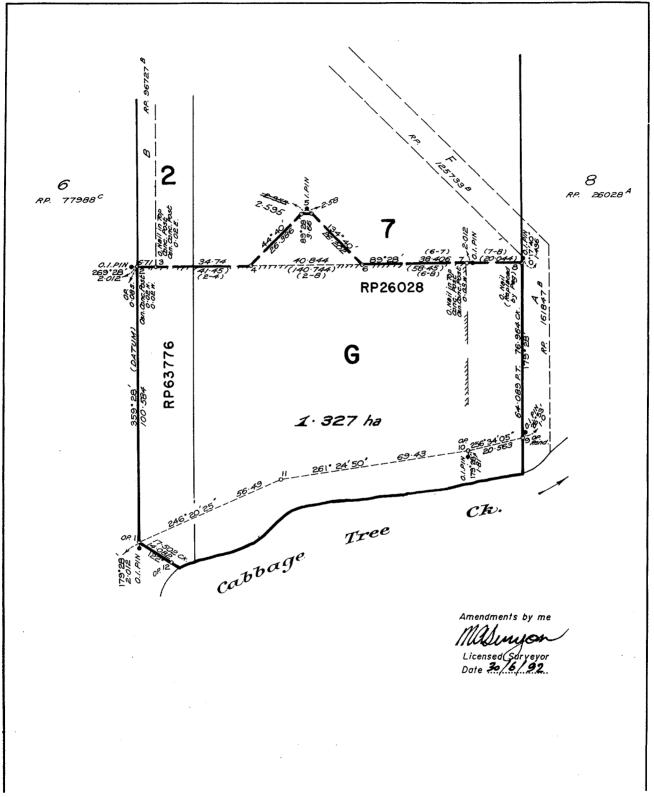
- 1. Full description is shown on the subject Lot and in the Title of the plan in subject style (i.e. Lot on plan description).
- 2. The Department encourages the use of D.O.L. plan forms for these surveys, however Identification Surveys lodged as sketch plans and survey records will be accepted. Plans are to be legible and conform with A2, A3 or A4 size.
- 3. Identification Surveys will not be registered, nor examined at the time of lodgement. However, an option to examine the plan will be reserved by the Surveyor-General.
- 4. Identification Surveys will be catalogued eg. IS489072, charted on the Departmental working map, noted on the Computerised Inventory of Survey Plans (CISP) and microfilmed.
- 5. Map Reference should be shown on Identification Surveys lodged as a sketch plan.







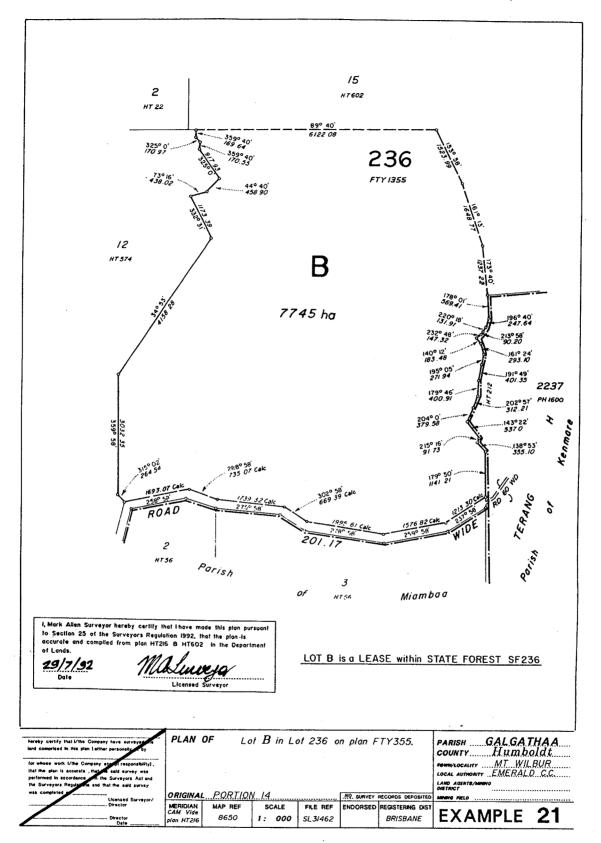
# Lease on Registered Plan Form (In Freehold Land)



i Mark Allan Surveyor
certify that I/the Company have surveyed KEDRON Stanley **PLAN OF** Lot G (Lease) in Lot 7 on RP26028 PARISH ... COUNTY ..... and in Lot 2 on RP63776. SANDGATE TOWN/LOCALITY ... LOCAL AUTHORITY BRISBANE C.C. ORIGINAL YES SURVEY RECORDS DEPOSITED ENDORSED REGISTERING DIST MERIDIAN of MAP REF SCALE FILE REF **EXAMPLE** C.C.24 1: 000 BRISBANE

### Leases

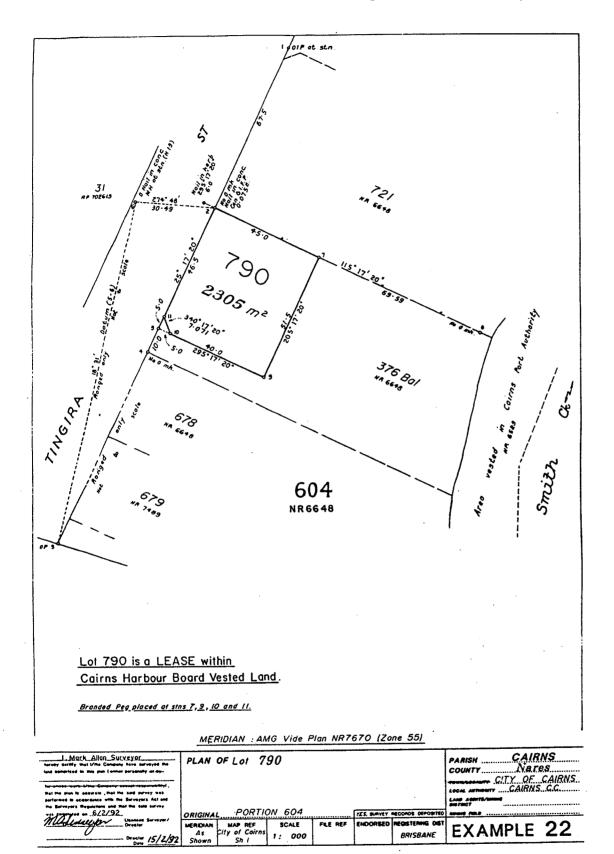
### (In Crown Reserves e.g. State Forest)



- 1. Lot B is a Special Lease within a State Forest described as Lot 236 on plan FTY1355, issued under Section 203(B) of the Land Act and Section 35(2) of the Forestry Act.
- 2. The wording in the Title Block and the full description shown on the face of the plan in subject style.
- 3. Boundaries are shown broken in subject style (similar to Easements) except where they are co-incident with surveyed Cadastral boundaries.
- 4. Alpha descriptions should not be repeated in any one parcel.

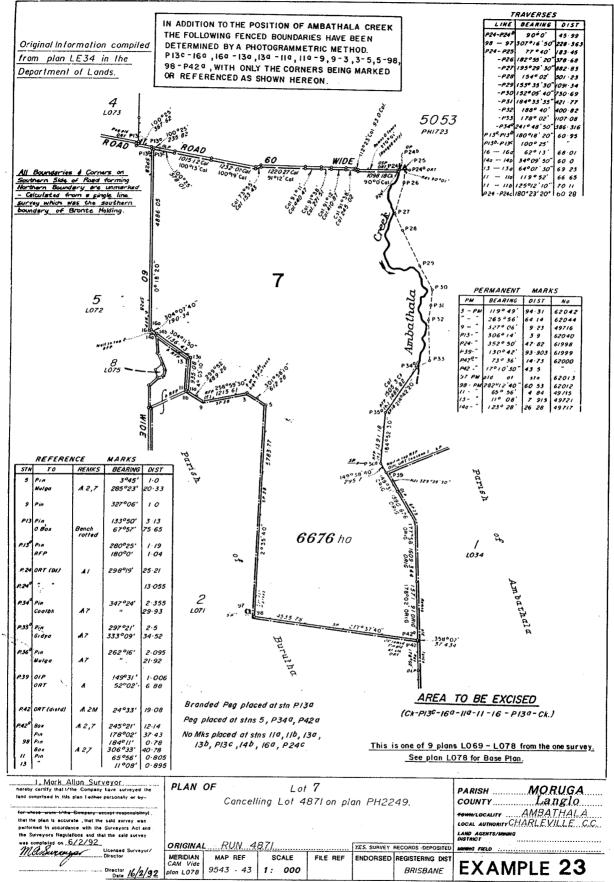
### Leases

### (In vested areas e.g. Harbour Boards)



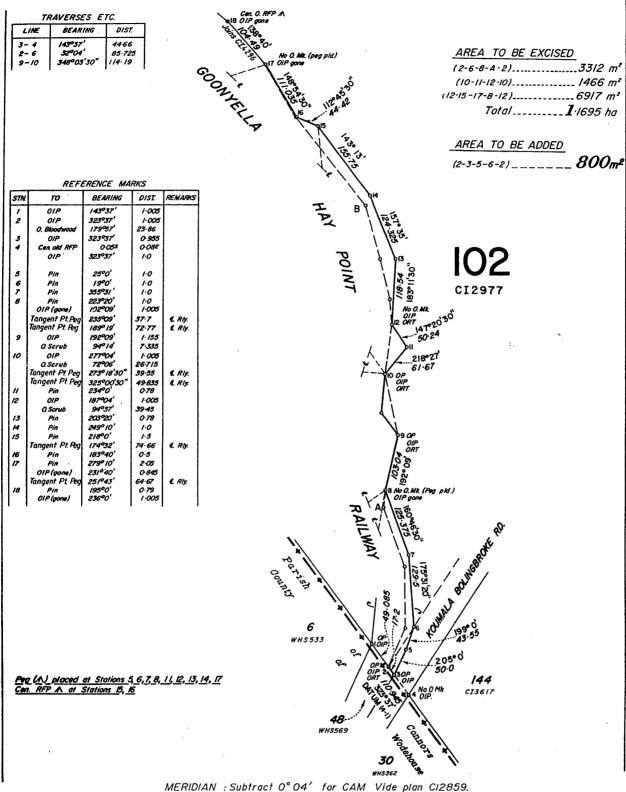
- 1. Plans for Leases in Harbours Corporation are to be submitted to the Department of Transport for approval prior to lodgement in the DOL.
- 2. The statement describing Lot 790 that is shown on the face of the plan.
- 3. Description of Vested Area (Lot 604 on plan NR6648) within which the Lease is located, is also shown in subject style.
- 4. Any additional requirements should be obtained from the relevant Harbour Board/Port Authority concerned.

# **Photogrammetric Survey**



- 1. For advice on this method of survey contact the Regional Senior Surveyor.
- 2. Features (Fences, Creeks etc.) identificable on photography are adopted as boundaries.
- 3. Boundaries determined by a photogrammetric method must be stated and identified on face.
- 4. Statements on face of plan.
- 5. Vide Section 16 of the Recommended Practices for Surveyors.

# Railway in Crown Land



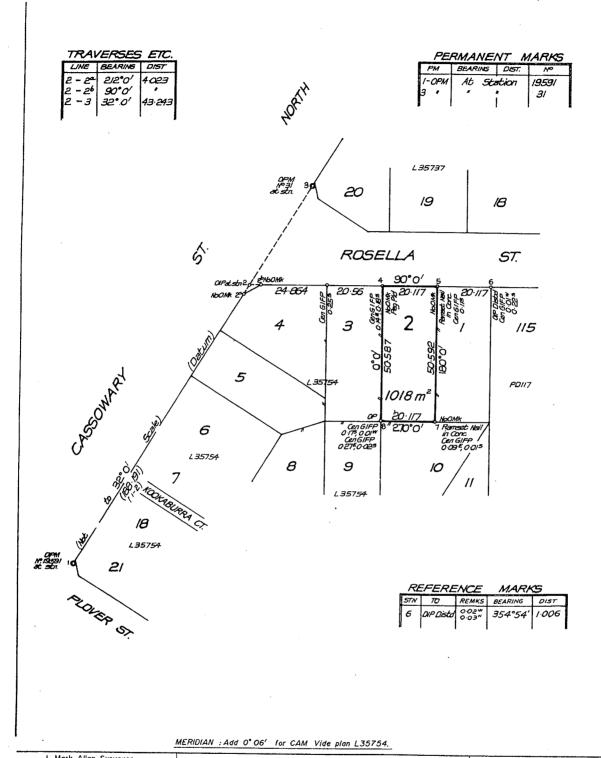
1. Mark Allan Surve hereby certify that I/the Company he land comprised in this plan (either pe	ave surveyed the	PLAN	11771	LWAY IN	LOT <b>10</b>	2		PARISH K	ELVIN erlisle	
for where work t/the Company econ that the plan is accurate , that the a								LOCAL AUTHORITY SAL	Y POINT RINA S.C.	•••
performed in accordance with the S the Surveyors Regulations and that	the seld survey					1		LAND AGENTS/MINING DISTRICT		
	censed Surveyor/	MERIDIAN	PORTION	IO2 SCALE	FILE REF		REGISTERING DIST		······	
$\mathcal{O}$	rector 16/2/92	As Shown	8754 - 42	1: 000	SL30793		BRISBANE	EXAMPL	E 24	
1101L3 —										

1. Wording of Action Statements.

- 2. In this particular case, a Section 25 Compiled Plan is required for the balance of Lot 102.
- 3. If Railway area is already resumed prior to survey, Action Statement will be titled "AREA EXCISED".

4. For Railway in Freehold Tenure, a D.O.L. subdivisional survey plan is prepared.

### Resurvey



y certify that I/the Company have surveyed the	PLAN OF	Lot 2	being R	esurvey	of Lot	2	PARISH	LONGREACH	
comprised in this plan I either personally or by	on plan								
hose work I/the Company eccept responsibility) ,							TOWN/LOGALITY	LONGREACH	
he plan is accurate , that the said survey was resed in accordance with the Surveyore Act and							LOCAL AUTHORITY .L	LONGREACH S.C.	

or 6/2/92 Shown 95

AL. YES SURVEY RECORDS DEPOSITE

MAP REF SCALE FILE REF ENDORSED REGISTERING DIS

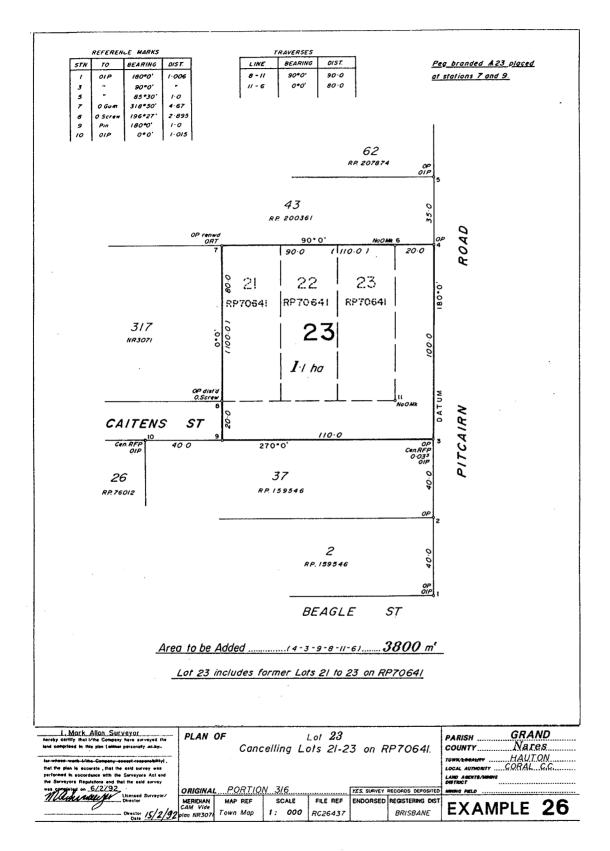
9543 - 43 1: 000 BRISBANE

TOWNAGOALITY LONGREACH S.C. LAND AGENTS/AMMING DISTRICT AGENTS/AMMING DISTRICT AGENTS/AMMING FELD

EXAMPLE 25

- 1. Prepare and lodge plan as a normal survey.
- 2. Show Area on subject Lot.
- 3. Wording of Plan Title.
- 4. This plan can be used for future land transactions.
- 5. Parcel retains its previous numerical identifier as the new description for the amended Lot.

### Road Closure (Addition to and Amalgamation of Freehold Tenure) (Vide Sec. 9 and 365A of Land Act)



- 1. Lots 21,22 and 23 on RP70641 are individual parcels held as a Consolidated Title to which it is proposed to add an area of 'ROAD TO BE CLOSED" (4-3-9-8-11-6). DOL approvals have stipulated amalgamation into one Lot due to removal of access. The Land Act (Sec. 9 and 365A) permits these Actions to be affected on the one plan.
- 2. The Actions statements on the face of the plan required for this Action.
- 3. The description of the new Title may adopt one of the previous numerical identifiers.
- 4. The description of the lapsed parcels may be shown in dotted style where space permits.

# **Road Closure**

# (Addition to undescribed Railway)

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i Mark Allan Surveyor hereby certily that I/the Company have surveyed the land comprised in this plan i either personelly or by	PI
for whose work lifthe Company accept responsibility; that the plan is accurate, that the said survey was performed in accordance with the Surveyors Act and the Surveyor Regulations and that the said survey	
was completed on 6/2/92  Masuryor Licensed Surveyor/ Director	OR.
Director 15/0 /92	P

PLAN OF

AREA REQUIRED FOR RAILWAY PURPOSES FROM ROAD ADJACENT TO LOT 8 on plan CL40329.

RIGINAL PORTION 8 YES SURVEY RECORDS DEPOSITE
FINDIAN MAP REF SCALE FILE REF ENDORSED REGISTERING DIST
NIO43 9150 - 33 1: 000 RC13139 BRISBANE

PARISH CLINTON
COUNTY Gladstone
COUNTY BENARABY
LOCAL AUTHORITY GLADSTONE C.C.
LAND AGENTS/MENNO
DISTRICT

EXAMPLE 27

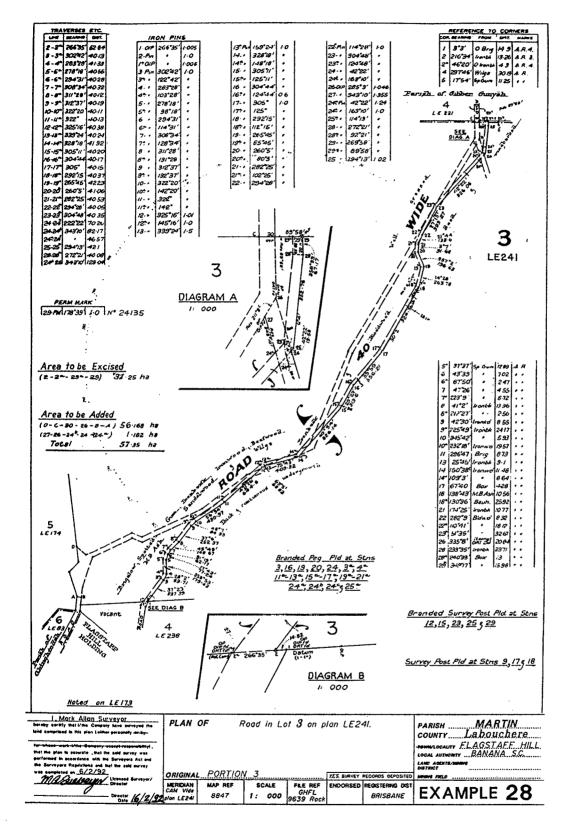
#### **NOTES**:

2. A plan of the amended Railway Area is not required for this type of case.

<sup>1.</sup> As Railway has no Property Description, an adjoining "Lot on Plan" description must appear on the plan and in the Title block in subject style to aid location and enable survey to be recorded in the DOL Computerised Inventory of Survey Plans (CISP).

### **Road Closure**

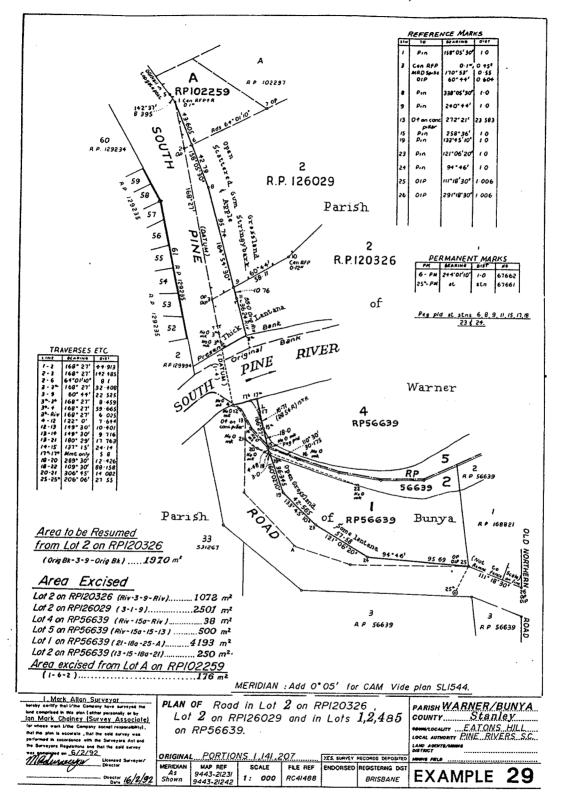
# (For complicated cases) Involving criss-crossing of old and new roads



- 1. New and Old Road to be included in the Action Statements on face of plan.
- 2. Survey and calculations of internal road intersections and severence areas are not necessary unless stipulated in the D.O.L. advices.
- 3. In Crown Lands the Lessee is required to "Surrender" lands from his/her Lease to enable road actions to proceed, these lands will need to be identified on the face of the plan. Action Statements ie. "Area to be Surrendered" with qualifying station numbers will need to be shown. Areas should be calculated.
- 4. Section 25 compiled plan to be drafted as necessary for the amended Lot. (Amended Lot can be completed on plan of survey if scale permits).

# **Road Opening**

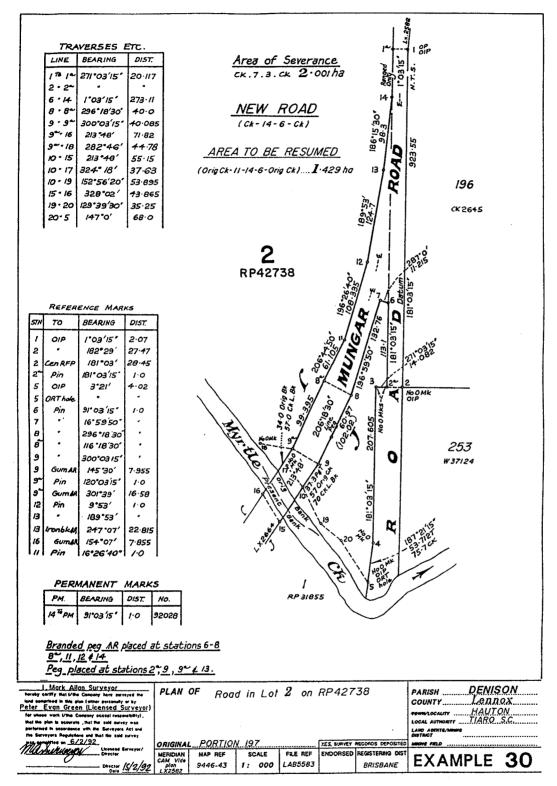
### (MRD Resumption where noticeable erosion in watercourse boundaries noted)



- 1. The special Action Statement necessary for this case.
- 2. The method depicting data on face of plan for location of "present" and "original" river banks.
- 3. An area for the New Road in the affected parcel (Lot 2 on RP120326) need not be shown.
- 4. Cases for accretion are treated in a similar manner. See Example Plan Page 120.
- 5. In addition to the local street and road names, the declared Main Road Name should be shown eg. BRUCE HIGHWAY, TEWANTIN NOOSA ROAD, etc.
- 6. Plans of the balances of the affected Lots can be prepared provided prior knowledge is available from Main Roads as to whether Section 25 compiled plans are required.
- 7. Resumption in Freehold land treat as normal plan of subdivision.

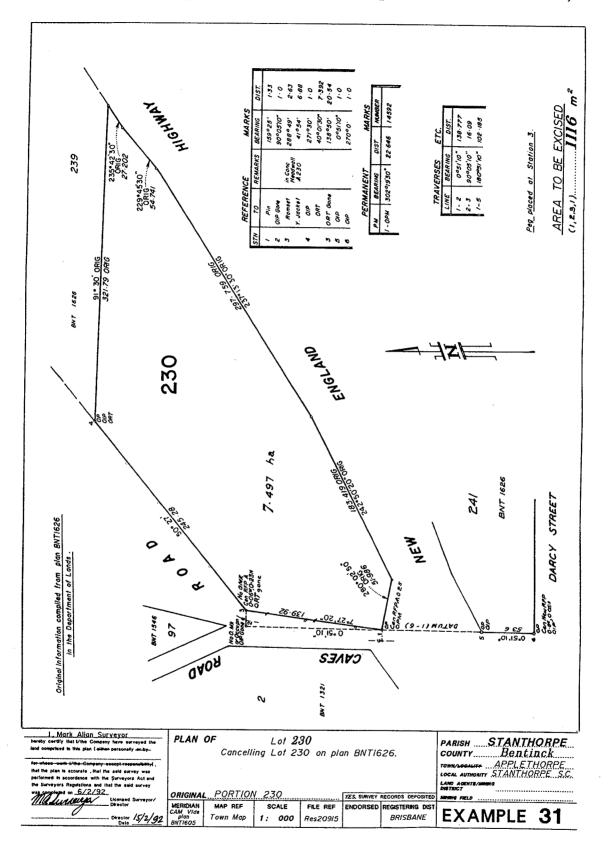
# **Road Opening**

### (MRD Resumption where noticeable accretion in watercourse boundaries is noted)



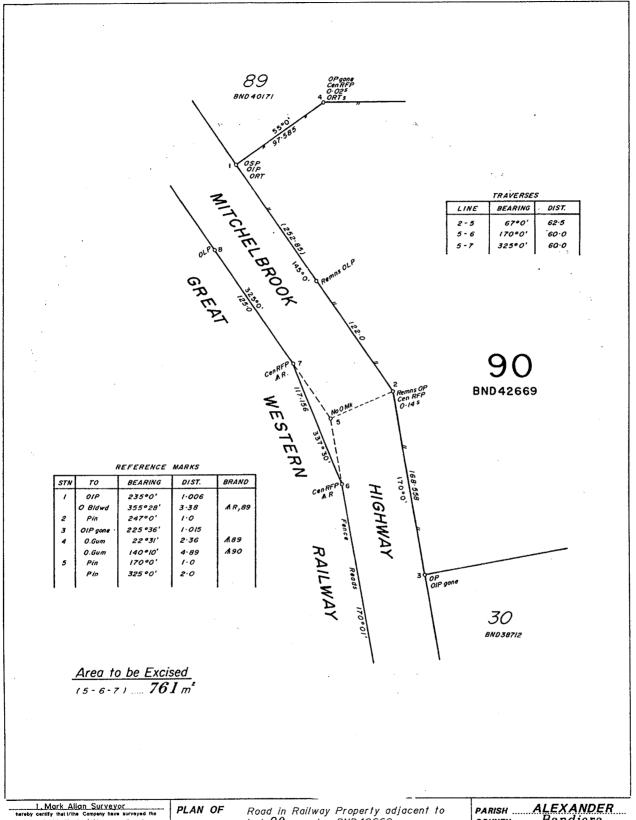
- 1. The special Action Statements necessary for this case.
- 2. The method of depicting data on face for location of "present" and "original" Creek banks.
- 3. Cases for Erosion are treated in a similar manner. See 2.7 Page 78 and Example Plan Page 119.
- 4. Plans of the balances of the affected Lots can be prepared, provided prior knowledge from Main Roads is available as to whether Section 25 compiled plans are required.
- 5. In addition to local Street and Road names, the declared Main Roads name should also be shown eg. BRUCE HIGHWAY, TEWANTIN NOOSA ROAD etc.
- 6. An area need not be shown in the "New Road" Statement.
- 7. Resumption in F/hold land treat as a normal plan of subdivision.

# Road Opening (Main Roads Resumption in Crown Tenure)



- 1. Where scale of plan will accommodate both the Survey Action and the Balance of the Leasehold Land, it is advantageous to combine both Actions on the one plan provided clarity of the plan can be retained upon reproduction at a reduced scale.
- 2. However, to combine both Actions, the metes and bounds of the balance Lot must be in a surveyed state. If this is not the case, a separate Section 25 compiled plan must be drawn for the balance Lot.
- 3. Parcel retains its previous numerical identifier as the new description for the amended Lot.

#### **Road Opening** (Main Roads requirements in Undescribed Railway)



1. Mark Allan Surveyor
hereby certify that/the Company have surveyed the
land compliands in this plan (either personally or by
com Susan Martin (Surveying Graduate)

Road in Railway Property adjacent to Lot  $90\,$  on plan BND42669.

Bandiera COUNTY ....

ORIGINAL MERIDIAN CAM Vide plan BND 42669 MAP REF 1: 000 6143-3

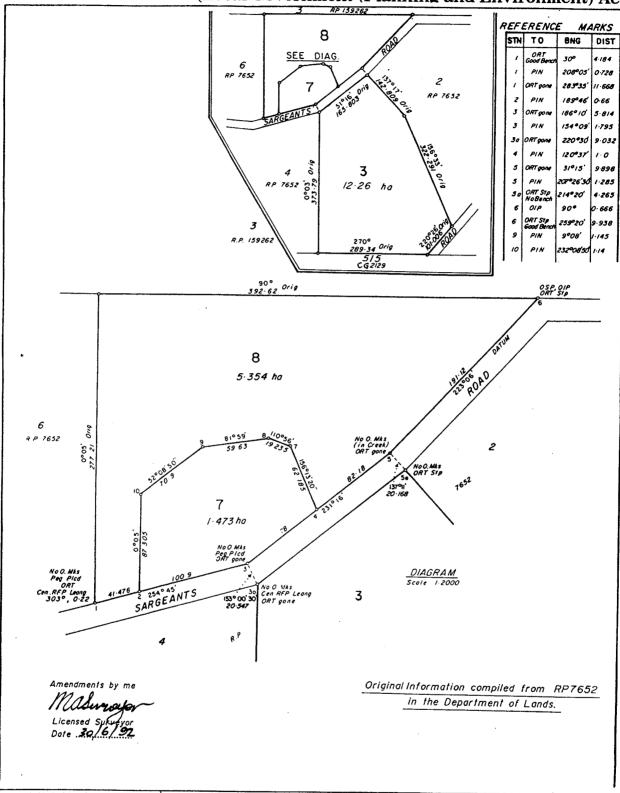
YES. SURVEY RECORDS DEPOSITED FILE REF ENDORSED REGISTERING DIST BRISBANE LAB63148

**EXAMPLE** 

- 1. Title of plan includes reference to an adjoining "Lot on Plan" to help locate the survey, and facilitate the enrolment of the survey in the DOL Computerised Inventory of Survey Plans (CISP).
- 2. A plan of the amended Railway area is not required in this instance.

# Section 5.8.3 Agreements

(Local Government (Planning and Environment) Act)



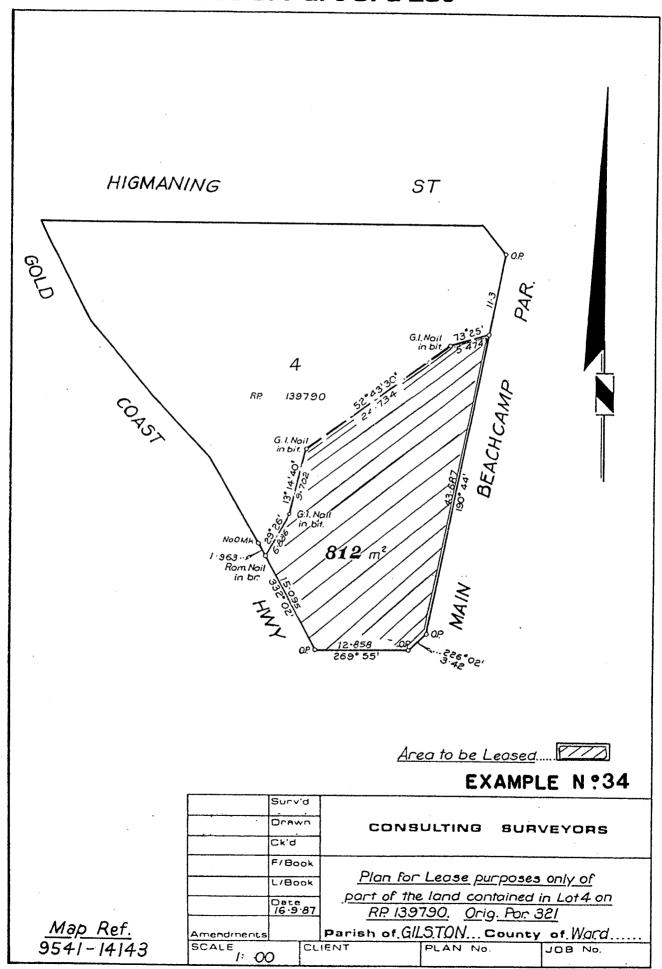
hereby certify that	Align Surveyor  Whe Company have surveyed the	PLAN	OF Lo	ts 3,7	a 8			PARISH BEERV	VAH.	
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	curate , that the said survey was cance with the Surveyors Act and							LOCAL AUTHORITY CALOUNDRA C.C.		
the Surveyors Res	plations and that the said survey							LAND AGENTS/MINING		
Mabure	Licensed Surveyor/	ORIGINAL	PORTIO	N. 17v		.NO. SURVEY	RECORDS DEPOSITED	MININE FIELD	••••••	
HURANO	Director	MERIDIAN	MAP REF	SCALE	FILE REF	ENDORSED	REGISTERING DIST		-	
NOTES:	Director 15/2/92	of RP7652	9543 - 43	1: 000			BRISBANE '	EXAMPLE	33	

1. Plan fulfills requirements of Section 5.8.3 of Local Government (Planning & Environment) Act 1990. (Lots 3 & 7 are linked)

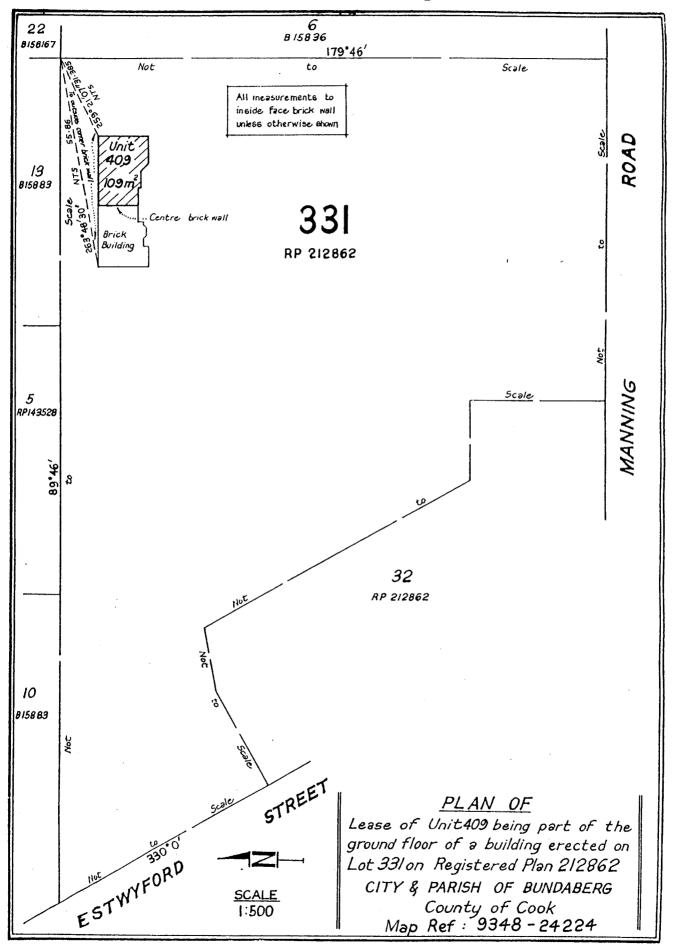
2. Both (or all) Lots which are the subject of the proposed agreement are to be shown on the one plan form on a common meridian and with connections (surveyed or original) between the Lots.

Council of the that all the requirements of this Cou Laws have been complied with and	of certifies incil, the Local Government Acts and all Byapproves this Plan of Subdivision	Previo	us Title <i> 592 -</i> <i> 592 -</i>	19		Lot Lot	3 7	RP RP	7652 7652	
Dated this	day of 19 Mayor or Chairman Town or Shire Clerk	Vo./	1355 K er Sec f in Se C/T AL ume Fo 192 11	110 1 10		to re 66 Act rship	giste) Lo	er an ts 3	Agreei & 7 t	nent o be
I/We										
<ul><li>as Proprietor/s of this land.</li><li>as Lessee/s of Miner's Homestead</li></ul>	d d new road as shown hereon to public use.									
Signature of • Proprietor/s • Le • Rule out which is inapplicable.	ssee/s									
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# Sketch of Lease of Part of a Lot



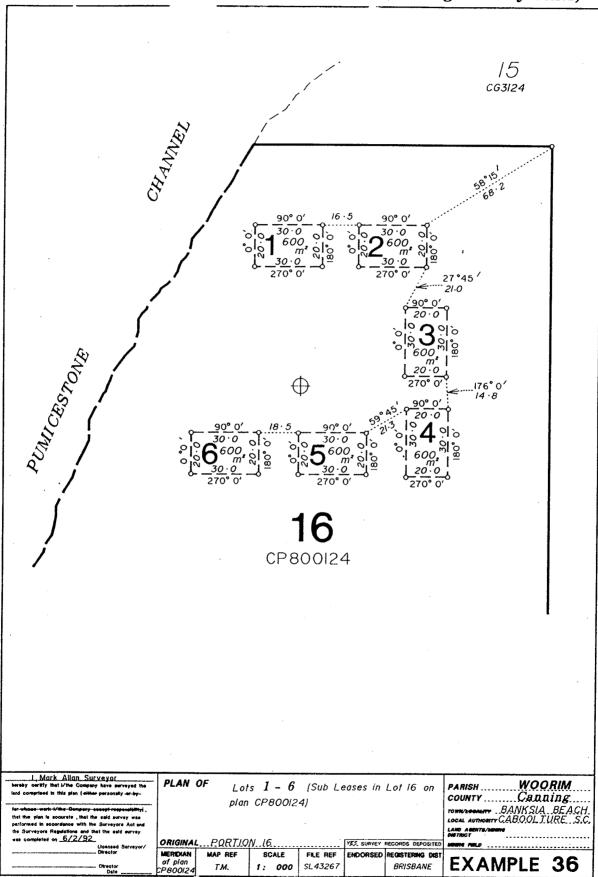
# Sketch of Lease of Part of a Building



**EXAMPLE Nº35** 

# Sub-Lease in Crown Tenure

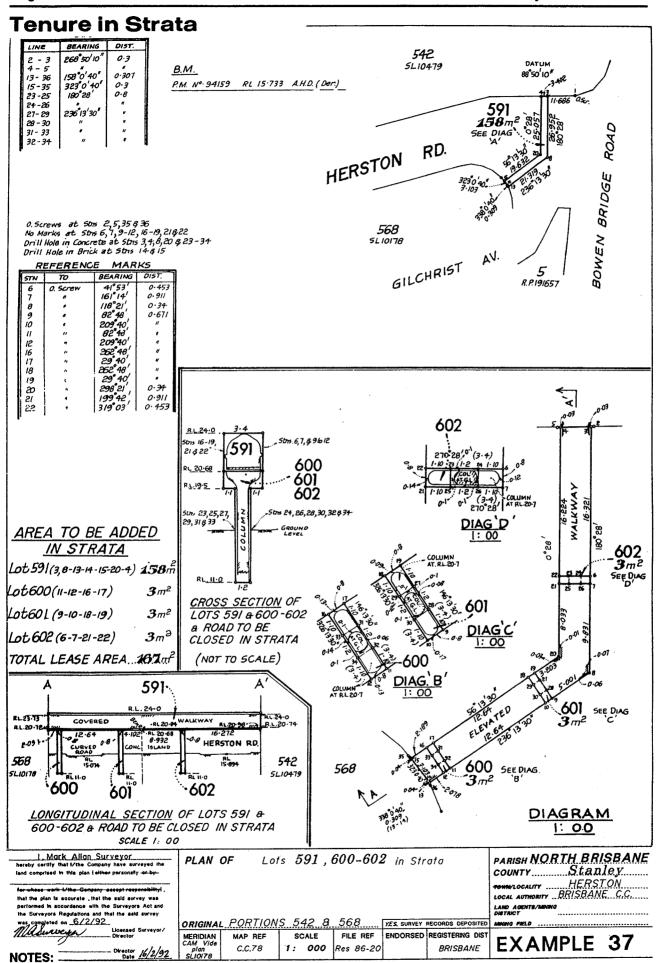
(At the instance of the lessee e.g. Holiday Units)



#### NOTES:

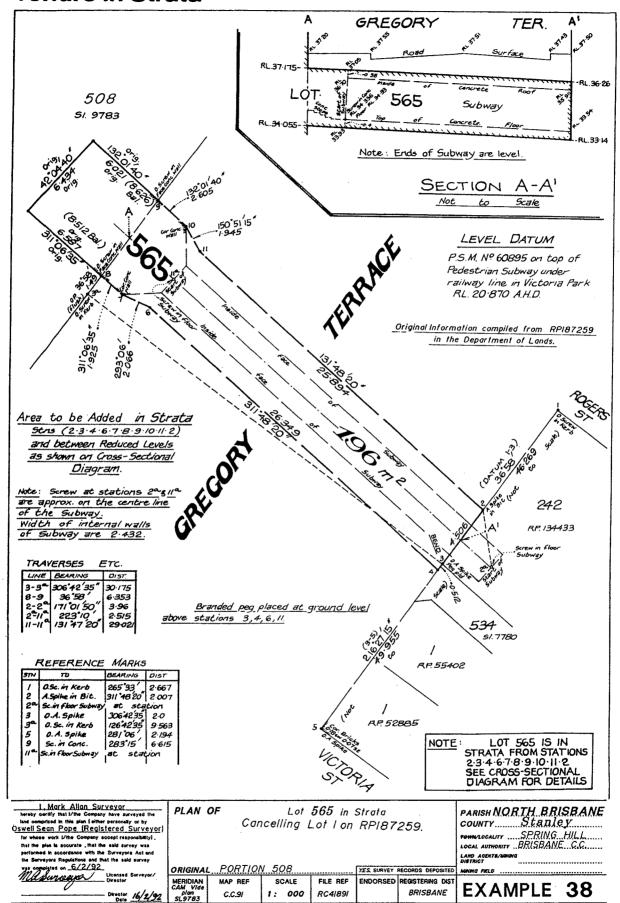
2. The original parent description. ie. Lot 16 on plan CP800124 must be shown on the face of all succeeding plans

<sup>1.</sup> A further breakdown of the Sub Lease need only refer back one generation eg. a subdivision of Lot 2 above — New plan title would read Lots 3 & 4 (Sub Leases In Lot 2 on plan EP800000) and not Lots 3 & 4 (Sub Leases in Lot 2 on plan EP800000 in Lot 16 on plan CP800124)



- 1. Special Statement on face to indicate Level Datum referenced to A.H.D.
- 2. Wording of Action Statement for Road to be Closed.
- 3. Subterrainian boundaries shown by broken lines (similar to Easements).

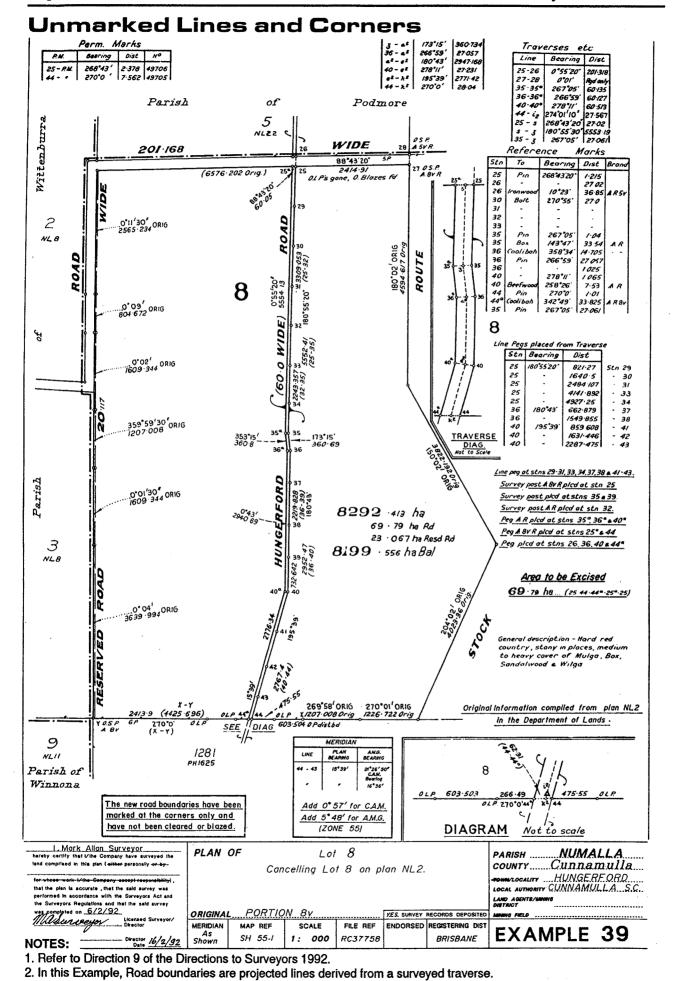
### **Tenure in Strata**



#### NOTES:

The method of representing Cross Sectional diagrams, etc.

- 2. Road Closure in Strata is limited by RLs based on registered Bench Mark referenced to AHD
- 3. For additional information refer to D.O.L. Document No. DYQ/810/000
- 4. For Restricted Titles (Subdivisions in Strata), enquiries should be made with the DOL Regional Senior Surveyor



3. Lines have not been cleared or blazed, however corners have been marked.

4. The bordered statement prominently shown indicating the status of the new survey work.

# Requirements of the Department of Minerals & Energy

### **Department of Minerals & Energy**

G.P.O. Box 194 BRISBANE Q 4001

Ph: (07) 237 1601 Fax: (07) 237 1634

**Att: Chief Surveyor** 

A plan of survey of a Mining Lease may be lodged subject to the Surveyor complying with the Mineral Resources Act 1989 - 1990 and the Mineral Resources Regulations 1990.

Specimen Plans indicate as far as possible most requirements of the Department. However specific actions would be detailed by the Chief Surveyor in the survey instructions.

If doubt exists, the Chief Surveyor Department of Minerals & Energy should be contacted.

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	Compiled Plans	3.5
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н	Handbook For Resource Industries Surveys	3.9
ı	Identification Survey	
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	Petroleum Well Location Surveys	3.14
_	Plan Forms	
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Ā	Right Of Way	3.16
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S	Special Franchise Agreements - See Relevant Acts	
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	Statutory Mine Working Plans	3.19
	Surface Areas - See Mining Lease	3.12.2
	Surrenders - See Mining Lease	3.12.7
	Survey Records - See Field Notes	3.8
Г	Title	3.2
J	Undescribed Balance	*
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# **GENERAL NOTE**

Type and Line Styles should be standardised appropriate for industry standard electronic (computer) production of plans.

### 3.1 Areas

Areas are computed in accordance with General Requirements 1.8

Should a "three line" area be involved, the exclusion may be shown by statement and providing all bearings and dimensions are shown — or may be inferred by a reference to a previous plan, the Nett area only is shown on the plan.

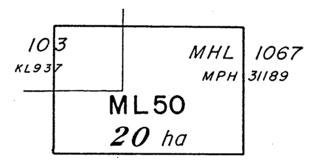
### See also "ROADS IN MINING LEASES" 3.17

Where more than one previous plan in involved, to avoid ambiguity in Datum and dimensional differences, the subject plan should be fully dimensioned.

# 3.2 Background Tenures

3.2.1 Where a Mining Tenement covers lands held under other tenures, all boundaries and descriptions of those lands are to be shown on the plan. The boundaries of the subject block are to be distinguished by heavier lines. Show underlying descriptions in light block as follows:-

### Sample



**3.2.2** When surface rights exist severances and connections are required.

### 3.3 Certificates

### 3.3.1 Certificate Required For Mineral Resources Plan

hereby certify that
I/the Company have surveyed the land shown in this plan (either
personally or by for whose work
I/the Company accept responsibility), that the plan is accurate, that
the survey was performed in accordance with the Mineral Resources
Act 1989 and the Regulations made thereunder, and that the survey
was completed on

***************************************	*************************
Approved Surveyor	Date

#### 3.3.2 Certificate Required For Petroleum Well Location Plan

(*) h	ereby certify that
I/the Company have surveyed the location of the	
shown in this plan, that the plan is accurate, th	at the survey was
performed in accordance with the Petroleum Act	1923-1988 and the
Petroleum Regulations (Land) 1966 and that the	survey was com-
pleted on	

Signature of Approved Person

Date

(\*) Insert full name of Approved Person

### 3.4 Claims And Areas

Claims and Areas as defined by the Mineral Resources Act are registered by the Mining Registrar and generally are not surveyed subject to Section 11.21 of the Mineral Resources Act. Where surveyed, show as for Mining Lease requirements.

## 3.5 Compiled Plans (Plans Without Field Survey)

- **3.5.1** Prior approval of the Chief Surveyor must be obtained for all compiled plans.
- 3.5.2 Information may be compiled from examined DEPARTMENT OF MINERALS & ENERGY, and DEPARTMENT OF LANDS plans only. Dimensions are not qualified by the word "Orig." Station Nos. or letters are shown only when required to describe specific actions (ie. Additions etc.)
- **3.5.3** If a compiled surround closes within the allowable limits of error, a calculated area should be used. If not, a compiled area is to be used and labelled where applicable "Bal".

#### 3.5.4 Compiled Plans Involving Existing ML's

Compiled plans involving actions on existing ML's must bear the following statement:

Sample

Copied and compiled from ....... (Plan No/s ......). in the \*Department of Minerals & Energy, Brisbane.

(\*) Substitute or add "Department of Lands" where applicable.

### 3.5.5 Compiled Plans Involving Unsurveyed ML's

3.5.5.1 Compiled plans involving new ML's must bear a Section 25 certificate to which should be added:

#### Sample

and that the Datum Post was found by inspection to agree with the Lease Application as shown hereon.

Licensed Surveyor

3.5.5.2 Compiled plans of ML's must show "Datum Post" on the face of the plan, with a connection from the appropriate lease corner tabulated as per the reference shown on the application.

An accurately measured connection is not required.

- **3.5.6** Where the compilation of plans cannot meet the requirements of 3.5.2 directions from the Chief Surveyor should be sought.
- **3.5.7** For private compiled plans the "DRAWN" box should be amended to "COMPILED BY".
- **3.5.8** Plans compiled by the Department of Minerals & Energy should be labelled "OFFICE COMPILATION" in the "DRAWN" BOX.
- **3.5.9** The title of the plan is the same as if it were a survey.

#### 3.6 Consolidated Leases

Two or more contiguous leases may be cancelled, amalgamated into one lease over which a new lease and number shall be issued. A survey is required.

# 3.7 Exploration Permit

**3.7.1** On plans showing a point, line or area of an EP, the sub-block corners of which are described by geographic co-ordinates, the datum of the co-ordinates should be stated on the face of the plan as follows:

### Sample

Geographic Co-ordinates on Australian Geodetic Datum eg. AGD 84

- **3.7.2** All bearings should be referred to the True Meridian.
- **3.7.3** When bearings are given, both forward and reverse azimuths must be shown where applicable.

- **3.7.4** If geodetic points are not available in the district at the time of survey, and an EP corner is determined by astronomical observations, a certificate signed by the holder and all adjoining EP holders, agreeing to accept the boundaries as located, must appear on the plan.
- 3.7.5 Plans of EP surveys should show connections to cadastral boundaries and comparison of meridians where practicable. Where observations are taken, a meridian table should be shown, vide "MERIDIAN" 1.42
- **3.7.6** In the Title Block a full Tenure description is applicable.
  - ➤ Exploration Permit Mineral No 123 (On face "EPM" may be used)
  - ➤ Exploration Permit Coal No 123 (On face "EPC" may be used)
  - ➤ Authority to Prospect Petroleum No 12 (On face "APP" may be used)

#### 3.8 Field Notes

Complete statement on plan form as follows:

- eg. (a) NO FIELD NOTES LODGED
- eg. (b) FIELD NOTES LODGED 26.1.88

#### NOTE:

The Mineral Resources Act requires that Field Notes be lodged for all plans.

# 3.9 Handbook For Resource Industries Surveys

A guide to survey requirements for actions effected under the Acts administered by the Department of Minerals & Energy is available from the Chief Surveyor.

# 3.10 Identification Survey

3.10.1 Plan requirements for boundary identification survey of all or part of any existing mining tenement are the same as the plan requirements for a survey of that tenement: except that the plan title should be headed:

#### Sample

IDENTIFICATION SURVEY OF

**3.10.2** Identification Surveys to be drawn on Department of Minerals & Energy plan forms.

### 3.11 Lapsed Boundaries

**3.11.1** Lapsed boundaries are previously cancelled boundaries or boundaries of dead leases.

They are generally only shown when used for survey reinstatement. Measured bearings and distances are shown on face of plan. Former description of the expired lease when required is shown in dotted hairline.

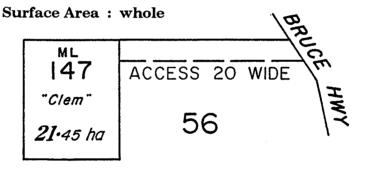
See also "LINEWORK" 1.38.5

### 3.12 Mining Lease

### 3.12.1 New Mining Lease

- 3.12.1.1 A plan of a new Mining Lease must show the external boundaries of the Lease, the area held under Surface Rights, any background tenures, and the Access to the Lease when applicable.
- **3.12.1.2** When Surface Rights exist, severance and connections to the background tenures are required.

### Sample



Title: ML 147 AND ACCESS

3.12.1.3 For details regarding Surface Area see 3.12.2.

See also "BACKGROUND TENURES" 3.2

- 3.12.1.4 For details regarding Access see "RIGHT OF WAY / ACCESS" 3.16
- 3.12.2 Surface Areas
- 3.12.2.1 The Surface Area (whether whole, part, or nil) is shown on the plan by statement, but must accord with the application description.

### Samples

eg.

SURFACE AREA - WHOLE

Oľ

SURFACE AREA - 25.75 ha (Stn N.s to be used)

or

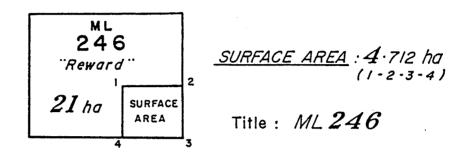
SURFACE AREA - NIL

3.12.2.2 When more than one Surface Area is contained within the one Lease, describe as Surface Area No.1 etc. A calculated area is shown for each and the areas of the total surface by statement.

When a past description has been described only as "Surface Area" a subsequent area should be described as Surface Area No.2 - See 3.12.2.3.

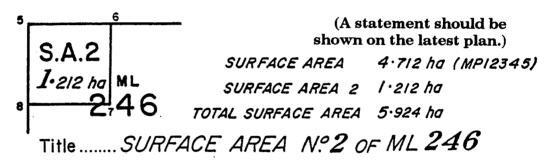
3.12.2.3 Shown on plan as follows::

### Sample



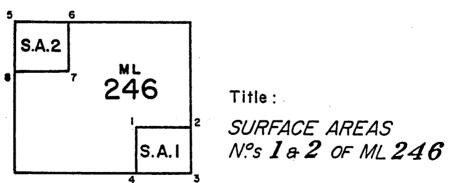
3.12.2.4 Surface Area is referred to in title when the plan is of the Surface Area only. When the Surface Areas are not contiguous, number new areas consecutively. See Also 3.12.2.5

### Sample



**3.12.2.5.** A compiled plan may be requested to show the Surface Area actions progressively.

### Sample



### 3.12.3 Application Posts

Show Connections to Applications Posts and the markings thereon, either on the face of the plan or tabulate.

### **3.12.4** Datum Post

All plans of Mining Leases, surveyed or compiled, may describe the position of the applicant's Datum Post and the marking thereon either on the face of the plan or tabulate.

Application Posts should be included in the same tabulation.

See also "COMPILED PLANS" 3.5.5.2

### 3.12.5 Depth Restrictions

On plans of Mining Leases which are restricted in depth, the plan should be endorsed with a suitable statement.

### Sample

M.L. 697 exists only below the depth of 15.24 m beneath the surface except for Lot 83 where it exists on and beneath the surface.

#### 3.12.6 Name Of Lease

The name of the Mining Lease is shown within the subject block as illustrated by diagrams in 3.12.1.2 and 3.12.2.3 above.

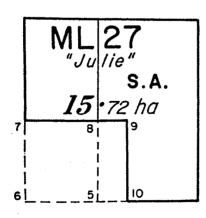
### 3.12.7 Surrender From Mining Lease

The plan is drawn as if the action were completed (original dimensions and cancelled boundaries if required).

Each Severance Area being surrendered from the Lease and Surface Area, as well as the Total Area surrendered are to be shown on the plan.

For Balance Areas see "UNDESCRIBED BALANCE" 3.21

### Sample



AREA TO BE SURRENDERED FROM SURFACE AREA OF ML 27

(5-8-9-10) ...... **I**:674 ha

AREA TO BE SURRENDERED FROM ML27 (6-7-9-10) ........... 5 · 023 ha

Title: ML 27

SURFACE AREA : 10 .72 ha

### 3.12.8 Resumption From Surface Area Of Mining Lease

Treat in a similar manner to Surrenders - stating purpose.

### Sample

On face eg.

AREA TO BE RESUMED FROM ML 50.. (Stn Nºs).. 2.745 ha

Title eg.

ML 50

The statement must clearly show whether the resumption is from the Lease (Surface and Underground) or from the Surface Area Only.

### 3.12.9 Mining Lease Encroaching On Mining Homesteads

The severance areas of any prior MHPL (and MHL) covered by the ML are to be stated on the plan, and shown as follows:-

### Sample

Area of ML in MHPL .... (Stn Nºs) ...... 2.345 ha

### 3.12.10 Mining Lease Location Surveys

Specifications for plans of Datum Post Location Surveys are available from the Chief Surveyor on request.

3.12.11 Any Mine workings, structures or improvements on or adjacent to boundaries must be noted in the field book and shown on the plan. Care should also be taken to comply with further Department of Minerals & Energy Instructions.

See also "ROADS IN MINING LEASES" 3.17

### 3.12.12 Mineral Development Licence

Mineral Development Licences as defined by the Mineral Resources Act may be lodged at the office of the Director General, Brisbane. When surveyed, generally shown as for Mining Lease requirements.

# 3.13 Petroleum Permits, Leases & Licenses

Whether for the purposes of the Petroleum Act 1923 - 1988, or the Petroleum (Submerged Lands) Act 1967 - 1982, it is necessary to determine the position on the surface of the earth of a point, line or area. Such a position shall be determined by reference to the Australian Geodetic Datum, and any plan depicting such position should be endorsed:

# Eg. Australian Geodetic Datum 1984

Where bearings are given, both forward and reverse azimuths must be shown where applicable.

# 3.14 Petroleum Well Location Surveys

Plan requirements for Well Location Surveys as required under Regulation 117 of the Petroleum Regulations (Land) 1966 will be made available upon request, from the Chief Surveyor.

### 3.15 Plan Forms

- 3.15.1 Except under special circumstances approved by the Chief Surveyor, surveys of all Mining Tenements are to be drawn on Department of Minerals & Energy plan forms.
- **3.15.2** New surveys of two or more tenements may not be drawn on the plan form unless each parcel is physically connected to the other by survey.
- **3.15.3** Plan forms are available in two (2) sizes and are obtainable from the Chief Surveyor.
- 3.15.4 A number of sheets may be lodged for the one survey.

# 3.16 Right Of Way (Petroleum Act) Access (Mineral Resources Act)

- 3.16.1 "Access" is defined as access to any Mining Tenement.
- **3.16.2** Normally not surveyed (only when instructed by the Warden or Director-General).
- 3.16.3 Treat generally as for an Easement Survey.

Show width of Access and secants.

Generally no area is required.

- **3.16.4** If only one side is run show the surveyed boundary by a full line and the opposite side in a broken line.
- **3.16.5** Shown on plan as follows:

#### Sample

On Face

eg. ACCESS 20 WIDE

Title (as the case dictates).

eg. ML 53 and ACCESS

or ML's 52,53 and ACCESS (ML53)

or ACCESS (ML 53)

3.16.6 A "Right of Way" showed access to a mining tenement on private land and after 1st August 1982, also to a mining tenement on Crown Land.

> Prior to 1st August 1982, access to a mining tenement on Crown Land was described as "Right of Access".

#### 3.17 Roads In Mining Leases

- 3.17.1 There are four methods of showing areas of Dedicated Roads and/or other exclusions or reservations through ML's on a plan, depending upon the form of the ML Application.
- 3.17.1.1 The road may be included in the ML if an application to disturb the road surface is approved by the Governor in Council (the most common case).

### Sample

120.5 ha

The road boundaries are shown in light lines.

3.17.1.2 The road may be excluded from the ML in the terms of the lease.

### Sample

120 · 5 ha

2 · 746 ha Rd (Show by statement with Stn N?s)

117 .8 ha (Only Area shown on face of plan)

The road boundaries are shown in heavy lines.

Join the severances with a vinculum. See 3.22.1

3.17.1.3 The road may be excluded only from the surface area of the ML in the terms of the lease.

### Sample

Within Lease On Face

by Statement

120.5 ha SURFACE AREA : 70.5 ha

2 · 746 ha Rd

67 · 954 ha

The road boundaries are shown in medium lines.

The surface area is shown by statement.

3.17.1.4 Where no surface area is required for the ML, the area of the road is not shown, only the area of the ML.

### Sample

120.5 ha

The road boundaries are shown in light lines.

See also "AREAS" 3.1

**3.17.2** In all cases the surveyed road boundaries should be plotted on the plan.

Full dimensions of the road are required in cases 3.17.1.2 and 3.17.1.3 above.

### 3.18 Status Of Tenure Table

Plans drawn for the purpose of a grant must show a tenure table. To avoid confusion over the status of a grant, the description of a plan must not be qualified by the term "A" or "Application". The tenure table will be completed by the Department at date of grant.

### Sample

### STATUS OF TENURE

TENURE No.	DATE OF GRANT
ML 4059	

# 3.19 Statutory Mine Working Plans

- **3.19.1** Drawing requirements for Statutory Mine Working Plans will be made available from the Chief Surveyor on request.
- 3.19.2 Plans must be drawn on official Department of Minerals & Energy Statutory Mine Working Plan sheets, obtainable from the Chief Surveyor.

### **3.20 Title**

3.20.1 Should be shown on plan as follows:

(b) PARISH ..... GYMPIE

(c) COUNTY ...... March

(d) MINING DISTRICT ....... Mareeba

See also "STYLES" 1.62 See also "SPECIMEN MINING RESOURCES PLAN" No 1

### 3.21 Undescribed Balance

In the case of an excision from a Surface Area or Mining Lease the Balance must be shown on the plan where possible. The Balance may be left as an Undescribed Balance and omitted from the plan only with the prior approval of the Chief Surveyor.

### 3.22 Vinculum

A Vinculum symbol binding Severances of tenements across intervening boundaries, or over other lands, are to be shown on face of plan thus:

### 3.22.1 For Subject Land

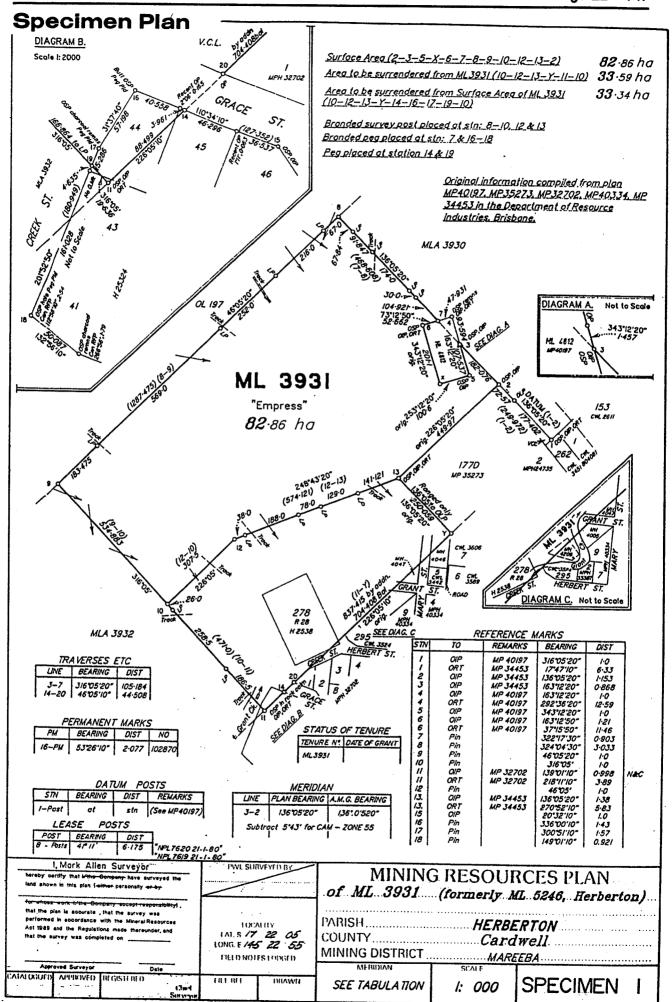


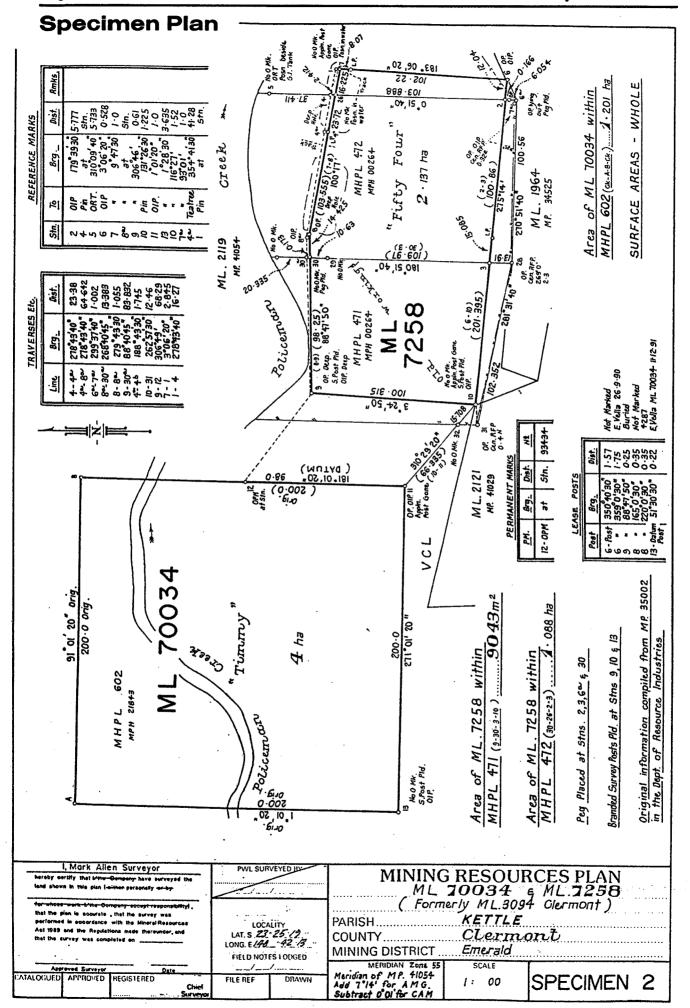
3.22.2 For Surface Areas, Sub Lease Etc. Over The Subject Land.



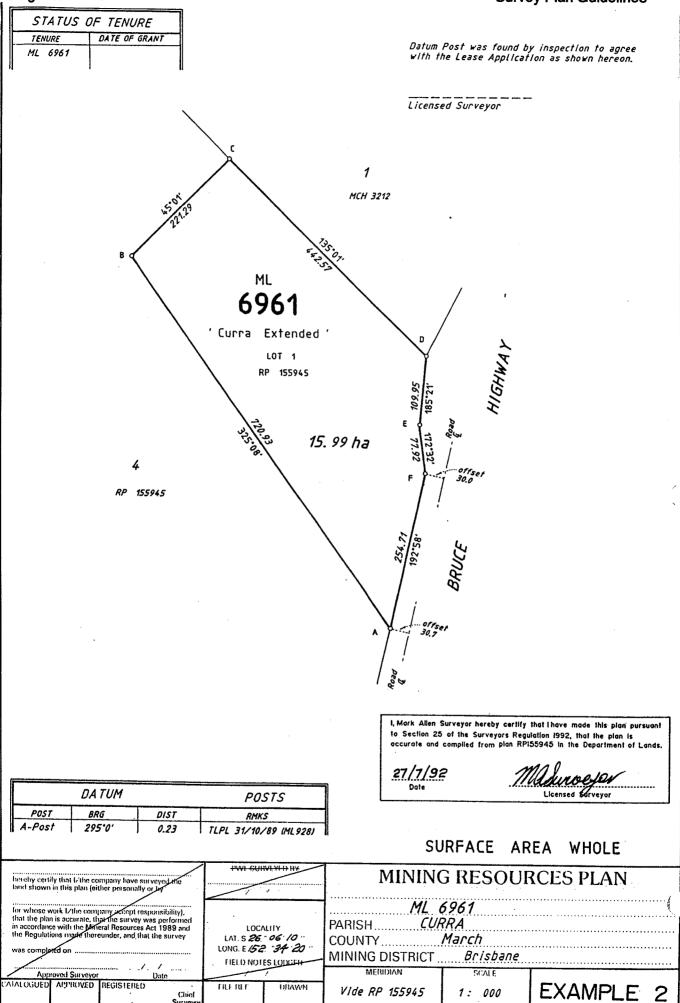
**3.22.3** For Background Descriptions Underlying The Subject Lease And For Adjoining Descriptions.





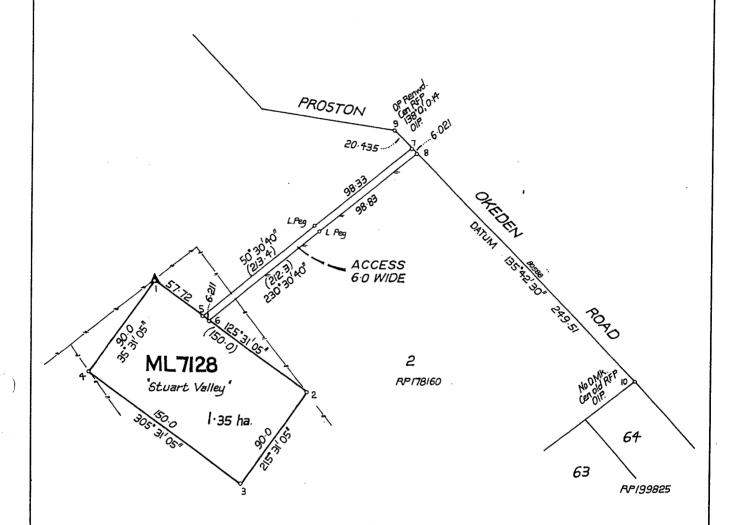


Chief



LEASE POSTS

Post	Bearing	Dist	4
1 - Post 3 - Post 4 - Post	164°57′ 136° 17′ 130° 05′	1.16	*V. Knopke 11.6.1990*  *V. Knopke 11.6.1990*  *V. Knopke 11.6.1990*



### PERMANENT MARKS

PM.	Bearing	Dist	Number
	205° 16′ 230° 52′	1·522 1·397	79822

SURFACE AREA - WHOLE

Str	To	Remark	Bearing	Dist.
1	Pin		<i>305 31 05</i>	
234	Pin Pin		305"31'05"	0.95
4	Pin	] ]	305 31,05 <b>"</b>	
5	Pin		125°31′05″	
9	Pin OIP		163°25'45" 315°42'30"	3·256 I·0
10	OIP		135°42′30″	1.0

REFERENCE MARKS

DATUM POST

- }	Post	Bearing	Dist		
ĺ	2-Post	219°49′	0.23	*V. Knopke	11.6.1990

STATUS OF TENURE

Tenure Nº	Date of Grant
ML 7128	12/12/91

Peg placed at stations 5-9 Survey Posts placed at stations 1-4

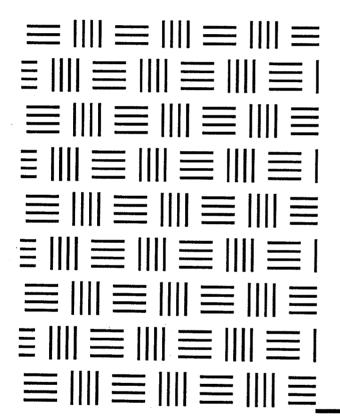
	M	ERIDIAN	
	Line	Plan Brg.	AMG Brg.
	1-2	125°31'05	125°31'05"
į		AMG	
ĺ	Subtract 7'23'05' for CAM		
. 1		ZONE 56	i

			1 20NE	56 l
I, Mark Allen Surveyor hereby certify that Uthe Company have surveyed the land shown in this plan (-either personally ex-by-	PWL SURVEYED BY	MINING RESOURCES PLAN		RCES PLAN
tor whose work tritle Company except responsibility! . that the plan is socurate , that the survey was performed in socordance with the Mineral Resources Act 1989 and the Regulations made thereunder, and that the survey was completed on	LOCALITY  LAT. S & 6 ° QB · 50 · ·  LONG. E & 7 ° 25 · 20 · ·  FIELD NOTES LODGED	PARISH	PROSTON Boondooma	
Approved Surveyor Date  CATALÓGUED APPROVED REGISTERED  Chief	FILE REF DRAWN	MERIDIAN AM6	SCALE /: 000	EXAMPLE 3

STATUS OF TENURE		·	REFERENCE		
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		3	Pin 306*38'4		
		. 6	OIP 126 38 4	_ l	11
	45	7	* 216°38' A		gone
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	OPM gone				
,	OPM 8000 Con. G.I.F.P. (60.0) O.O.O.N.O.O.W DATU	LANE			
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PERMANENT MARKS		1	No O Mk Peg placed Cen.G.I.F.P O·27W,O·08N		1
P.M. BEARING DIST NO	7 1	6.0	0.27W,0.08N		
1- OPM gane 172° 16' 1.12 86439	I have been	610 38 40	1		
11- PM at stn   110336	Can G.L.F. P.O.F.		\		
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16 Par stn WP7  CON LOC.  I, Mark Allen Surveyor  hereby certify that teltha-Banpany have surveyed the land shown in this prior (without become because of the surveyed that the shown in this prior (without because of the surveyed that shown in this prior (without because of the surveyed that the surveyed that the surveyed that the surveyed the surveyed that the surveyed the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed that the surveyed the surveyed that the surveyed that the surveyed that the surve	PWI SURVITIONS LOCALITY	MININO LOT 185  Cancelling La PARISH FIFE	RESOUR	OF WEIPA CES PLA P.40548	N
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I CON LOC.  I, Mark Allen Surveyor hereby certify that I-the-Gengeny have surveyed the land shown in this plan (wither-personally ex-by- tor whose work I-the-Gengeny accept responsibility). That the plan is accordance with the Mineral Resources Act 1982 and the Regulations made thereunder, and that the survey was completed on  Approved Surveyor Date	LOCALITY LAT. S 1 2 3 9 4 0 LONG. E 14 1 5 1 10 FIELD NOTES LODGED	MINING LOT 185  Cancelling La PARISH FIFE COUNTY Weipa MINING DISTRICT	GRESOUR  Series 2 and 3 on M  Calras	OF WEIPA CES PLA	N
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Part

# Disciplinary Procedures



SURVEYORS BOARD
QUEENSLAND

F1

**Complaints Procedure** 

**F2** 

Investigation and Finalisation

### Published by:

Surveyors Board of Queensland

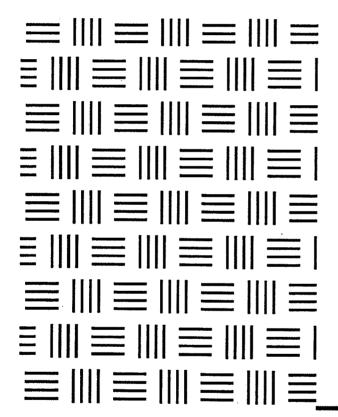
Land Centre Cnr Main and Vulture Streets Woolloongabba Qld 4102

P.O. Box 3211 South Brisbane Qld 4102

Phone: 896 3032

Part

# Complaints Procedure





How a complaint can arise

and

How it may be lodged

### Published by:

Surveyors Board of Queensland

Land Centre Cnr Main and Vulture Streets Woolloongabba Qld 4102

P.O. Box 3211 South Brisbane Qld 4102

Phone: 896 3032

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Surveyor against Surveyor	
Administration	
Role of Board	
Vexatious Complaint	
Arbitration	

# **Complaint Receipt**

### 1.0 Introduction

The Surveyors Act 1977 [Section 17(f)] provides for the Board to receive and investigate reports and complaints concerning the competence of surveyors, surveying graduates and surveying associates and the accuracy of their work.

Part V [Section 53A to 65] of the Act provides for the investigation of complaints and discipline of registered persons.

# 2.0 Background

The Complaints Committee of the Surveyors Board of Queensland was initially formed in November 1989. Due to the confidential nature of complaints, it was deemed essential that only Board Members be on this committee - unlike the Education and Cadastral Reform Committees for example, where registered persons are invited to participate.

Prior to the 1990 amendments to the Act, formal disciplinary proceedings against a registered person required prosecution through a "Surveyors Disciplinary Committee", comprising a District Court Judge and two Registered Surveyors.

The 1990 amendments to the Surveyors Act (Sections 65A, 65B and 65C) provides the Board with a "Second Tier" disciplinary procedure, where in the opinion of the Board, the degree of misconduct does not warrant an appearance before the Surveyors Disciplinary Committee. The Board prepares misconduct particulars (charges), but advises the Surveyor in question that it intends to deal with the misconduct under the "Second Tier".

If the Surveyor accepts the "Second Tier", the Boards decision is final, but the degree of punishment is far less than that available to a Surveyors Disciplinary Committee. The Board would either issue a reprimand and/or a fine and/or a payment of the Boards investigative, legal, hearing and administrative costs.

# **3.0** Assessment of Complaint

On receipt of a complaint, the Complaints Committee determines whether or not a complaint made to the Board is frivolous or vexatious. Hence, all complaints require some degree of investigation. Under Section 53B of the Act, the Board may appoint a surveyor to carry out an investigation on behalf of the Board.

All surveyors should be aware of the cost to the Board in carrying out an investigation. For example, a complaint which does not result in any disciplinary action, yet requires some degree of investigation, could cost from \$2,000 to \$4,000 to process.

Many complaints can be avoided, in particular Surveyor to Surveyor complaints. The parties to a dispute should attempt to resolve the matter in question prior to lodging a formal complaint with the Board.

# 4.0 Complaints Committee - Terms of Reference

Terms of reference of the Committee were endorsed by the February 1993 Board Meeting.

### 4.1 Terms of Reference

- ➤ Make an initial assessment of each complaint and recommend an appropriate course of action to the Board.
- ➤ Seek appropriate advice on the complaint and associated matters and take action to bring the matter of the complaint to a conclusion in a timely manner.
- ➤ To encourage participants to a complaint to use conciliation in the first instance to resolve the complaint.
- ➤ Endeavour, where possible, to use local Town Group involvement in the resolution process, in conjunction with the Board.
- ➤ Where an investigator is to be appointed, brief that investigator in all aspects of their task.
- ➤ Review and consider the investigators report and make recommendation thereon to the Board.
- ➤ Provide a report to the Board on all aspects of the complaint and recommend on how the matter is to be finalised including appropriate action in cases where an offence has been committed.

# **5.0** Source and Detail of a Complaint

A complaint of any kind must be in writing and addressed to the Board.

#### 5.1 Detail

Complainants are to provide sufficient detail and where available, plans and associated documentation. This will assist the Board in determining whether the complaint is within its jurisdiction.

#### 5.2 Sources

A complaint could be sourced from a:-

- (a) Member of the public;
- (b) Fellow surveyor;
- (c) Registering authority; and
- (d) The Board itself.

### 5.3 Complaint by a Surveyor Against a Surveyor

Guidelines have been prepared for surveyors lodging a complaint about a fellow surveyor.

The complainant is requested to, where appropriate:

- ➤ Meet with the registered person, or representatives of the registered entity, where this is appropriate, who is the subject of the complaint and conduct meaningful discussions with a view to resolving the matter in the best interests of the profession and the parties concerned.
- ➤ Involve where appropriate, office bearers of the ISA Town Group at the location, if this may assist in resolving a surveyor to surveyor disagreement.
- ➤ Provide the following information to the Board in the event that the matter cannot be resolved by discussion:-
  - The complainant's name, address, telephone and facsimile numbers, qualifications and experience, occupation and place of employment.
  - The name of the registered person or entity who is the subject of the complaint and state their address, telephone and facsimile numbers, qualifications, occupation and place of employment if known.
  - A brief succinct and factual statement of the complaint.
  - A background history to the complaint and an outline of the steps that have been taken so far in order to resolve the matter. Full details to substantiate the complaint.
  - A statement of any deemed non-compliance with the Surveyors Act and Regulation, setting out the appropriate Sections and Regulation which may apply and the grounds relied upon by the complainant.
  - Details of any previous complaint lodged by the complainant.
  - A supporting statement from any person who is able to substantiate the validity of the complaint, where this is appropriate.
  - Copies of all relevant reports and plans and any other evidence with relates to the complaint.

### **6.0** Administration

Where an enquiry or verbal complaint is received, the Administration Officer would request the party to commit the matter in writing to the Board.

Upon the receipt of a written complaint the Administration Officer:-

- ➤ acknowledges receipt of the complaint.
- ➤ advises the Executive Officer.
- refers the complaint to the next meeting of the Complaints Committee.

The Board reviews the material and places a categorisation on the complaint based on the information available to it. It endeavours to establish whether a complaint is frivolous or has substance. Further, it attempts to determine the type of allegation, whether it relates to Negligence and/or Incompetence and/or Unprofessional conduct and/or Breach of Contract and/or a vexatious allegation or simply a notification of an event that has occurred or some appropriate allegation in terms of the Act.

If the matter is considered as requiring urgent action, a flying minute is prepared setting out a summary of the complaint and the recommended action to be taken.

The Committee at its meeting:-

- ➤ Considers the complaint and associated report.
- ➤ Determines the nature of the complaint.
- ➤ Establishes if the matter is assessed as not constituting a complaint.
- ➤ Determines the likely impact on third parties or the public interest.
- ➤ Recommends an appropriate action to the Board:
  - able to be resolved by a discussion/meeting,
  - seek further information from the
    - complainant
    - accused,
  - appoint an investigator and determine the type of investigation, eg. field, interview or both,
  - other action.

# 7.0 Board's Disciplinary and Arbitration Role

Allegations of an error, a misunderstanding between parties or a breach of contract will not necessarily constitute grounds for a complaint under the Act. Grounds may exist for matters to be rectified and for aggrieved parties to be compensated, but these are not necessarily for the Board to determine or to be involved in. If the registered person's conduct following these events is allegedly unsatisfactory, the Board then has a duty to consider that conduct.

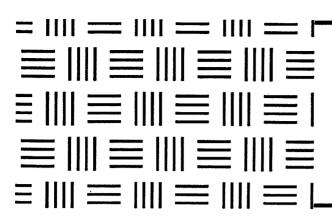
### 7.1 Vexatious Complaint

The Board takes care to identify matters of a vexatious or mischievous nature, and that appropriate action is taken on these. The reason for a complaint being lodged would be sought. If negligence, incompetence or misconduct are not alleged, what grounds could one surveyor have for complaining about another, especially if the complainant has not contacted that surveyor in an effort to have the matter rectified?

### 7.2 Arbitration

Arbitration probably only applies to complaints by surveyors against surveyors or by the Registering Authority against a surveyor. The Board would generally not involve itself in disputes between members of the public and surveyors and where litigation is possible.

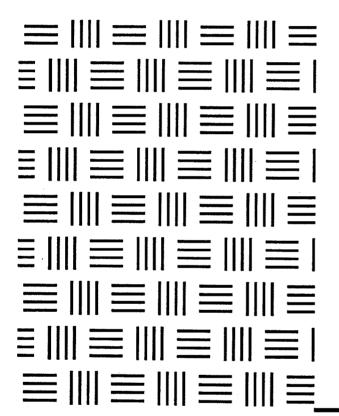
Where surveyors are in dispute over matters other than of a technical nature, the Board considers that surveyors should consider seeking assistance from an arbitrator.



Part

**F2** 

# Investigation and Finalisation





Avenues of gathering information on a complaint

and

How a complaint may be finalised

### Published by:

Surveyors Board of Queensland

Land Centre Cnr Main and Vulture Streets Woolloongabba Qld 4102

P.O. Box 3211 South Brisbane Qld 4102

Phone: 896 3032

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# Investigation

# 1.0 Investigations

The Board, having determined the type of and seriousness of a complaint, would then establish a course of action to deal with the matter. In respect of matters of negligence and/or incompetence and/or unprofessional conduct, the Board has a duty under the Act to deal with those complaints.

There is however no requirement for the Board to proceed in matters of breach of contract, a vexatious or mischievous allegation, matters of misunderstanding and procedures which may involve claims against professional indemnity insurance.

After considering the nature of the complaint, the Board may determine that it requires further information or evidence. This may then be gathered in a number of ways as set out earlier. Where an investigator is appointed under Section 53B, the powers of the investigator are set out in Sections 53C, 53D and 53E of the Act.

An investigator, before accepting an appointment, should be aware that he/she may be required to assist in the drafting of charges against a fellow surveyor where required and may be called upon to give evidence before a Surveyors Disciplinary Committee or a Civil Court.

# 2.0 Investigation and Disciplinary Action where Civil Action is Possible

The Board has a duty to administer the Act and it would not be deterred because civil proceedings may take place in another jurisdiction. If a complainant (plaintiff) requests that the Board await the outcome of other actions, legal advice would normally be sought.

The Board would proceed in the normal manner with an investigation and the assessment of evidence and type of action to be taken, even though it is aware that a civil action is proceeding.

# 3.0 Notification of Investigation

The Board, when appointing an investigator, would determine how the person under investigation is to be advised. The following is taken into consideration:-

- ➤ Courtesy to the registered person being investigated.
- ➤ Appropriate timing to ensure that the investigating surveyor's role is facilitated.
- ➤ Where it is established that a field investigation is <u>not</u> required, the registered person would be advised of the investigators appointment by the Board, at the same time that the Board appoints the investigator.

➤ Where the Board determines in its preliminary assessment of the file that field evidence should be obtained, or where it requests the investigator to confirm that he may need to obtain field data, then the investigator would advise the registered person of the investigation in a timely manner, but no later than when the field investigation is commenced.

# **Finalisation**

# 4.0 Courses of Action on an Investigators Report

The Board has a number of courses of action available to it on receipt of an investigators report. (Those complaints not requiring an outside investigator will have been dealt with and finalised). These courses are:-

**4.1** Report indicates no breach of Act and/or Regulation and this is confirmed by the Board.

Brief written response to complainant and defendant. Board file closed.

- Report indicates a breach of Act and/or Regulation. The Board confirms this and determines the breach is of a minor nature. The Board may proceed in two ways:-
- 4.2.1 Report indicates minor breach, which the registered person under investigation has acknowledged to the investigator. On the basis of the report, the Board resolves to note the surveyors file and advises the person of the action.
- 4.2.2 Report indicates minor breach, which may or may not be acknowledged by the surveyor. The Registered person is required to appear before the Board. After his/her appearance, the Board resolves its action on the matter, and advises the Registered person of this at his/her appearance and confirms this in writing.

The Board does not intend to deal with the matter under Section 65A, (2nd tier) and as such, a reprimand only can be instituted.

4.3 Report indicates a breach which is either of concern or of a serious nature. The breaches warrant the drawing up of misconduct particulars (charges). The misconduct particulars may be dealt with by the Board (S65) or the Surveyors Disciplinary Committee (S53).

The gravity of the offence would determine whether the registered person is offered the option of coming before the Board or whether the matter should proceed to the Surveyors Disciplinary Committee.

**4.3.1** Where the Board elects to proceed via Section 65A (2nd tier), the provisions of Section 65B would be implemented.

The person under investigation is advised of the charges, and is given the option of having the misconduct particulars (charges) dealt with by the Board. If this offer is not accepted, then the charges <u>must</u> be dealt with by the Surveyors Disciplinary Committee.

The plaintiff can answer the misconduct particulars in writing and may also appear before the Board. Questioning of the person would usually be limited to seeking clarification on the matters set out in the misconduct particulars.

4.3.2 Where the breaches are of a serious nature, or the plaintiff elects not to appear before the Board, the misconduct particulars become charges and are dealt with by the Surveyors Disciplinary Committee.

The Surveyors Disciplinary Committee is comprised of a Judge of the District Court and two appropriately qualified Registered Surveyors.

### 5.0 Penalties

The Board may take disciplinary action where misconduct particulars are found proven by imposing a fine, admonish or reprimand the person or adjourn the matter. The Board can also order a person charged with misconduct, to pay to the Board costs associated with the investigation, for its legal advise and the hearing and administration of an action.

The Surveyors Disciplinary Committee has wide powers under Section 61 and where it finds a charge proven, it may do one or more of the following, reprimand, fine, correct defective work, order payment for the cost of correcting work, restrict the persons' practice to a particular category of surveying for a period of time, suspend the persons' registration, cancel the registration and/or endorsement of the person, and make orders as to costs, including investigation, legal, administrative and hearing costs.

# 6.0 Appeals

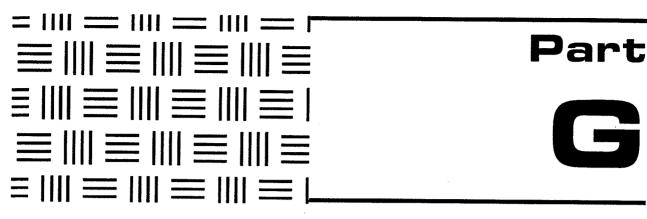
A person may only appeal against a decision of a Surveyors Disciplinary Committee on a point of law, (Section 65(2)).

There is no mechanism for appeal under Section 65A.

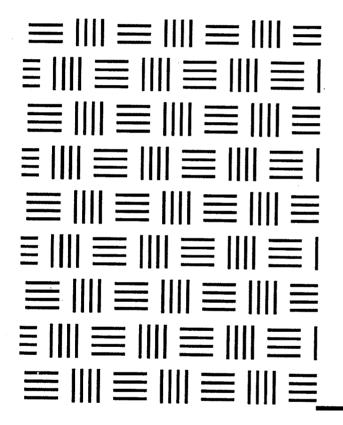
# 7.0 Publication by the Board

Decisions of a Surveyors Disciplinary Committee (Section 61) where the decision includes an action which amends the registration of a registered person, are to be published in the Government Gazette. All other decisions of a Surveyors Disciplinary Committee shall be published in the Board's Annual Report and may be published in the Queensland Surveyors Bulletin.

Decisions of the Board, under a Section 65A hearing, and where the misconduct particulars are upheld (found proven) shall be published in the Board's Annual Report and may be published in the Queensland Surveyors Bulletin.



# Surveyors Board Forms





Specimen copies of all forms used by the Surveyors Board and approved by the Board under the Surveyors Regulation 1992

Persons requiring forms should contact the Board's office for originals

### Published by:

Surveyors Board of Queensland

Land Centre

Cnr Main and Vulture Streets Woolloongabba Qld 4102

P.O. Box 3211

South Brisbane Qld 4102

Phone: 896 3032

### **Forms**

The Forms set out in this Part, being Nos 1 to 18, shall be used for the purposes for which they are respectively applicable.

A Form as approved by the Board shall be completed in full or as so stated on the Form.

The Board, under the Surveyors Regulations 1992, Section 3, has duly considered the format of the attached Forms Nos 1 to 18 and adopted the use of such forms.

The implementation date for the Forms is as notated on each Form and the Index.

E C Cottrell

President

Surveyors Board Of Queensland

#### Note:

The Board Forms included in this Manual are Specimen Copies Only. Persons requiring forms should contact the Board's office

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Form 18
Certificate for Cadastral Plans - Compiled

### Form 1 QUEENSLAND

Surveyors Act 1977 (Ss. 38A and 39) Surveyors Regulation 1992 (Section 6)

APPLICATION FOR REGISTRATION	ON AS A SURVEYING ASSOCIATE
To: The Secretary, Surveyors Board of Queensland.	
I,(Full Name)	, of
* Residential Address:	
Postal Address:	
Telephone No. (Business)	Fax No.
hereby apply for registration under the support of my application, I enclose the	ais Act as a Surveying Associate. In the following documentary evidence:-+
Date:	Signature of Applicant
* Insert residential and postal a numbers.	address, and telephone and facsimile
as to good fame and character, and	vant certificates, copies of references copies of documents showing particulars on by the applicant for the purposes of
	FEE:
	DATE:
	REC NO:

-May, 1992

## Form 2 QUEENSLAND

Surveyors Act 1977 (Ss. 38 and 39) Surveyors Regulation 1992 (Section 7)

APPLICATION FOR REGISTRATION AS	A SURVEYING GRADUATE
	^ \
To: The Secretary, Surveyors Board of Queensland.	
I,(Full Name)	, of
* Residential Address:	
Postal Address:	
Telephone No. (Business)	Fax No.
hereby apply for registration under this Act as a application, I enclose the following documentary	Surveying Graduate. In support of my
approaches, I enclose the following documentary	Evidence +
	Signature of Applicant
Date:	
* Insert residential and postal address, and	telephone and facsimile numbers.
+ _Copies of degrees, diplomas and other r	•
references as to good fame and character.	;
	FEE:
	DATE:
Man. 1002	REC NO:
May, 1992	

## Form 3 QUEENSLAND

Surveyors Act 1977 (Ss. 37, 39 and 40) Surveyors Regulation 1992 (Section 8 and 11)

APPLICATION FOR REGIST	IRATION AS A SURVEYOR
To: The Secretary, Surveyors Board of Queensland.	
I,	, of
(Full Name)  * Residential Address:	
Postal Address:	
Telephone No. (Business)	Fax No
hereby apply for registration under this application, I enclose the following documen	Act as a Surveyor. In support of my
	# Signature of Applicant
Date:	w sagament of inprisonne
Insert residential and postal address address of its registered office and ponumbers.	or, in the case of a body corporate, the ostal address, and telephone and facsimile
references as to good fame and character	er relevant certificates, and copies of r in the case of a natural person or, in the ne documentary evidence required to comply ation 1992.
To be signed by the applicant in the c body corporate, by a director who is a	ase of an individual or, in the case of a Registered Surveyor.
	FEE:
	DATE:
•	REC NO:
fay, 1992	ALC NO.

May, 1992

## Form 4 QUEENSLAND

Surveyors Act 1977 (Ss. 40 and 42) Surveyors Regulation 1992 (Section 9 and 14)

## APPLICATION FOR ENDORSEMENT TO PERFORM CADASTRAL SURVEYS

To: The Secretary, Surveyors Board of Queensland.	
	, of
I,(Full Name)	——————————————————————————————————————
* Residential Address:	
Postal Address:	
Telephone No. (Business)	Fax No.
hereby apply to have my registration in the R that I may perform cadastral surveys. In following documentary evidence:- +	egister of Surveyors endorsed to the effect support of my application , I enclose the
	<u></u>
Date:	# Signature of Applicant
* Insert residential and postal address address of its registered office and pumbers.	or, in the case of a body corporate, the postal address, and telephone and facsimile
/ natural person or, in the case of a	er relevant certificates in the case of a body corporate, copies of the documentary ion 14 of the Surveyors Regulation 1992.
To be signed by the applicant in the body corporate, by a director who is a	case of an individual or, in the case of a a Licensed Surveyor.
	FEE:
	DATE:
	REC NO:

Revision 0 — Nov. 1992 Surve

#### Form 5 QUEENSLAND

Surveyors Act 1977 (S. 42A) Surveyors Regulation 1992 (Section 10)

### APPLICATION FOR ENDORSEMENT AS A CONSULTING SURVEYOR

To:	The Secretary, Surveyors Board of Queensland.
I.	$\wedge$
_,_	(Full Name)
* R	desidential Address:
	Postal Address:
	Telephone No. (Business) Fax No.
serv	eby apply to have my registration in the Register of Surveyors endorsed to the effect I am a Consulting Surveyor. I certify that I provide or intend to provide survey vices to the public for a fee. In support of my application, I provide the following permation:-
1.	Under what name or as a part of what entity do you intend to practise?
2.	Are you at present rendering survey services to the public for a fee?
3.	Do you have an office out of which you presently consult to the public?
4.	If the answer to (3) is yes, what is the address?
5.	If the answer to (3) is no, do you intend to establish an office and if so at what
	address?
6.	Section 10(2) of the Surveyors Regulation 1992 requires that applicants take out and
	maintain Professional Indemnity Insurance. Please advise the following details:-
	(a) The name of the Insurance Company
	(b) Your policy number
	(c) The amount insured (min \$100,000)
	A copy of the insurance certificate is to be provided.

- 2 -

7.	Section 10(2) of the Surveyors Regulation 1992 requires that applicants take out and
	maintain Public Liability Insurance. Please advise the following details:-
	(a) The name of the Insurance Company
	(b) Your policy number
	(c) The amount insured (min \$500,000)
	A copy of the insurance certificate is to be provided.
8.	Do you have or are you in the process of implementing a Quality Assurance program?
9.	Do you take part in Continuing Professional Development (CPD) programs and if so to
	what extent?
10.	Please provide the Board with the following information by attaching same to this
	application form -
	(a) a copy of the letterhead under which you practise;
	(b) a copy of the form of invoice on which you bill clients.
-	
	Signature of Applicant
Date	
*	Insert residential and postal address, and telephone and facsimile numbers.
	FEE:
( (	DATE:
	REC NO:
мау,	1992

#### Form 6 QUEENSLAND

Surveyors Act 1977 (S. 37)

#### REPORT OF PRACTICAL EXPERIENCE

To: The Secretary, Surveyors Board of Que	ensland.	^
Ι,		$\langle \ \rangle$ , of
(Full Name)		
Postal Address:		
a Licensed Surveyor/Surveyor	registered under this Act, c	a Surveying Graduate/student,
has gained practical experie	nce in surveys under my direc	tion and supervision
for a period of		
He/she has performed the fol	lowing work as specified:-	
REPORTING PERIOD:	TO:	
+ TYPE OF SURVEY	DESCRIPTION OF WORK	NO OF WEEKS
Tria (True Co		
His/Her performance was as fe	311ows - *	
	)	
Date:	Signature o	of Licensed Surveyor/Surveyor
* report should state cle graduate/student in all practice of surveying.	early the level of performand l aspects (ethical, administ	ce achieved by the Surveying rative and technical) of the
The minimum periods to licensing for each typ	urban cadastral, rural cadas fulfill the Board's requir e of survey shall be rural ngineering (6 months) other (	ements for registration and cadastral (6 months), urban
May, 1992		

**Surveyors Board of Queensland** 

Revision 0 — Nov. 1992

Surveyors Board of Queensland

#### Form 7 QUEENSLAND

Surveyors Act 1977 (S. 37)

#### APPLICATION FOR ACCEPTANCE OF PROJECTS

To:	The Secretary, Surveyors Board of Queensland.	
has c	eby certify that + completed the projects listed hereunde Surveyors Board of Queensland, and opriate level of responsibility. I re	er, which are equivalent to those prescribed by that the projects have been performed at an ecommend that such projects be accepted by the
* Lis	st of projects:-	
Date:		Signature of Head of Surveying School,
		(Name of Education Institution)
PART	В	
I +	(6)	, of
	(Fu	(1/ Name)
Res	idential Address:	
Pos	tal Address:	
Te1	ephone No. (Business)	Fax No.
repor	ts in relation to the projects listed	bservations and notes, computations, plans and hereunder were made by me personally with such tion and that the projects were not copied.
* Lis	t of projects:-	
Date:		Signature of Surveying Graduate/student
* <	Describe each project and state its If the space is insufficient, attack	date of commencement and date of completion. h a schedule.
+	Insert full name of surveying gradua	ate/student.
		FEE:
		1 111.
		DATE:
		REC NO:
May,	1992	

**Surveyors Board of Queensland** 

Revision 0 — Nov. 1992

#### Form 8 QUEENSLAND

Surveyors Act 1977 (S. 37)

## APPLICATION FOR APPROVAL OF A PROPOSED PROFESSIONAL ASSESSMENT PROJECT

To: The Secretary, Surveyors Board of Queensland.	
I,	of
(Full Name)	101
* Residential Address:	
Postal Address:	
Telephone No. (Business) Fax No.	
a Surveying Graduate hereby apply for approval of a proposition.	sed Professional Assessment
Nature of project proposed:-	
Details of the project are attached.	
_	Signature of Applicant
Date:	
	1.6. * * 1
* Insert residential and postal address and telephone and	nd facsimile numbers.
	PPP.
	FEE:
	DATE:
May, 1992	REC NO:

#### Form 9A QUEENSLAND

Surveyors Act 1977 (Ss. 40, 41 and 42)

#### APPLICATION FOR RENEWAL OF REGISTRATION

To: The Secretary Surveyors Board of Queensland.	
Ι,	, of
(Full Name)	, 01
* Residential Address:	
Postal Address:	
Telephone No: (Business)Fax No	:
hereby apply for renewal of my registration under this Act	as a
Surveying Associate	
☐ Surveying Graduate	
Surveyor	
AND	
for endorsement to the effect that I may perform ca	dastral surveys for the year
ending on 31 December, 19	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Signature of Surveyor, Licensed eveyor, Surveying Graduate, eveying Associate
* Insert residential and postal address or in the case of of its registered office and postal address, and telep	f a body corporate, the address bhone and facsimile numbers.
To be signed by the applicant in the case of an indivi- corporate, by a director who is a Registered Surveyor.	dual or, in the case of a body
+ Indicate (/) category of registration for which renewa	l is sought.
	FEE:
	·
	DATE:
May, 1992	REC NO:

QUEENSLAND

Surveyors Act 1977 (Ss. 40, 41 and 42)

## APPLICATION FOR RENEWAL OF REGISTRATION AS A CONSULTING SURVEYOR

To:	The Secretary Surveyors Board of Queensland.
I,	, of
	(Full Name)
* Res	idential Address:
	tal Address:
Tel	ephone No: (Business) Fax No:
hereb follo	y apply for renewal of my registration as a surveyor under this Act and for the wing endorsements:- +
	1. to the effect that I may perform cadastral surveys
	2. to the effect that I am a consulting surveyor
The f	ollowing information is provided in support of my application:
1.	Under what name or as a part of what entity do you intend to practise?
	Are you at present rendering survey services to the public for a fee?
3.	Do you have an office out of which you presently consult to the public?
4.	If the answer to (3) is yes, what is the address?
5.	If the answer to (3) is no, do you intend to establish an office and if so at what address?
6.	Section 10(2) of the Surveyors Regulation 1992 requires that applicants take out and
	maintain Professional indemnity Insurance. Please advise the following details:-  (a) The name of the Insurance Company
	(b) Your policy number
**	(c) The amount insured (min \$100,000)
)	A copy of the annual renewal certificate showing the amount insured is to be lodged
	with this application.

-	
7.	Section 10(2) of the Surveyors Regulation 1992 requires that applicants take out and
	maintain Public Liability Insurance. Please advise the following details:-
	(a) The name of the Insurance Company
	(b) Your policy number
	(c) The amount insured (min \$500,000)
	A copy of the annual renewal certificate showing the amount insured is to be lodged
	with this application.
8.	Do you have or are you in the process of implementing a Quality Assurance program?
9.	Do you take part in Continuing Professional Development (CPD) programs and if so to
	what extent?
10.	Please provide the Board with the following information by attaching same to this
	application form -
	(a) a copy of the letterhead under which you practise;
	(b) a copy of the form of invoice on which you bill clients.
	# Signature of Applicant
Date:	
*	Insert residential and postal address or in the case of a body corporate, the address of its registered office and postal address, and telephone and facsimile numbers.
#	To be signed by the applicant in the case of an individual or, in the case of a body corporate, by a director who is a Registered Surveyor.
+	Indicate (7) category(s) of endorsement for which renewal is sought.
	FEE:
	DATE:
	REC NO:
May,	1992

#### Form 10 QUEENSLAND

Surveyors Act 1977 (Section 40) Surveyors Regulation 1992 (Section 12)

APPLICATION FOR REGISTRATION AS A SURVEYOR BY A BODY CORPORATE SOLICITORS CERTIFICATE The Secretary, Surveyors Board of Queensland. Solicitor, \_\_\_\_\_, hereby certify that the Memorandum and Articles of Association of the Body Corporate Pty Ltd incorporated in the State of Queensland on complies with the following sections of Surveyors Regulation 1992. Surveyors Regulation 1992 Section 11(c)(i) 11(c)(ii) \*\* 11(c)(iii) 11 11(c)(iv)11(c)(v)11(c)(vi) 14(2)(5) Signature Date:

May, 1992

<sup>\*</sup> Section 14(2)(b) should be deleted if not applicable.

#### Form 11 QUEENSLAND

Surveyors Act 1977 (Section 40) Surveyors Regulation 1992 (Section 13)

### APPLICATION FOR RENEWAL OF REGISTRATION AS A SURVEYOR BY A BODY CORPORATE

	DIRECTORS'	CERTIFICATE	
To:	Secretary, Surveyors Board of Queensland.		
We,			the Directors,
hereby	y certify that the Memorandum and Artic	cles of Association of the	
	orporate		Pty Ltd
Survey	y with the following sections of Survey  yors Regulation 1992	Regulation 1992.	(
Section """"""""""""""""""""""""""""""""""""	on 11(c)(i) 11(c)(ii) 11(c)(iii) 11(c)(iv) 11(c)(v) 11(c)(vi) 14(2)(b)		
Date:		(All the Directors to s	sign)

\* Section 14(2)(b) should be deleted if not applicable.

May, 1992

# Form 12 QUEENSLAND

Surveyors Act 1977 Surveyors Regulation 1992 (S 33)

#### **CERTIFICATE FOR SURVEY RECORDS**

I *	_ hereby certify	that the	survey records +
are accurate	records of the	survey perf	formed by myself
personally/the company or by #	for whose	work I/the	company accept
responsibility.			/
	\$ Sig	nature of Li	censed Surveyor
Date:		·	
* Insert full name of Licensed Surveyor or, as	the case may be	tha nama af	the comment
+ Insert sufficient particulars to properly identi		ords being c	ertified.
# Insert full name of the person and his qualifi			
\$ Or, in the case of a company, execution under Section 11 of the Surveyors Regulation 1992	er the Common Se.	al in the mar	nner referred to in
May, 1992			

# Form 13 QUEENSLAND

Surveyors Act 1977 Surveyors Regulation 1992 (Section 30)

	CERTIFI	ICATE FOR CADASTRAL PL	ANS	
1	hereby	certify that 2		surveyed the land
com	prised in this plan 3			for whose work *
4		and that the plan i	is accurate,	. \ \/
was	performed in accordance with the	he Surveyors Act 1977 and the	Surveyors I	Regulation 1992, and
	the said survey was competed on			
6		6/7		
Lic	ensed Surveyor (Sign)	Dir		censed (Sign)
		Sur	rveyor	
Date	×	6/7	rector	(Sign)
Daic	· · · · · · · · · · · · · · · · · · ·	- Dil	ector	(Sigil)
1.	- I, (full name of Licensed Surveyor	or		
	- Name of Company endorsed as Li			
2.	- I have, or			
	- the Company has			
3.	- personally (leave 4 blank), or			
	- by (full name and qualification of and if applicable	licensed surveyor),		
	- and by (full name and qualification	n of registered person),		
4.	- I accept responsibility, or			
	- the Company accepts responsibility	y		
5. /	- Date			
6.( (	Signature			
7.	- Company must execute under Com	nmon Seal, see Regulation 11(c)(vi)		
*	Delete if applicable.			

April, 1993

#### Form 14 QUEENSLAND

#### Surveyors Act 1977

#### SURVEYORS BOARD OF QUEENSLAND

### CERTIFICATE OF REGISTRATION AS A SURVEYING ASSOCIATE

THIS IS TO CERTIFY THAT	was registered under this
Act as a Surveying Associate on the	day of
Registration under this Act remains in force subject	to renewal from year to year
and otherwise subject to the provisions of this Act.	
Sealed with the Common Seal of the Board this	day of
	President
May, 1992	Secretary

#### Form 15 QUEENSLAND

#### Surveyors Act 1977

#### SURVEYORS BOARD OF QUEENSLAND

CERTIFICATE OF REGISTRATION	AS A SURVEYING GRADUATE
THIS IS TO CERTIFY THAT	was registered under
this Act as a Surveying Graduate on the	day of
, 19	
Registration under this Act remains in force	subject to renewal from year to year and
otherwise subject to the provisions of this	Act.
Sealed with the Common Seal of the Be	pard this day of
	President
Mars. 1003	Secretary
May, 1992	
	·

#### Form 16 QUEENSLAND

Surveyors Act 1977

SURVEYORS BOARD OF QUEENSLAND

# CERTIFICATE OF REGISTRATION AS A \*LICENSED SURVEYOR/\*SURVEYOR

THIS IS TO CERTIFY THAT	+	w	as registered under this Act as a
Surveyor on the	day of	, 19	*AND that this registration was
endorsed on the	day of	, 19	, to the effect that he/she/it may
perform cadastral surveys.			
Registration under this Act remai	ns in force subject to	renewal from year	
to year and otherwise subject to t	his Act.		
Sealed with the Common Seal of	the Board this	c	lay of,
19			·
			President
			Secretary

- \* Delete if inapplicable.
- + Insert full name in the case of an individual or, in the case of a body corporate, the name of the company.

May, 1992

# Form 17 QUEENSLAND

**PROPOSED** 

Surveyors Act 1977 (Section 76)

RECERTIFICATION OF CA	ADASTRAL PLAN
1 hereby certify this plan is a	accurate at this date of re-certification.
2	2/3
Licensed Surveyor (Sign)	Director & I(icensed (Sign) Surveyor 2/3
Date:	Director (Sign)
<ol> <li>I, (full name of Licensed Surveyor or</li> <li>Name of Company endorsed as Licensed Surveyor)</li> </ol>	
2 Signature	
3 Company must execute under Common Seal, see Regulat	jon/11(c)(vi)
The implementation date of the Form is 1/8/93.	

July 1993

## Form 18 QUEENSLAND

Surveyors Act 1977 Surveyors Regulation 1992 (Section 25)

CERTIFICATE FOR CADASTRAL PLANS - COMPILED hereby certify that 2\_\_\_\_\_ made this pursuant to Section 25 of the Surveyors Regulation 1992 and that the plan is accurate, and compiled from\_\_\_\_ (Department the of 4/5 Director & Licensed (Sign) Licensed Surveyor (Sign) Surveyor Date: Director (Sign) - I, (full name of Licensed Surveyor or 1. - Name of Company endorsed as Licensed Surveyor) 2. - I have, or - the Company has, or - Full name and qualification of registered person has - Department of Lands and/or/Minerals & Energy or other source. 3. - Signature 5. - Company must execute under Common Seal, see Regulation 11(c)(vi)

April, 1993

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# Surveyors Act

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#### Published by:

Surveyors Board of Queensland

**Land Centre** 

Cnr Main and Vulture Streets Woolloongabba Qld 4102

P.O. Box 3211

South Brisbane Qld 4102

Phone: 896 3032

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# Surveyors Regulation



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