



Queensland

Survey and Mapping Infrastructure Regulation 2004

Explanatory Notes for SL 2004 No. 130

made under the

Survey and Mapping Infrastructure Act 2003

General Outline

The regulations in large part set out the principles that surveyors must observe when carrying out surveys under the Act. These are generally high-level statements that provide a framework for what each survey should achieve during the conduct of a survey and the preparation of the appropriate records, plans and other documents relevant to the survey. The principles also guide the preparation of standards under the Act.

These principles are set out in general form in which case they apply to all surveys carried out under the Act. The regulations also expand these to a specific set of principles that have particular application to cadastral or land boundary surveying. The application of some of the principles is demonstrated by use of examples. These are intended to be indicative only and are not intended to be exhaustive cases of how the relevant principle might be applied.

The regulations also deal with a number of specific matters, with part 3 specifying the official reference system for describing location (i.e. latitude and longitude) and part 4 further developing the principles in relation to certain aspects of surveys, particularly for cadastral surveys.

Part 1 Preliminary

Clause 1 specifies the short title of the regulation.

Clause 2 specifies the starting date for the regulation.

Clause 3 provides for the definitions of particular words or phrases in the dictionary in the schedule to the regulations.

Part 2 Principles to be applied in carrying out surveys

Division 1 All surveys

Clause 4 is the first of three general principles regarding the carrying out of surveys. These focus respectively on—

- the value of the survey and mapping infrastructure, and the ways surveys contribute to the value of the infrastructure;
- the manner in which the client's requirements are met; and
- the integration of the survey with other surveys.

This principle recognises that survey and mapping infrastructure is a valuable asset to the State and the community due to the tangible and intangible benefits that it provides to the growth and productivity of the State in general.

Clause 5 provides examples to illustrate some of the characteristics that a survey should have, if it is to contribute to the establishment, maintenance and enhancement of the infrastructure. These examples recognise that the development of the infrastructure occurs through an incremental process by which each survey adds value.

In addition to the examples that deal with the quality of the field survey, the marks and the plan, other examples are provided to deal with—

- correction of errors to ensure that the quality of the infrastructure does not deteriorate;
- the recording of information in State datasets, to ensure that it is publicly accessible; and
- the professional responsibility for the survey, to provide a basis on which the State and the public can rely on the information that is contributing to the infrastructure.

Clause 6 supports but does not limit the operation of section 55 of the Act. Under that section, where a surveyor intends to carry out a survey that has the potential to contribute to the development of the survey and mapping infrastructure, the surveyor must notify the chief executive. This provides the chief executive with the opportunity to discuss the specifications of the

survey, and if appropriate make a contribution to the cost of the survey, so that the survey can contribute to the infrastructure.

Section 55 of the Act requires the surveyor to consider whether the intended survey “is of value for a survey and mapping infrastructure purpose”. The examples in this clause are designed to assist surveyors in making that assessment, by considering whether the survey adds to the physical and/or information parts of the infrastructure or whether it assists to integrate parts of that information.

The clause does not limit the chief executive or a surveyor in deciding when a survey is of value to the survey and mapping infrastructure, for the purpose of requesting certain information about a survey or requesting advice on conducting a survey.

Similarly the clause does not limit the operation of section 34 of the Act where the chief executive may request or obtain information about a survey mark from a surveyor, surveying associate, surveying graduate or public authority, the chief executive reasonably considers is of value for a survey and mapping purpose.

Clause 7 expresses the principle that a survey and the plan must satisfy the intention of the survey. The clause provides examples of how this might be achieved, dealing with the spatial location of features surveyed, placing and referencing appropriate survey marks, and that the survey and plan achieves an appropriate level of survey quality. Survey quality is defined in the Act.

Clause 8 expresses a principle which highlights that surveys must be conducted so as to ensure that the new information produced can fit with existing survey and mapping information, or with survey and mapping information that is produced in the future. This is achieved by relating the survey to a recognised survey framework, such as the geodetic or cadastral framework, or to other features of significance. This principle ensures that further value can be derived from the survey, possibly beyond that contemplated by the person commissioning the survey.

Division 2 Cadastral surveys

Clause 9 provides that the principles for cadastral surveys that are presented in division 2 supplement the general principles for surveys presented in division 1.

These additional principles recognise that cadastral surveys—

- involve the delineation of an area of land over which an interest in land exists or is to be created;
- affect the definition of boundaries of adjoining land over which interests are held;
- involve re-establishment of boundaries in accordance with precedent established in law; and
- contribute to a particularly important component of the survey and mapping infrastructure—the cadastral boundary system.

Clause 10 states how boundary locations for land must be shown and described on plans.

The clause also provides that surveyed boundaries must be marked such that they are readily identified or are discernable on the land, however exceptions are provided to this principle where—

- the client agrees in writing that a boundary is not required to be marked according to the principle; and
- the relevant survey standard is otherwise complied with; or
- the survey is referenced to recognised permanent survey marks which form part of the State control survey.

Clause 11 highlights the consideration surveyors must have to the State, adjoining landholders, the subject landholder and any other party affected by the boundary, when performing cadastral surveys. Some examples of how this can be achieved are provided. These examples recognise that owners and persons holding an interest in land that may not necessarily abut the subject land or boundary, may also have an interest in a reinstated boundary if a subsequent survey relies on that evidence to reinstate the position of that person's boundary.

The clause makes reference to a 'hierarchy of evidence', which it defines as an established group of evidentiary matters that a surveyor gives weight to when determining a boundary location. Cadastral boundary surveying generally identifies several forms of evidence that may or may not always be able to be readily reconciled. Courts have tended to place a higher weight on some categories of evidence than on others (for example, existing survey marks are seen as strong evidence of the location of the boundary, while original measurements generally have a lower weight). However, each situation will be different, depending on the cause of discrepancies between the available evidence, and every boundary

reinstatement must be determined from an evaluation of all of the evidence available, giving due consideration to any precedents.

Other examples relate to the location of natural features that form boundaries; encroachments over boundaries; and errors or irregularities in information.

Clause 12 identifies the ways in which land boundary surveys strengthen and add to the cadastral boundary system and the survey and mapping infrastructure in general. These examples reflect the fact that all cadastral surveys contribute to the quality and robustness of the overall system, and that the quality of each survey relies on the quality of marks placed on, and records kept for, previous surveys.

Part 3 Geodetic reference framework

Clause 13 prescribes the geodetic reference framework and mapping projection that has been approved for Queensland. Those prescribed here are the framework that has been adopted nationally by the Commonwealth and by Australian State and Territory governments.

Part 4 Provisions about survey standard and survey guideline matters

Clause 14 states that the survey standards may make certain provisions for the supervision of persons carrying out cadastral surveys.

Clause 15 identifies those persons permitted to place or reinstate a cadastral survey mark and a permanent survey mark. This provision assists in preserving the integrity of each type of infrastructure. The clause ensures that only persons appropriately registered or endorsed and familiar with the applicable survey principles, standards and guidelines place or reinstate these types of marks. The clause does not preclude other persons from making measurements to or from these types of marks.

Clause 16 permits cadastral surveyors to compile information from other cadastral surveys or other types of surveys when defining land boundaries. The cadastral surveyor is however always responsible for the correctness of the information being compiled, and for the adequacy and appropriateness of the marking used throughout the survey. This clause provides a balance between ensuring a survey is of an appropriate standard and avoiding unnecessary expense in undertaking the survey if suitable information and marks are already in existence.

Clause 17 extends the approach contemplated by Clause 16, to the situation where the survey is undertaken entirely by using information from existing surveys. The clause provides for the circumstances and the conditions applicable when a cadastral surveyor prepares a plan of survey without carrying out a survey on the land.

Clause 18 describes the procedures a cadastral surveyor must use when reinstating existing land boundaries.

Clause 19 states that a cadastral surveyor must advise affected land owners in writing when a reinstated land boundary adversely impacts upon that owner. The registering entity must also be advised of the actions taken. Such circumstances might arise when a reinstated boundary reveals an encroachment by a fence, building or other form of improvement upon the land, or that original survey marks may not have properly represented the correct positions of the boundary.

Clause 20 sets out the procedure for cadastral surveyors upon the completion of a cadastral survey. Cadastral survey plans must be certified in the correct form and in the way provided for in that form. The registering entity or the chief executive might also require additional documents to be lodged with the survey plan, for example supporting information that confirms that certain elements of the survey and the plan comply with particular principles and standards.

Clause 21 requires cadastral surveyors performing land boundary surveys to only use equipment that is calibrated to ensure that it is capable of achieving the specifications contained in the appropriate cadastral survey standard. This provision supports the certifications on survey plans by cadastral surveyors in regard to the correctness and accuracy of their survey.

Clause 22 states that where records relating to a cadastral survey are lodged, deposited or given, these records must be certified in the prescribed form as to their accuracy and correctness. Those records of cadastral surveys that are not lodged with the chief executive or the registrar of titles must be retained by the surveyor for a period of 6 years.

ENDNOTES

- 1 Laid before the Legislative Assembly on . . .
- 2 The administering agency is the Department of Natural Resources, Mines and Energy.

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