

LAND TENURE CENTER

University of Wisconsin - Madison

Consultancy Services to
The Government of the
Republic of Trinidad & Tobago

LAND USE POLICY AND ADMINISTRATION PROJECT (LUPAP) LAND SURVEYING COMPONENT

CADASTRAL SURVEYING REPORT

Prepared by Alec McEwen



Reviewed by Fred Brazier and Charisse Griffith-Charles

May 2000

Contents

1.	EXECUTIVE SUMMARY	3	
2.	INTRODUCTION	4	
3.	SCOPE OF WORK	4	
4.	METHODOLOGY	4	
5.	LAND SURVEYORS ACT		
6.	LAND SURVEYORS REGULATIONS	7	
7.	LAND SURVEYORS RULES		
8.	BEST PRACTICE GUIDELINES		
9.	REGISTRATION OF DEEDS ACT		
	REAL PROPERTY ORDINANCE		
11.	STATE LAND (REGULARISATION OF TENURE) ACT	.10	
12.	PLANNING AND DEVELOPMENT OF LAND BILL	.12	
	LAND ADJUDICATION ACT		
	REGISTRATION OF TITLES TO LAND ACT		
	LAND TRIBUNAL ACT		
16.	CONCLUSIONS AND RECOMMENDATIONS	.17	
	ACKNOWLEDGEMENTS		
	NEX A: BEST PRACTICE GUIDELINES		
1. 2.		.19	
3.	SUPERVISION	.21	
4.			
	NEX B: NOTICE OF MEETINGS		
	NEX C: SUMMARY OF PRESENTATION TOPICS		
	NEX D: ATTENDEES AT PRESENTATION ON 20/05/2000		
ANNEX E: ATTENDEES AT PRESENTATION ON 25/05/200027			
ANI	NEX F: LIST OF PERSONS MET	.28	

1. EXECUTIVE SUMMARY

- 1.1 The cadastral surveying component of the Land Use Policy and Administration Project (LUPAP) consists of two main elements:
 - a) Ensuring that cadastral surveying legislation and practice are appropriate for Trinidad and Tobago, particularly in view of the recent enactment, and anticipated proclamation, of the Land Adjudication Act, the Registration of Titles to Land Act and the Land Tribunal Act; and
 - b) Strengthening the cadastral category of land surveying in Trinidad and Tobago, especially the private sector.
- 1.2 Until the enactment of the Land Surveyors, 1996, land surveying in Trinidad and Tobago meant cadastral surveying, for that was the only category of land surveying that was recognised by law and required a licence to practise. The Act now provides for the compulsory registration of other categories of land surveyor, but only cadastral surveyors require licensing in addition to registration.
- 1.3 The introduction of other statutory categories of land surveying raises the possibility of conflict with other professions. Prior to the passage of the Land Surveyors Act, engineers, for example, were entitled to carry out land surveys for non-cadastral purposes. The Act now permits engineering surveys to be undertaken only by persons registered in the engineering surveying category. The Consultant recommends that the Land Surveyors Act be reviewed by all the affected parties to determine what changes to the legislation are needed to remove any professional conflict.
- 1.4 Because the Land Surveyors Regulations, 1998 already deal very largely with cadastral surveying, they require few changes to satisfy the new requirements. The Consultant's draft Cadastral Surveying Regulations contain appropriate extracts from the current regulations, with such additional material or alterations as he considers necessary to deal with the new legislation.
- 1.5 The Registrar General expressed uncertainty to the Consultant as to what type of survey information will be needed for registering an adjudicated parcel under the new Act. The Consultant understands that each parcel adjudicated under the Land Adjudication Act will be demarcated on the ground and identified by a Unique Parcel Reference Number on a Parcel Identification Map which shows the correct topological relationship of all parcels on the map. This information is sufficient to register the parcel and issue a certificate of title. Any owner of a registered adjudicated parcel who requires a cadastral survey plan that shows the bearings and distances of the parcel boundaries and the parcel area could obtain it, but the survey and preparation of the plan should be at his or her own expense.

2. INTRODUCTION

- 2.1 The Cadastral Surveying Consultant arrived in Trinidad and Tobago on 9th May 2000 and departed on 27th May. This report contains his findings, conclusions and recommendations.
- 2.2 Cadastral Surveying is one of the categories of land surveying. The LUPAP Regulations Team is preparing proposed new regulations for five of those categories. Reports on the geodetic, photogrammetric, hydrographic and engineering surveying categories were submitted previously by the respective consultants. Since a number of requirements and problems are common to all five categories, the Cadastral Consultant will not reiterate points and recommendations that have already been made adequately by his fellow consultants. Instead, he will confine himself to matters which refer specifically to the cadastral category.

3. SCOPE OF WORK

- 3.1 The Terms of Reference for the Cadastral Surveying Consultant include the following deliverables:
 - a) make a presentation to Trinidad and Tobago Land Surveyors and other land-based professionals in general, and to Lands and Surveys Division staff in particular;
 - b) prepare draft new regulations for cadastral surveying for the planning and development of land, and also for the implementation of the Land Registration and Land Adjudication Bills (assuming they will be passed);
 - c) prepare best practice guidelines where required; and
 - d) prepare a report on the consultancy.

4. METHODOLOGY

- 4.1 The Consultant's initial approach to the work included a study of the material supplied to him before he arrived in Trinidad and Tobago. This material consisted of various reports and documents, including a copy of some existing or proposed legislation.
- 4.2 Soon after his arrival the Consultant was provided with further material, consisting of additional documents and legislation, including the revised Land Adjudication Bill (No. 2), 1999 and the Registration of Titles to Land Bill (No. 2), 1999.
- 4.3 The Team Leader of the Regulations Team made arrangements for the Consultant to meet a number of government officials and professional persons in the private sector. These meetings helped the Consultant to become more

familiar with the situation regarding cadastral surveying and related activities in Trinidad and Tobago and to identify the major problems in those areas.

4.4 The Consultant delivered a presentation on Cadastral Surveying in the 21st Century to members of the Institute of Surveyors of Trinidad and Tobago on 20th May 2000. Some lawyers and members of other professions were among the audience. The same presentation was also delivered to staff of the Lands and Surveys Division on 25th May. Questions and comments following each of the two presentations proved useful to the Consultant in determining local opinion regarding current professional practice and issues in cadastral surveying.

5. LAND SURVEYORS ACT

- 5.1 The Land Surveyors Act, 1996 (Act No. 33 of 1996) was passed by Parliament in October 1996 and it received the President's assent on 19th November 1996. It repealed and replaced the Land Surveyors Ordinance, No. 19 of 1952, which was passed during the pre-independence period.
- 5.2 The Act represents a significant departure from its predecessor, and indeed it differs greatly from similar legislation in most other jurisdictions. Legislation relating to land surveyors is among the oldest laws of many countries, but it normally applies only to cadastral surveying, not to other categories of surveying. Typically, the legislation provides that only those persons who satisfy the specified examination requirements and undergo the required practical training are authorised to perform cadastral surveys. Authorisation takes the form of a licence to practise. Such legislation therefore confers on the licensed surveyor the exclusive right to carry out cadastral surveys. This licence is not normally available to other categories of land surveying, such as geodetic, hydrographic and photogrammetric. Surveyors in those other categories are normally free to practise without any licensing requirement. This means that although they may be well qualified and experienced, they have no sole right to practise their profession.
- 5.3 In enacting its new Land Surveyors Act, Trinidad and Tobago has taken a bold step by requiring the registration of surveyors, regardless of which designated category they practise. In addition to registration, a person wishing to practise cadastral surveying must also obtain a licence as a Trinidad and Tobago Land Surveyor, a requirement that preserves the special status and privileges of the cadastral surveyor. The Consultant understands that the Act was based, at least in part, on a draft of the then proposed Canada Lands Surveyors Bill which, although produced nearly a decade ago, did not become law until 1999. Like the Trinidad and Tobago legislation, the Canadian Act provides for and requires the registration of different categories of surveyor.
- 5.4 Under subsection 2(1) of the Act, the interpretation of word "surveyor" includes a hydrographer, engineer surveyor, cadastral and land management surveyor, photogrammetrist, geodesist or cartographer or as may be prescribed by the Board

It is evident that the Land Survey Board, to which the subsection refers, has very broad powers to prescribe other categories of surveying if it chooses to do so. This by no means suggests that the Board would ever act irresponsibly or without consultation with other affected professions. But there remain certain activities, of which the creation, operation and maintenance of a Geographical Information System is a prime example, that cannot be fairly said to belong exclusively to any single profession, for its claimants can include surveyors, engineers, geographers, computer scientists and perhaps others. Resistance from those professions could be expected if the Board were to prescribe the practitioner of GIS as a surveyor.

- 5.5 Of more immediate importance is the possibility of problems arising from the very wide definition of "land surveying" in subsection 2(1). By implication, if not expressly, this definition includes engineering surveys, which is an activity that is sometimes undertaken in Trinidad and Tobago by engineers and perhaps more commonly by survey technicians. An amendment to the Act may be needed to remove this ambiguity.
- 5.6 It may be of interest to consider a case in Nova Scotia, R. v. Robb (K.W.) & Associates Ltd. (1991), 101 N.S.R. (2d) 216. A licensed land surveyor was charged with the unauthorised practice of professional engineering contrary to the Engineering Profession Act. His alleged offence was the preparation of road profiles and cross-sections included with plans submitted by his client as part of an application for subdivision approval. After his conviction in the Provincial Court he appealed to the Nova Scotia Court of Appeal. The Court of Appeal reversed the trial court's decision and set aside the conviction. It found that the relevant legislation supported the lawful involvement of both engineers and land surveyors in road design. The court said that land surveyors are involved in a rudimentary, preliminary way for the purpose of locating road allowances, and engineers in a more complex and specific way for the engineering purposes of road construction. But the court found "a gray, overlapping area of some magnitude between the two professions." It also commented that the "demarcation line should long since have been determined between the two professions by negotiation, fixed by regulation or statutory amendment, and settled by practice." Although decisions of Canadian courts are not binding in Trinidad and Tobago, they can be cited as persuasive authority.
- 5.7 Subsection 2(1) of the Act defines cadastral surveying and land management as a single category of "surveyor", rather than as two separate categories. Since land management is not normally regarded as a category of land surveying the Consultant considers it advisable to delete the words "and land management" from the definition.
- 5.8 Some other provisions of the Act call for amendment or clarification. They include, for example, the desirability of prescribing the term of years during which the Registrar-Secretary of the Land Survey Board shall hold office. At present, section 8 provides for the Minister's appointment of that officer but it specifies no fixed or maximum term. Section 36 should be amended to state that no member

of the Land Survey Board, during the time when he holds that office, shall also be a member of the Land Surveyors Disciplinary Committee. Another important issue that is still under consideration by the Board is the procedure for registering a person in more than one category of surveying under the Act.

5.9 Because of the time it takes in most countries to pass or amend legislation, the Consultant does not favour making piecemeal changes to the Act. Instead he recommends that the Board arrange a series of meetings at which the Board members and representatives of the Institute and other affected professional organisations could come together to discuss and determine what amendments are needed. Those proposed amendments could then formally submitted to the Minister with a request that they be embodied in a Bill to amend the Act accordingly.

6. LAND SURVEYORS REGULATIONS

- 6.1 Section 64 of the Land Surveyors Act, 1996 authorises the Board, with the applicable Minister's approval, to make regulations for carrying out the purposes of the Act. Under this authority the Land Surveyors Regulations, 1998 were approved and came into force on 2nd November 1998.
- 6.2 Although the Regulations were designed to meet the requirements of the new Land Surveyors Act, they follow regulations made under the previous legislation that understandably related solely to cadastral surveying. In the Consultant's opinion, very few amendments to the Land Surveyors Regulations, 1998 are needed from the cadastral point of view. To satisfy the requirements of his Terms of Reference for new cadastral regulations, the Consultant has produced a draft consisting of extracts from the existing regulations, revised with the additions and changes that he considers necessary.
- 6.3 The Third Schedule to the Regulations contains a Code of Ethics which applies to all persons registered under the Land Surveyors Act, 1996. Since the provisions of this code are comprehensive and similar to those adopted for the land surveying profession in some other jurisdictions, the Consultant sees no need to alter them.

7. LAND SURVEYORS RULES

- 7.1 Regulation 41 of the Land Surveyors Regulations, 1998 requires the Board to establish rules from time to time, in consultation with the Institute of Surveyors of Trinidad and Tobago and the Director of Surveys. These rules are for the execution of cadastral surveys, recording of field notes, and the preparation of cadastral plans. The Consultant is not required by his Terms of Reference to prepare the Land Surveyors Rules, but he agreed to review a draft set that has been produced by a member of the Regulation Team for the Board's approval.
- 7.2 The draft rules contain technical details the requirements of which may change from to time. In the Consultant's opinion it is appropriate for the Board to

be able to establish such rules without the more formal procedure of obtaining the Minister's approval.

8. BEST PRACTICE GUIDELINES

- 8.1 The Consultant prepared a draft set of Best Practice Guidelines for cadastral surveying. These guidelines, which deal with law, monuments and boundaries, supervision, and fees and advertising are intended to supplement the Act, Regulations, Code of Ethics and Rules.
- 8.2 In the Consultant's opinion, the Land Surveyors Act, 1996, the subsidiary legislation made thereunder and the Best Practice Guidelines should provide cadastral surveyors with direction and advice that will assist them in the practice and promotion of their profession. In addition, these various rules should also help to ensure that cadastral surveys in Trinidad and Tobago are carried out to the required technical standards. It should be observed, however, that a regulatory framework by itself is not enough. There must also be adequate enforcement.

9. REGISTRATION OF DEEDS ACT

- 9.1 A registration system for the recording of deeds to land was established by an ordinance that came into force in Trinidad and Tobago on 1st January 1885. The applicable law is now the Registration of Deeds Act, published in the 1980 edition of the Revised Statutes of Trinidad and Tobago as Chapter 19:06.
- 9.2 The Registration of Deeds Act, commonly referred to locally as the "Old Law", is a typical deeds-recording system, in that it is essentially a repository of documents. The entry of a document in the register carries no assurance as to the validity of the information contained in the document. This means that although a registered document may provide evidence of title it is not proof of title. The main importance of registration under a deeds-recording system is to establish priority of interest. For example, suppose that a vendor fraudulently sells the same parcel of land to two different purchasers. The purchaser who first registers the transaction will have the better claim to the land, even though his was the second transaction, provided he has bought in good faith and is unaware of the first purchase. In such a situation, the first purchaser has no claim against the registry, and would have to pursue a legal remedy against the vendor, who by that time might be bankrupt or have fled the jurisdiction.
- 9.3 Each deed in the registry is numbered sequentially, according to the date of its registration. All the deeds registered in any one year are bound in volumes, numbered according to the year.
- 9.4 The Act contains no provision relating to the manner in which land conveyed by a deed shall be described. Nor does it require a deed to be accompanied by a survey plan when it is presented for registration. Nowadays, some lending institutions may require the attachment of a survey plan to a conveyance or mortgage document. Where land is subdivided a survey plan may

also be registered. The Registrar General informed the Consultant, however, that the number of survey plans received by the registry is still very small.

9.5 Subsection 22(3) of The Land Surveyors Act, 1996 prohibits the filing in the Registry of Deeds of plans made by unqualified persons, as has happened in the past. It provides that:

Every map, plan or diagram of any land attached to any document tendered for registration under any law relating to the registration of land or title to land shall be certified by a Trinidad and Tobago Land Surveyor and be registered with the Director of Surveys.

This subsection introduced an important change in the law. The previous requirement was for the registration with the Director of Surveys of only those plans relating to transactions registered under the Real Property Ordinance.

- 9.6 Despite its imperfections the Registry of Deeds is preferred by some parties to land transactions because documents can be registered more quickly and at a much lower cost than is possible under the alternative Registry of Real Property. The registry estimates that about 20,000 documents are registered each year.
- 9.7 The Registry of Deeds is still operated as a manual system, but it is gradually being computerised. The scanning of deeds registered during the past 30 years is underway, and this has been completed as far back as 1984. At the present time, users of the registry are unable to carry out a title search by computer but eventually this will be possible.

10. REAL PROPERTY ORDINANCE

- 10.1 Registration of land titles has existed in Trinidad and Tobago for more than one hundred years. The current law was introduced by legislation in 1895 which, with some subsequent amendments, survives today as the Real Property Ordinance in the Revised Statutes of Trinidad and Tobago 1950, Chapter 27, No. 11. Unfortunately, this ordinance was not reprinted in the current (1980) edition of the revised statutes, because of its intended replacement by the Land Registration Act, 1981 (Act No. 24 of 1981) that never came into operation. This means that the Real Property Ordinance is no longer available from the Government Printery, but it is available for inspection in the National Archives.
- 10.2 The Real Property Ordinance established a land titles registration system. Registration under this system is State confirmation of ownership, subject to such qualifications and exceptions as are specified in the Ordinance.
- 10.3 All State land granted after August 1889 must be registered under the Ordinance. The title to other land may also be registered, but this is permissive, not compulsory. The Registrar General estimates that about 15% of all private land in Trinidad and Tobago is registered under the Real Property Ordinance. Once land is registered it may not be removed from registration, except with respect to land acquired by the State.

- 10.4 The original of every State grant and every certificate of title is stored in a volume known as the Register Book. The Registry of Real Property is operated as a manual system. Although computerisation is in progress its implementation is still at a very early stage.
- 10.5 Registration of title under the Ordinance is conclusive, subject to such encumbrances as are shown in the Register Book, as constituted by the grant or certificate of title. The title may be subject to the exceptions and qualifications described in Section 45, such as easements and subsisting claims of adverse possession. In addition, all registered titles are subject to the overriding interests described in section 46, such as unpaid taxes and the State's right of expropriation.
- 10.6 The registry deals with approximately 100 applications every year, each of which may take about 2 years to complete the registration process for a cost of about \$TT10,000-15,000.

10.7 Section 33 of the Ordinance states:

Every original grant or certificate of title bound in the Register Book shall have drawn on or attached to it a map of the land therein comprised, which map shall be provided by or at the expense of the applicant; and every certificate of title subsequently issued shall either have drawn on it or attached to it a map of the land therein comprised, and provided in like manner, or shall refer to a map in which such land is delineated and which is already contained in the Register Book.

10.8 Section 34 of the Ordinance states:

Every map, plan or diagram required for the purposes of this Ordinance shall be prepared and furnished in the manner specially provided for the purpose by the Land Surveyors Ordinance and by rules made thereunder.

The Land Surveyors Ordinance (Chapter 27, No. 2) referred to in section 34 has been repealed, as has its successor (No. 19 of 1952). The current law is subsection 22(3) of the Land Surveyors Act, 1996, quoted above in paragraph 8(5) of this report.

11. STATE LAND (REGULARISATION OF TENURE) ACT

- 11.1 The objects of the State Land (Regularisation of Tenure) Act, 1998 are to protect certain squatters from ejectment from State land; to facilitate the acquisition of leasehold titles by both squatters and tenants in designated areas; and to provide for the establishment of land settlement areas. More specifically, the Act applies only to
 - a) a squatter in actual occupation of State land on which there is a dwelling house before 1st January, 1998;
 - a squatter or tenant within a Designated Area and a person within a Land Settlement Area (both types of area are defined in the Act); and

- c) a squatter or tenant in actual occupation or tenancy of lands owned by a State Agency listed in the Schedule to the Act, on which there is a dwelling house before 1st January, 1998.
- 11.2 Section 5 of the Act established a Land Settlement Agency (LSA), which is responsible for administering and carrying out the provisions of the Act in the Island of Trinidad. The Tobago House of Assembly bears the same responsibility with respect to the State lands that are vested in it. Although the benefit of the Act does not extend to persons squatting on private land, it is understood that the LSA intends to consider ways of dealing with such situations.
- 11.3 The Act provides for the issue by the State of three separate, successive types of interest. These interests are Certificate of Comfort, Statutory Lease, and Deed of Lease.
- 11.4 A Certificate of Comfort is a personal, non-transferable right. It provides the holder with protection against ejectment, but it does not create an interest in land. The Act does not require the boundaries of land occupied by a squatter to be surveyed for the purpose of issuing a Certificate of Comfort. Yet the LSA needs to determine the geographical location of the site by a rapid, but reasonably accurately, method that does not involve undue expense. To discuss possible methods, a meeting with the Director of LSA was held on 11th May 2000. The Consultant, accompanied by Fred Brazier, Ali Hasham and others, attended this meeting. Among the methods considered are:
 - a) the use of kinematic GPS to determine the coordinates of the centroid or some other point within the site,
 - b) the identification of the site from recent air photography, and
 - c) the utilisation of census enumeration diagrams.
- 11.6 A Statutory Lease for a period of 30 years may be acquired by a squatter who has obtained a Certificate of Comfort, or by a tenant in occupation of land in a Designated Area or a Land Settlement Area. A Statutory Lease may not be assigned or transferred, except to the State, but it is transferable for the remainder of its term in the estate of a deceased person according to law. A survey of the boundaries of land held under an application for a Statutory Lease is required before the lease will be issued. Only a Trinidad and Tobago Land Surveyor should be permitted to make this survey. At the present time (May 2000), several Statutory Leases are in preparation but none has been issued.
- 11.7 A squatter or tenant who is entitled to a Statutory Lease may obtain the grant of a Deed of Lease for a term of 199 years. The grant may be issued to the squatter or tenant upon his payment in full of a premium prescribed by Order of the Minister, together with the annual rent, the infrastructure development costs and the cost of a cadastral survey of the land. A Deed of Lease is declared by subsection 15(1) to be a legal interest in State land.

12. PLANNING AND DEVELOPMENT OF LAND BILL

- 12.1 Land Surveyors and other persons registered in accordance with section 17 of the Land Surveyors Act, 1996 are affected by some provisions of the Planning and Development of Land Bill, 1999. Clause 24(2)(d) of the Bill states that a development plan shall include, among other items, "such maps, drawings and other graphic representations" as may be necessary to illustrate, explain and provide a reasoned justification for the conclusions of the development plan. If any of this required material falls into the category of cartography it lies within the definition of "land surveying" and "surveying" in subsection 2(1) of the Land Surveyors Act, 1996. Any person other than a person registered in accordance with Part IV of that Act who prepares such material commits an offence under section 55 of the Act by engaging "in the practice of surveying"
- 12.2 Clause 37(2)(a) of the Bill provides that an application for permission to develop land shall be accompanied by "such plans, drawings, surveys, maps, diagrams" and other information as the regulations prescribe. Under clause 105 the Minister is authorised to make such regulations, but they are subject to negative resolution of Parliament. Care should be taken to ensure that any regulation relating to the preparation of plans, drawings, surveys, and maps does not conflict with the provisions of subsection 2(1) and section 55 of the Land Surveyors Act, 1996.
- 12.3 Part VI of the Bill provides for the recognition of registered professionals in the development approval process with the objective of expediting commencement of construction. The definition of "registered professional" in clause 73 of Part VI includes "a Trinidad and Tobago Land Surveyor registered under the Land Surveyors Act." This definition does not contain the words "Land Surveyor", but paragraph (e) of "registered professional" permits the inclusion of "a member of such other profession as may be prescribed by regulation." The Consultant recommends that the definition of "registered professional" in clause 73 be amended to include Land Surveyor in addition to Trinidad and Tobago Land Surveyor. This is needed because land surveyors other than cadastral surveyors may be involved in development approval.
- 12.4 Clause 74 requires the governing board or council of the professional organisation for each body of registered professionals to consult with every relevant agency and fix minimum levels of professional competence required for the preparation of such categories of application for approval of proposed building or other development as may be appropriate. With respect to Land Surveyors and Trinidad and Tobago Land Surveyors, the Land Survey Board, in cooperation with the Institute of Surveyors of Trinidad and Tobago, should consult with every relevant agency when the Bill becomes law.
- 12.5 Clause 75 requires each professional organisation, upon the application of any of its members, to determine whether the member satisfies the requirements

- of clause 74. The organisation shall give or withhold certificates of competence accordingly and shall give written notice to every concerned agency of the name, address and particulars of the certificate of competence that it has issued to any member. Here also, the Land Survey Board, in consultation with the Institute of Surveyors of Trinidad and Tobago, should be responsible for issuing or withholding certificates of competence and notifying the appropriate agencies accordingly.
- 12.6 Clause 76 requires the governing Board or Council of each professional organisation, not later than 1st March in each year, to prepare a list showing the names and addresses of all persons to whom the organisation has given a certificate of competence. The list shall show the categories of applications for approval to which the certificates of competence apply, including any limitations or restrictions. The secretary of the organisation shall send a copy of the list to every concerned agency and shall publish the list in the official Gazette.
- 12.7 The remainder of Part VI (clauses 77 through 89) deal mainly with the obligations of listed professionals. They include the removal of a professional from the list following an agency complaint, termination of listing, the official register of all listed professionals, the time for granting or refusing development approvals, expediting the circulation of applications, reliance on professional certificate, the issue and effect of building permits, and fixing the amount of performance bonds for listed professionals.
- 12.8 Clause 81 is important to Land Surveyors and Trinidad and Tobago Land Surveyors. Its three sub-clauses read as follows:
 - a) Except for simple plans, every plan for building construction or land development shall be prepared and submitted to the appropriate agency by a registered professional.
 - b) Every plan must be stamped with the name and address of the registered professional under whose professional certificate any approval submission is made and must be signed by such professional.
 - c) Supporting documents, sketches, calculations and like material must be stamped with the name and address of the registered professional or must be similarly authenticated.
- 12.9 The Land Survey Board and the Institute of Surveyors of Trinidad and Tobago should be aware of the Planning and Development of Land Bill and its implications for the land surveying profession.

13. LAND ADJUDICATION ACT

13.1 Land adjudication (referred to as Land Settlement in some other jurisdictions) enables the State to determine and confirm the ownership of, and the legal interests in, individual parcels of land. It also provides for the physical demarcation of parcel boundaries. The need for adjudication may arise from

dispute or merely from uncertainty. Even where land is unoccupied and is apparently owned by the State, adjudication provides a convenient method of cleansing the title by making sure that no adverse claims exist or, if they do exist, they are properly dealt with. Adjudication deals only with existing rights to land, but it can be the prelude to subdividing tracts of State-owned land for subsequent allocation to private persons. Adjudication can be carried out systematically, area by area, or sporadically for isolated parcels. Either or both of these methods may be appropriate, depending on the local circumstances, but systematic adjudication is normally more efficient and less costly than the sporadic approach.

- 13.2 The Land Adjudication Act was passed in April 2000 but it has not yet been proclaimed. It provides for the Minister's appointment of an Adjudication Officer and for such Assistant Adjudication Officers, Demarcation Officers, Recording Officers and Survey Officers as may be necessary. Section 4(5) of the Act requires that the Adjudication Officer be an Attorney-at-Law of seven years standing. Section 4(6) states that the qualification for the appointment of the other officers "shall be as prescribed." It is assumed that the Minister responsible for land adjudication would prescribe that qualification in a Regulation authorised under section 27. Because the work of the Survey Officer involves aspects of cadastral surveying, it is important to ensure that this officer is a Trinidad and Tobago Land Surveyor, licensed and registered under section 17 of the Land Surveyors Act, 1996. The Minister's Regulations should also provide that survey work under section 13 of the Land Adjudication Act shall be carried out in accordance with the Land Surveyors Act, 1996 and the regulations made thereunder.
- 13.3 The work of the Demarcation Officer under section 11 includes indicating or causing the indication of certain types of boundaries. Such work would almost always require the involvement of the Survey Officer. Also, surveys undertaken by the Survey Officer as a result of demarcation should be carried out simultaneously or very shortly after the demarcation itself. If the time interval between demarcation and survey is too long there is a risk of the surreptitious moving of boundary marks by unscrupulous persons. A standard type of boundary monument should be used for demarcation during an adjudication process.
- 13.4 Among the Survey Officer's duties is the preparation of a section demarcation map, and also a parcel identification map on which he shall number each parcel consecutively. A parcel number and the number of the adjudication section in which it is situated shall together form the Unique Parcel Reference Number for registration under the Registration of Titles to Land Act. For the purpose of initial registration it is not necessary to show the bearings and distances of the boundaries of each parcel or the area of the parcel.
- 13.5 It is possible that a Trinidad and Tobago Land Surveyor could be appointed to both offices of Demarcation Officer and Survey Officer. Provided the surveyor is qualified to award compensation and perform the other duties

required by section 12 the Consultant believes that there could be an advantage in appointing him to the two offices concurrently.

13.6 The Act is silent as to who pays for the adjudication process. Any such operation is bound to involve considerable expense and the probable amount of its cost must be considered. The Consultant recommends that the initial adjudication be introduced in a pilot area of manageable size, preferably containing a variety of types of property. The experience gained from the pilot project would be invaluable and would help to estimate the cost of extending adjudication to other areas of the country.

14. REGISTRATION OF TITLES TO LAND ACT

- 14.1 The main purposes of the Registration of Titles to Land Act (which was passed in April 2000 but has not yet been proclaimed) are to provide a modern system for the registration of title to every parcel of land and to create a single system of land registration. Until that second purpose is accomplished, Trinidad and Tobago will have three laws governing the registration of land transactions, The Registration of Deeds Act, the Real Property Ordinance and the Registration of Titles to Land Act, once that Act is proclaimed and actually implemented.
- 14.2 When the final adjudication record of a parcel adjudicated under the Land Adjudication Act is registered under the Registration of Titles to Land Act, both the Real Property Ordinance and the Registration of Deeds Act shall cease to apply to that parcel.
- 14.3 Part VII of the Act provides for the establishment of an Assurance Fund from which compensation may be paid to claimants with respect to certain loss or damage. The State confirmation and assurance of a registered title is sometimes erroneously believed to include a guarantee of the accuracy of the boundary measurements and the area of a parcel that are described in the register or shown on an accompanying survey plan. To prevent any such confusion, the Consultant recommends that the Act be amended by adding a new subsection to section 34 (Conclusiveness of the Register), as follows:

The boundary measurements and the area of a parcel of land described in a certificate of title consist only of the actual measurements on the ground of the legal boundaries and the area they enclose, notwithstanding that a certificate of title, survey plan or other instrument describes or shows measurements or an area that is more or less than the actual measurements or area of the parcel

15. LAND TRIBUNAL ACT

15.1 The principal object of the Land Tribunal Act (which was passed in April 2000 but has not yet been proclaimed) is to provide for appeals from an Adjudication Officer appointed under the Land Adjudication Act when that Act comes into force and is implemented. If that were its only purpose, the two pieces of legislation could be combined conveniently in a single law. But the Land Tribunal Act goes further, for it transfers to the Tribunal's jurisdiction the authority

at present exercised by a number of other governmental and judicial agencies. The Schedule to the Act identifies the sections of seven other Acts, and names the corresponding existing authority, that will fall within the Land Tribunal's jurisdiction on a date fixed by Order of the President.

- 15.2 With respect to the Registration of Titles to Land Act, sections 8 and 9 of the Land Tribunal Act authorise the Tribunal to hear claims for compensation, and to give direction to the Registrar upon the Registrar's application for guidance.
- 15.3 Section 3 provides that the Land Tribunal shall consist of a Chairman and a Deputy Chairman, each of whom shall be an Attorney-at-Law of seven years standing, together with not more than six other members. The President shall appoint all the members of the Tribunal. Section 3(8) states that the President, on the advice of the Chairman, may appoint as a temporary member of the Tribunal a person with special knowledge and experience in one or more of the following:
 - a) Administration in local government;
 - b) Town and Country Planning;
 - c) Environmental Planning, environmental science, or environmental development;
 - d) Architectural engineering, surveying or building construction;
 - e) Land valuation;
 - f) Matters relating to the management and use of agricultural lands and the practice relating thereto;
 - g) Any other matter in respect of which the Tribunal needs assistance in determining any issue which engages its attention.
- 15.4 A decision or Order of the Land Tribunal may be appealed to the Court of Appeal, but only upon a point of law and only with the leave of a judge of that court. The Court of Appeal has the power to confirm, vary, amend or set aside the Order, and may make such other Orders as the nature of the case requires to ensure the determination on the merits of the question in controversy between the parties to the appeal.
- 15.5 Section 14(2) provides that a decision of the Court of Appeal shall be final and conclusive.
- 15.6 The Act does not say whether or not claimants who appeal to the Land Tribunal or to the Court of Appeal would be required to pay legal fees and court costs, but it is normal and reasonable to charge for appeals. If such charges are required some claimants may be unable to pay them if they are set too high. On the other hand, if appellants are not required to pay, or if the fees and costs are set too low, they may be encouraged to make frivolous appeals.

16. CONCLUSIONS AND RECOMMENDATIONS

- 16.1 The proposed revisions to the cadastral surveying component of the Land Surveyors Regulations, 1998 will strengthen the practice of land surveying in Trinidad and Tobago. The new regulations are also appropriate for cadastral surveys required by the State Land (Regularisation of Tenure) Act, and also the Land Adjudication Act and the Registration of Titles to Land Act when those two Acts come into force.
- 16.2 However it is necessary to clarify or amend certain provisions of the Land Surveyors Act, 1996, with respect to various matters. These include, for example, the definition of "surveying", the possible overlap of certain categories of surveying with other professions, and the registration of land surveyors in more than one category. The Consultant further believes that these and other matters should be addressed by a thorough review of the Act by all the affected organisations, rather than by proposing piecemeal changes.

16.3 The Consultant recommends that:

- a) the Land Survey Board arrange meetings at which Board members and representatives of the Institute of Surveyors of Trinidad and Tobago and other affected professional organisations determine what amendments to the Land Surveyors Act, 1996 are needed;
- the Director of Lands and Surveys and the Director of the Land Settlement Agency agree upon an appropriate method or methods for identifying the location of any site for which a Certificate of Comfort is to be issued under the State Land (Regularisation of Tenure) Act;
- the definition of "registered professional" in clause 73 of the Planning and Development of Land Bill, 1999 be amended to include Land Surveyor in addition to Trinidad and Tobago Land Surveyor;
- d) the Land Survey Board and the Institute of Surveyors of Trinidad and Tobago be aware of the provisions of the Planning and Development of Land Bill, 1999 and its implications for the surveying profession;
- e) the Survey Officer appointed under section 4(6) of the Land Adjudication Act be a Trinidad and Tobago Land Surveyor;
- f) implementation of the Land Adjudication Act take the initial form of a pilot project to obtain practical experience and an estimate of the resources required to extend adjudication to other areas of Trinidad and Tobago. and
- g) the Registration of Titles to Land Act be amended to make it clear that the description of a parcel of land in a certificate of title or in an accompanying survey plan is not conclusive as to the parcel's actual area or boundary measurements.

17. ACKNOWLEDGEMENTS

- 17.1 The Consultant expresses his appreciation to all those persons and organisations who took the time to receive him, answer his many questions and provide him with information and advice.
- 17.2 In particular, the Consultant wishes to thank members of the Lands and Survey Division, the Land Settlement Agency, the Registrar-General's Department, the Land Survey Board, and the Institute of Surveyors of Trinidad and Tobago for their most valuable assistance.

ANNEX A: BEST PRACTICE GUIDELINES

1. LAW

Legislation

- 1.1 The authority to perform cadastral surveys in Trinidad and Tobago is derived from legislation. This legislation consists of Acts of Parliament and the subsidiary legislation made thereunder. Subsidiary legislation consists of regulations, rules, orders and codes of ethics. Provided it is clearly authorised by the Act from which it flows, subsidiary regulation has the same legal validity and force as the Act itself. The purpose of subsidiary legislation is to allow such matters as procedural, technical and administrative details, all of which may need changes from time to time, to be given legal force by a statutory authority without requiring them to be passed by Parliament.
- 1.2 The principal legislation affecting cadastral surveys and Trinidad and Tobago Land Surveyors consists of:
 - a) The Land Surveyors Act, 1996 (Act No. 33 of 1996);
 - b) The Land Surveyors Regulations, 1998;
 - c) The Rules made under Regulation 41 of the Land Surveyors Regulations, 1998;
 - d) The Code of Ethics, forming the Third Schedule to the Regulations.
- 1.3 In addition, some other existing or proposed legislation may contain provisions that require, permit or imply the making of cadastral surveys. Examples include:
 - a) Section 10. (e) of the State Land (Regularisation of Tenure) Act, 1998.
 - b) Section 13 of the Land Adjudication Act (not yet proclaimed).
 - c) Section 21 of the Registration of Titles to Land Act (not .yet proclaimed).

Court Decisions

1.4 In the settlement of disputes, including disputes relating to cadastral surveys and Trinidad and Tobago Land Surveyors, courts declare and apply the applicable law. The applicable law consists of common law and statute law. Trinidad and Tobago Land Surveyors should be aware of existing judicial decisions that might affect their work, and they should try to keep informed of new court judgments as they are rendered from time to time. It should be kept in mind that the decision of a court is authoritative even if the case is not published in the law reports.

2. MONUMENTS AND BOUNDARIES

Monuments

- 2.1 Monuments should be placed at every boundary corner, deflection point and point of curvature. In situations where a monument is likely to interfere with agricultural or other operations, its top should be no higher than the surface of the ground. In other situations, the top of the monument should be a few centimetres above the surface of the ground to facilitate the location and identification of the monument.
- 2.2 Monuments should be made of durable material. Although the type of monument used should always suit local conditions, every effort should be made to use standard types of monument approved by the Board in consultation with the Director of Surveys and the Institute of Surveyors of Trinidad and Tobago. This will help to avoid uncertainty as to whether or not a mark found at a boundary corner is a true monument.

Boundaries

- 2.3 All surveyed boundaries, other than natural boundaries, should consist of straight lines or circular curves.
- 2.4 When a surveyor is employed to retrace original or existing boundaries, it is essential that a thorough field investigation be made to discover evidence relating to the boundaries as originally surveyed. An accepted judicial guideline is that the hierarchy of boundary evidence, in descending order of importance, is as follows:
 - a) Natural boundaries or evidence of them:
 - b) Original monuments or traces of them;
 - c) Fences or other evidence of possession, reasonably dating back to the original survey;
 - d) Measurement shown on plans of previous surveys.

Other types of boundary evidence, such as horizontal coordinates, may be admissible in court. The issue is not just the legal admissibility of such evidence but also its weight or reliability.

2.5 Positional conflicts arising from plan dimensions, monuments on the ground or other sources are not uncommon during or as a result of cadastral surveys. It is the responsibility of a surveyor to discharge his duty in an unbiased manner when attempting to settle such conflicts.

Natural Boundaries

2.6 At common law, a natural boundary at any particular instant is the designated natural feature as it exists at that instant, and the boundary position changes with the natural movements of the feature as long as those movements are gradual and imperceptible from moment to moment.

2.7 It is essential to designate clearly and concisely on the survey plan and in the field notes the character of any natural feature adopted as a boundary. At common law there is a presumption that where two riparian parcels lie on opposite sides of a non-navigable river or stream, the boundary separating the parcels coincides with the middle thread of the water. This presumption can be rebutted where there is legislation, judicial decision or existing rights to the contrary. Where a parcel adjoins a navigable river, the courts have held that the bank defines the boundary between land and water. A bank has been judicially defined as the limit or edge of the bed of a body of water. In this definition the bed is the land covered so long by water as to wrest it from vegetation, or as to mark a distinct character upon the vegetation where it extends into the water, or upon the soil itself.

3. SUPERVISION

- 3.1 In accordance with the Land Surveyors Regulations, 1998 every cadastral survey shall be carried out by a surveyor personally or by assistants under his supervision. Although this suggests that the surveyor need not be personally present throughout, or perhaps even at any time during, a survey, he remains responsible for it when he has certified the survey as correct. The fact that the surveyor delegated the survey fieldwork, for example, to an assistant who is not licensed as a surveyor, does not relieve the supervising surveyor from responsibility in the event that the survey is later proved to be incorrect. In a court case involving a boundary dispute, a surveyor runs the risk of being judicially censured, and perhaps found to be professionally negligent, if he is called upon to testify and has no direct personal knowledge of the field conditions relating to the survey. In such instances, no successful attempt could be made to shift the responsibility to the assistant. If, instead, the assistant himself were called to give evidence he would not be able to testify as a qualified surveyor.
- 3.2 For his own protection, a surveyor should either appear in person at some time during the survey he is employed to carry out, or delegate the survey field work to an assistant only in those situations where boundary conflicts are unlikely to result from the survey.

4. FEES AND ADVERTISING Fees

- 4.1 Land surveyors' institutes or associations in some jurisdictions attempt to establish a fixed or minimum scale of fees for their professional work. Whether or not a court will hold a scale of fees to be legally valid will depend on the wording of the statute or regulation from which the scale is derived. There are judicial decisions in which courts have rejected a minimum or fixed fee scale for surveyors on the grounds that it is not expressly authorised by legislation, that it contravenes competition legislation, or that it is against public policy.
- 4.2 The practice now commonly adopted by a number of professional licensing bodies is to recommend fee guidelines for their members, rather than minimum or fixed fees. Some courts have taken the view that certain surveyors may be able to offer a service at the required professional standard that is equal

to that of their competitors but for a lower fee. This, in the courts' opinion, may be due to their greater skill, the superior efficiency of their business operations, or simply their willingness to accept a smaller reward than that of their competitors. If they are prepared to accept a more modest compensation, the courts have said, they should not be prevented from doing so.

4.3 Because clients may question or complain about the cost of a survey after it is finished, it is important for the surveyor to ensure that both parties agree in advance to the nature of the survey work to be undertaken and its probable cost. It is advisable to put this agreement in writing, rather than in the form of a telephone conversation or other oral communication. The client has a right to expect a reliable estimate from which the surveyor's invoice will not vary significantly. Sometimes a client may mislead the surveyor by misrepresenting field or other conditions, thereby affecting the estimate. If upon commencing the survey the surveyor finds that he has seriously underestimated the cost of work he should provide the client immediately with a revised figure and seek further instructions before continuing the work. In such circumstances he should not proceed with the survey on the assumption that the client will pay whatever cost is involved. In the case of large survey projects, especially where the work lies in an unfamiliar area, the surveyor would be well advised to visit the site before offering an estimate to a prospective client.

Advertising

- 4.4 It is normal and proper for surveyors in private practice to advertise their services as a means of attracting clients. But the style of advertising that is now considered professionally acceptable has undergone a significant shift from the days when it was considered improper in a telephone directory, for example, to advertise by anything other than a single line. Nowadays, many professional practitioners use display advertisements in telephone directories, and they may also publish calendars, diaries and literature that advertises the firm or company. This material is often produced for free distribution to clients. Advertising of this kind is inappropriate if it suggests that the advertiser is more competent than his competitors, or perhaps if the advertisement carries unprofessional slogans, of which "No job too big, no job too small." might be an example.
- 4.5 In some jurisdictions a surveying firm cannot be incorporated and its title must contain only the names of licensed surveyors who are now or who were members of the firm. The modern trend is to allow incorporation but even where this is permitted surveyors should be careful to choose a suitable corporate title. Azimuth Surveys Ltd, for example, might be inoffensive, but Low Price Surveys, Inc. would be objectionable.
- 4.6 Although acceptability of the style and content of professional advertising will depend to some extent on current tastes and attitudes, the surveyor should avoid promoting his services by the use of words or illustrations that create an undesirable impression and might bring his profession into disrepute.

ANNEX B: NOTICE OF MEETINGS





Ministry of Agriculture, Land and Marine Resources and Ministry of Housing and Settlement

NOTICE

Information Circular to Surveyors of Trinidad and Tobago

LAND SURVEYORS REGULATIONS: CADASTRAL SURVEYING CATEGORY
Land Use Policy and Administration Project: LUPAP

Surveyors and persons interested in Land Surveying and Cadastral Surveying are invited to attend a

Meeting to be held at 10:00 a.m. on Saturday 20 May 2000 at the Professional Centre (near Hasely Crawford Stadium)

Alec McEwen is Emeritus Professor of Geomatics Engineering at the University of Calgary in Alberta, Canada and has a Masters Degree in Law, his PhD is in Land Law. Alec was Director of Lands and Surveys in Newfoundland Province. He is now a consultant advising on Land Administration – including Cadastre, Land Information and Boundary & Title Research – and has worked in every continent (except Antarctica!) Alec will be making a presentation on:

Cadastral Surveying in the 21st Century

Practice:

- The application of modern technology
- Cadastral co-ordinates and survey control
- Boundary marks standardisation
- Standards of accuracy
- Checking fieldwork and plans
- The impact of proposed legislation

The Profession:

- The role of a land surveyor's institute
- Supervision of surveys
- Practice review
- Continuing Professional Development (CPD)
- Complaints and discipline
- Fees and estimates

Your attendance at this meeting would be very much appreciated.

The presentation will take about 45 minutes, and will be followed by an open-forum "question and answer" session and refreshment.

For further information contact:

Fred Brazier 633 8948 or 625 0427 email: fbrazier@wow.net

Charisse Griffith-Charles 640 2959 or 662 2002 Ext. 3314 email: charain@tstt.net.tt

Repeated at Lands and Surveys Division at 3:00pm on Thurs. 25 May 2000

ANNEX C: SUMMARY OF PRESENTATION TOPICS

CADASTRAL SURVEYING IN THE 21ST CENTURY

1. WHAT IS A CADASTRAL SURVEY?

CADASTRAL SURVEYING PRACTICE

- The Application of Modern Technology
 - From Compass to Satellite
 - Cost of Equipment
 - Cadastral Surveys and LIS
- 3. Cadastral Coordinates and Survey Control
 - Why Use Coordinates?
 - Can Coordinates Replace Boundary Marks?
 - Effect of Datum Shift and Readjustment
- 4. Boundary Mark Standardisation
 - Natural and Artificial Boundary Features
 - Are Boundary Marks Always Necessary?
 - Why Use Standard Boundary Marks?
- 5. Standards of Accuracy
 - Accuracy and Precision
 - Should Land Values Determine Accuracy Requirements?
 - Guaranteed Boundaries
- 6. Checking Fieldwork and Plans
 - Why are Checks Necessary?
 - Who Should do the Checking?
 - Who Pays?
- 7. The Impact of Proposed Legislation
 - Land Adjudication Act
 - Registration of Titles to Land Act
 - Land Tribunal Act

THE CADASTRAL SURVEYING PROFESSION

- 8. The Role of a Land Surveyors Institute
 - Service to Members
 - Protection of the Public'
 - Advancement of Professional Standards
- 9. Supervision of Surveys
 - The Surveyor as Manager
 - Delegation of Duties
 - Professional Responsibility
- 10. Practice Review
 - Professional Initiative
 - Self-Policing
 - Field and Office Monitoring
- 11. Continuing Professional Development
 - Licence for Life?
 - Courses and Seminars
 - Newsletters and Journals
- 12. Complaints and Discipline
 - Complaints Procedure
 - Disciplinary Hearings
 - Penalties and Publicity
- 13. Fees and Estimates
 - Minimum Fees or Fee Guidelines?
 - Estimate and Invoice
 - Fees and Quality of Work

ANNEX D: ATTENDEES AT PRESENTATION ON 20/05/2000

No.	Name	Speciality / Profession
1	Cuthbert Bazil	Cadastral surveyor / Land surveyor
2	Winston Doyle	Cadastral surveying/ TTLS
3	Geoff Long	Land Surveyor
4	Anthony Montserin	Engineering Surveyor
5	Gordon Farrell	Cadastral Surveyor
6	Ainsley Charles	Hydrographer
7	Bheshem Ramlal	UWI Lecturer (GIS)
8	Lenny W Hanomansingh	Land Surveyor
9	Sholan Ramnath	Student Surveyor
10	Karla Edwards	Student Surveyor
11	Burton Williams	Cadastral Surveying / TTLS
12	Kulraj Kamta	Attorney – land matters
13	Albert Haynes	Land Surveying
14	Fitzherbert Reyes	Land Surveyor
15	Aldwyn Aqui	Land Surveyor, Cadastral
16	Brian Moses	Land Surveyor
17	Fidel Omar-Ali	Graduate Land Surveyor
18	Camille Fortune-Rollock	Land Surveyor
19	Shri Persad Maharaj	Land Surveyor
20	Paul Williams	Land Surveyor
21	Alan Williams	LUPAP Co-ordinator
22	Denis Sue Hong	TSTT
23	Peter Beard	Land Surveyor
24	Barry Hernandez	Land Surveyor
25	Alicia Naimool	Land Surveyor
26	Leslie Akum Lum	Land Surveyor
27	Anwar Ali	Land Surveyor
28	Andrew Bowles	Land Surveyor
29	G Burkett	Graduate Land Surveyor / Eng. Surveying Tech.
30	Bradley Powder	Engineering Surveying Technician
31	Krishna Ramlakhan	Land Surveyor
32	Francis Charles	Land Surveyor

ANNEX E: ATTENDEES AT PRESENTATION ON 25/05/2000

No.	Name	Speciality / Profession
1	Alicia Naimool	Land Surveying
2	Ronald Nowbutt	Land and Hydrographic Surveying
3	Roop Singh	Land Surveying
4	Kelvin Ramdass	Land Surveyor
5	Roland Wiseman	Land Surveyor
6	Keith Whiteman	Draughtsman / DMPF senior data operator
7	Michael Jones	Land Surveyor
8	Darren Hamid	Land Surveyor
9	Stephanie Elder-Alexander	Land Surveyor
10	B. Maharaj	Graduate Surveyor
11	Cheryl Ann Elder	Lands and Surveys Division
12	A Wesmaas	UWI Land Surveying Student
13	Keith Scott	Private TT Land Surveyor
14	Tyrone Leong	Director of Surveys.

ANNEX F: LIST OF PERSONS MET

Lands and Surveys Division, Ministry of Housing and Settlements

Tyrone Leong, Director

Andrew Bowles, Surveyor III

Michael Jones, Surveyor III

Stephanie Elder-Alexander, Manager, Digital Map Production

Fitzherbert Reyes, Surveyor

Registrar General Department, Ministry of the Attorney General and Legal Affairs

Susan Francois, Registrar General

Eugenia Weekes

Land Survey Board of Trinidad and Tobago

Aldwyn Phillip, Registrar-Secretary

Land Settlement Agency, Ministry of Housing and Settlements

Robin Rajack, Director

Wayne Huggins

Land Surveyors in Private Practice

Cuthbert Bazil

Francis Charles

Paul Williams

Department of Surveying and Land Information, University of the West Indies

Dr Asad Mohammed, Head of Department

Dr Raid Al-Tahir

Ms Charisse Griffith-Charles

Dr Jacob Opedayi

Dr Bheshem Ramlal