European settlement in British Columbia is very recent, by global standards. That simple fact is one reason why British Columbia has been able to develop one of the best land survey and title registration systems in the world.

When Captain James Cook sailed into Nootka Sound in 1778, when Juan Francisco Quadra travelled through what would one day be called the Gulf Islands, and when Captain George Vancouver first glimpsed Point Grey in 1792, they saw before them an endless expanse of resources for the taking, occupied only by small groups of indigenous persons. With the colonial mindset of the day, they dismissed any notion that these groups of First Nations people might have rights to the resources.

The Hudson’s Bay Company wished to sell some of its land. With great foresight, the company deemed it necessary first to physically survey the boundaries of the land it wished to sell, then to mark the corners of the new parcels with some sort of physical monument. Only after the survey was complete, the corners marked, and a plan drawn to represent the survey was a newly created parcel of land sold.

Joseph Despard Pemberton, surveyor for the Hudson’s Bay Company, arrived at Fort Victoria in June 1851 and immediately began to consider how surveys might be conducted. He gave thought to the shape and size of the parcels to be surveyed, which may have been made all the more challenging, given the lack of surveyors, the rough terrain, and the desire to create parcels quickly to complete pending land transactions.
At least one rather unique suggestion was made.

**Rope, Pig, and Compass Traverse**

Sir,

Further to my letter which you published in *Survey Review No. 165*, my attention has been drawn to a modification of the well-known Rope, Pig and Compass Traverse which was used in jungle areas. For those unfamiliar with the technique the system was to tie the rope of known length to the tail of a pig and drive it off into the bush so that when the rope became taut one knew the distance to the pig and since this made the unfortunate animal squeal, one could take a compass bearing on the noise and hence derive the bearing and distance to the pig. I am reliably informed that a modification of this technique was developed using specially bred pigs, such that when the rope became taut not only did the pig squeal but it also left behind a monument marking its position. I am sure that this technique must have proved a great time-saver.

Yours faithfully,

Peter F. Dale

**First Recorded Surveys**

The first surveys we have on record in BC were made of lands sold by the Hudson’s Bay Company; there was no similarity of shape to any of them. They were made on a point-to-point basis establishing corners A, B, C, D, and so on. There are no field notes. Plans were drawn at scales of either 6 inches or 4 inches to the mile, but undimensioned as to distance or bearing. These plans were attached to Hudson’s Bay Company Grants that contained a “metes and bounds” description. Distances in descriptions were in links; the areas were given in statute acres and roods.

Corners were usually described as being marked with a post “pottery under” or a post “beneath which a piece of pottery is placed supported by a stone.” The first Hudson’s Bay survey and title document is dated December 15, 1851.

In accordance with reversionary terms contained in the Hudson’s Bay Company’s Patent, Vancouver Island and the British Columbia mainland became Crown colonies in 1859. The two colonies became one in 1866 and eventually joined the fledging country of Canada in 1871.

From the very beginning, the colonies and then the province recognized, as had the Hudson’s Bay Company, the importance of properly defining parcels of Crown land by field survey prior to sale, of carefully maintaining records of those surveys, and of ownership of parcels of land. At the very beginning, a Department of Lands was created and a Surveyor General was appointed. Joseph Pemberton, the Hudson’s Bay Company surveyor, became the first Surveyor General for the Colony of Vancouver Island.

Over time, nine systems of survey were developed to define parcels of land when Crown land was first surveyed. A “system of survey” is simply a template that defines the shape, area, and orientation of the boundaries of the parcel to true north, east, south, and west. Those different systems resulted in primary parcels of various shapes, sizes, and orientations to cardinal directions. Although nine systems of survey were used throughout our province’s history, certain fundamental rules were maintained, including the following.

- Surveys were conducted by qualified Practitioners. Prior to 1891, the Chief Commissioner of Lands and Works, or Surveyor General, authorized surveyors to practise through appointment. Surveyors thus appointed were
designated Land Surveyors (LS). In 1891, the British Columbia Legislature passed the first Land Surveyors Act whereby a Board of Examiners was appointed by the Lieutenant Governor in Council. This Board, under the direction of the Surveyor General, was responsible for examining new surveyors. Surveyors admitted under this Act were designated Provincial Land Surveyors and entitled to use the initials PLS.

- In 1905, the Corporation of Land Surveyors of the Province of British Columbia was incorporated by an Act of the BC Legislature wherein the Board of Management of the Corporation was given authority to examine candidates for admission as articled pupils and as commissioned land surveyors. Surveyors admitted after 1905 were, and still are, identified by the initials BCLS. The Corporation of Land Surveyors of the Province of British Columbia adopted a new name, the Association of British Columbia Land Surveyors, in 2005.

- Surveys were conducted under specific direction from the Surveyor General and his staff. The direction included specific guidance on the system of survey to be employed. Additionally, technical direction was given. For example, surveys had to meet certain precision requirements, specific types of monuments had to be placed at the corners of the parcel, and boundary lines had to be cut and blazed.

- The field notes of the survey had to be submitted to the Surveyor General’s office. Depending upon the era, an Official plan showing the parcel that had been surveyed was drafted by the Surveyor General’s staff or the land surveyor who conducted the survey. The field notes and the Official plan then became permanent records, carefully maintained in the Crown Land Registry.

The records of the Crown Land Registry were and continue to be accessible to the public. The Crown Land Registry maintains several million pages of field book notes and thousands of Official plans.

Once an Official plan of a parcel of land was prepared and filed in the Crown Land Registry, the parcel could be transferred. From colonial days, this has been done with a Crown Grant. A Crown Grant typically contains two pages. The first page shows the legal description of the parcel, the name of the owner, and—very important—a number of exceptions and reservations. Often, these exceptions and reservations will indicate that the Grant does not include, for example, minerals or petroleum, and that the Crown has the right to resume 1/20th of the parcel for road-making purposes.

Two originals of the Crown Grant are created. One is maintained in the Crown Land Registry. Like field notes and Official plans, the public has the ability to access and view Crown Grants. This is very important because it is necessary to review Crown Grants to check the exceptions and reservations to which a Grant is subject. The second original is delivered to the Land Title Office. Today, upon receipt of a Crown Grant, the Registrar of the Land Title Office creates a Certificate of Title to the parcel.

Torrens: A Very Good Idea

British Columbia, including the colonies before the province came into existence, has always maintained a system for recording ownership and interests in private land.

For a short while, the colonies maintained Deeds Registries.

A Deeds Registry results in a complicated, unreliable system for recording interests in land. To gain an opinion on ownership of interests in land, an unbroken chain of documentary evidence over long periods of time or possibly from the original granting of the land from the Crown is required. If any one of those documents was not properly executed, or if all documents in the chain cannot be obtained, then a shadow of doubt is cast upon the claim of ownership.

While still a colony, in 1861 Vancouver Island adopted the Torrens system. The Colony of British Columbia—the Mainland—followed suit shortly thereafter.

Sir Robert Torrens was an Australian politician and civil servant who, in the 1850s, was unhappy with the land conveyancing and recording system. Based on his experience in registering the ownership of ocean vessels, he devised a method of making land registration conclusive.

The Colony of Vancouver Island was the second jurisdiction in the world to adopt a Torrens-based system of title registration. Today, many countries around the world and provinces in eastern Canada are either using the system or are in the process of converting their land registration to one based upon Torrens principles. The Torrens system of title registration was formulated to combat the problems of uncertainty, complexity, and cost associated with the Deeds Registry system.

Use of the Torrens system in British Columbia is significant because it results in a very secure and transparent system of recording interests in land. The cost to convey land, register interests in land, and update and refresh ownership records is minimal.
The basis of a Torrens system is a register, maintained by the state, of land holdings.

Under our Torrens system, security of title—meaning ownership of land—is based on the principles of “indefeasibility,” registration, abolition of the “doctrine of notice,” and assurance.

A title that is “indefeasible” cannot be defeated, revoked, or made void. The person who has title has a right, good against the world, to the land. Under the British Columbia Torrens system, evidence of the right to land is constituted by the record on the Land Register: The record includes the name of the owner and the names of any others who have interests in the property. Other interests include, for example, mortgages, agreements for sale, leases, easements, covenants, rights of way, and certificates of pending litigation.

There are a limited number of exceptions to the principle of indefeasibility, in accordance with section 23 of the Land Title Act. These include the exceptions and reservations contained in the original Crown Grant.

To establish an indefeasible title, the documents that transfer legal ownership or create an interest in land must be filed and registered in the Land Title Office. Registration has the effect of passing the estate or interest in land. While registration is not mandatory in British Columbia, failure to register means that the estate or interest claimed by an owner cannot be enforced against a third party.

With the adoption of the Torrens system, the principle of “notice” has been abolished. It is not necessary, in British Columbia, to make an exhaustive inquiry into the validity of a title or an interest. Rather, a person who deals with land is entitled to rely on the register. (A limited number of exceptions to this principle are set out in section 29 of the Act.)

The Land Title Act establishes assurance funds to compensate individuals who are deprived of title or an interest in land through the operation of the Torrens system. In British Columbia in the past 19 years, the land title system processed 15 million transactions, yet only 2 claims related to land ownership fraud were paid from the Assurance Fund.

The Role of the BC Land Surveyor

British Columbia Land Surveyors play a critical role in letting property owners sleep at night. Although our Torrens system of title registration guarantees title, it does not guarantee the extent of land within a title. Defining boundaries of parcels of land is the sole responsibility of the land surveyor.

It is the duty of the land surveyor to establish, and to re-establish, boundaries of land with a great deal of care. The land surveyor must conduct his or her work not only with complete technical confidence, but with a thorough understanding of the case and the common and statute laws that govern boundary definition.

The land surveyor is an unusual beast in that he or she does not advocate for the person who is paying the invoice. Land surveyors are public officers. Their duty is to serve the
“cadastral fabric.” They must place a boundary where field evidence and applicable law dictate. Their work cannot be influenced by their client.

A land surveyor in our province is commissioned by the Association of British Columbia Land Surveyors and is authorized to carry out legal surveys throughout BC. Many provincial statutes specifically designate BC Land Surveyors as the only persons entitled to perform legal surveys of land pursuant to the particular Act.

To become a land surveyor, an individual must undergo rigorous preprofessional education and subsequent training as an articled pupil. Many land surveyors have obtained university degrees in geomatic engineering; others have acquired technical diplomas in survey technologies. As such, the British Columbia Land Surveyor is well grounded in the science of surveying and the application of this knowledge.

Land surveyors are self-governed and must belong to the Association of British Columbia Land Surveyors. The Association is governed by the Land Surveyors Act, a provincial statute that sets out the framework within which the Association and its members operate.

The Association develops bylaws and guidelines for the conduct of its members, establishes and administers the requirements for entry into the profession, and liaises with government bodies and other associations in a continuous effort to improve the quality of service to the public. The membership of the Association is restricted to holders of a BCLS commission and students undergoing accreditation.

Titles to parcels of land are almost always based upon a survey plan. Only British Columbia Land Surveyors can create parcels of land and the survey plans that record the size, shape, and extent of those parcels.

In the course of defining a parcel of land, boundaries are defined and monuments placed at the corners of the parcels.

The title and the survey plan upon which it is based are recorded in the Land Title Office, available for any member of the public to inspect.

The result is a registration system that is simple, secure, transparent, guaranteed, and inexpensive. Interests in land can be conveyed easily, quickly, and inexpensively. It is one of the best in the world—and one that enables us all to sleep soundly at night.

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Sources of Information
Association of British Columbia Land Surveyors’ Website
The Land Title and Survey Authority of British Columbia’s Website
Land Title Practice Manual, Volume 1