

# **Part-Parcel Adverse Possession as a Means to Resolving Problem Survey Areas**

**Shane SIMMONS, Australia**

**Key words:** Cadastre; Land management; Land re-adjustment; Security of tenure

## **SUMMARY**

Each state and territory within Australia adopted the Torrens system of land title registration whereby a principal feature of the Torrens system is the notion of an indefeasible title affording protection to registrable interests by the act of a registered proprietor holding the land absolutely free from all encumbrances except those noted on the register. There are a number of exceptions, one of which is not usually recognised - the loss of legal title through an application for possessory title by adverse possession. Adverse possession can be legislated as either a whole parcel or a part-parcel application. Within all states in Australia problem survey areas exist where the accuracy of modern measurement techniques when applied over surveys completed pre-electronic distance measurement will raise the issue of reinstatement by mathematical solution versus occupation based upon earlier surveys. A problem survey can exist where mathematical solutions and occupation vary greatly. This paper examines the application of part-parcel adverse possession as a means to resolve problem survey areas where agreement between land owners is not likely to be achieved where land readjustment between adjoining owners is desirable to maintain an accurate cadastre.

# **Part-Parcel Adverse Possession as a Means to Resolving Problem Survey Areas**

**Shane SIMMONS, Australia**

## **1. INTRODUCTION**

Inner city areas are rejuvenated by urban planning initiatives or simply developed to a higher land use due to demand for that land use which often entails a survey over a substantially older survey. In turn, this may identify problems in boundary definition for the lots surveyed, leading to part-parcel boundary related issues between neighbours. Part-parcel adverse possession applications and other alternatives exist to attempt to resolve such issues. Some commentators for example, Teo (2008), have argued that the use of adverse possession can't be justified within the Torrens system of land registration in a modern cadastre. Such a proposition may be reasonable within jurisdictions where the surveyors have had the continual benefit of usage of modern instrumentation and computing power e.g. Singapore, but it fails to take into account survey discrepancies that can exist and do exist in older more established cadastral systems where the initial surveys were in the 1800's.

Adverse possession is a doctrine of land law whereby a person either occupying or in possession of land legally owned by another may acquire ownership and title to the occupied land. There is no payment for either purchase or compensation for dispossession.

For a successful adverse possession claim there are a number of common law requirements, typically the following common law elements are required: exclusive - continuous and uninterrupted possession; possession must be adverse to the interests of the legal owner and without permission of the legal owner; open and notorious - using the land in a manner so as to place the legal owner on notice that a trespasser is in possession; and for a defined period of time - a statute of limitations applies for a definite period of time which limits the action taken by the legal owner to recover the land to that period of time.

Whole-parcel adverse possession is a means to obtaining title to a particular parcel of land based upon possession encompassing the entire parcel. Part-parcel adverse possession can be predominantly made up of two situations: a discrete part of the parcel, for example, a fenced paddock or parts of a parcel separated by a road reserve, and secondly when possession is offset from a 'surveyed' boundary line by an encroaching structural element. Routinely, the second scenario involves a strip of land and a long-standing encroachment. Such part-parcel adverse possession claims are described by Park and Williamson (2001) as resolving the extents of ownership of the parcel as opposed to ownership of the parcel.

## 2. THE ROLE OF THE SURVEYOR WITHIN LAND REGISTRATION SCHEMES

The Torrens system of title registration is based upon the notion that a person or entity documented in a land register as registered proprietor of a land parcel, is conclusive evidence of legal ownership of that interest. Land title registration schemes ideally create and promote certainty of land title to allow the operation of an efficient land market for the conveyance of land from one party to another. Typically, institutionalised credit markets within Australia lend funds to intending land purchasers by way of a mortgage whereby the intending owner transfers an interest in the property to the lender to secure the repayment of the debt. In 2005–06, 95% of Australian households who had recently bought their first home had a mortgage (ABS, 2008) emphasising the importance of the ability to raise and generate credit through a well-established financial system for the successful operation of a land market.

Whilst an effective land administration system is essential for a successful land market, it is not sufficient by itself to be a success (Wallace and Williamson, 2004). Land registration schemes require the support of a cadastre containing both a documented record or register detailing the rights, restrictions and responsibilities for land ownership (Dalrymple, Williamson and Wallace, 2003) and a detailed physical description of the extents of the parcel by either lodgement of a survey plan and measurements or by description of the extent of the boundaries of a parcel of land.

The primary purpose of cadastral surveying is to define the land parcel – on the ground and within the cadastre by the process of survey, adjudication, monumentation and description of the boundaries. Adjudication, monumentation and description of boundaries by the metes have not fundamentally changed from the 19<sup>th</sup> century to the 21<sup>st</sup> century however the advance of technology has dramatically changed the accuracies obtainable for the survey and measurement of boundaries. From compass or circumferentor and Gunter's chain to angular and distance measurement by total station and more recently global navigation satellite systems exposes the discrepancies possible in angular and distance measurement from a survey using circumferentor and chain to one by total station. The difference in technology and accuracies obtainable is especially important in areas of steeper slope where slope angle and horizontal distance can be accurately read and calculated. McClelland (1999) stated surveys over measurements originally surveyed for example pre-1870, are often extremely difficult to reinstate due to inherent problems often caused by amongst others, difficult terrain and the limitations of the technology of earlier days. A less than diligent adjudication and measurement of a section (say bounded by four roads) of land that has not allowed for both the common law principles for boundary reinstatement and the technology available at the time of original survey can create an inaccurate cadastre whereby abutting lots may conceivably overlap or alternatively create gaps where there is no gap. The distribution of excess/shortage in proportion to the distance surveyed (in the absence of better evidence) where discrepancies occur between surveyed and/or deed distances is well-established in cadastral reinstatement practice based primarily upon Australian and North American case law, statute and directions to surveyors. Cooley (1882) described an act passed in 1869 regarding the duties and powers of county surveyors being directed as follows: ‘extinct corner...must be re-established...in all other cases at its proportionate distance between the

nearest original corners on the same line.' Cooley (1882) premised that occasionally surveyors in supposed obedience to the state statute disregarded all evidences of occupation and claim of title thus plunging whole neighbourhoods into quarrels and litigation by establishing corners 'at points with which the previous occupation cannot harmonise.' McClelland (1999) explained that a mathematical solution for the distribution of excess and shortage whilst simple to compute and apparently equitable to all lots may not be the most appropriate reinstatement when considered in light of the evidence of long standing occupation.

The following simple examples of poor adjudication practices combined with the use of current survey instrumentation demonstrate the possible effect on the cadastre:

A 200m north/south hilly street section containing 20m wide lots (as measured in 1860), is surveyed in 2009 to measure 202m. Surveyor A measures a deed distance of 100m from the southern boundary line to reinstate a lot corner and places a peg. In a survey of the adjoining lot, Surveyor B measures a deed distance of 100m from the north boundary line to reinstate the same lot corner. Surveyor B fails to notice the peg placed by Surveyor A (2m away) and consequently creates a 2m wide separation of the cadastre. A land owner erects a fence on the monumented boundary line and thus occupies 2m more than the deed distance. Alternatively, the 1860 lots were fenced at the 1860 surveyed 20m intervals (which actually measures a consistent 20.2m in 2010). Surveyor C measured a deed distance of 100m from the south in 1980 and monuments the lot corner which disagrees by 1m with the fenced occupation, subsequently a house is erected set-back off the fence line which encroaches over the legal boundary. A significant period of time passes to 2010 (beyond the limitation period) allowing the boundary line formed by occupation to fall within a part-parcel adverse possession claim for the fenced occupation leading to application and registration as the title boundary.

The law has in part sought to balance competing land interests through the doctrine of adverse possession. Part-parcel adverse possession has been viewed and advocated as a boundary repair mechanism by many commentators, especially part-parcel adverse possession pertaining to strips of land between abutting lots generally based upon occupation and fencing. Park and Williamson (2003) stated that governments having land title registration schemes require a mechanism wherein small adjustments to boundaries should be permitted. Statutory provisions for part-parcel adverse possession claims allow applications to be made to the Registrar of the Titles Office or equivalent and to allow the Registrar to amend the original certificate of title or issue a new certificate of title.

### **3. ALTERNATIVES TO PART-PARCEL ADVERSE POSSESSION**

Part-parcel adverse possession is not the only mechanism that can act as a form of boundary repair mechanism. An alternative and often used mechanism lies with statutory encroachment legislation, however there are other mechanisms that can be applied as a boundary repair mechanism or solution to a part-parcel boundary problem.

### **3.1 Statutory encroachment legislation**

Generally, statutory encroachment legislation allows provision with respect to an encroachment whereby if it is proved to the satisfaction of the Court that the encroachment was not intentional and did not arise from gross negligence, then the Court may vest an estate in any part of the adjoining land and the payment of compensation by the encroaching owner. Thus the application of statutory encroachment as a mechanism to solve possessory title issues is a method to solve boundary repair issues whereby the affected owner may be entitled to compensation and the possessory owner may gain title or an interest in the land. Typically either the legal owner or the possessory owner can apply to the court for relief with respect to the encroachment. With statutory encroachment legislation the original survey dimensions are accepted as evidence of the boundary and action is taken under the encroachment provisions to vest an interest or title in the land covering the encroachment.

An encroachment can be defined not only as a structure but also as including the use of a wall, fence, hedge, ditch, garden bed or other way of marking the boundary between lots. Some jurisdictions expressly do not permit relief with regard to fencing etc, which precludes an application for relief based upon both recently fenced occupation and older fenced occupation. It should be noted that a limitation period is not required for an application for relief as opposed to adverse possession. If a jurisdiction applies statutory encroachment legislation as a boundary repair mechanism, in lieu of part-parcel adverse possession, fencing etc. should be construed as an encroachment.

Statutory encroachment legislation applies within the following states in Australia: Queensland *Property Law Act 1974*, South Australia *Encroachments Act 1944*, New South Wales *Encroachment of Buildings Act 1922*, Western Australia *Property Law Act 1969* and the Northern Territory *Encroachment of Buildings Act 1982*. In Western Australia in *Duarte v. Denby* [2007] WASC both the issues of encroachment relief and part-parcel adverse possession counter-claim were made over approximately a 200mm strip of land, which highlights the folly of a land dispute over land valued at a mere \$3,000 against the time and cost of the parties seeking redress through the court. Statutory encroachment legislation requires a determination by the court. A variation of the form of statutory encroachment legislation lay with encroachment agreements, for example, Alberta, Canada, within the *Land Titles Act 2000* allows neighbours to execute an encroachment agreement between the registered owner of a parcel of land to permit the encroachment of improvements on an adjoining parcel of land, with a security of interest similar to that of an easement.

### **3.2 Confused/problem/uncertain boundary legislation**

In localities where there is an identified and significant boundary discrepancy (usually a block shift scenario affecting multiple boundary lines in a section), the location may be declared as a confused/problem/uncertain boundary area and statutory provisions exist for the approval and determination of boundaries by a regulatory body with the necessary expertise – typically the titles office. Generally, an area will not be declared a problem area unless a significant number of lots in a section disagree with the legal boundary. For example, South Australia

introduced confused boundary provisions in 1993 within the *Survey Act 1992* and the *Real Property Act 1886*: ‘for when the occupation of land within the area does not accord to a substantial extent with the boundaries of land as shown in records or plans held in the Lands Titles Registration Office’ (*Survey Act 1992*). The role of the regulatory body or the surveyor responsible for the survey is to determine the lot boundaries in a manner that is equitable with due consideration to relevant evidence, type of occupation, the length of occupation, history and common law principles. A survey plan is prepared for registration of the determined lot boundaries where the land boundaries affected by the plan are altered to the extent necessary to give effect to the plan (*Real Property Act 1886*). If after an appropriate objection period and no appeal is lodged, the Registrar-General may deposit the plan in the Lands Titles Registration Office (*Survey Act 1992*). It should be noted that within s255 of the *Real Property Act 1886*, the Registrar-General may deposit a plan in the Lands Titles Registration Office without the consent of a person who appears in the Register to have or to claim an estate or interest in land affected by the plan and the Registrar-General may amend the original certificate of title or issue a new certificate of title. The costs of the Registrar-General’s deliberations are borne by the state.

Unfortunately, no provision exists for lot(s) with an identified uncertain boundary, if they are outside of a declared confused boundary area. Consequently an alternative mechanism other than declaration of a confused boundary area is required which could be achieved through empowering an arbitrator from a regulatory authority.

### **3.3 Regulatory authority application for determination of a boundary**

For lots where there may be an uncertain boundary, statutory provisions can be applied to allow application to the Registrar of the Titles Office or equivalent arbitrator for determination of a boundary. For example, in Ontario, Canada an application can be made under the *Boundaries Act 1990*, R.S.O. to the Director of Titles to determine a boundary between lots. It is implied that the Director has the expertise to adjudicate on the reinstatement of boundaries and the expertise is recognised through the *Boundaries Act 1990* which imparts independent authority upon the Director to resolve the dispute. The Director can dispose of any objection in such a manner as considered to be just and equitable within the circumstances and determine boundaries as the Director deems appropriate placing significant decision-making authority upon the Director in resolving boundary disputes. An appeal can be made through the court regarding the Director’s decision, the costs of the Director’s deliberations are borne by the state. The purpose of the legislature in allowing the Director the powers to adjudicate on boundary disputes provides an expeditious and cost-effective mechanism to resolve boundary disputes.

### **3.4 The "we don't have a problem" approach**

If a jurisdiction does not have either statutory encroachment legislation or statutory provisions allowing part-parcel adverse possession application, it is likely there is no specific method to deal with boundary repair issues, for example, the Australian Capital Territory in Australia. With no mechanism to deal with boundary repair issues, boundary disputes are left to be dealt

with by the courts and left to future owners to resolve, if inclined to do so. Otherwise the onus is placed upon the cadastral surveyor to effectively survey and adjudicate on boundary determination. In localities requiring possible uncertain boundary adjudication, the cadastral surveyor has to consider two options in adjudication where there is an absence of survey monumentation: accept the original survey dimensions as evidence of boundaries or accept existing occupation as evidence of boundaries. Many commentators have criticised inaccurate surveys at the initial monumentation of the boundary as cause for many modern boundary dispute issues, without due regard to the inhospitable vegetation and terrain that may have existed at the time in many localities and also without considering the instrumentation and computing power that is available to the modern surveyor, allowing an unfair comparison of accuracy between a modern survey to a much older survey. For the surveyor to accept existing occupation (especially in a contentious area) as evidence in the absence of original corner marks or original survey marks within close proximity requires considerable investigation into the history of the occupation and the relationship to the original survey marks. The level of investigation by the surveyor to adjudicate on the boundary would normally be less than which would be presented at a court of law due to time, cost and other investigative constraints. For occupation that is old and undisputed, in *Attorney-General v. Nicholas* [1927] G.L.R the judgment stated ‘...the original survey marks are gone, a long occupation, acquiesced in throughout the period by the surrounding owners, is evidence of a convincing nature that the land so occupied is that which the grant conveys...’ (as cited by Land Services 2009). Unfortunately, in boundary disputes acquiescence often exists only in so far as the owners are ignorant of the occupational discrepancies to original title dimensions.

### 3.5 The "superhero" approach

Failing a legal resolution, physically shift all structural elements, fences and occupation etc. back within or on the originally surveyed legal boundaries or lots. Such an exercise most likely would also require satisfaction of local government set-back requirements as there would be a requirement for a building code application. A set-back is described as: a development consent term establishing a minimum regulatory distance from a lot line to the outermost projection of a structure. Generally, the set-back establish an area near the boundary of a lot upon which building, appurtenant devices and other structures may not be built, and constrains the building footprint to the area enclosed by the set-back lines. Some local authorities relax the requirements on eaves, garden sheds and carports etc.

Park and Williamson (2003) stated the best argument favouring occupational boundaries over legal boundaries is the immense practical difficulties presented by such an exercise in areas where encroachments are common e.g. steep areas of inner city Brisbane suburbs (McClelland 1999). Obviously, like the heading, this approach would be prohibitively expensive and ridiculously comic if applied in a significant area and jurisdiction, if it wasn’t such a serious issue.

#### **4. SOME PERTINENT ISSUES TO BOUNDARY REPAIR**

A relatively recent court case in Canada was heard before the Court of Appeal for Ontario and significantly was the first survey case to be heard in the Court of Appeal since 1917. The case highlighted the difficulties and differences of opinion that can occur in the reinstatement of boundaries that involve adjudication of boundaries, where there is conflict between long-standing occupation/possession and a mathematical solution to the reinstatement of an 'old' survey boundary due to the interpretation of the evidence used to establish the boundary. The dispute between neighbours culminated in *Nicholson v. Halliday*, [2005] 259 (ON. C.A) and spanned 12 years before final determination of the disputed boundary line. *Nicholson v. Halliday* raised pertinent issues regarding acquiescence, part-parcel adverse possession as a solution and the role of the surveyor as adjudicator.

A disputed boundary line or corner can only be determined by a court of law and Cooley (1882) rationalised the role of the surveyor as 'surveyors are not and cannot be judicial officers, but in a great many cases they act in a quasi-judicial capacity.' Cooley (1882) further explained the authority that allows the surveyor to act as a quasi-judicial officer and entrusting the surveyor with cadastral surveys also allows parties to settle their own boundary lines and acquiescence of a particular line or monument, for any considerable period, as strong, if not conclusive evidence of such settlement. Whilst on the surface a boundary line may appear to be settled by acquiescence and occupation, often this may be simply be due to ignorance or lack of a mathematical determination and survey of the boundaries. This was certainly apparent in *Nicholson v. Halliday*. Cooley (1882) iterated the role of the surveyor in regards to acquiescence, adjudication and occupation as being where corners are found to be extinct and all parties concerned have acquiesced in lines which are traced by either structure, fencing or other landmark, which may or may not have been trustworthy. Bringing these lines into discredit, when the people concerned do not question them, not only breeds trouble in the neighbourhood, but it must often subject the surveyor himself to annoyance and perhaps discredit, since in a legal controversy the law as well as common sense must declare that a supposed boundary line long acquiesced in, is better evidence of where the real line should be than any survey made after the original monuments have disappeared.

Cooley (1882) expounded the nature of the problems that can derive from the interaction of possession, survey and adjudication in the following extract:

In towns the block and lot stakes soon disappear; there are no witness trees, and no monuments to govern except such as have been put in their places, or where their places were supposed to be. The streets are likely to be soon marked off by fences, and the lots in a block will be measured off from these, without looking farther. Now it may perhaps be known in a particular case that a certain monument still remaining was the starting point in the original survey....a surveyor...assuming the original....to be accurate....will then undertake to find all streets and all lots by course and distance.....This procedure might unsettle every line and every monument existing by acquiescence in the town; it would be very likely to change the lines of streets, and raise controversies everywhere. Or

suppose, for example, a particular village street has been located by acquiescence and used for many years, and the proprietors in a certain block have laid off their lots in reference to this practical location. Two lot owner's quarrel, and one of them calls in a surveyor, that he may make sure his neighbour shall not get an inch of land from him. This surveyor undertakes to make his survey accurate, whether the original was so or not, and the first result is, he notifies the lot owners that there is error in the street line, and that all fences should be moved, say 1 foot to the east. Perhaps he goes on to drive stakes through the block according to this conclusion. Of course, if he is right in doing this, all lines in the village will be unsettled.....It is not likely that the lot owners generally will allow the new survey to unsettle their possessions, but there is always a probability of finding someone disposed to do so. We shall then have a lawsuit; and with what result?

A significant element within a boundary repair issue lies with the displacement offset between the legal boundary and the occupational boundary from whence a boundary either becomes a boundary repair/dispute issue or is within allowable limits from which no action can occur. In most instances, the value of the land is not taken into consideration nor is the shape of the lot. For example, a 1 metre shift in a boundary is more significant for a narrow rectangular lot than a regular shaped lot with regard to setback distances for structures and the overall area. A similar 1 metre shift in a boundary in a high-value land use area has a significantly greater financial effect than in a low-value land use area. Regardless of those issues, the question remains as to what is an appropriate standard to determine whether there is a boundary repair issue. In Victoria and other jurisdictions in Australia, a margin of error is allowed in the description of boundaries. For example the Victorian *Property Law Act 1958* acts as a de-facto standard for boundary repair system between vendors and purchasers to define allowable survey error limit differences between boundary dimensions as stated and the actual dimensions of such boundaries as found by measurement on the ground. Typically if the difference does not exceed 50 millimetres for a boundary line irrespective of length where the length does not exceed 40.3 metres, no action shall be brought by reason or in respect of such difference. Such an allowable limit may be appropriate for high-value land use areas. However, for use as an overarching standard it can lead to what may be regarded as a trifling error application. For example in *Patsios v Glavinic* [2006] VSC there was a suggestion that if the 'palings were on the other side of the fence' then the survey would be within the allowable limit and Justice Smith in summation in *Patsios v Glavinic* [2006] VSC stated 'this was a case in which the costs...were always going to grossly exceed any value of the land in question', which raises the consideration of cost versus benefit.

Conversely in Nova Scotia, Canada, pursuant to the *Land Registration Act 2001* allows the proprietor of an adjacent parcel by way of adverse possession and occupation to acquire an interest in part of a parcel, if that part does not exceed 20% of the area of the parcel in which the interest is acquired. In the author's opinion 20% is too significant a proportion of the area of a lot that can be obtained by part-parcel adverse possession, for example, it would represent a 4 metre strip in a 20 metre wide lot. An appropriate percentage would be one where the value of the potential loss in land is less than the cost of taking the issue to court and a range of 5% to 10% may be more appropriate. For example, a lot losing a 1 metre of frontage for a

20 metre wide lot where the lot was valued at \$100,000 could suffer a \$5,000 loss in value due to an adverse possession application, which ideally should be less than the cost of attempting to defend against the claim in a court of law.

The cadastral survey guidelines published by the Land Services group (2009) (an excellent resource and source for cadastral surveyors to both consult and educate regardless of jurisdiction), the guidelines state that consistent differences between the legal boundary and the occupational boundary to the magnitude of 0.4 metre are considered worthy of investigation.

## 5. SOME RECENT CASE STUDIES INVOLVING BOUNDARY ISSUES

Two recent examples regarding boundary determinations occurred in *Nicholson v. Halliday*, [2005] 259 (ON. C.A) and also regarding a re-survey of a suburban section in the suburb of Enoggera, Brisbane, Queensland, Australia involving multiple land owners. Both of these will be examined in some detail.

### 5.1 *Nicholson v. Halliday*

*Nicholson v. Halliday* involved a dispute over the boundaries between two heavily timbered low-value land use lots. The following sections relating to the case are summaries from the court transcript.

For over fifty years, the owners assumed that a fence, constructed long before either of them acquired title, marked the boundary until surveys in 1992 and 2000 by Ontario land surveyor Halliday (the Halliday survey) marked a significantly different location. An Application was made under the *Boundaries Act*, R.S.O. 1990 to the Director of Titles to determine whether either the fence or the Halliday survey marked the boundary between the lots. The Director determined that the fence was the boundary line and not as determined by the Halliday survey. An appeal was made to the Divisional Court and on appeal the Director's decision was reversed holding the Halliday survey line as the true boundary. An appeal was brought before the Ontario Court of Appeal, which allowed the appeal and restored the Director's original decision regarding the fence as the true boundary.

The background to the dispute revolves around five one-hundred acre lots surveyed in 1870, each with a frontage of twenty chains (1320') and a depth of fifty chains (3300'). Survey posts were set at the lot corners but the lines between the lots were not surveyed or run which is used to explain why the fence did not follow the mathematical position of the boundary.

In 1962, Mr. Little purchased Lot 22 and always considered the fence to mark the boundary between his lot and Lot 23. As he had lived in the area since 1932, Mr. Little remembered the fence from his youth, and helped repair the fence in 1937. In 1979, Mr. Serre purchased Lot 23 and as did his predecessor in title, Mr. Serre shared Mr. Little's assumption that the fence represented the boundary between the two lots.

That view changed in 1992, after the first Halliday survey. Halliday began the survey in the north corner of the lot at the road allowance and established the lot frontage by proportional division. After establishing the line's northerly commencement, Mr. Halliday simply ran the lot line to the lot's southerly limit as per the plan bearing. Mr. Halliday did not consider the fence to be a boundary fence because it did not extend to the lot's north limit and because it followed an irregular path, unlike other boundary fences in the area. During the course of the survey, Mr. Halliday observed a cabin located on what he thought was Mr. Serre's lot. The cabin was Mr. Little's and built on what both Mr. Little and Mr. Serre had believed to be Mr. Little's lot.

In preparation for the appeal, Mr. Serre retained a second surveyor whom supported the Halliday survey, in part because he concluded that the fence had not been built in relation to the original monuments and because its irregular path was not in keeping with the rectilinear nature of other fences in the area. In those circumstances, Mr. Dorland was of the opinion that the fence was not built to mark the boundary.

In 1998, Mr. Little retained Mr. Nicholson who was of the opinion that the fence established the boundary. Mr. Nicholson held this opinion because he thought that the fence builder had started to build not from the northerly limit – where the Halliday survey began – but from the southerly limit of the lot. In support of his opinion, he noted that, at the southerly limit of the lot, the fence was virtually coincident with the south corner established by the Halliday survey. From the south limit, the fence continued for approximately 3400' and then abruptly changed direction including one particularly severe deviation. Mr. Nicholson viewed this as consistent with the builder ascertaining the southerly lot limit once 3300' had been fenced. If the fence marks the boundary, the lot areas are eighty-seven acres and one hundred and thirteen acres respectively. If the Halliday survey marked the boundary, each lot is one hundred acres. The difference of opinion led the parties to seek a boundary determination from the Director. Of interest, the parties to the application before the Director were not the owners, but the surveyors. After reviewing the evidence, the Director concluded that the fence represented "the best evidence of the original running of the line".

The Divisional Court majority had found the Director had supposedly committed four errors in determination:

1. Finding the fence as a boundary fence absent direct evidence that the fence had ever been used for that purpose, particularly at the time of the original survey;
2. Accepting as relevant, evidence of the lot owners' peaceful acceptance of the fence as the boundary;
3. Confusing the principles applicable to the resolution of a boundary dispute with the principles applicable to adverse possession; and
4. Failing to give weight to the one hundred acres of bush land that each owner believed he had bought.

The Court of Appeal commented on the Director's supposed errors within the following subsections.

### 5.1.1 Fencing relating back to the original survey

With respect to whether the evidence relates back to the original survey, the Court of Appeal held that the Director related the fence back in time to 1915 or 1919, when the two lots were first separately held. Until the lots were separately owned, no reason existed to run the line or build a fence, consequently 1915 or 1919 was accepted as the appropriate date of reference. The question was not when the fence was built but whether it was built in relation to the original survey as clear or direct evidence is often not available and the passage of time makes it increasingly difficult to provide direct evidence as the builder of the fence may not be available to testify as to intention. The fence itself is the legacy that the builder has left, its location, and its known history are the only available evidence from which its original purpose can be inferred. One of the factors with which the Divisional Court majority was concerned was evidence about the dramatic bend at one segment of the fence. With respect to this evidence, the Director said: 'It is quite conceivable that the fence was built along the edge of the bush road for ease of construction.' The fact that a small portion of the fence was built along the bush road does not derogate from the conclusion that it was intended to mark the boundary and the Director determined, on the balance of probabilities, that the fence was built, not as a fence of convenience, but to mark the boundary between the lots. The Director's reference to ease of construction applied only to that portion of the fence that took a bend at a point 400' from its northerly termination, it was not a reference to the fence in its entirety and could not be used to undermine the Director's overall finding that the fence, taken in its entirety, marked the boundary. With respect to the history and location of the fence, the Director relied on Mr. Little's evidence that the fence existed in a state of disrepair in 1937 and Mr. Nicholson's evidence that its southerly point was virtually coincident to the south lot line, related back to the accepted dates, represented a first running of the lot line and was supported by evidence. It was established that early settlers marked their boundaries by locating the original monument and using a compass, ran the lot line or erected a fence. Lots were occupied relative to the lot line as marked, if it was peacefully settled by adjacent lot owners. This practice was recognised even though such a boundary may not be in accordance with survey measurements. The Director found the fence was probably constructed from the south limit of the concession northward with the use of a compass and that, in addition to magnetic declination, the builder of the fence was further deflected by the nature of the topography, trees, bush and rock outcropping.

### 5.1.2 Acquiescence and Peaceful Acceptance

There was evidence before the Director that the owners of Lots 22 and 23 had peacefully accepted the fence as the boundary for more than fifty years. The question before the Director was whether the fence delineated a boundary, not whether subsequent purchasers believed that it did or did not. Evidence of lengthy acquiescence or peaceful acceptance of a fence as a boundary has long been held to be relevant to the question of the fence's purpose. Long standing peaceful acceptance is a fact from which the Director was entitled to draw an

inference in support of the proposition that, since the fence served the purpose of a boundary from at least 1937, it likely also served that purpose when it was built. The Court of Appeal saw no error in the Director's reliance on the lot owners' acceptance of the fence as informing the question of the fence's purpose as a boundary.

#### 5.1.3 Adverse Possession

The Court of Appeal held that in order for adverse possession to occur, there must be a true boundary and since that was the determination to be made before the hearing, then occupation to an undefined boundary by either party cannot be considered adverse. Possessory evidence is relevant to determine the boundary, however only when the boundary is defined can any issue arise regarding adverse possession. In *Thelland v. Golden Haulage Ltd.*, [1989] O.J. No. 2303 (Dist. Ct.), it was held that if no original monumentation is in existence, the next acceptable evidence is evidence regarding the original positions of the monumentation or evidence regarding the original running of the line, including possessory evidence. Evidence of possession which relates back to the first survey or first establishment of the line would be the best evidence of where the line was originally located. The Court of Appeal held that the neighbours' acquiescence to the fence as creating a boundary, and the lengthy possession of the lands in accordance with that boundary, was evidence from which the Director was entitled to draw reasonable inference.

#### 5.1.4 Relevance of acreage by measurement

The Court of Appeal held that the boundary line was the issue, not the expectations as to acreage of the current owners. The duty of the surveyor is to locate the original line, which then determines the boundary line. However erroneous the original survey, the monuments that were set, the trees that were marked and blazed, must, nevertheless, govern, even though the effect may create an imbalance in the deed areas as per the title. In the case of successive purchasers or owners, they are entitled to no more or less in area than their predecessors in title; for parties buy in reference to the lines or monuments, and are entitled to what lies within the lines and no more.

Specifically the Court of Appeal commented that at the time of acquisition, any owner who wished to confirm title for a specific number of acres could have commissioned a survey to ascertain the acreage. Neither owner did until 1992 and thus for many years acreage was not of specific importance.

#### 5.1.5 Summary of *Nicholson v. Halliday*

The Court of Appeal considered the Director's decision was reasonable and upheld the Director's determination of the fence as the boundary. More importantly the Court of Appeal reiterated the role of the surveyor in adjudicating a boundary determination. In *Thelland v. Golden Haulage Ltd.*, [1989] O.J. No. 2303 (Dist. Ct.) a paper by Ms. Lorraine Petzold, O.L.S., the Executive Director of the Association of Ontario Land Surveyors was cited as presented to the Law Society of Upper Canada in October, 1983. The paper noted the

hierarchy of evidence in determination of boundary reinstatement which ranks the evidence to re-establish a boundary from most compelling to least compelling as follows:

1. Natural boundaries;
2. Original monuments;
3. Fences or possession that can reasonably be related back to the time of the original survey; and
4. Measurements (as shown on the plan or as stated in the metes and bounds description).

The Court of Appeal held that the surveyor's goal was to find and confirm where the lot line had been run in the first place; not to correct by measurement a lot line that had already been set by the owner and accepted by the neighbour. Fences and possession is an accepted means of boundary demarcation as it was presumed they were established to run the lot line and were established in relation to monuments. Even if the monuments had been wrongly placed, the acceptance of a boundary by land owners became the best method of ensuring a just running of the line. As noted in *Diehl v. Zanger*: 'As between old boundary fences, and any survey made after the monuments have disappeared, the fences are by far the better evidence of what the lines of a lot actually are.' The Court of Appeal held it is a serious mistake for the surveyor who thinks that when monuments are gone, the only option is to place new monuments where the old ones would have been, if they had been correctly placed. The original lines must govern, and the laws under which they were made must govern, because the land was granted, divided, and descended to successive owners under the original lines and surveys. Long standing occupation often affords very satisfactory evidence of the original boundary when no other evidence is attainable. The surveyor should enquire when it originated, how and why the lines were located as they were, and whether claim of title had always accompanied the possession, and give all the facts due force as evidence.

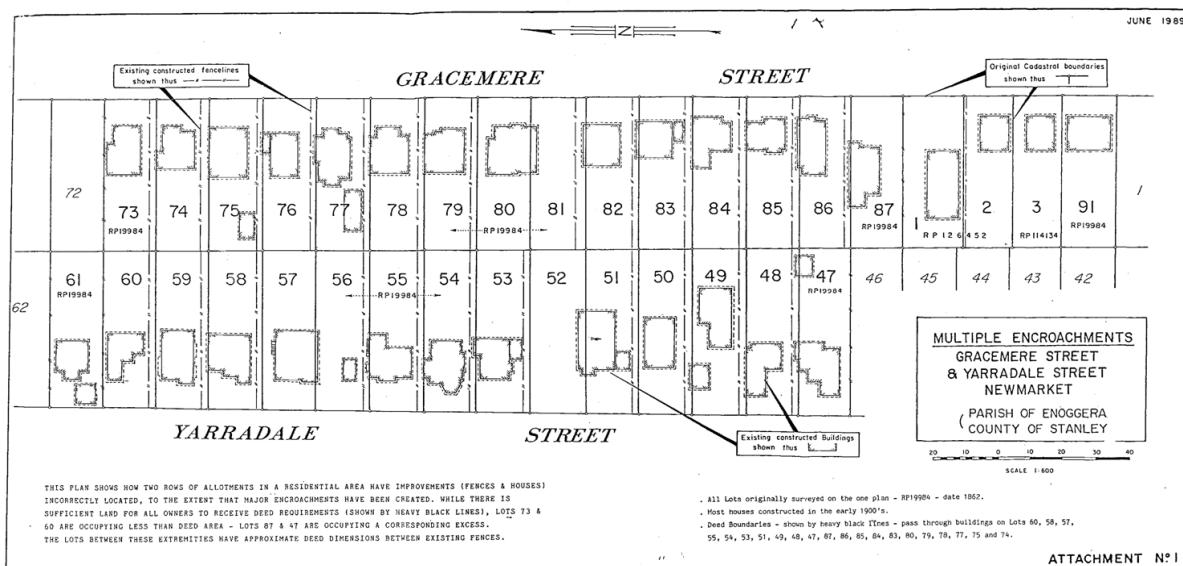
An article by Moodie (2005) implied that many surveyors may have been more comfortable with the dispute being determined by adverse possession. For adverse possession to apply in this case, the Halliday survey would have needed to be registered prior to an application for the area of occupation. The issue would hinge upon when the limitation period applies in that jurisdiction, for example in New South Wales, Australia, the limitation period for part-parcel adverse possession applications applies only against the current registered proprietor as opposed to a chain of registered owners in some other jurisdictions in Australia e.g. Victoria, proprietorship would not have been an issue in *Nicholson v. Halliday*.

## 5.2 Re-survey of a suburban section in Brisbane, Queensland, Australia

A section in the suburb of Enoggera, Brisbane was chosen as a case study, this locality has previously been subject to analysis by McClelland (2001). A section within McClelland's (2001) subject area was chosen as a case study, specifically seeking an area where there could be a block shift affecting multiple lots where the occupation of the land generally does not agree with the legal boundaries of the lots. A substantial proportion of the section contains occupation lying substantially north of the deed boundaries as measured from the southern

boundary of the section. See Figure 1 for an overview of the multiple encroachments in a suburban section of Enoggera, Brisbane

Figure 1: Overview of multiple encroachments in a suburban section of Enoggera



Source: McClelland, DERM

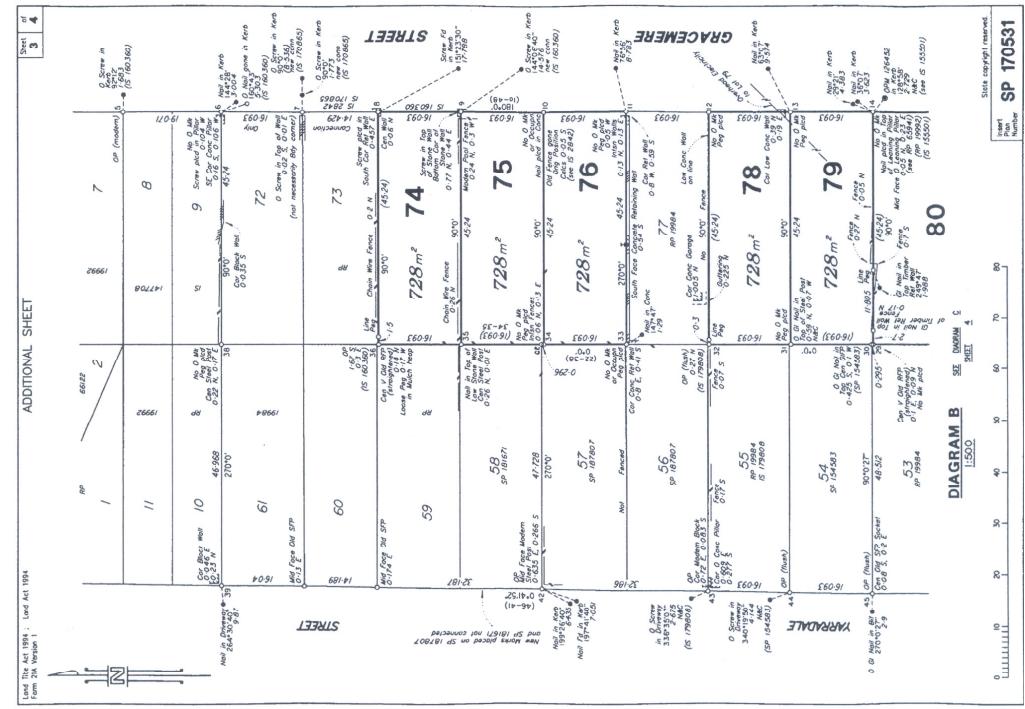
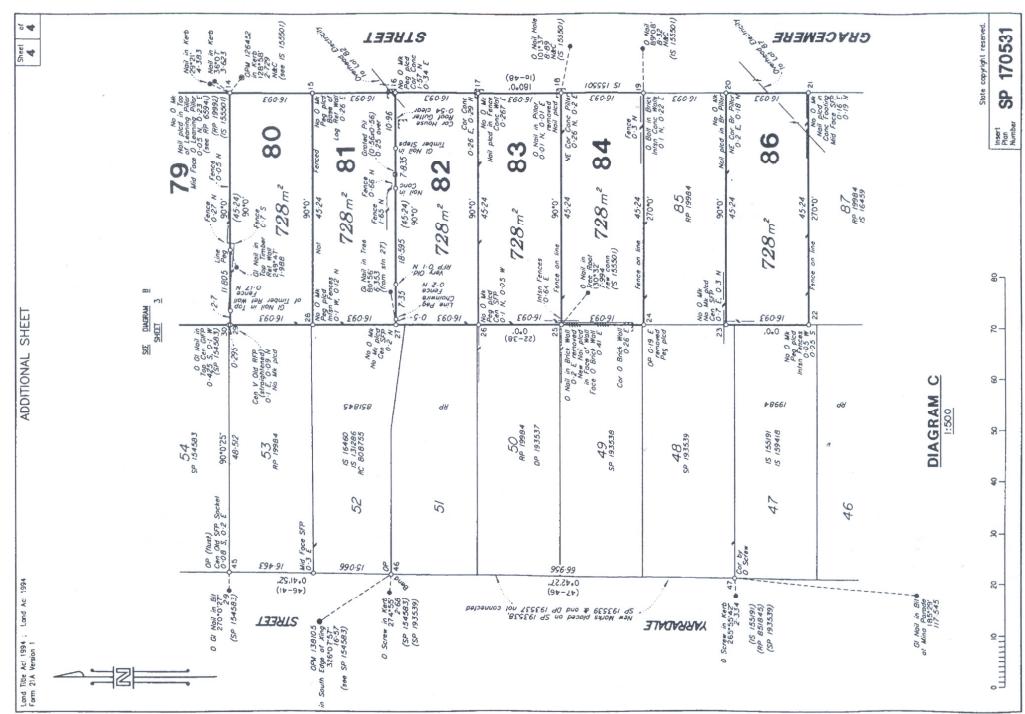
The survey of this section highlights the difficulty in obtaining agreement between multiple land owners. The section was surveyed in May, 2004 and was lodged as a re-survey of lots 72-76 and lots 78-86 and it was not until October 2006 that the plan was finally registered. In general, the registered plan allocated deed dimensions from the northern extremity of the section to lot 72, approximately 1.3 metres shortage from lot 72 to lot 86 and then 1.5 metres excess from lot 86 to the south extremity of the section. At some stage in the intervening 2 years and 5 months from initial lodgement to registration, the owners of lots 72, 73 and 85 removed those lots from the re-survey either because of a change of heart or the lots had a transfer in ownership and the new owners did not agree with the re-survey. Initially, both lots 72 and 73 were adjudicated to suffer significant shortage with respect to deed dimensions, especially lot 73 with approximately a 1.3 metre boundary line offset shift, which would have changed the title area from 728 square metres to 663 square metres. Presumably it was for this reason that the owners of lot 73 dropped out of the re-survey instead choosing to retain the belief of owning the land as per the title area – at least on paper. There was a change of ownership with lot 74 and the new owners agreed with the re-survey and were a significant beneficiary of the re-survey through the removal of an encroachment, as was also lot 75. It is apparent that the confusion over the boundaries did not necessarily affect the marketability of the lots. Lots 74 to 86 all retained deed dimensions, but most importantly all significant encroachments were removed. Agreement with occupation was generally equally split, between either on-line or generally up to 0.3 metre to the north, for Lots 74 to 86. It appears that substantial best-fit analysis and trial and error was undertaken to retain as many deed dimensions as possible, whilst removing all significant encroachments. Unfortunately in

achieving such a configuration, lot 73 was allocated significant shortage from the deed dimension. The proposed boundary reinstatement of both lots 72 and 73 was based upon occupation and from lot 74 onwards to lot 86 by deed dimension.

The survey plan took two years to obtain full agreement and to be registered given the substantial requirements for agreement and cooperation that was required to undertake a re-survey of the lots, which highlights the extreme difficulty attached to such a solution for boundary problems of this nature. Personal communications with McClelland (2009) identified only two possibilities by way of survey: By agreement and accept existing occupations as boundary evidence and commission a re-survey or secondly by agreement and accept the original survey dimensions as evidence of boundaries and commission a re-survey. The final survey plan, lodged and registered adopted a mix of both propositions.

See Figure 2 on the following page to view parts of the survey plan as registered for a suburban section in Enoggera.

Figure 2; Parts of Survey plan as registered in suburban section, Enoggera



Source: McClelland, DERM

---

TS 10K - Cadastral Boundary Issues

Shane Simmons

## Part-parcel adverse possession as a means of resolving problem survey areas

## **6. RECOMMENDATIONS TO RESOLVE PART-PARCEL BOUNDARY ISSUES**

Park and Williamson (2001) supposed that calls for unification in title registration schemes including part-parcel adverse possession are based upon the benefits of simplicity and cost reduction for participants in the land market. Court hearings regarding boundary disputes, like Family Law cases, tend to be irrational, emotional and spiteful proceedings often extending to multiple hearings on the issue over many years and court hearings e.g. six separate court hearings involving neighbours commencing with *Shadbolt v Wise* [2002] QSC 348, culminating in *Shadbolt v. Maroochy Shire Council* [2006] QPEC 113 and finally resolved in 2008. Unfortunately boundary dispute issues are not simple, each dispute may possess unique characteristics that differentiates that particular dispute from another dispute and for that reason the alternative solutions to part-parcel adverse possession fulfil a niche boundary dispute area best suited to a particular circumstance.

Statutory encroachment legislation is best served to solve disputes between neighbours where there is inadvertent occupation within a relatively recent time frame, generally less than the limitation period, where the time frame is irrelevant for any application. Statutory encroachment should only be available for relief of significant structures which specifically precludes relief for occupation by fencing or similar within the limitation period. Utilising significant structures only as the criteria for application in statutory encroachment, allows another method to deal with issues of fenced occupation and the like.

Part-parcel adverse possession is not an ideal solution for multiple lots involving a block shift of the boundaries due to occupational discrepancies with the legal boundary found by a recent survey either over an older survey or by survey error. It takes time to resolve an individual part-parcel adverse possession application as the title for a lot has to be finalised before attempting an adjacent lot – the domino effect, which for multiple lots could span a substantial time period in order to resolve the boundaries. For a boundary dispute between neighbours, part-parcel adverse possession based upon long standing occupation is a simple solution to boundary repair issues where occupation disagrees with the mathematical solution of a boundary line. However, the author believes that part-parcel adverse possession is best applied within a certain range of allowable limits. Australia and other countries of larger area and smaller population have populated towns and cities predominantly with detached housing, typically with set-back distances from the side boundary of 1.5 metres for a standard urban residential lot (say 700 square metres). The author believes that part-parcel adverse possession should apply only at a minimum allowable margin of error of 0.3 metre up to a maximum of say 10% of the area for standard size residential lots. The adoption of a minimum application of greater than 0.3 metre will remove what the author regards as trifling error applications whilst a maximum of say 10% would marginally exceed the typical set-back requirements of local government planning schemes.

The easiest and most efficient method to resolve multiple lots where a block shift of the boundaries may be required due to occupational discrepancies is by way of re-survey and agreement of all land owners (if agreement is at all possible). The surveyor undertaking a

survey for a client will most likely be adjudicating a single lot and by the application of common law principles of long standing occupation, can only amend the title to the lot being surveyed. However, given the difficulties seen in the case study and assuming agreement is not forthcoming, the application of confused/problem/uncertain boundary legislation may best resolve issues involving multiple lots. However, substantial costs are borne by the state with resolving confused boundaries in an area and it also requires substantial goodwill by the state in both resolving and declaring an area as a confused boundary area.

Seeking resolution through a regulatory authority application for determination of a boundary is best suited to determining a disputed boundary line between neighbouring properties and is a viable alternative to the application of part-parcel adverse possession. The notion of empowering an arbitrator to determine the location of a fence when there is no other issue in dispute has been raised, for example, Victorian Parliamentary Law Reform Commission (as cited by Park, Ting and Williamson, 1999). The author recommends that the applicant(s) should bear the cost of resolution of the application regardless of whether the applicant is advantaged or not.

Analysis of the above alternatives to resolve part-parcel boundary related issues between neighbours identifies six primary considerations that may impact on the resolution to a particular problem and the choices by and of the state in resolving such issues:

1. Compensation – question of whether compensation is payable to the displaced legal land owner. Compensation applies in statutory encroachment legislation but does not apply in adverse possession with the single exception of Sweden (BIICL 2006);
2. Occupation – nature, strength and evidence of occupation that could lead to a successful part-parcel boundary re-definition or registration of another interest (e.g. easement, lease);
3. Systematic block shift issue – question of whether the issue is part of a wider problem with the boundaries in a particular locality;
4. Time – is the length of occupation sufficient to satisfy the limitation period for an adverse possession application;
5. Intentional encroachment - is the encroachment deliberate which may possibly lead to removal of the encroachment or is it adverse to the legal land owner leading to an application for adverse possession; and
6. Cost – both the public and private cost with resolving an issue by a particular course of action and the effect on the efficient operation of a land market.

Assuming the state chooses to legislate or provide a mechanism to resolve part-parcel boundary issues between neighbours, a mixture of the above options needs to be considered. There is an old proverb well versed for a surveyor: you can't fit a square peg in a round hole, with regard to resolving part-parcel boundary related issues, the reality is that a 'one size fits all' approach - does not fit.

The state should adopt statutory encroachment relief legislation as a matter of course. Statutory encroachment legislation combined with either part-parcel adverse possession or a regulatory authority is legislated and given the power to adjudicate and determine a boundary line, will cover many instances of part-parcel boundary issues and disputes. For example, Nova Scotia, Canada applies both statutory encroachment legislation and part-parcel adverse possession within the bounds of the *Land Registration Act 2001*.

If the state wishes to provide a mechanism to deal with wider problem areas of uncertain boundaries then the state should apply confused/problem/uncertain boundary legislation.

If the state does not legislate or provide means to resolve part-parcel boundary disputes, then a greater expectation and responsibility needs to be placed upon the surveyor to resolve the issue by common law principles which may include increased investigation into occupation and possessory titles as a matter of course within a survey.

All methods of part-parcel boundary repair determination should require a plan of re-survey to maintain an accurate cadastre and land title registration scheme. The requirement for re-survey raises the issue of whether identification surveys of land upon the acquisition of said land should be compulsory and whether a notation on the title regarding fencing is required was discussed in the Victorian Parliamentary Law Reform Commission (as cited by Park, Ting and Williamson, 1999).

## 7. CONCLUSION

An overview of the application of part-parcel boundary issues has been presented and whether part-parcel adverse possession can apply as a possible solution. It is the authors considered opinion that both statutory encroachment and part-parcel adverse possession form a sound basis for dealing with part-parcel boundary repair issues. Part-parcel adverse possession or similar effect and statutory encroachment legislation is of particular interest as a boundary repair mechanism or solution to problem survey areas where occupation differs significantly from title dimensions or reinstatement by a cadastral surveyor.

## REFERENCES AND BIBLIOGRAPHY

Australian Bureau of Statistics 2008, 4102.0 Australian Social Trends 2008 Article: *First home buyers*, available on-line at URL:  
[http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/0B88F976F90C636ECA25748E0012AB6C/\\$File/41020\\_2008\\_20.pdf](http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/0B88F976F90C636ECA25748E0012AB6C/$File/41020_2008_20.pdf), Accessed 23 December 2009

British Institute of International and Comparative Law (BIICL) 2006, *Adverse possession*, Report by the British Institute of International and Comparative Law for Her Majesty's Court Service

Cooley, T.M. (1882), *The judicial functions of surveyors*, An address by the Chief Justice, Supreme Court of Michigan, 1864-1885 delivered at the Michigan state convention of surveyors and engineers.

Dalrymple, K., Williamson, I.P. and Wallace, J. (2003), Cadastral systems within Australia, *The Australian Surveyor*, vol. 48, no. 1, pp 37-49.

Government of South Australia, *Survey principles and case law rulings: cadastral survey guidelines*, Available on-line at URL:

[http://www.landservices.sa.gov.au/5publications/Surveying-Drafting\\_Manuals\\_and\\_Guidelines/Cadastral\\_Survey\\_Guidelines/2004v2sec4.asp](http://www.landservices.sa.gov.au/5publications/Surveying-Drafting_Manuals_and_Guidelines/Cadastral_Survey_Guidelines/2004v2sec4.asp), Accessed 23 December 2009

McClelland, P. (1999), Inner suburban reinstatement – art or science?, *Queensland Surveyor*, vol. 1999, no. 4

McClelland, P. (2001), Whatever happened to RP19673?, *Queensland Surveyor*, vol. 2001, no. 1

Moodie, J. (2005), Tehkummah fence decision rocks survey law, *Manitoulin Expositor*, Accessed 23/12/2009, Available on-line at URL:

[http://www.manitoulin.ca/Expositor/old%20files/jan19\\_2005.htm](http://www.manitoulin.ca/Expositor/old%20files/jan19_2005.htm), Accessed 23 December 2009

Park, M.M. (2003), *The effect of adverse possession on part of a registered title land parcel*, PhD thesis, Department of Geomatics, University of Melbourne

Park, M.M. (2007), Adverse possession as repair mechanism: recent developments and further reflections, *Toward Spatially Enabled Government and Society*, SBN 978-0-7325-1620-8, University of Melbourne.

Park, M.M., Ting, L. and Williamson, I.P. (1999), Adverse possession of Torrens land, *Law Institute Journal* vol.72, issue 11.

Park, M.M. and Williamson, I.P. (2003), The need to provide for boundary adjustments in a registered title land system, *The Australian Surveyor*, vol. 48, no. 1, pp 50-58.

Park, M. and Williamson, I.P. (2001), A uniform approach to boundary location discrepancies: promoting and proscribing the reform of the land title register, *Proceedings of the 42nd Australian Surveyors Congress*

Simmons, S. (2009), An overview of adverse possession in Australia within the framework of the Torrens system of land registration and comment on a related court case. *Proceedings of the Surveying & Spatial Sciences Institute Biennial International Conference Adelaide September 2009*, Surveying & Spatial Sciences Institute, ISBN: 978-0-9581366-8-6.

Teo, H.Y. (2008), A critique of the doctrine of adverse possession, *Cross Sections: the Bruce Hall Academic Journal*, volume IV 2008, Australian National University

Wallace, J. and Williamson, I.P. (2004), Using remedies and relativities to regularise access to land, *Proceedings of Expert Group Meeting on Secure Land Tenure: New Legal Frameworks and Tools*, Nairobi, Kenya.

Wallace, J. and Williamson, I.P. (2006), Building land markets, *Land Use Policy*, vol. 23, no. 2, pp 123-135.

Case law:

Australasian Legal Information Institute cases, Available at URL:

<http://www.austlii.edu.au/databases.html>, [Accessed 23 December 2009]

*Duarte v. Denby* [2007] WASC

*Patsios v Glavinic* [2006] VSC

*Shadbolt v Wise* [2002] QSC

*Shadbolt v. Maroochy Shire Council* [2006] QPEC

Canadian Legal Information Institute cases, Available at URL:

<http://www.canlii.org/en/index.php> [Accessed 23 December 2009]

*Nicholson v. Halliday*, [2005] 259 (ON. C.A)

Statutory legislation:

Alberta, Available from URL: <http://www.canlii.ca/en/ab/laws/stat/rsa-2000-c-1-4/latest/rsa-2000-c-1-4.html>, [Accessed 23 December 2009]

Australian Capital Territory, Available from URL:

<http://www.legislation.act.gov.au/a/default.asp>, [Accessed 23 December 2009]

New South Wales, Available from URL:

<http://www.legislation.nsw.gov.au/maintop/scanact/inforce/NONE/0>, [Accessed 23 December 2009]

Northern Territory, Available from URL: <http://www.legislation.act.gov.au/a/default.asp>, [Accessed 23 December 2009]

Nova Scotia, Available from URL: <http://www.gov.ns.ca/legislature/legc/>, [Accessed 23 December 2009]

Ontario, Available from URL: <http://www.search.e-laws.gov.on.ca/en/isysquery/b68215ca-7732-4407-975a-2de097a7f282/4/frame/?search=browseStatutes&context=,> [Accessed 23 December 2009]

Queensland, Available from URL: [http://www.legislation.qld.gov.au/Acts\\_SLs/Acts\\_SL.htm](http://www.legislation.qld.gov.au/Acts_SLs/Acts_SL.htm), [Accessed 23 December 2009]

South Australia, Available from URL: <http://www.legislation.sa.gov.au/browseActs.aspx>, [Accessed 23 December 2009]

Tasmania, Available from URL: <http://www.thelaw.tas.gov.au/browse/index.w3p>, [Accessed 23 December 2009]

Victoria, Available from URL:

[http://www.legislation.vic.gov.au/Domino%5CWeb\\_Notes%5CLDMS%5CPubLawToday.nsf](http://www.legislation.vic.gov.au/Domino%5CWeb_Notes%5CLDMS%5CPubLawToday.nsf), [Accessed 23 December 2009]

West Australia, Available from URL:

[http://www.slp.wa.gov.au/legislation/statutes.nsf/main\\_actsf.html](http://www.slp.wa.gov.au/legislation/statutes.nsf/main_actsf.html), [Accessed 23 December 2009]

## BIOGRAPHICAL NOTES

Shane SIMMONS, B.Surv.(UQ), G.Dip.Surv.Pr.(QUT), G.Dip.Bus.(Prop.St.) (UQ), G.Cert.Finance (SIA), cadastral surveyor, MSSIQ, MIEE, MAPI.

Since 1995, Shane has been a lecturer in surveying at the University of Southern Queensland and is currently program coordinator of the surveying and spatial science discipline. Prior to 1995, Shane was an endorsed cadastral land surveyor with 16 years experience in both the private and public sectors primarily involved with engineering and construction projects. Shane completed a Graduate Diploma of Business (property studies major) at the University of Queensland in 2000. Since 1998, Shane has been honorary editor of the Queensland professional journals, *Queensland Surveyor* and *Spatial Science Queensland*. Shane's principal research interests include professional issues, land development and land law. Shane is actively involved locally with the USQ rugby club as a volunteer administrator and manager.

## CONTACTS

Mr Shane SIMMONS

Senior lecturer and endorsed cadastral surveyor, Queensland.

University of Southern Queensland  
Baker St, Toowoomba, Queensland 4350  
Australia  
Tel. +61 7 46312910  
Fax: +61 7 46312526  
Email: [simmonss@usq.edu.au](mailto:simmonss@usq.edu.au)  
Web site:  
<http://apps.usq.edu.au/StaffSearch/default.aspx?staffsearchaction=showdetails&staffsearchrecordid=577>