

## LOSS AND ERROR PREVENTION IN THE SURVEY AND RETRACEMENT OF NATURAL BOUNDARIES IN ONTARIO

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### Introduction

The emergence of waterfront issues in development of both urban and rural environments in North America and, specifically in the Province of Ontario, is no accident. The development of tourism and recreational activities is actively promoted by community planners, and government ministries have issued publications that encourage and assist in the planning and development of waterfronts; for example, the Ministry of Municipal Affairs has published the booklet entitled *Urban Waterfronts Planning and Development*.<sup>1</sup> Likewise, Royal Commission studies have focused on the need for providing a coherent approach to the establishment, maintenance, and regeneration of waterfront facilities and these serve to make the waterfront a subject of heightened public awareness. The Royal Commission Report, on the Future of the Toronto Waterfront, published in August 1990, entitled *Watershed*,<sup>2</sup> is another example of the elevated focus of waterfront development issues.

Under the authority of the *Planning Act 1983*, s. 3, the Minister of Municipal Affairs has issued separate policy statements addressing Flood Plain Planning and Wetlands. Although neither policy statement requires the surveying of any natural boundary, the Flood Plain Planning Statement contains an interesting diagram to illustrate a cross-section of a waterway to show a two-zone floodway-flood fringe concept.

### TWO ZONE FLOODWAY-FLOOD FRINGE CONCEPT

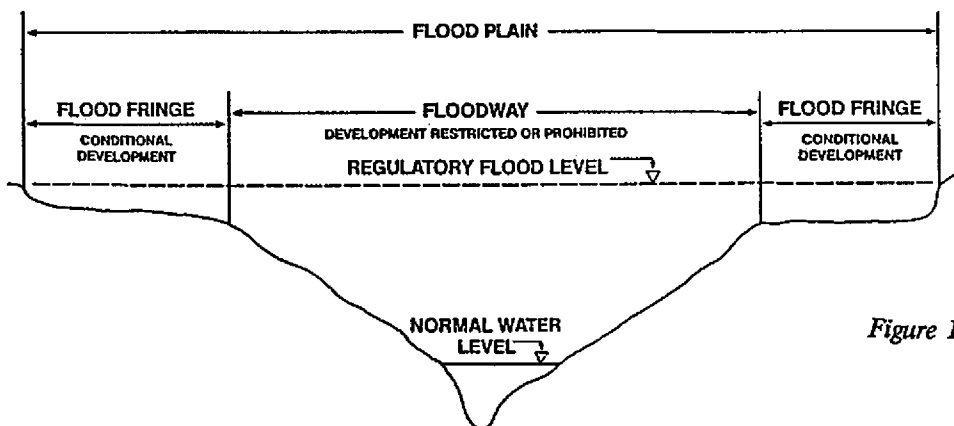


Figure 1

Nonetheless, some conservation authorities have viewed accurate surveys as essential to their wetland and flood plain management role and have actively pursued this activity.

The complexities of the legal issues of the title and of the land surveying of the dry land/ wet land interface is seldom acknowledged or even cautioned to the layperson as a potential area of expense, frustration, and obstacles. The April 1987 publication of the Ministry of Municipal Affairs entitled *Urban Waterfronts Planning And Development*,<sup>3</sup> which is only 74 pages long before it reaches the appendices, contains a short section dealing with "ownership". Portions of this section (at pages 30 and 31) read as follows:

Determination of waterfront land ownership is often complicated. On shore, adjacent to the water, there may be a 20 metre wide strip of land which may be either a road allowance or a Crown shoreline reserve. Road allowances, identified as such in the original surveys of townships, exist whether or not there are actually roads on them. They may already have been purchased by the shore property owner, be owned by the municipality or by the Crown. Crown shoreline reserves commonly exist where there is no original road allowance.

Ownership of water lots (the land under a navigable water body which is determined by an extension of the property lines out into the water) will also affect waterfront development. In some instances, the shore property owner has title to this land. In general, unless the Crown patent (deed) specifically confers ownership of the lands under the water, the beds of navigable waters are owned by the Crown as represented by the Ministry of Natural Resources. As ownership is not always clear or continuous along a shoreline, before any development (e.g. a breakwater) is undertaken, a search of the land title records should be made to clarify the situation. Use of these lands can sometimes be obtained through leasing arrangements with the owners.

Ownership is discussed in a glib and superficial manner in a brief publication of this nature. No mention is made of ownership problems or the determination of the actual legal limit between the upland owner and the owner of the bed of the body of water. No reference is made anywhere in the publication to the assistance or use of a land surveyor's services. This should not be surprising.

A highly respected and standard authority in the area of real property law for solicitors in Canada is *Anger and Honsberger Real Property* (2nd Edition).<sup>4</sup> Only ten pages in this two volume work, which totals more than 2000 pages of text, are devoted to a chapter on the topic of "Boundaries and Adjoining Land Owners"<sup>5</sup> and barely more than one page treats the topic of lands bounded by water.<sup>6</sup> Small wonder it is that the topic of natural boundaries, the extent of title to parcels of land fronting on water, and the rights of the Crown in relation to the beds of those waters that are navigable and in which the Crown has not alienated its interest are a source of confusion, mystery, and misconception on the part of the legal profession.

Notwithstanding this, the land surveying profession must still respond and produce plans of survey, reports, and documentation on which members of the legal profession

and the general public are entitled to rely for the information shown. Where the information pertains to the location of the legal boundary of the dry land/wet land interface, the prospect of being found wrong, being told that one is wrong, and being suspected of being wrong, are all too common and risky.

The object of this paper is to discuss the professional liability of land surveyors in this province arising out of the surveying of natural boundaries. In itself, this is no mean effort. We have all looked forward to some guidance from the courts or other authorities for principles that are clear, authoritative, and not equivocal. Many of us had assumed that authority and direction would emerge out of the decision of the Supreme Court of Ontario (now the Ontario Court (General Division)) in the decision of *Gibbs v. Village of Grand Bend*, (1989), 71 O.R. (2d) 70. However, appeals were filed in the Ontario Court of Appeal by the defendant.<sup>7</sup> I was recently advised, in early February, by one of the plaintiff's counsel that the transcript of the trial proceedings had not even been started. At this rate, the appeal will not likely be perfected until sometime in 1992 and it may well be that the appeal is not even heard until 1993. There is no telling how long it will take for the Court of Appeal to release its decision if, as would be expected, a decision is reserved following the argument and submissions. Between now and 1994, land surveyors will continue to be retained and paid for the preparation of reports and plans of survey for waterfront property. In many instances, an approach might be adopted by the land surveyor which is consistent, for example, with the decision of the trial court in *Gibbs v. Grand Bend*. However, by 1994 the Court of Appeal might rule that the trial judge's approach and decision is incorrect, or wrong in certain areas that the land surveyor in the meantime had adopted as being correct. And, of course, there are other areas of uncertainty besides those raised in the *Grand Bend* case. Where does this leave the land surveying professional today, faced with such uncertainty?

### *Negligence Update*

Liability in negligence is part of the tort law in all common law jurisdictions. It would appear that the legal starting point for the evolution of the case law is with the dissenting judgment of Lord Denning in *Candler v. Crane, Christmas, and Co.*, [1951] 1 All E.R. 426. The case was about the liability attached to errors in accounting. Lord Denning stated that accountants owed a duty of care to anyone to whom they gave advice, and that this duty of care included third parties that the accountants had good reason to know or assume would be receiving their advice. However, the accountants would not be liable to third parties that were completely unknown at the time of the rendering of the advice.

This dissenting judgment was subsequently adopted by the English House of Lords in *Hedley Byrne and Co. Ltd. v. Heller and Partners Ltd.*, [1963] 2 All E.R. 575: accountants, and other professionals who render advice, owe a duty of care to completely unknown third parties, provided that they are within a class of people who could be reasonably foreseen as expected to rely on that advice. Since then, the Supreme Court of Canada adopted the *Hedley Byrne* principle in its decision in *Haig v. Bamford* (1976), 72 D.L.R. (3d) 368. This decision essentially involved the preparation of audited financial statements for a company by a firm of chartered accountants. The accountants were found to have known that the statements would be shown to potential investors in the company. The Supreme Court of Canada held that

the firm owed a duty of care to, and was liable for the losses suffered by, a person who invested in the company on the basis of the financial statements and reliance on them. This was found by the Court even though the investor may not have been known to the accounting firm at the time of the preparation of the statements or at the time that the statements were shown to him. The case establishes unequivocally for Canadian law the liability of professionals in general to third parties for negligent misstatement.

The case was successful before the Supreme Court of Canada in large part because the plaintiffs were able to establish and prove that the decision to make the investment in the company which lost their investment was based virtually entirely on the information contained in the audited financial statements. The corollary, of course, is that if reliance can be proven on other information, facts, and materials, other than those of the defendant, on the part of a plaintiff who has allegedly suffered a loss, then a defendant will not be found liable to a third party for such negligent preparation of financial statements.

This was the law in Canada for over a decade until a recent series of cases were decided by the British Columbia Court of Appeal in late 1990.

*In Kripps v. Touche, Ross & Co.*<sup>8</sup> several hundred people had purchased debentures from a mortgage company and sued the accounting firm for alleged negligence in the preparation of the company's financial statements. The mortgage company had raised money by the sale of debentures through a prospectus that had been prepared and published and included the audited financial reports which had been approved by Touche, Ross & Co. The people who had lost money in the purchase of the debentures had argued that the accounting firm had failed to report that a substantial amount of the interest remained unpaid and had instead been capitalized, that it had extended a third party guarantee for the borrowings of a subsidiary, and that it was also carrying on business in the United States. The key issue in the case was whether or not the accounting firm owed a duty of care to the many people who had invested in the mortgage company. The British Columbia Court of Appeal found liability and, on its surface, this decision extends the liability for professional advice further than ever before. It, along with other similar decisions,<sup>9</sup> suggest that a plaintiff needs to prove that only the slightest amount of reliance on advice from a professional was made in order to win a case against the professional for negligent misstatement. This general trend can only be interpreted as a serious enlargement of liability, not only in terms of establishing or making a finding of negligence in the first place, but also in respect to the court's approach to evaluating damages.

Negligent misstatement, as a source of liability in regard to the report and plan prepared by a land surveyor, is to be contrasted with negligent performance of the actual work by the surveyor. The most obvious example of negligent performance in a surveyor's work is found in *Stafford v. Bell* (1881), 6 O.A.R. 273 (C.A.), where the Ontario Court of Appeal held that there must be evidence of a want of reasonable skill and knowledge; failure to know the provisions for the running of a sideline as set out in the *Surveys Act* of the day was held to constitute a want of reasonable skill and knowledge. Damages followed against the land surveyor. A more recent example is *Duguay v. H.G. Green Surveys Ltd.*, (1988), 92 N.B.R. (2d) 424 (N.B.Q.B.). The plaintiff sued a land surveying firm for damages arising from a survey that was performed by a surveyor in the employ of the company. He was hired to mark on the ground a property line which had already been partially marked by a survey monument

and a line of blazes on trees. Instead, he arbitrarily chose a compass bearing and began cutting trees to mark the boundary line. Although he was warned that he was on the plaintiff's neighbour's land, he kept on cutting. The cut line eventually was as much as 100 feet into the neighbour's property and many trees had been cut down. The court found that the survey company was liable for the negligence of the employee and that this amounted to gross negligence. Damages followed in the amount of almost \$10,000.00.

Both *Stafford v. Bell* and *Duguay* are illustrations of a want of reasonable skill and knowledge to such an extent that the mistake or the error on the part of the surveyor's work flowed from a lack of skill or knowledge on the part of the surveyor himself. Both cases point to a lack of knowledge of the law, the first statutory, the second common law, in respect to the retracement of a previously run and monumented property line.

It is significant that liability can arise for a land surveyor for negligent misstatement (and have this tort liability extend to all sorts of unforeseeable third parties who make the slightest amount of reliance in the surveyor's material) and, also, on the other hand, out of a lack of reasonable skill and knowledge on the part of the surveyor in his performance.

In respect to natural boundaries, liability for a lack of reasonable skill and knowledge could arise at any point in time by the surveyor placing the property line, say, in the middle of a stream. If the stream is subsequently found to be navigable, then the liability arises out of having failed to place the boundary at the edge of the stream. Using the same illustration, liability could also arise in failing to correctly locate the position of the centre line of the stream, or the edge of the stream, on the ground, and on a plan of survey illustrating the property boundaries, due to technical or measurement incompetence.

### *Natural Boundary Issues*

Although more writing is emerging all the time on natural boundary issues, the retracement of natural boundaries has not become simpler for the practising surveyor. This is attributed to two principal factors: (1) the inherent difficulty of defining at law the true or correct character and location of the natural boundary and (2) the inherent difficulty of locating, on the ground, that which the law has prescribed as being the limit on the ground.

Stated in another way, the difficulty is first in finding the correct terminology in order to describe the location of the natural boundary on the ground. Once the correct terminology has been found, the difficulty then is the physical demarcation on the ground of what the terminology calls for. In the first instance, the problem from a liability potential point of view is not unlike that of *Stafford v. Bell*.

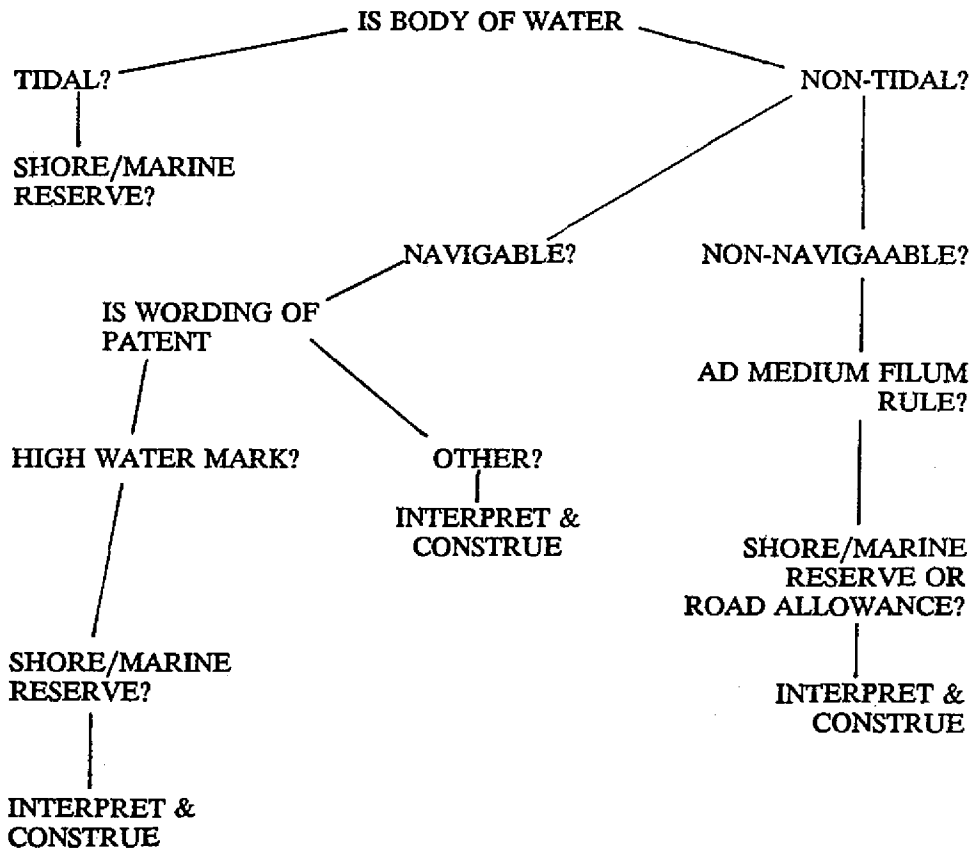
Either ignorance of the law, or inability in being able to find the correct principles that must be applied in the location of the natural boundary, may result in liability. This has been clearly demonstrated in the whole line of cases which have followed *Stafford*

*v. Bell.* Liability in respect to the second aspect, which poses a greater difficulty for the land surveyor, flows from the fact that the waterfront environment in which a natural boundary is to be positioned is most often unique for each parcel, both in terms of the physical environment and the circumstances of the evidence which can be researched and applied to such position. The evidence would include such information as survey instructions, field notes, diaries, and reservations in the Crown patents.

*An approach for correct terminology?*

One would hope that a systematic approach could have been developed for resolving, in an organized fashion, the question of where a natural boundary was located. Such a systematic approach might be in the form of a flow chart. Questions, answered as "yes" or "no", might lead the user of the chart to a description of where the boundary was located. The description of location might be articulated in such a way as to closely resemble the kind of wording that might be adopted by a court of law as well.

**DECISION FLOWCHART FOR NATURAL BOUNDARY TERMINOLOGY**



In going through such a chart, yes/no type of questions might include:

1. Is the body of water tidal or non-tidal?
2. Is the body of water navigable or not navigable?
3. Is the boundary described in the patent as the "high water mark" or otherwise?
4. Does the original Crown patent contain reservations of the beds of waters, or make mention of a reservation for roads along the shore? and so on.

We are all tempted to look for such a solution to give a clear guideline on the wording that will best express the dry land/wet land interface. *Although developing an approach to finding the correct articulation of how a boundary is described might be possible, using a device such as a flow chart is not only impossible but downright dangerous. It is too simplistic.*

The law does not lend itself well to this sort of systematizing. There is very little uniformity in the wording of Crown patents, in reference to natural boundaries, and also in the way reservations are worded. Navigability, as a simple yes/no test cannot be ascertained on the basis of a cursory field examination of a stream or river. The historical use to which the stream or river has been put is now very much in issue. The present recreational use of the stream, in summer and winter, has now been found relevant. The intention of past and present landowners may have a bearing.<sup>10</sup>

We must include many other circumstances, and the total evidence of the boundary, in formulating the expression which best articulates the wording of the dry land/wet land interface. When using the expression "best articulates" I mean to say that it states the location of the boundary in such a way as to be most likely to be adopted and affirmed by a court of law or a tribunal under the *Boundaries Act*.

Julius Melnitzer, plaintiff's counsel at trial in the *Gibbs* case, stated the proposition very well in a presentation to this Association's Annual Meeting last year in Ottawa,

... just as lawyers can't do real estate deals without enough understanding about surveys to be able to carry out their mandate, you cannot do a survey without knowing enough about deeds, their construction, and the law of boundaries to do your job.<sup>11</sup>

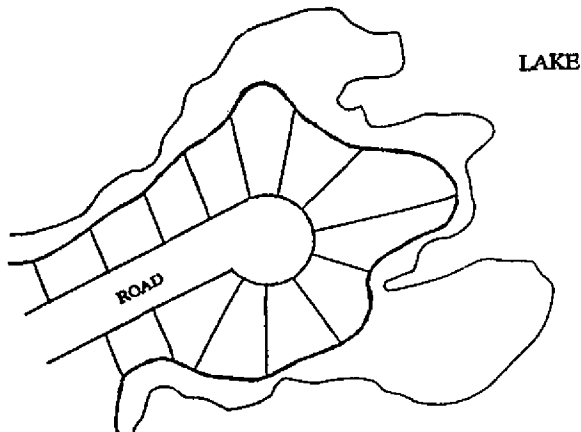
Lack of enough of that knowledge may lead to adopting a certain kind of wording as to how to approach the demarcation of a natural boundary which is contrary to the test used by the Courts.

### *Several Examples*

The risk of a claim resulting from the incorrect positioning is not at all small. Let me use two examples to illustrate this point and the nature of the damages that a land surveyor might face.

A. The first example contemplates a retracement of a boundary on the Great Lakes for a parcel to be subdivided. The surveyor decides that its dry land/wet land interface is to be governed by the expression "High Water Mark" and resorts to the OLS Manual for reference. There is found the definition at Section 5.3 which states,

"High Water Mark" means the mark made by the action of water under natural conditions on the shore or bank of a body of water, which action has been so common and usual and so long continued that it has created a difference between the character of the vegetation or soil on one side of the mark and the character of the vegetation or soil on the other side of the mark.<sup>12</sup>



Next, the surveyor is guided by his interpretation of the case law, and places a solid line boundary, on his plan of subdivision, without specification of its intended nature as the boundary, and in fact placing it distant from the "true" natural boundary, that is, it happens to not be in contact with the water. He has been guided by the soil/vegetation test.

The subdivision plan is registered, lots are conveyed, houses are built and owners improve their shoreline by landscaping, building docks, and perhaps even adding sand fill, or dredging out channels for pleasure craft. None of this activity is either unusual or inconsistent with what shoreline property owners might be expected to do.

The issue of the surveyor's liability arises when one of the lots is purchased on a resale and there is an inherent and substantial value attached to the property by reason of its shoreline improvements and access to water. The purchaser's lawyer might requisition proof of title to the land between the water's edge and the lot boundary as shown on the plan of subdivision. Whether or not there is a claim capable of being made against the surveyor will depend on a number of factors. They will probably include the following:

1. Are the lots on the plan of subdivision riparian?
2. Who or who's estate now owns the title to the land between the water's edge and the lot if the title is not riparian?
3. Is there contribution to the owner's damages that can be attributed to the



owner's own activities in perhaps building and constructing without necessary permits and approvals?

4. Can the damages be attributed to the former owner's solicitor?
5. How has the surveyor labelled the boundary on the plan of subdivision and what were the original instructions?

Some of these factors may have left the land surveyor with no choice when originally subdividing. There may have been a mandatory wording that had to be attached as a label for the natural boundary. There has been mention before of the dilemma faced by land surveyors in the past when forced to perform under conflicting guidelines. Professor Lambden writes, in connection with the amendment to the *Beds of Navigable Waters Act* from 1940 to 1951,

. . . the Ontario approach was identical to the continuing federal instruction. Where the provincial effort failed was in definition and in the understanding of that definition by administrators and property owners and by the surveying profession caught in the middle in the execution of their duties.<sup>13</sup>

It is unlikely that liability would flow to the surveyor for damages suffered by a property owner when the surveyor follows the instruction, guideline or administrative directive set out under the authority of the Crown. But is this also the case if the surveyor blindly follows such instructions, knowing or suspecting it is either incorrect or not applicable, but just complies anyway, in order to get a plan registered or approved for registration? This is where the speculation begins, which makes the surveyor's task more hazardous.

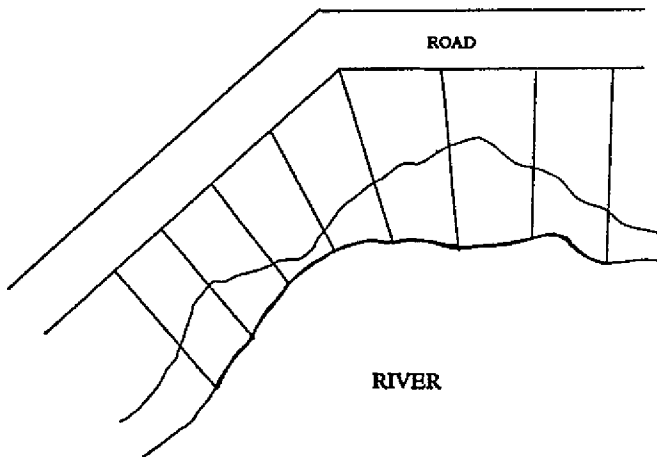
B. The second example illustrates the opposite scenario -- one in which the surveyor's interpretation of the definition is guided by other case law, including the decision of Lane, Co. C. J., in *Attersley v. Blakely*, as affirmed by the Court of Appeal:

. . . the old common law rule as to the boundary between land and water placing it at the water's lowest mark is the law as it stands at the moment.<sup>14</sup>

The retracement of the natural boundary in this example may lead the surveyor to try and reconstruct a low water mark which existed at some time in the past by taking soundings and measurements of the water's depth, even though it may be covered by several feet of water under present natural conditions.

Using the same circumstances as in the previous example, assume that a plan of subdivision is prepared with similar water front lots. This example leaves the property owners with title that is undoubtedly riparian. But does the title correctly extend beyond the present water's edge in its normal condition to the "low water mark"?

Unfortunately, although I have framed this situation as an example, I understand that there is a practice that continues today in some parts of Ontario along the direction



of what this example illustrates. E & O claims could readily arise out of the property owner's lack of title to the bed of the body of water, a subrogated claim from the Title Assurance Fund, if the land is registered in land titles, or a claim for compensation resulting from a shortfall in the area of the parcel purchased.

The example underscores the need to be thoroughly familiar with the principles that apply in these circumstances. The Court of Appeal in *Attersley v. Blakely* also cited with approval the decision of the Court in *Stover v. Lavoia*,<sup>15</sup> in which can be read,

... the boundary to the lake shore means and carries to the edge of the water in its natural condition at low-water mark.

However, the Court considered the *existing* water's edge to be the boundary in that particular case.

These two examples illustrate the potential for liability resulting from a misinterpretation of the legal principles applicable to the retracement problem.

### ***Liability of the Crown?***

Liability for the Crown is always a delicate and difficult topic to address. Historically, there were many immunities and obstacles to Crown liability that were enjoyed and relied upon by the Crown and its servants and agents. However, liability arising out of negligence is probably the single most important source of tort liability for the Crown and other public bodies and this appears to be no different from that of private individuals and corporations.

The distinctions or differences between liability that attaches to activity of the Crown as opposed to liability that attaches to private individuals is developed at this point in time in Canadian law relatively well. Peter Hogg, in his book *Liability of the Crown*<sup>16</sup> makes a very clear explanation of the distinction between decisions that are "planning" in nature and those that are "operational". At page 123, Hogg writes:

The Supreme Court of the United States established the rule that a decision at the "planning" level of government could not give rise to liability for negligence while a decision at the "operational" level could do so. . . . For example, a ship owner sued the United States for damage to a ship that had run aground. The Coast Guard has established a warning light but had allowed the light to go out. Was the government liable? The decision to build the lighthouse was a planning decision and the failure to build the lighthouse would not have given rise to liability for negligence. But, having made the planning decision to establish the lighthouse, the Coast Guard came under a duty to execute that decision with due care. The failure of keeping the burning (or to warn of its absence) was an "operational" act or omission, which gave rise to liability to the ship owner who had been injured.

The reason why a governmental act or omission at the planning level is immune from tortious liability is because the courts are not competent to evaluate a decision reached at the planning level. The question whether or not to build a lighthouse, for example, depends upon a whole host of considerations. Some of these are highly technical; other are political. Of the latter, the crucial question may be whether and to what extent scarce governmental resources can be made available in priority to other projects. No court is in as good a position to reach such a complex judgment as the appropriate governmental officials. And indeed it is basic to our constitutional arrangements that such decisions should be made by officials who are ultimately answerable to the electorate rather than by judges who are not politically answerable at all.

The distinction between the planning and operational levels of government has emigrated from the United States to [Canada]. In [Canadian] cases, however, the words "discretionary" or "policy" are commonly used to describe what the Americans call the "planning" level of government. . . . The distinction between planning and operational decisions applies not only to the Crown but to all persons or bodies exercising governmental powers.

With this explanation in mind, it is interesting to evaluate the historical role that has been played by ministries of government and officers of the Crown in this province in regards to the management of waterfront property. Such an analysis should also include an evaluation of the statutory authority that is used by government for this management activity. Part of the management activity includes directing the public how the recording of their private ownership interests in waterfront property are to be recorded and maintained within the provincial land registration system. Such management activity also dictates how a property owner may acquire a licence of occupation or other interest in the bed of a natural body of water, the ownership of

which resides in the Crown. For example, if a person wants to protect his shore front from erosion from wind and water damage, then some shoreline protection might be necessary to be placed partly on or in the bed of the body of water immediately in front of the property owner's parcel. However, the legislative and regulatory requirements on a property owner wishing to do this are extensive and relatively onerous.

If a property owner, on the other hand, enjoys accretion to his waterfront property, and his property title was initially riparian, registration of his property interest under the Land Titles Act will not necessarily permit his parcel to enlarge by "operation of law" without making a separate application under the *Land Titles Act* for first registration of the accreted parcel. Without registration of the accreted parcel under the *Land Titles Act*, the owner is simply not the owner of the accreted land. However, at common law he is. There is nothing in the *Land Titles Act* or in the regulations under the *Land Titles Act* which necessarily requires a property owner to make first application under the *Land Titles Act* for the accreted land; however, from a property management point of view, from a land management and administration point of view, it may well be desirable as a policy to require an owner to do this because it may simplify the land interest recording function of the registration system. This could be an example of administrative expedience or ease of maintaining an administrative system as dictating a requirement on the public which may well not be founded in either common law or statutory law. If such is the case, such insistence by an officer of the Crown could be viewed as an operational decision rather than a "policy" decision, however convenient such a decision might be for the smooth running of the registration system.

Indirectly, this phenomenon has been hinted at in a paper presentation by myself and Ron Logan at the March 1990 national conference in Ottawa *GIS for the 1990's* in a paper entitled "*The Consequences of Certain Choices in GIS/LIS Design: Enhancement in the Integrity of Land Ownership?*"<sup>17</sup> The whole point that is being made here is that liability for the Crown would probably not arise in its dealings with natural boundaries issues as an outgrowth of straightforward negligence. Instead, the liability would flow from failure to operate a government program, be it for the registration of land interest recording or for shoreline property management and financial assistance.

### *Some Practical Considerations*

Despite the continuing uncertainty in the law and its application insofar as natural boundary retracement is concerned, there are some practical measures that should be carefully considered and looked at in the future. The start of this year saw the introduction of the Surveyor's Real Property Report as the replacement for a whole series of surveying products that were produced for the public in the past. For the first time, the two part report gives the land surveyor an opportunity to address the natural boundary retracement issues that posed difficulty in preparing a plan of survey, or building location survey. Surveyors should make use of this opportunity and address the retracement issues in the written part of the Report.

Not only can survey methodology and background research be described, but problems of apparent ambiguities in the law or doubts or reservations of the surveyor can be

addressed. Your doubts and reservations may well become part of the "limiting conditions" that should form part of every survey report. If written in a frank, careful and thorough manner, then they will assist your client in appreciating the limitations on your services and product.

Equally important, such a narrative may well avoid future E & O claims due to the fact that your report will also disclose to the client the limitations on the extent to which reliance can be placed on the solid black line marking the natural boundary on your survey plan. In effect, the report almost has the effect of changing that solid black line to a fuzzy grey strip.

A further practical consideration points to the need for uncompromising and thorough research. Research has always been an essential aspect of a land surveyor's service. But more with natural boundary retracement than any other type of survey work, the need for research cannot be overstated or compromised. This fact should be kept in mind when giving cost estimates, or quotes, for certain kinds of work.

A further area to explore is that of public awareness and education. Only by making the public aware of the inherent difficulty in retracing natural boundaries, will there be an appreciation of your own efforts when you render services. Public awareness will also facilitate law reform or other approaches to come to terms with this problem generally. Of course, law reform may not solve all problems, but it may well assist by, say, legislation to clarify how certain legal principles apply in individual cases.

### *Concluding Remarks*

On a closing note, it is perhaps helpful to refer to the wording used by Professor Lambden and myself in *Survey Law in Canada*:

A natural boundary appears, in first instance, to be a tangible boundary, and this is true if it is at the visible interface of land and water which is a water's edge boundary on inland non-tidal waters . . . .<sup>18</sup>

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2. Crombie, Hon. David (Commissioner). *Watershed*. Interim Report. Toronto: Royal Commission on the Future of the Toronto Waterfront. August 1990.
3. Note 1 above.
4. Oosterhoff, A.H. and W.B. Rayner. *Anger and Honsberger Law of Real Property*. 2nd ed. (Aurora, Ontario: Canada Law Book Inc., 1985).
5. Note 4 above. Chapter 19, page 978.
6. Note 4 above. Paragraph 1907, page 986.
7. Notices of Appeal were filed with the Ontario Court of Appeal in File Numbers 53/90 and 54/90 by the Village of Grand Bend and Her Majesty the Queen in Right of the Province of Ontario and the Attorney General of Ontario.
8. Reported February 1, 1991, *The Lawyers Weekly*. Case Number 1036-017.
9. For example, *Surrey Credit Union v. Willson*. Reported February 1, 1991, *The Lawyers Weekly*. Case Number 1036-018.
10. See *Re Coleman and A.G. Ont.* (1983), 143 D.L.R. (3d) 608, 27 R.P.R. 107, 12 C.E.L.R. 104 (Ont. H.C.) and *Canoe Ontario v. Reed* (1989), 69 O.R. (2d) 494, 6 R.P.R. (2d) 226 (Ont. H.C.).
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