

They Left Their Mark - But Now It's Gone

By Peter J. Stringer, O.L.S.

From the earliest times, man has held land as valuable and has marked it to indicate his boundaries. In early Egypt, as legend has it, land was marked by stones. This land was flooded every year and overlaid with silt. The art of surveying was developed to relocate these monuments.

The bible mentions monuments in Moses' times when they were considered precious enough for a law to be given. Moses said, "Thou shalt not remove thy neighbour's land mark, which they of old time have set in thine inheritance." He also said, "Cursed be he that removeth his neighbour's land mark."

In early Rome, monuments were placed by religious ceremony. Priest-Surveyors offered burnt sacrifices to the God, Terminus. They dug a hole and placed ashes, the blood of sacrifice and various foods and wine. Then the boundary stone, which had previously been anointed and crowned with garlands was set. Anyone removing this monument could be executed. The date of February 23 on the Roman calendar marked the end of the old Roman year and a festival called Terminalia was held to honour property monuments.

An interesting outgrowth of this was the old Anglo-Saxon custom of "Beating the Bounds." (I took part in one of these rituals in Llantrisant, Wales in 1985. The town people marched in procession around the boundaries of the village and young boys were held by their feet and arms and bumped on the various old stones which marked the village limits).

The second parliament in Canada passed a law in 1789 stating "and be it further enacted by the authority aforesaid that if any person or persons shall knowingly and wilfully pull down, deface, alter or remove any such monument so erected as aforesaid, he, she or they shall be adjudged guilty of felony and shall suffer death without the benefit of clergy. The legislation was later amended to read "seven years imprisonment" but it shows the respect for survey monuments in those days.

* (The foregoing was extracted without permission from a thesis written by R.W. Cumming, B.Sc., entitled "Monuments in Surveying", which was reproduced with permission by the Ministry of Transportation, Ontario-not dated).

The setting of boundary monuments is probably the most important task undertaken by a surveyor. The monuments will be used and relied upon by future generations and they will become the object of considerable question and debate. Regardless of how sophisticated we become in defining boundaries mathematically and electronically, the general public will still be asking the age old question, "where is my property corner?" I doubt that a set of geographic coordinates supported by statute and a hand held GPS receiver will provide much comfort to the property owner having a dispute with a neighbour. They will want to see the boundary markers. Therefore, we must strive to ensure that the marks which we set so carefully stay put.

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Surveyors can clearly see and appreciate the results of survey monument destruction but when it comes to the protection and preservation of these marks, they are in a very difficult position. The surveyor is perceived as acting only in self-interest when it comes to discussions about pre-construction identification, protection or replacement. The situation could be compared to that of gas companies which install lines and appliances and then insist that regular maintenance be done on each fixture. Unless a

public regulatory authority demands that such maintenance be done in order to protect the public, any attempt to insist on maintenance will be considered self-serving.

Since we are not able to protect survey monuments on our own, it will be incumbent on the provincial and municipal government agencies, acting in the public interest, to assume a leadership role in ensuring that survey marks are protected.

As well, anyone who would come in contact with boundary markers must be made aware of the importance that these marks have for our society, both now and in the future. They must also be enlisted to help preserve and care for these monuments for the protection of future generations.

In recent years, Ontario Hydro and Bell Canada have chosen more environmentally friendly ways of controlling vegetation growth under utility lines. The preferred method now appears to be clearing and grubbing instead of spraying herbicides. Their efforts on behalf of our environment must be commended but these new methods are systematically destroying survey fabric which has taken generations to put in place. Equally appalling is the seeming lack of interest by the Ministry of Transportation of Ontario. Hundreds of kilometres of grubbing has been undertaken by the utility companies under lines which are normally situated along the limits of municipal roads and provincial highways. Hundreds of monuments have been destroyed and I would daresay that the costs related to the damage to survey fabric, caused by grubbing along highway limits, is more than the cost of the grubbing.

In recent years, the communication, gas and power companies have been actively involved in the installation of underground services. They often contract the pre-engineering surveys to engineering or technical firms, without insisting on the location of survey monuments by the Ontario Land Surveyor. The services are then installed with great haste and with little or no regard to the location of boundaries or the preservation of monu-

ments. I spoke casually one day to a back-hoe operator, who was excavating for a utility line. When asked about survey bars, he explained that he preferred to remove them as soon as he started excavating, so that he would not run the risk of puncturing a tire on his tractor.

Where is the accountability? At what moment in history did it become acceptable for municipalities, government agencies, utility companies and construction contractors to plunder this vital public resource without concern or action? If they are destroying the monuments, they must accept responsibility and take the initiative to ensure that survey monuments are protected.

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In these days of fiscal restraint, the will to solve this problem is not apparent. If an electrical cable is severed, the lights go out and dinner is not on the table. If a Bell Canada line is destroyed, communication with neighbours ceases. If a gas line is broken, the consequences can be deadly and action is taken without delay to correct the situation.

The removal of survey monuments does not create an immediate crisis and therefore it is usually forgotten or pushed aside and considered as unimportant. It does, however, create a long term liability which will come back to haunt everyone affected.

Immediate action is required to prevent a deteriorating situation from becoming worse.

FIRST

The Association of Ontario Land Surveyors should formally advise the Surveyor General of the concerns and request that his office assume a leadership role in protecting survey monuments.

SECOND

A memorandum should be sent from the Association of Ontario Land Surveyors to all government ministries and municipalities reminding them of the penalties and consequences of removing survey monuments.

THIRD

These government agencies should be provided with appropriate wording for contracts and the like which will clearly set out the importance of these monuments and responsibility for replacing them by utilities or contractors.

FOURTH

The Association of Ontario Land Surveyors should request that government agencies require Ontario Land Surveyors to be a party to contract completion agreements so that final payments for certain contracts cannot be made until the surveyor has signed a document stating that survey monuments have been replaced.

FIFTH

Government agencies should require utility companies or their contractors to have Ontario Land Surveyors locate survey monuments prior to grubbing and clearing or prior to excavation near property lines and ensure that they are replaced if destroyed prior to completion of contracts.

SIXTH

The Ontario government should undertake right-of-way inspections in areas where construction activity has taken place and replace survey monuments where necessary.

SEVENTH

The surveyor should report destroyed monuments to utility companies or government agencies when encountered. Where it is apparent that the destruction has been caused by a specific group, a report should be written and action taken to have the monuments replaced and the bill for such work directed to the offending party.

If we take action to preserve the survey fabric, then those that take our place in the next century will applaud every time they find an ancient but well-preserved mark set by a surveyor in the late 1900s.



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Upcoming Events ...

1995

August

- 16 AERC Workshop for Monitors and Students
- 16 Georgian Bay Regional Group Meeting
To Be Advised

September

- 11-12 Joint Regional Group Council Meeting
AOLS Office
- 15 Eastern Regional Group with New York State
Wolf Island
- 20-21 AERC Lecture Course
- 22-23 ISTO Annual Meeting
Highland Inn, Midland

October

- 11-14 Manitoba Land Surveyors' AGM
Winnipeg
- 26 Erindale Awards
To Be Advised

November

- 8 Georgian Bay Regional Group Meeting
To Be Advised

1996

February

- 21-23 104th Annual Meeting
London Convention Centre /
Radisson Hotel London