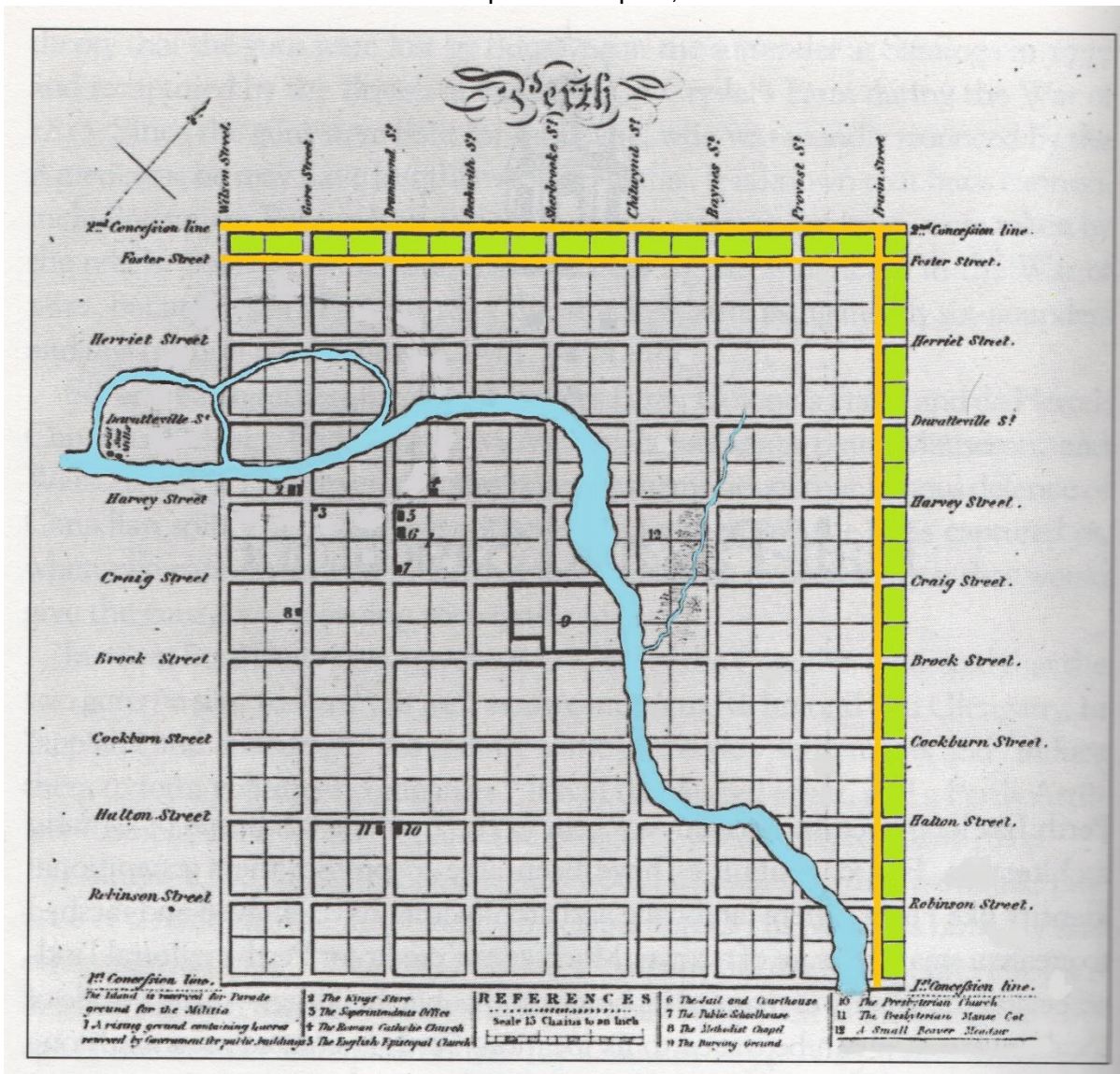


FOSTER STREET & OTHER MISCALCULATIONS

Rueben Sherwood & the Surveyors' Story

As would be expected of a town conceived and planned by the military, the historic core of Perth marches in uniformly square blocks northward from its southern boundary at South Street (Drummond Township Concession-1) and from west to east from Wilson Street. There are a few breaks in that perfect pattern, where branches of the Tay River cut diagonally across the grid, but, for less apparent reasons, the pattern also changes dramatically on its northern and eastern boundaries, at North Street (Drummond Concession-2) and at Irwin Street. The blocks between Foster and North Streets, and those east of Irwin Street, are less than half the size of other downtown blocks. Were these anomalies part of the plan, or did someone make a mistake?



1816 Map of Perth – Note Foster Street and Drummond Concession-2 (North Street) and acreage east of Irwin Street (Courtesy of Perth Matheson House Museum)

Precisely who determined the original site plan is not clear and, as the 'plan' was nothing more than a grid of four-acre blocks¹, divided by 66-foot wide streets, very little 'planning' was actually called for.² As historian Richard Reid explained, there is nothing particularly unique about Perth's layout.

*The use of government funds and military expertise to create instant towns throughout the [British] empire had a long tradition by 1815. By the middle of the previous century, guidelines had been issued outlining the general principles ... reflecting the importance given to creating urban centres as part of a successful colonial establishment. Such towns acted as the vanguard of imperial expansion and control, centres that reinforced British culture and facilitated further settlement. In Upper Canada by the 1790s a number of towns had been created. Some, such as York (as laid out) and Kingston, followed a simple grid plan while others, Niagara-on-the-Lake, Johnston, and Cornwall for example, were laid out in a much more formal Georgian pattern ...*³

The choice of layout, grid vs Georgian, was probably decided upon by one of four men, or by that quartet collectively: Settlement Superintendent Colonel Alexander McDonell (1762-1842)⁴; Provincial Land Surveyor Reuben Sherwood (1774-1851); Army Staff Surgeon Dr. Alexander Thom (1775-1845); and/or Lieutenant Joshua Jebb (1793-1863) of the Royal Engineers.

On February 22, 1815, the Earl of Bathurst, his Majesty's Secretary of State for War and the Colonies, issued a proclamation at Edinburgh, Scotland, offering free passage, 100 acres of 'waste' land, tools, rations, and other benefits to anyone prepared to settle in Upper Canada⁵. In response, about 700 men, women, and children sailed from Greenock that June, aboard the ships *Atlas*, *Baltic Merchant*, *Dorothy*, and *Eliza*. When they reached Quebec City on September 4th, however, they discovered that preparations for their arrival had hardly begun. A party of single men was sent on to Kingston and "employed on the King's works", but family groups were forced to spend the winter of 1815-1816 in barracks and barns at Quebec City, Montreal, Coteau de Lac, Cornwall, Prescott, and Brockville.

¹ To be allocated as four individual one acre plots.

² In addition to the one square mile core of four-acre blocks, the town plan also included 16 adjacent 'park lots' of 25 acres each, lying northwest from North Street, from the Bathurst-Drummond Townline to Sherbrooke Street. According to historian Richard Reid, writing in *The Urban History Review* (Vol.19, June 1990) these lots were "set aside for the correct social elite". How 'elite' status was determined and how those individuals were selected is not explained, but the original park lot grantees were: William J. Greig, John Greenley (1775-1854), Lieutenant Roderick Matheson (1793-1873), Captain William Marshall (1774-1864), Captain Josiah Tayler (1787-1844), John Hughes, Captain Alexander McMillan (1783-1850), Fraser Willard, James Adamson, William James, John Alexander Murdoch, Rev. William Bell (1780-1857), William Hunter.

³ *Urban History Review*, August 3, 2022, *The End of Imperial Town Planning in Upper Canada*, by Richard Reid. Georgian town plans tended to include circles, crescents, cul de sacs, and more green space.

⁴ The name was originally spelled 'McDonell', but after 1838 he signed 'Macdonell'.

⁵ Those taking up the offer had to post a refundable £16 bond to ensure they did not run off to the United States.

Meanwhile, the Treaty of Ghent having ended the American War of 1812 on December 24, 1814, the process of standing-down Britain's enormous army got underway.⁶ In the Canada's the Glengarry Light Infantry Fencibles began discharging troops in March 1815 as their service periods expired⁷, releasing men whose terms of enlistment had promised them land grants on completion of their service. Other units, like the Canadian Regiment of Fencible Infantry, had been made the same offer, and rumors of a land bonus were circulating through the ranks of regular British regiments awaiting repatriation to the United Kingdom. Eventually more than 1,200 soldier-settlers, representing 90 different army, navy, and other military units, would be attracted to what became the Perth settlement.

As the Earl of Bathurst pushed his Edinburgh Declaration scheme forward, and regiments discharged their soldiers, the restoration of civil government in Upper Canada was coming about amid some confusion and delay. Lieutenant Governor Francis Gore (1769-1852) had spent the war years in England, and, in his absence, the colony had been under army control. Military Governors, Majors General Isaac Brock (1769-1812) and Gordon Drummond (1772-1854), had directed the administration from 1811 through September 1815 when Gore returned to his post. In many departments, the return to civilian control proved a slow, confused, bureaucratic process.



Alexander McDonnell (1762-1842)
(Photo courtesy ancestry.ca)

It was not until June 1815 that the army appointed Alexander McDonnell as Superintendent of the envisioned military settlement.

Born in Scotland, McDonnell had emigrated with his parents to the colony of New York in 1773. During the American Revolutionary War, he served with Kings Royal Regiment of New York and then secured a Lieutenant's commission in Butler's Rangers. He arrived in Upper Canada among the Loyalist refugees who settled in the Niagara region. He was appointed sheriff of the Home District, serving 1792-1805, and in 1800 was elected to the House of Assembly for Glengarry and Prescott. In 1812 he was appointed Deputy Paymaster General of Militia with the rank of colonel, a post he held until he was named Superintendent of the Perth Military Settlement in 1815. McDonnell later became Assistant Secretary of Indian Affairs (1816-1828). From 1831 through 1841 he held a seat on the Legislative Council, and in 1835 he was made a director of the Bank of Upper Canada.

Even with McDonnell named to direct the project, Major-General John Wilson (c1765-1819), Commander of the Forces⁸, did not publish governing regulations until July. Another four months passed before the civil administration, in the form of the Executive Council at York, passed an order in November directing the Surveyor-General to identify vacant land to accommodate the Earl of Bathurst's immigrants, some of whom had already reached Brockville a month earlier. Shortly after new year 1816 an area northwest of Rideau Lake was finally chosen⁹ for the creation of three new townships, but survey work still did not get underway until March.

⁶ Napoleon's 'hundred days' last gasp, leading to his defeat at Waterloo on June 18, 1815, came and went with little impact upon developments in Upper Canada.

⁷ The regiment would be entirely disbanded by June 1816.

⁸ Wilson served as Commander of the Forces for only a few months in 1815-1816.

⁹ Even though the land had not yet been appropriated by the Crown from the native peoples.

Early that month, Lieutenant Colonel Francis Cockburn (1780-1868), Assistant Quartermaster General for Upper Canada, met with Settlement Superintendent McDonell, Surveyor Sherwood, and medical officer Dr. Thom at Brockville to discuss final plans for the “military settlement on the Rideau”. On March 16th, Cockburn, McDonell, and Sherwood, together with Royal Engineer Lieutenant Joshua Jebb, Royal Navy Captain Allen Otty (1784-1859), and Quartermaster’s Department clerk Ensign Daniel Daverne (1784-1830), set out from Brockville to fix the site for a government warehouse to serve the new settlement. Travelling via Rideau and Otty Lakes, Jebb’s Creek and the Pike River (shortly renamed the Tay), on March 25th they,

... fixed upon a most beautiful site for the depot stores, nearly where the line between [Townships] Nos. 1 [Bathurst] and 2 [Drummond] will cross the Pike River, and within the first mile out – a fall of about 2 1/2 feet in the River, sufficient for any mills we may require, and the quality of the land unexceptionally good.”¹⁰

Within a few days, access to the site was sufficiently opened to permit the delivery of 20 sleigh-loads of government supplied provisions, and on March 28th a vanguard of the 270 Scots settlers who had spent the winter at Brockville arrived. The first of those were issued location tickets on April 17th and the first soldier-settlers, from the Glengarry Light Infantry, received their tickets the following day. Men from the de Watteville regiment reached the site a few days later but most of them had to wait nearly a month for surveyors to map lots on which they could be located.

Had the land survey begun just a month or two earlier it would have advanced at a faster pace. Even though snow, where it was deep, presented some hinderance, generally speaking frozen ground, and especially ice covered swamps and bogs, offered an advantage to men blazing survey lines through dense forest. However, by the time the surveyors took up their compasses and chains, the ice and snow were thawing in the spring sun, producing slush, mud, floods, and clouds of mosquitos and black flies.

Survey of the Perth Military Settlement was placed in the charge of Provincial Land Surveyor Reuben Sherwood, a man of considerable experience and skill, although not formally trained in the trade. In Upper Canada, qualified and experienced surveyors were in short supply.



Reuben Sherwood (1774-1851)
(Courtesy Marmora Historical Society)

The son of Thomas Sherwood (1745-1826), reputedly the first Loyalist settlers to locate in Leeds County, Rueben Sherwood had enlisted with the British Loyal Rangers at age 14 during the American Revolutionary War, and later worked as a spy for the British and Loyalist forces.¹¹ Following Britain’s failure to put down the rebellion, he settled with his family at Brockville and

¹⁰ Letter from Sherwood to Cockburn dated March 25, 1816.

¹¹ Allegedly once disguising himself as a woman to slip through American lines.

was trained as a surveyor by his father¹². Thomas Sherwood had executed some of the first surveys in Leeds and Grenville Counties, although he too was not a formally trained surveyor.

During the American War of 1812 Rueben Sherwood was a Captain of Leeds Militia and then a Captain in the Intelligence Department serving as Captain-Superintendent of Guides, with responsibility for the entire St. Lawrence River route between Coteau-du-lac and Kingston. He saw action at the failed attack on Ogdensburg (1812) and at the Battle of Chrysler's Farm (1813). Except for the war years, he worked as an Upper Canada Provincial Land Surveyor from 1809 until 1822.

With the first immigrant and soldier-settler families having already arrived on the Tay, and hundreds more pressing close behind them, Superintendent McDonell and Surveyor Sherwood were under enormous pressure from Francis Cockburn, head of the Quartermaster General's Settling Department, and his deputy Captain George Fowler (1766-1822). Completing the survey of the new townships of Bathurst, Drummond, and Beckwith, was essential if arriving settlers were to be placed on their land in time to prepare for winter. This 'need for speed', combined with the realities of surveying 300 square miles¹³, nearly 200,000 wilderness acres, would serve to greatly undermine the accuracy of the end result.

More than two centuries later, the shrunken blocks on Perth's north and east periphery are perhaps the most obvious manifestation, but are just one outcome, of the difficulties faced in surveying the settlement. Climate, equipment failure, manpower shortages, personality conflicts and, above all, haste, conspired to leave a legacy of errors and subsequent boundary disputes that would keep local lawyers in business for a generation to come.

On June 28, 1816, Forces Commander Major-General Wilson wrote from Quebec to Upper Canada Lieutenant Governor Francis Gore "*recommending that 10, or even 15, land surveyors should be sent at once to the Perth Settlement to provide lands for the disbanded non-commissioned officers and private men of the De Watteville, De Meuron, Canadian Fencibles, and Glengarry regiments*"¹⁴ – but there were simply no additional surveyors to send.

In the end, Rueben Sherwood was assisted by a few men who had some prior experience of surveying, but the greater part of the job was executed by whatever assistants and chainmen he could hire in circumstances where few were willing to take on the hard physical labor of hacking and tramping through endless miles of bush.

¹² Some sources say he also studied briefly in New York State under a surveyor named Ephraim Lay.

¹³ The three townships were to be laid out as squares, 10 miles each side.

¹⁴ *Notes on the Foregoing Military Settlements*, by Brigadier General E. A. Cruikshank, in *An Account of the Founding of Three Military settlements in Eastern Ontario, Perth Lanark & Richmond, 1815-1820* by George F. Playter, *Ontario Historical Society Papers & Records*, Vol. XX, 1923.

Some hands were recruited from among the first settlers to appear on the banks of the Tay, immigrants from the Brockville group and former soldiers, but most of those were available only briefly until they turned their attention to settling on their allotments. Also, although titled 'Deputy Surveyors' or 'Assistant Surveyors', most of them knew nothing of the business at hand, and the majority were ill-equipped for life under canvas, enduring cold and damp, while surviving on rations of army biscuit and salt pork. Welcome as a cash salary was to poor immigrants, most had to give up the job before they had scarcely begun.

Some First Nations workers were hired, but when their own seasonal activities demanded, the First Nations workers would leave, usually unannounced, to hunt, fish and gather at the traditional times in their annual cycle.

By the end of 1816, Settlement Secretary Daniel Daverne was complaining to the Quartermaster General's office that "*many of the [survey] lines run are very erroneous*" and recommended that the practice of hiring deputy or assistant surveyors at the settlement be discontinued.



19th Century Surveyor's Tool Kit
(Photo courtesy of Old World Auctions)

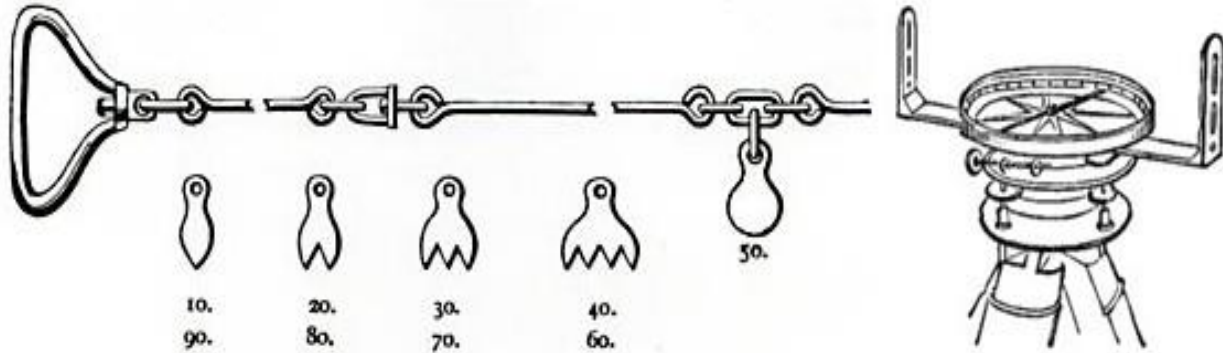
The durability of tools placed in the hands of these ad hoc survey crews left much to be desired as well – although even the sturdiest implements would probably have succumbed to the rough usage. Add to that the limited understanding the workmen brought to using those tools, and major inaccuracies resulted.

When a survey chain broke, from being dragged, day-after-day, through the ice, slush, rocks, mud, brush, stumps, and tree roots, the gangs simply patched it back together as best they could.

In the absence of replacement parts, broken links might not be replaced at all. Chains thus became shorter by 7.92 inches with each repair and, as they progressed along a concession line, the lots grew narrower and smaller with each break. In Beckwith Township, "*when they reached the end of the first concession, they found they had 50 acres left over. Distances between concession lines are today scarcely ever equal*".¹⁵ Lots that should have contained 200 acres might have as few as 180 acres.

¹⁵ *A Pioneer History of the County of Lanark*, by Jean S. McGill (1968).

Other crews patched their broken chains with replacement links of twisted willow or cedar bark. As work progressed, these handmade links stretched, making the survey chain progressively longer with each repair and lots became wider and larger. Some supposed 200 acre lots, later proved to contain as much as 220 or even 225 acres.



Within the town of Perth, the creation Foster Street¹⁶ was the result of a broken and repair-shortened short survey chain.

During the first weeks of April 1816 one of Sherwood's survey teams laid out the village on a one mile square block of land in the southwest corner of Township No. 2 (Drummond). Each of the nine north-south and east-west four-acre blocks should have measured 6.3 chains (417.4 feet) on each side, separated by streets one chain (66 feet) in width, but, as the survey progressed south to north, from its baseline on Drummond C-1 (South Street),

*... on account of the short chain, each block lacked about 40 feet in length. When the surveyors reached what should have been North Street or the Second Concession [of Drummond Township], they found that they had a narrow strip of land separating them from their objective. They solved this problem, however, by introducing a new street in addition to those appearing in the original plan. Sherwood, the Chief Surveyor, was away at the time and did not know of the mistake until he came back, but he was too careless to rectify it.*¹⁷

The surplus street between Herriot and North Streets was named for Colonel Colley Lyon Lucas Foster (1778-1813), who had been aide de camp to Lieutenant General Gordon Drummond, during the war and in 1816 was Assistant Adjutant General of British Forces in Canada.

The error emerged again when the survey crew plotted the blocks west to east. A narrow strip of ground remained beyond Irwin Street, but not one large enough to accommodate both an additional 66 foot street and narrow block.

¹⁶ Foster Street was named for Colonel Colley Lyons Lucas Foster (1778-1813), Adjutant General of Regular Forces in Upper Canada and later commander of the Upper Canada Militia.

¹⁷ Clyde Bell, *Perth Courier*, May 30, 1963.

Whether Sherwood was actually “careless”, or distracted by self interest, or just overwhelmed is not entirely clear. What is certain, is that he was not popular with, and regarded as insubordinate by, Superintendent Alexander McDonell. According to historian Andrew Haydon¹⁸, McDonell thought the surveyor acted,

... most perversely when, as McDonnell understood it, Sherwood should have been taking orders from him. But on the 26th April, "contrary to my opinion," Captain Sherwood left the settlement and didn't return until the evening of the 7th of May, and even when he did come, he was still in idleness by the 14th of May, when McDonnell, in a mixed state of anger and despair, wrote to the Governor's Secretary. "I directed him yesterday to proceed to the survey of Township No. 2 [Drummond]. This he flatly refused and is gone up the river in a canoe with an Indian, and for what purpose I know not".¹⁹

In that letter McDonell also asked “*that Captain Sherwood may not be one of those employed, as he will throw such obstacles in my way as will impede the prospect of the settlement*”²⁰. In a follow-up letter to Captain Fowler on May 11th McDonell repeated his request that Sherwood be sacked. “*I cannot and do not depend on very much information which Captain Sherwood and Mr. Graves²¹ give me ... I am far from satisfied with Sherwood*”²².

Nevertheless, Sherwood continued to ignore McDonell. To Sherwood’s mind, McDonell was ignorant of practical surveying and had even less appreciation of the difficulties faced by the men in the bush.

In May, in an effort to address the difficulty settlers faced in finding their lots in the dense forest, McDonell gave Sherwood written instructions to mark each lot “*with a post at four corners and one at each side of the centre sideline containing within such boundary one hundred acres*”²³. Sherwood disregarded the order, even though McDonell claimed it was issued “*under the authority*” of Governor General Gordon Drummond²⁴. Sherwood’s response was a letter of his own to Upper Canada Surveyor General Thomas Ridout (1754-1829)²⁵, with a copy to McDonell, pointing out that executing those instructions “*would cause an admeasurement of 444 miles of side lines in one township and would employ a surveyor a whole year to perform.*”²⁶ Settlers would have to continue to look for blaze-marked trees.



(Image courtesy Toronto Public Library)

¹⁸ Andrew Haydon (1867-1932), lawyer, Canadian Senator, historian.

¹⁹ *Pioneer Sketches of the District of Bathurst*, by Andrew Haydon (1923).

²⁰ *Ibid.*

²¹ One of the Assistant Surveyors. Graves had also served as a Captain in the Corps of Guides.

²² *A Pioneer History of the County of Lanark*, by Jean S. McGill (1968).

²³ *Pioneer Sketches of the District of Bathurst*, by Andrew Haydon (1923).

²⁴ When Francis Gore resumed his duties as Lieutenant Governor of Upper Canada in March 1815, Drummond move up to the post of Governor General of the Canada's, resident at Quebec City.

²⁵ Thomas Ridout was also not a qualified surveyor, but a political appointment.

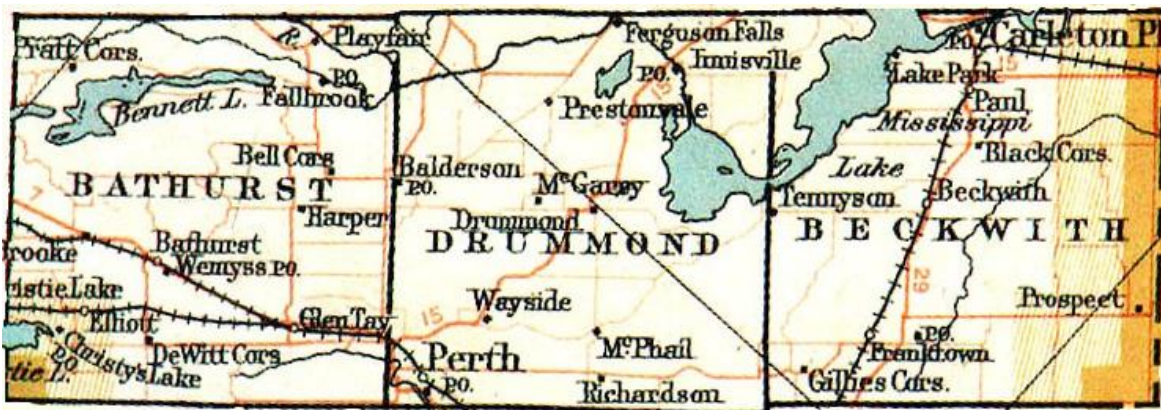
²⁶ *Ibid.*

Even without placing posts along the lot sidelines²⁷, Sherwood and his men found it impossible to complete the township surveys according to the original plan. On paper,

*Every concession line was to be a road, and there were to be roads crossing these at right angles every five lots ... in all concessions. The priorities of forest life and the pervasive swamps prevented any such system of roads from ever realistically developing.*²⁸

A major element of the friction between the superintendent and the surveyor was rooted in the fact that Sherwood and his crews were employees of the civil authorities, even though they were working for the army and their salaries were paid from the military chest. On a visit to Perth in mid-June, Deputy Assistant Quartermaster Fowler reported back to Quebec headquarters that,

*You will perceive that from want of survey the locating of the numerous settlers from the several disbanded corps for the present is at a stand, and a great number of de Watteville's men have disappeared in consequence. The fatal effect of the surveyor here having considered himself altogether independent of the Superintendent is most evident. Had this not been the case there would have been abundance of land on which to place the men waiting for their grants.*²⁹



(Map excerpted from map of Lanark County c1945, Ontario Archives)

Apart from irritants directly related to the work, there was also a societal gulf between surveyor Sherwood and men like McDonnell and Fowler. It was in the nature of 19th century Upper Canada society that McDonnell and Fowler, who had been born in Britain, saw American born Sherwood as occupying a rung on the class ladder a step below themselves.

While Sherwood was faced with any number of insurmountable obstacles, both of nature and bureaucracy, McDonnell and Fowler were doubtless justified in their complaints that he was frequently absent from the scene and often failed to provide the degree of supervision required by his less than qualified survey crews. Completion of the survey was delayed, and its accuracy compromised, by Sherwood's inattention.

²⁷ For the most part, each 100 acre lot was marked only by a blaze on a tree trunk at each corner.

²⁸ *Beckwith: Irish & Scottish Identities in a Canadian Community 1816-1991*, by Glenn J. Lockwood (1991).

²⁹ Letter dated June 19, 1816, quoted in *Pioneer Sketches of the District of Bathurst*, by Andrew Haydon (1923).

When Sherwood disappeared “*up the river in a canoe with an Indian*”, he was often simply applying lessons learned in the recent war – that working with Native guides and benefiting from local indigenous knowledge was vital to his job. Whether his disappearances were always in the interest of the settlement survey, however, is questionable. McDonell believed Sherwood’s periodic absences were related to his personal and business affairs; visits to family in Brockville and, in particular, construction of his sawmill on Black Creek at Burgess Township C-4/L-12, a property Sherwood had owned since he had surveyed that township in 1812.³⁰

Alexander McDonell was replaced as Perth Military Settlement Superintended by Captain George Fowler at the end of 1816. Fowler was replaced by Daniel Joseph Daverne who served in the capacity of Acting Superintendent until July 1819 when Captain William Marshall (1774-1864) took over, holding the post until the end of the military regime in 1822. Rueben Sherwood, however, supervised the Perth Military Settlement land survey from his appointment in 1816 through 1822, by which time he had completed the survey of 900 square miles (576,000 acres), plotting the Townships of Bathurst, Beckwith, Dalhousie, Darling, Drummond, Lanark, Lavant, Ramsay, and Sherbrooke.

1 chain = 66 feet or 22 yards or 20.1168 meters or 4 rods or 100 links / 1 link = 7.92 Inches
There are 10 chains in a furlong, and 80 chains in one statute mile.
1 acre = 10 square chains (a square 3.166 chains/side or 208.71 feet/side).
1 acre = measures approximately 208.71 feet × 208.71 feet (square).
1 acre = 4,840 square yards (or) 43,560 square feet (or) 160 perches.

- Ron W. Shaw (2022)

³⁰ The Sherwood mill site is now part of Murphy’s Point Provincial Park.