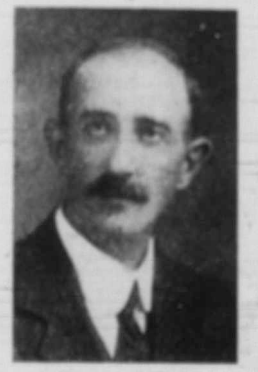
Some of the Bridges and Culverts that Wallace is Building for Posterity. These Structures will be giving service when the History of the Millenium is being Written.
Double 24 inch Pipe Culvert at Capacity — A 14 foot Bridge with Moulded Concrete Railing — A Battery of Five 24 inch Pipes Set in Concrete

A Good Roads Municipality

What Wallace, Manitoba, has done to Improve Its Highways

By R. D. Colquette

The Municipality of Wallace, Manitoba, is on the western boundary of the province. The main line of the C.P.R. runs through it. Like several other municipalities in Manitoba it is under the provincial Good Roads' Act and is accomplishing wonders in the improvement of its highways. It is a municipality of good roads enthusiasts. There are no bad roads' enthusiasts there. The farmers of Wallace don't believe in licking their horses up a 12 per cent. grade to get away from a five per cent. debenture. Their time is too valuable to bump over rough prairie trails and flounder through half dried sloughs with 50 bushels of wheat in the bottom of the wagon box. The town people are equally strong on shortening the distance between the country and the town by smoothing out the obstacles between them. The automobile owners, both farmers and townspeople, like smooth sailing, where the danger of breaking the speed limit is greater than the danger of breaking their necks. Starting out in 1913 with their building program, they are now in sight of their goal of over 195 miles of thoroughly modern gravel road from which no farmer will be further away than two miles.



S. A. BUTTON, C.E.

Last fall I spent a couple of days in Wallace. By the courtesy of the reeve, Col. C. E. Ivens, Mr. Bridgett, a prominent merchant of Virden, and S. A. Button, the supervising engineer of the municipality I travelled over about 110 miles of these improved highways. I also had the opportunity of discussing the good roads' question with many of the residents of the municipality. Their remarks are an indication of how the good roads' idea has taken hold of the people of Wallace. "In the old days" said Mr. Bridgett, "the settlers had to come long distances to our town. Then new railroads came through and for a long time we lost sight of many of them. Now our good roads and the automobile are bringing them back again and we have the pleasure of renewing old acquaintances." "These roads they are building are spoiling us," said a hotel-keeper. "As soon as we get outside of the municipality we lose our tempers." "You don't need no shock absorbers on your "tin Lizzies" in this municipality," remarked a garage man. Some incidents I heard of bore equally striking testimony of the benefits of good roads. One farmer had declared that he had saved enough money hauling wheat one summer when it was too wet to get on the summer fallow to pay for his share of the road debentures for 30 years. An ex-reeve who had at first opposed the good roads scheme later won a valuable prize in the dragging competition, doing the work without compensation. He is now a good roads enthusiast. The most striking part of it all is that the new roads are costing no more than the old ones. "If you are going to write anything about this good roads proposition" said Col. Ivens, "be sure that you make it clear that our cash outlay has not been increased by coming under the Good Roads Act. Before adopting our by-law we were spending about $15,000 a year of our own money on roads and were making no progress. We were opening up new roads but the old ones were going back. The council decided that some change had to be made. The Good Roads Act gave us the opportunity. We decided to keep on spending $15,000 a year but to spend it in a different way. We started our scheme and now we are spending about the same amount annually on our debentures and on maintenance and have all the benefit of our good roads without any increased money outlay."

Starting in the Right Direction

It was in 1912 that Wallace made the first start in the good roads' movement. That year a preliminary survey and report was made. In the fall, the necessary by-law was passed by the council and the following June it was put to a popular vote. After a whirl-wind campaign in which towns people and farmers supporting the move co-operated the by-law was carried, though it had no walk-over. Work was at once started and though it has been checked somewhat by the war, the municipality has gone much further than was at first intended. This is partly due to the fact that the Good Roads Act has been amended and that the municipalities now receive more assistance than formerly. During the years 1913 to 1916, debentures were issued for $150,000 at 4½ per cent., netting $138,115.13. Of the debenture issue $25,000 was for the provincial highway running through the municipality, the debentures running for 40 years; the other $125,000 being 30 years' debentures to be applied on municipal highways. Last fall the council was authorized to raise another $48,000 to gravel earth roads and build permanent bridges. The construction work completed to November 1, 1917, is as follows:

156½ miles graded, 18 foot road surface.

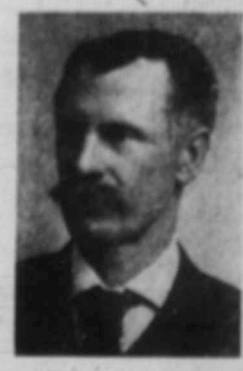
88½ miles gravelled, first coat 4 ins. deep and 8 ft. wide.

10 miles gravelled, second coat 2 ins. deep and 6 ft. wide.

12 re-inforced concrete culverts, 3ft. by 6ft. to 8ft. by 8ft.

16 re-inforced concrete bridges, 14ft. to 30ft. span.

956 concrete pipe culverts, 20ft. to 25ft. long, 10in., 12in., 15in., 18in. and 24in. diameter, with stone headwalls.



COL. C. E. IVENS

The detailed cost of this work was as follows:

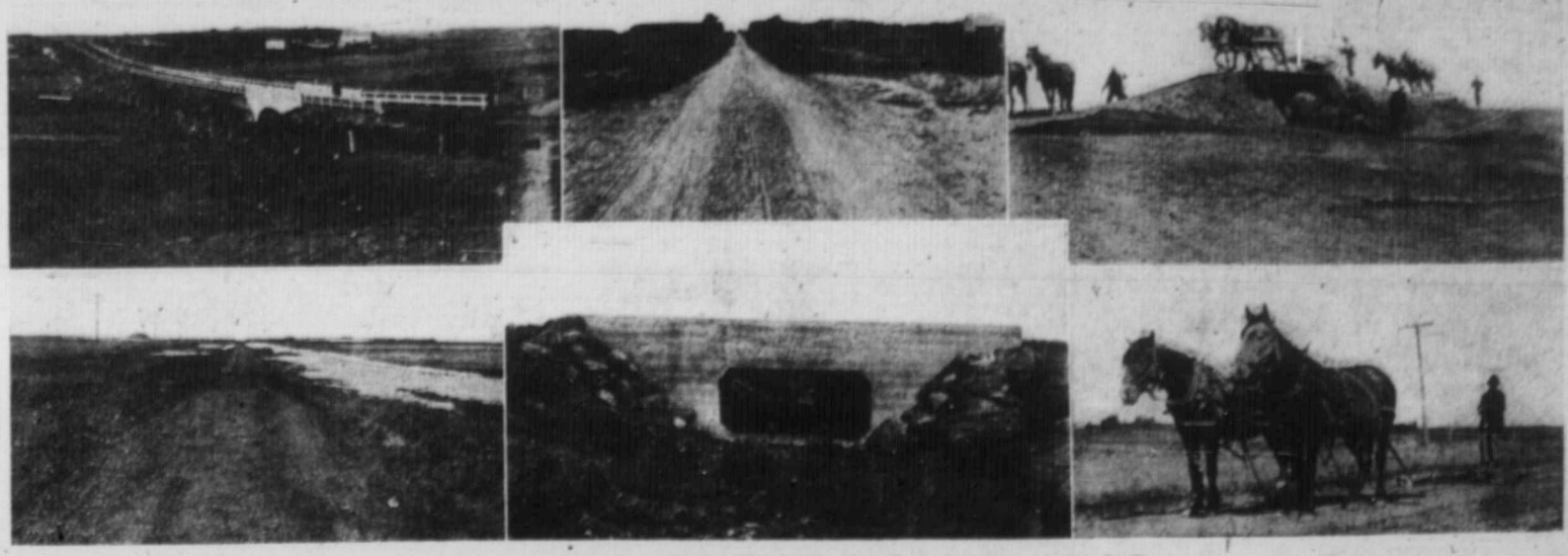
Brushing	$5,371.75
Grading	128,200.50
Pipe culverts laid in place	26,659.05
Re-inforced coperete culverts and bridges	37,138.25
Gravelling	44,781.05
Guard Rails	1,678.30
Engineering	12,144.90
	$255,973.80

The estimated cost of the system when completed is $397,000 or $2,000 per mile.

Construction of Highways

Wallace is favored with abundant deposits of the choicest road building material. It has any amount of gravel, none of which has to be hauled more than five miles, and much of it less than two miles. Some of it is fine but it makes an excellent road surface. The land is comparatively level though there are some grades where creeks or coulees are crossed. For grading up the roads, contracts are let. Most of the work is done with wheel scrapers. Push graders are not favored because the land is slightly undulating. It is recognized that they are good where the land is perfectly level, but where it is not they take the earth out of the low spots and make drainage more difficult. The contracts are performed under the supervision of Mr. Button and his associates. After completion a grade is allowed to

Continued on Page 14



Reinforced Concrete Bridge—Approaches and Guard Rails
Correct Position of Winter Road—Traffic to the Side

Scenes showing some of the Wallace Municipality Good Roads Activities and the Results
"Now for a Spin," you say as you strike this stretch
A 3 foot by 6 foot Reinforced Concrete Culvert

Loading Gravel in one of the Municipal Pits
The Gravel Drag at Work. Note Slot in Side