

Engineering Department

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Road Management in Townships.

The chief points in the system of road management, in townships where improved methods have been adopted, include the following:

Statute labor is commuted at a fixed rate per day, and the amount is collected at the same time as the other taxes, by the township tax collector; or in place of commuting statute labor, a special rate on the township assessment may be levied for road purposes, thereby entirely doing away with statute labor.

One road overseer is appointed for the entire township; or, if desired, the township is divided into a convenient number of divisions for road purposes, usually two, three or four, and a road overseer is appointed over each. This practically amounts to a reduction of the number of pathmasters and the enlarging of road beats, and is essential to the success of the proposed system. To merely commute statute labor and retain the former number of pathmasters, giving each a small amount to spend, means a perpetuation of many of the defects of the statute labor system.

The duties of the road overseer are:

(a) To supervise all work and repairs done on the roads and bridges within his division.

(b) To acquaint himself with the best methods of constructing and maintaining good roads, and of operating graders and other road machinery, used by the township.

(c) To employ, direct and discharge all men and teams required to carry on the work, and to purchase necessary materials.

(d) To see that all washouts, drain and culvert obstructions, bridge failures and other unforeseen defects, are repaired or protected with the least possible delay, so as to prevent further injury to the road or accident to the users of the road, and to otherwise act promptly in all cases of emergency.

(e) To report to the council early in each year as to the work required during the coming season, and to carry out the instructions of the council with regard thereto, and to perform such other services as may be required of him from time to time, under the written instructions of the council.

(f) To collect the poll-tax in his road division.

(g) To keep an accurate record of the men employed and the work done, and to furnish this written form to the reeve at proper intervals, in order that the reeve, upon being satisfied of the correctness of the statement, may issue cheques for payment thereof.

(h) To stake out all works and see that they are undertaken systematically, so that no time will be lost in taking men, teams and machinery from one part of the township to another.

(i) To supervise the performance of all work done by contract, and certify as to completion, acting as inspector for the township.

(j) To supervise the opening of snow roads under such regulations thereto as, in the opinion of the council, the needs of the township may require.

(k) To report to the council at the close of each year, showing in detail the character, location and cost of each separate work undertaken.

(l) Works, the cost of which will exceed a certain fixed amount (ordinarily from \$10 to \$20, as may be determined by the council), may be let by contract to the lowest satisfactory bidder, but in the event of any work being duly advertised to be let by contract, and the tenders being too high, in the opinion of the commissioner or the reeve, it should be the duty of the former to undertake the work by day labor under his own direction.

The commissioner should be retained in office as permanently as circumstances permit, in order that his experience, increasing from year to year, may enable him to do more perfect and economical work. He should have exclusive control and management of the maintenance, repair and improvement of all the public roads and bridges within his division, in so far as the commutation and other moneys belonging or appropriated to his division will enable him to do so, subject always to such written instructions as he may receive from the council, or from the road and bridge committee of his division.

It is exceedingly important that the commissioners should be men of good judgment, practical, with ability to direct labor to advantage. The selection of suitable men as commissioners is of the greatest necessity, as upon them will depend the success of any system adopted.

It is unwise for councillors to act as road commissioners. Councillors, like the pathmasters of the old statute labor system, are elected annually, and cannot become experienced. There is a tendency for them to use their office, not so much for the benefit of the roads, as to gain votes for the next election. The ratepayers are apt to become dissatisfied, unless councillors perform the duties of commissioner without remuneration.

Work is distributed throughout the different sections of each road division as evenly as possible, always endeavoring to make the roads permanent, giving prefer-

ence in this respect to highways most used by the public.

The division of the township is made, not only to separate the work of the overseers, but also to assist in adjusting the expenditure. Any method which seems to concentrate expenditure on a few roads will meet with disapproval.

The council should constitute itself a "Road and Bridge Committee," to suit the road divisions, in order that the road overseers may consult the councillors as occasion arises, with regard to details of the work.

Work for the grading machine should be staked out in advance by the overseer, so that each piece can be taken up consecutively. Otherwise much time is lost in moving the machine from one part of the township to another. The grader should start work early in the spring, and be kept continuously in operation until the season's work is completed.

The usual road appropriation is made from the general funds of the township, this to be used for the purchase of tools, machinery and materials, or for small jobs and contracts.

The residents of the township are employed to do the work, provided they come properly equipped, and will do a fair amount of work, preference being given to ratepayers of the division in which the work is being done, in order that as many as desire may have an opportunity to earn back the amount of their commuted statute labor.

Work is paid for in cash, if desired, but preferably by cheque; payment to be made in accordance with the pay roll submitted by the road overseer, accompanied by necessary vouchers and such information as may be considered necessary.

A general plan for road improvement should be laid down by the council for the overseer to follow.

This plan should specify the width to be graded, width and depth of road metal, character of drainage, etc., of all roads.

All roadmaking machines should be under the care of the road overseer.

The same man and teams should be hired to operate the machinery for the entire season, as they become proficient and do better work. This applies particularly to the operation of a road grader.

The council or overseer appoints foremen in different parts of the township to collect the necessary labor, and act promptly when roads are blocked with snow, the men employed to be paid in cash by the council.

A public meeting at Toronto Junction favored a municipal telephone system, owing to what are considered the excessive rates of the Bell Telephone Co.

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A by-law to erect a town hall at a cost of \$10,000 was defeated in Cobourg.