

## OPERATING RESULTS OF "DIRECT OXIDATION"

(Continued from page 395)

parison with other methods of sewage treatment to determine if savings in installation cost would be sufficient to counterbalance the increased maintenance and operation charges.

If it should be determined that the proportion of lime could be materially reduced without deterioration in the quality of effluent there would be a proportionate reduction in operating costs.

7. To permit continuous operation of a works including these processes, electrolytic cells and other equipment must

be in duplicate. It is undoubtedly necessary to replace plates in the electrolytic cell from time to time and accordingly a type of cell should be adopted which admits of such renewals in place and at a minimum cost for labor.

8. The short observations of the combination of fine screening, lime treatment, electrolytic cells and final settlement appear to justify an extended test by this department should the opportunity be offered. Such tests should include study of results secured with lime additions reduced to the proportion the owner of the patent claims as the actual needs of the process and should also include study of various methods of treatment and disposal of the sludge from the resettling basins.

## CONSTRUCTION NEWS SECTION

Readers will confer a great favor by sending in news items from time to time. We are particularly eager to get notes regarding engineering work in hand or proposed, contracts awarded, changes in staffs, etc.

### ADDITIONAL TENDERS PENDING

Not Including Those Reported in This Issue

Further information may be had from the issues of *The Canadian Engineer*, to which reference is made.

PLACE OF WORK	TENDERS		PAGE
	CLOSE	ISSUE OF	
Belleville, Ont., excavation and building foundation walls.	Oct. 17.	Oct. 9.	48
Hartney, Man., wooden pile bridge . . . . .	Oct. 17.	Sept. 25.	45
Port Maitland, Ont., reconstruction of pier . . . . .	Oct. 20.	Oct. 9.	54
Rimouski, Que., monument. . . . .	Oct. 30.	Sept. 25.	52
Shellmouth, Man., bridge floor.	Oct. 21.	Oct. 9.	45
Toronto, Ont., annual supplies.	Oct. 28.	Oct. 9.	46

### BRIDGES, ROADS AND STREETS

**Barrie, Ont.**—Sidewalks may be constructed on Victoria St., between Sanford and Innisfil Streets, on the south side of Sophia St., on the west side of Bayfield St., and on the north side of Ross St., from Small St. to Kidd's Creek.

**Barrie, Ont.**—The town council instructed K. S. Macdonell, town engineer, to secure estimates on a pavement for Dunlop and Elizabeth Streets.

**Batiscan, Que.**—The provincial government has decided to erect a steel bridge over the Batiscan river.

**Bedford Tp., Que.**—The township council decided to carry out a programme of road improvement. Application

will be made to the Provincial Road Department for \$20,000 under the Good Roads Act, and the roads will be built as early as possible next year.

**Calgary, Alta.**—City council decided to have Tenth Ave., from Eighth St. W. to Fourteenth St. W., graded, at a cost of \$2,366. City clerk, J. M. Miller.

**Chatham, Ont.**—Tenders will be received by W. M. Abraham, R.R. No. 1, Chatham, Ont., up till noon on Saturday, October 18, for the construction of about 18,000 square feet of sidewalk on Grand Ave. and Taylor Ave., near Chatham. Plans and specifications may be seen at the office of W. G. McGeorge, C.E., Chatham.

**Dundas, Ont.**—Ratepayers will vote on a by-law to provide \$3,500 for rebuilding Head St. bridge. Engineer, J. W. Tyrrell, Hamilton.

**Hamilton, Ont.**—The city council intends to construct a pipe sewer on Bay St., from Macaulay St. to Burlington St. S. H. Kent, city clerk.

**L'Assomption, Que.**—Tenders will be received up to 10 o'clock a.m. of October 20th, 1919, by Jos. E. Duhamel, secretary-treasurer, L'Assomption, Que., for the erection of a bridge. One price must be for the superstructure in steel and another price for all the other work in constructing the bridge. For all further particulars, address the secretary-treasurer.

**Lindsay, Ont.**—Town council instructed the board of works to construct several granolithic walks. Clerk, Duncan Ray.

**London, Ont.**—A by-law will be submitted to the ratepayers in January, authorizing an expenditure of \$50,000 for a new bridge on Ridout St.

**London, Ont.**—Tenders, addressed to the "Chairman and Members, No. 2 Committee," will be received at the office of the city clerk up to 3 p.m. on Monday, October 27th, 1919, for the supply of one 1,200 U.S. gallon capacity motor-driven street flusher, complete. Specifications, etc., may be obtained at the office of H. A. Brazier, city engineer.

**London, Ont.**—The construction of a new pavement on King St., between Wellington and Richmond Sts., is to be commenced at once. City clerk, S. Baker.

**New Westminster, B.C.**—The provincial department of railways has decided to construct a footbridge sidewalk as an addition to the railway bridge which spans the Fraser river here. Estimated cost about \$13,000 or \$14,000.

**Norwood, Ont.**—It is reported that the Provincial Highways Department, in order to test the qualities of the rock from the Belmont township quarries for road-building, will construct a piece of road between Havelock and Trent River, a distance of about four miles.

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