SHERBROOKE POWER PLANT.

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Sherbrooke is the third largest city in the Province of Quebec, and is the commercial centre of the Eastern Townships. It has exceptionally good railway facilities, as it is on the main line of the Grand Trunk Railway; is a divisional point on the Canadian Pacific Railway, the Canadian terminus of the Boston and Maine system, and the headquarters of the Quebec Central Railway Company.

It is the distributing centre for the now rapidly developing asbestos district to the north, the rich farming land of the Eastern Townships to the south and west, and the vast pulp limits to the north and east. Since the development of the mineral and timber resources of the district on a truly large scale, the population of Sherbrooke has increased very rapidly, and this fact is made very plainly evident by the opening of many new streets, and the great activity in the building trades. Situated about two miles to the south of the city is the beautiful residential town of Lennoxville, which is given ready access to the city by a line of the street railway, on which a very up-to-date service is maintained. Lennoxville also has the railway facilities afforded by the four roads mentioned above, and of late years several large industrial concerns have located there. The joint population of the two communities thus served by the Sherbrooke Railway & Power Company is now over twenty thousand.

The Magog River draining Lake Memphremagog, a body of water thirty miles long, enters a deep and narrow gorge just above the city, and flows through the centre of the city, emptying into the St. Francis within the city limits. There is a municipal hydro-electric plant in the gorge supplying the city with a most efficient lighting service. After passing through the city's plant, the waters of the Magog were again utilized at two lower developments to operate the old plant of the Sherbrooke Street Railway, and several industrial concerns situated on its banks.

The new Sherbrooke Railway & Power Company, incorporated in 1910, took over the system of the Sherbrooke Street Railway, and acquired the water power rights on the Magog River between the municipal plant and the St. Francis River, giving a total available head of 63 feet, by which a minimum of 4,000 h.p. can be developed. By means of dams between the lake and the gorge the water in the lake can be held back during the flood period, thus providing a magnificent storage, by means of which a practically constant flow can be maintained the year around.

Sherbrooke is to the Province of Quebec what Hamilton is to Ontario, and it has long been felt that the one thing needed to make it a most important manufacturing centre was a plentiful supply of cheap power.

It was with this end in view that the Sherbrooke Railway & Power Company was incorporated. Development was commenced early this summer.

The Development.

The new development combines the two old developments below the municipal plant, and the two old dams will be discarded. A new concrete dam will be erected at the upper level, and the water carried by a large steel penstock to the new power house 650 feet below, thus obtaining a working head of 63 feet of the 4,000 h.p. thus developed.

Site on Magog River, showing Foundation Work of New Power Development Being Erected By Sherbrooke Railway and Power Company.

About 800 h.p. will be required to operate the street railway with its contemplated extensions, and the remaining 3,000 h.p. will be available for industrial purposes.

The power house and dam are now being constructed by the Bishop Construction Company of Montreal, under the supervision of Messrs. Ross & Holgate, consulting engineers, who have had entire charge of the engineering of the new company since its inception. The whole plant will be in commercial operation by November 1st, 1910.

The Dam.

The new dam is some 300 feet long, and will be built across the rock gorge. The conditions are very favorable as in the centre of the river at this point is a large island of solid rock. The dam is built entirely of concrete. About 2,500 cubic yards of concrete will be utilized in its construction. It will be built in three sections, a large spillway section in the centre, and bulkhead and stop log sections on the sides. A large steel plate thimble 13 feet in diameter will be let into the bulkhead section to convey the water into the penstock.