





TWENTY-SEVENTH ANNUAL REPORT

OF THE

COMMISSIONERS

FOR THE

Queen Victoria Niagara Falls Park

1912

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PRINTED BY ORDER OF  
THE LEGISLATIVE ASSEMBLY OF ONTARIO

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TORONTO

COMMISSIONERS FOR THE QUEEN VICTORIA NIAGARA  
FALLS PARK.

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JOHN W. LANGMUIR, Chairman, Toronto.

GEORGE H. WILKES, Brantford.

P. W. ELLIS, Toronto.

COLONEL L. CLARKE RAYMOND, K.C., Welland.

WILLIAM L. DORAN, Niagara Falls.

LIONEL H. CLARKE, Toronto.

JAMES D. CHAPLIN, St. Catharines.

---

JOHN H. JACKSON, C.E.,  
Superintendent.

J. HARRISON PEW,  
Assistant Superintendent.

HENRY J. MOORE,  
Chief Gardener.



PARLIAMENT BUILDINGS,

TORONTO, March 25th, 1913.

*To His Honour* SIR JOHN MORISON GIBSON, Knight Commander of the Most Distinguished Order of St. Michael and St. George, a Colonel in the Militia of Canada, etc., etc., etc.

*Lieutenant Governor of the Province of Ontario.*

MAY IT PLEASE YOUR HONOUR:

I beg to submit herewith the Twenty-seventh Annual Report of the Queen Victoria Niagara Falls Park Commission, 1912.

I have the honour to be,

Your Honour's most obedient servant,

W. J. HANNA,  
Provincial Secretary.





*To the Honourable W. J. HANNA, K.C., M.P.P., Provincial Secretary, Province of Ontario, Parliament Buildings, Toronto.*

SIR,—I have the honour to transmit herewith for presentation to the Legislature of Ontario the Twenty-seventh Annual Report of the Commissioners for the Queen Victoria Niagara Falls Park (being for the year 1912), together with statements of receipts and expenditures and other documents connected with the Report.

I have the honour to be, Sir,

Your obedient servant,

J. W. LANGMUIR,  
Chairman.

TORONTO, March 22nd. 1913.



# TWENTY-SEVENTH ANNUAL REPORT OF THE Commissioners for the Queen Victoria Niagara Falls Park.

*To the Honourable* SIR JOHN MORISON GIBSON, K.C., LL.D.,  
*Lieutenant-Governor of the Province of Ontario, Toronto.*

MAY IT PLEASE YOUR HONOUR:

Your Commissioners, as required by Statute, submit herewith the Twenty-seventh Annual Report of the Queen Victoria Niagara Falls Park Commission, being for the year ended 31st December, 1912.

Appended to the report of the Commissioners will be found the usual financial statements exhibiting the receipts and expenditures for the year; the report of the Park Superintendent, together with other official documents outlining in detail the works of maintenance and improvement carried out during the past twelve months.

The Annual Reports of the Commissioners have given very full particulars respecting the park lands acquired from year to year since the formation of the Board in 1885, as well as information respecting the works of maintenance and improvement that have been carried on in the various sections of the system. In the Annual Report for 1909 the lands acquired up to that date, forming part of what is now designated the "Queen Victoria Niagara Falls Park System"—which practically extends along the Niagara River from Lake Erie to Lake Ontario—were specifically set out. As, however, it is the intention of the Commissioners on this occasion to refer not only to the present condition of the various portions of the Park, but also to allude to the plans which have been under the consideration of the Board for some time for the future restoration and development of the unfinished portions, it becomes necessary to give in detail the location and extent of each parcel comprising the entire Park System, and also to show the manner in which such sections were acquired or become vested in the Commission as follows:

- |   |           |
|---|-----------|
| (1) The Queen Victoria Park at Niagara Falls (the Park proper), comprising a land area of 204 acres, with a water area of 267 acres, acquired by purchase and expropriation .....   | 471 acres |
| (2) Queenston Heights Park, containing 88 acres, of which 22 acres were acquired by purchase, the remainder being vested partly by the Ontario Government and partly by the Dominion Government in the Commission for preservation and management ..... | 88 "      |
| (3) Niagara Glen, including Wintergreen Flat, containing 103.5 acres, acquired by purchase .....  | 103.5 "   |
| (4) The Old Fort Grounds, at Fort Erie, containing 17.5 acres, vested by the Dominion Government in the Commission for preservation and management .....  | 17.5 "    |
| (5) Butler's Burying Ground and Lundy's Lane Burying Ground, placed under the control of the Commission by the Ontario Government for the purpose of preservation and care .....  | 6 "       |

(6) The Chain Reserve, Queen Victoria Park to Niagara-on-the-Lake, including the talus in the gorge, a distance of 13 miles, vested in the Park Commission by the Government of Ontario, and containing 226 acres . . . . .	226 acres
(7) The Chain Reserve along the Niagara River from Chippawa to Fort Erie, including the Boulevard entrance from Chippawa to the Park proper, and all lands for widening the Chain Reserve, acquired by purchase and expropriation . . . . .	266 "
Total area . . . . .	1,178 "

Having thus shown the territorial extent of the Park System, reference may now be made to what has been accomplished in the way of restoration and development, and what it is proposed to do in the physical and scenic treatment of the respective localities forming the Park System. This review will, perhaps, be better prefaced by submitting in a condensed form the receipts and expenditures of the entire Park System since the organization of the Board in 1885, as follows:

#### RECEIPTS.

Sale of Debentures . . . . .	\$840,470 53	
Power Companies' rentals . . . . .	1,103,288 75	
International Electrical Railway Company, rental . . . . .	212,500 00	
Tolls and franchise revenues from descent under Falls, photographic privileges, etc. . . . .	238,989 38	
Sundries . . . . .	90,527 46	
	<hr/>	\$2,485,776 12
Overdraft in Bank . . . . .		18,230 98
		<hr/>
		\$2,504,007 10

#### EXPENDITURES.

##### CAPITAL ACCOUNT:

(a) Cost of land acquired by purchase or expropriation. . . . .	\$555,604 08
(b) Capital expenditures on buildings, roads, paths, planting and all charges for improvements and betterment of parks and boulevards . . . . .	744,500 31
	<hr/>
	\$1,300,104 39

##### MAINTENANCE ACCOUNT:

(a) Debenture interest and interest on monthly overdrafts . . . . .	\$624,132 39
(b) Officials' salaries, wages, up-keep of restored grounds and buildings, including office and Commissioners' expenses for 27 years . . . . .	579,770 32
	<hr/>
	\$1,203,902 71

Or a total expenditure of . . . . . \$2,504,007 10

From the very inception of the Niagara Falls Park scheme the method of financing—so far at any rate as maintenance is concerned—differs from that generally adopted in most National and Municipal Park Systems. Apart from the bond issue amounting to \$900,000.00, guaranteed by the Province of Ontario, the proceeds of which (with the exception of \$65,000.00 still unsold) were used exclusively for Capital Expenditures, no Legislative grant whatever has been voted for capital improvements or maintenance. Even the small charge which was origin-

ally intended to be made for admission to the Park had to be abandoned owing to the policy of practically a free Park having been adopted by the State Reservation on the American side of the river.

The Commission for the first seven years of its administration had to rely entirely on revenues obtained from the franchise granted for the operation of the electric railway through the Park and along the shore of the Niagara River; fees derived from the leasing of the elevator and scenic tunnel leading under the Falls, and from leasing restaurant and photographic privileges. The very meagre revenues obtained from these sources were not only insufficient for the ordinary maintenance of the Park as then constituted, but were entirely inadequate for the payment of the interest on the bond issue and the setting apart of a sinking fund. It will be obvious, therefore, that under these adverse financial conditions no well conceived plan for the restoration and improvement of such an extensive and varied Park System could be undertaken on a broad and comprehensive scale until funds could be assured for the proper and effective carrying on of such work. Scenic decoration was therefore confined to the portion of the Park overlooking the Falls. This condition of affairs grew worse rather than better as time passed, for the upkeep of the restored portion of the Park demanded increased expenditures, and the large number of visitors necessitated police supervision and an increased number of permanent and temporary officials for ordinary care and management.

The Commissioners were, in effect, placed in the position of having an extensive estate passed over to them as Trustees upon the understanding that they would create ways and means, as best they could, for practically converting farm lands and country roads into parks, boulevards, and pleasure grounds up to the highest standard of aesthetic treatment. And, to greatly add to their difficulties, means had also to be provided to pay the interest on the bonds guaranteed by the Province of Ontario.

This impoverished financial condition of the Park Commission continued with little hope of relief until 1892, when, after long protracted efforts, assistance came through the use of the waters of the Niagara River for the generation of Hydro-Electric Power. In 1892 the first contract for such power generation was entered into between the Commissioners and the Canadian Niagara Power Company, which, however, was subsequently abandoned and a new contract entered into in 1899. The granting of this franchise was followed in 1900 by an Agreement with the Ontario Power Company for practically similar privileges and rights as had been granted to the Canadian Niagara Power Company, and in 1903 a third franchise was granted to the Electrical Development Company (then Messrs. Mackenzie, Pellatt & Nicholls). In this way an assured income was at last reached for carrying on the expansion and development of the entire Park System.

#### QUEEN VICTORIA NIAGARA FALLS PARK.

The first territory placed under the care of the Commissioners was one hundred and fifty-four acres immediately adjacent to the river and gorge at the Horseshoe Falls, and known as the "Queen Victoria Niagara Falls Park." Along with this acquirement was a water area equivalent to 317 acres, of which fifty acres have been filled in along the shore line, and by the creation of artificial islands, making a total land area of two hundred and four acres. This territory came into the possession of the Province for Park purposes in 1887.



Serious difficulties were encountered by the Commissioners in the vigorous prosecution of works of restoration and improvement, not only through the lack of funds, but by the continual breaking up of the Park surface by the Power Companies in their works of construction. Notwithstanding these drawbacks, the northerly end of the Park proper, comprising some sixty acres, was practically completed and dedicated to public use over fifteen years ago.

Apart entirely from the grand spectacle of the great Cataract of Niagara, which is constantly in view, and the historic associations connected with this portion of the Park System, those who have visited the most famed Parks in Europe and America, and are, therefore, in a position to judge, assert that this finished portion of the Queen Victoria Niagara Falls Park takes rank with the best Parks in the world.

The plan adopted by the Ontario Power Company of laying enormous steel and cement underground conduits for carrying the water from the highest river level to the point of operation below the Falls, while conferring most substantial benefits on that Company by enabling the use of the full head of water, caused the almost continuous disturbance of a large portion of the Park surface. These open excavations, extending over a mile of the southerly end of the Park, which have continued for a period exceeding ten years, have prevented the commencement of plans of improvement for that portion of the Park territory from the Administration Building to the Dufferin Islands. As large demands have been made on the Ontario Power Company for power to be distributed by the Hydro Electric Power Commission, there is reasonable hope that the third and last conduit will be commenced and proceeded with during the current year. As soon as the third pipe is laid it is intended to vigorously proceed with the remaining works of restoration. The Commissioners have decided to adopt a different principle of landscape treatment in this part of the Park, so as to give full effect to land and water vistas with a lesser area of shrub and plant life and more forestry treatment.

*New Conservatories.*—One of the best and most popular features of the great parks of the world are properly constructed conservatories, and no Park System can be complete from an educational and aesthetic standpoint, or indeed in affording the highest degree of pleasure to visitors, without well designed and commodious conservatories with all the latest and most complete equipment for the various stages of propagation. The Park Commissioners in the past have been placed at great disadvantage in their efforts to provide stock for out-door uses and room for housing plants of a tropical nature owing to the lack of adequate structures of this character. Even, however, with the very restricted and incomplete buildings in use the results achieved have given great pleasure to many thousands of visitors from all parts of the Dominion. No Park on the Continent is more entitled to the most modern and best equipped greenhouses and conservatory plant than the Park at Niagara Falls. It is, therefore, proposed to erect a central conservatory at a convenient point in the Park on a plan which will permit of enlargement by the addition of wings as necessity arises.

*Aquatic Garden and Rockery.*—In this connection the Commissioners also contemplate the construction of an aquatic garden and rockery—an ideal location for which is the Island Pond near the northerly gateway of the Park, fed from a perpetual spring flowing from the base of the escarpment, which natural provision will obviate the necessity of a large outlay for a constant supply of water for the garden and rockery purposes.

*Table Rock House.*—The position of the building known as "Table Rock

House"—one of the oldest structures taken over with the Park lands in 1886—situate, as it is, at the narrowest point in the Park and projecting into the roadway directly overlooking the Falls, is most objectionable from every point of view. The building has been under lease during the past ten years for the sale of souvenirs, and also provides dressing-room accommodation for visitors going under the Falls, and other purposes. As the lease expires on the 1st June of the present year the Board has had under consideration for some time plans for the removal of the old and unsightly building and the erection of a proper structure nearer the escarpment in rear of the present building. A very excellent view of the Falls and Lower Gorge from the tower of Table Rock House will be lost when the old structure is demolished, but in the plan under consideration it is proposed to restore and improve this view by the construction of an elevator to the high altitude overlooking the Falls, which will connect with the scenic tunnel descent under the Falls. The plans for and location of the proposed new structure have given the Commissioners much thought, with the result that one of the two proposed plans had to be adopted, namely: A partial sub-surface structure on practically the existing site, or the proposed building close to the escarpment. Whatever plan is adopted, it is obvious that at this crucial point the building must not obtrude upon the line of vision nor be unduly prominent. The old structure was erected in the age of private ownership at Niagara Falls, when the chief object was the mercenary one of obtaining the most convenient site for selling souvenirs to tourists.

Were it not absolutely necessary that there should be a building in the vicinity of the Horseshoe Falls to be used as a shelter from the spray conditions which continually menace this splendid coign of vantage from which all visitors wish to obtain a lasting view of the Cataract, as well as to provide a station for the Electric Railway Company, it would be much better that all buildings above the surface should be dispensed with at this crucial and congested point. This, however, would result in tourists and visitors being unable to obtain one of the best views of the Horseshoe Falls on many days throughout the year.

*Parapet Wall.*—There is also the completion of the massive stone and iron parapet wall, two sections of which have been built along the face of the cliff between the Horseshoe Falls and the northerly entrance at Ferry Road. Two other lengths of approximately 1,100 and 675 feet will give a continuous heavy railing for the safety of visitors, with an appropriate architectural finish along the whole Park front overlooking the gorge. It is proposed that the section between Rambler's Rest and Clifton Incline shall be built during the coming year, and to suitably terminate the work the northerly end will be built in conjunction with, and as an integral part of the Memorial Monument to Burrel Hecock, who heroically lost his life when the Ice Bridge was broken up in February, 1912.

#### QUEENSTON HEIGHTS PARK.

Reference has been made in many of the later reports of the Park Commission to the growing popularity of the Queenston Heights Park, evidenced by the constantly increasing number of visitors to this historic and beautiful part of the Park System.

Great improvements have been made in the grounds and extensive ball fields and play grounds have been provided for the sports that are always indulged in, chiefly during the school vacation, when picnics are an almost daily occurrence. The lack of adequate facilities, particularly in buildings, is, however, constantly

pressing upon the attention of the Commissioners. A small one-storey wooden structure does duty for serving refreshments and general restaurant purposes, but it is quite evident that this cannot supply the increasing needs of this important resort much longer, and it is therefore proposed to erect a modern refectory building, somewhat after the type of the Administration Building at Queen Victoria Park, of smaller dimensions, but at the same time having regard to the future requirements of the Park.

In addition to the land passed over to the Commissioners for park purposes by the Ontario and Dominion Governments at Queenston Heights, two plots immediately adjoining, comprising nearly twenty-five acres, have been purchased, which have greatly added to the completeness of this unique Park. It is most important, however, that its limits should extend to the river gorge east of the present park, and to that end another plot of land containing about seventeen additional acres should be acquired so as to give an unbroken frontage along the river. The Commissioners believe that the possession of this acreage will prove to be a wise policy, not only at Queenston Heights, but in respect of other lands that are required in connection with the general Park System.

#### NIAGARA FALLS PARK BOULEVARD.

The roadway of the Boulevard between the Park proper and the Village of Bridgeburg, which has been in progress for the past two years, is at last completed. The work has been subjected to many vexatious delays. In the first instance the stone secured by the contractor was not of a suitable quality for road making, and much time was lost in obtaining proper road metal from the quarries owing to the large demand for crushed stone for all purposes during 1912. It is satisfactory to report, however, that before the close of the year the roadway itself was in condition for vehicular traffic and it only remains to complete the gutters and some other protective works of drainage outlets as soon as the spring opens.

Immediately on the completion of the various sections of the roadway, grading and planting was at once proceeded with and a considerable portion of this work has already been done, and the remainder will be pushed forward to completion during the current year.

Now that the Boulevard between the City of Niagara Falls and the Village of Bridgeburg is practically completed, the Commissioners have turned their attention to the acquirement of the necessary lands for the continuation of the Boulevard to connect the Central Park at Niagara Falls with the Queenston Heights Park, and later on to Niagara on Lake Ontario; the aim of the Commissioners being that the Park and Boulevard system shall in time be continuously connected from Lake Erie to Lake Ontario.

Owing to the great length of the Niagara Falls Park system, extending a distance of over thirty-five miles, with spacious park areas situate at Fort Erie, Niagara Falls (Ontario), Niagara Glen, Queenston Heights, and in the future possibly Niagara-on-the-Lake, the construction of boulevards and connecting roads between the various sections is a prime necessity and the acquirement of land for this purpose when it can be obtained at reasonable rates, will secure to the present and future generations a system of parks and recreation resorts for the people of Ontario, the Dominion of Canada and the world at large that has no equal on the Continent of America.

Apart from the great utility of the Boulevard from Lake Erie to Queenston



Heights it will, when completed, be one of the most attractive features of the Queen Victoria Niagara Falls Park System in connection with which it may be permitted to reproduce an extract from the Report for 1908.

"Commencing at the foot of Lake Erie and following the sinuosities of the shore at an altitude sufficiently high to give a continued and comprehensive view of the Niagara River and the opposite American shore until the Rapids immediately above the Falls come in full view; then through the beautiful Park in sight of the turbulent rapids until the great Cataract of Niagara Falls is reached, and continuing along the banks of the lower river with its wonderful panorama of gorge, rapids, whirlpool and magnificent banks until the rushing and turbulent river merges with the quiet water of Lake Ontario."

#### POWER COMPANIES.

In last year's Report reference was made to the application of the Canadian Niagara Power Company for alterations and changes to that Company's intake, with a view to increasing the efficiency of the forebay, particularly in respect to ice conditions. The Company accepted the conditions imposed by the Board and has proceeded with its plans under the agreement and expects to commence the work outlined early in the spring. The conduct of the work will cause a torn up condition of the park surface during the year 1913, resulting from the excavations necessary to build underground works, but when finished the normal surface will be completely restored and indeed the shore line somewhat improved.

*The Ontario Power Company* was engaged until the early part of the summer in extending its second water conduit in front of the Administration Building which, owing to the severe winter, was not completed as early as was expected, interfering somewhat with the opening of the tourist season. Late in the autumn another application as received from the Company to be allowed to extend this second conduit to the limit originally provided for Units 13 and 14 of the power house equipment. This action was rendered necessary on account of the large demands for power, chiefly from the Ontario Hydro Electric Power Commission. Every effort is being made to have this work completed, and the surface restored by the first of May at the latest, and it is hoped that the summer tourist season will not again be interfered with by works of this nature.

*The Electrical Development Company.* Good progress has been made during the year by this Company in the entire completion of its generating station or power house within the Park limits. During the winter months the steel frame work was erected, and with the approach of good weather for outside building operations the stone work was undertaken and all during the twelve months artisans have been busily engaged in moulding the Indiana limestone in the form for erection. The design shown in the report for the year 1903 has been carried into effect, and, as therein stated, "the building is a well proportioned structure suitable for the location and entirely effective in its architectural treatment."

In the month of November permission was sought by this company to erect, as an addition to the southerly end of the power house, a machine shop one storey in altitude. Representation was made that this was necessary from an operating point of view to properly take care of repairs to machinery and worn parts of generators and turbines. From a scenic standpoint, however, the Commissioners thought that this addition would be detrimental to the appearance of the Park. While it was fully realized that no hampering condition should be placed upon

this hydro electric station, with a tendency to inefficient results, it was nevertheless thought desirable to secure modifications in the architectural design. To this end it was proposed that the addition might be made of the same height as the main building, or failing that to secure a roof garden effect, and a lookout for public use to view the upper rapids. At the same time, the Commissioners thought it desirable to secure from the company an abandonment of its right to place a transformer station within the Park limits, that building having already been erected at a point in the Township of Stamford, outside the boundary of the Park. The Company, however, refused absolutely to negotiate upon this basis, and withdrew its application for the proposed machine shop. It is expected now that all of this area south and east of the power house station will be ready for planting and decoration with the clearing away of the debris and materials on the completion of the present work.

### RECEIPTS AND EXPENDITURES.

The detailed statements showing the receipts and expenditures for the year ended 31st December, 1912, are herewith appended. It will be seen that the revenue received from all sources amounted to \$177,617.95, of which, however, \$20,009.61 represented the sale of Debentures and special payment received from the Ship-building Company representing that Company's share in the cost of diverting the Boulevard roadway around their manufacturing plant. There still remains \$65,000.00 four per cent. Debentures, guaranteed by the Province, for the purpose of constructing the Boulevard, which have not been disposed of owing to the low price obtainable for such security during the past year.

The fixed rentals of the three power companies amount to \$60,000.00, and the excess rental to \$74,210.41, which latter amounts have been received, as heretofore reported, without prejudice to the rights of either party in the suit instituted by the Government to determine the proper method of calculating the amount of power generated and the rental payable therefor.

After protracted delays this suit was taken last year to the Privy Council in London, when a decision entirely in favour of the contention of the Commissioners was rendered, and accounts for the rentals accrued to November 30th, 1912, under the rendering of the Privy Council judgment, have been sent out to the three power companies as follows:—

Canadian Niagara Power Company.....	\$52,435 37
Ontario Power Company.....	50,274 33
Electrical Development Company.....	92,402 76
	<hr/>
	\$195,112 46

These amounts the Commissioners expect to receive and show as part of the Park revenue for the year 1913.

The expenditures upon capital account, including the amount expended upon the Boulevard for all purposes, and also the large legal costs in connection with the power rental suit, amounting to over \$10,000, aggregated the sum of \$95,851.95. The expenditures on maintenance account for salaries, wages, materials, and other expenses of upkeep over the whole Park System amounted to the sum of \$59,038.63, and to this must be added the interest on bonds and bank charges during the year, namely, \$33,217.35.

All of which is respectfully submitted.

J. W. LANGMUIR, Chairman.  
GEORGE H. WILKES.  
P. W. ELLIS.  
L. C. RAYMOND.  
W. L. DORAN.  
L. H. CLARKE.  
J. D. CHAPLIN.

Toronto, March 11th, 1913.

## QUEEN VICTORIA NIAGARA FALLS PARK SYSTEM.

## FINANCIAL REPORT, 1912.

## RECEIPTS.

Ontario Power Company, rental . . . . .	\$30,000 00	
Ontario Power Company, excess rental . . . . .	33,542 75	
Canadian Niagara Power Company, rental . . . . .	15,000 00	
Canadian Niagara Power Company, excess rental . . . . .	27,548 37	
Electrical Development Company, rental . . . . .	15,000 00	
Electrical Development Company, excess rental . . . . .	13,119 29	
International Railway Company . . . . .	10,000 00	
Zybach and Company . . . . .	9,000 00	
Brock's Monument, tolls . . . . .	1,481 70	
Wharf privileges . . . . .	505 00	
Shipyard deposit, with interest . . . . .	\$10,001 53	
Boulevard Debentures . . . . .	10,008 08	
	<hr/>	
	20,009 61	
Sundries . . . . .	2,411 23	
	<hr/>	
		\$177,617 95
December 31st, 1912. Overdraft in Imperial Bank . . . . .		18,230 98
		<hr/>
		\$195,848 93

NOTE.—There is also a balance of \$1,000.00 in the Queen Victoria Niagara Falls Park System current account (accountable warrant).

## EXPENDITURES.

## CAPITAL ACCOUNT:

*Queen Victoria Park—*

Parapet Wall (balance of contract) . . . . .	\$325 00	
Water Supply for Bath Houses . . . . .	231 70	
Trees and Shrubs . . . . .	56 23	
Burning Spring Embankment . . . . .	4,832 93	
Park Equipment . . . . .	786 85	
New Roads and Paths (north and south) . . . . .	719 16	
Office Equipment . . . . .	180 92	
Drainage and Water Connections . . . . .	1,169 28	
Greenhouse Extension (under contract) . . . . .	2,653 42	
Roller House, Garage (including under contract) . . . . .	295 72	
Furnishings (Commissioners' Quarters) . . . . .	284 54	
	<hr/>	
		\$11,535 75

*Queenston—*

Road at Entrance and Planting . . . . .	\$1,005 26	
Improvements to Present Shelter . . . . .	22 10	
Paths and Grading . . . . .	185 83	
Under Contract . . . . .	255 75	
	<hr/>	
		\$1,468 94

*Niagara Glen—*

Tool House (balance under contract) . . . . .	\$114 97	
Iron Railing along Cliff . . . . .	3 68	
	<hr/>	
		\$118 65

*Niagara River Boulevard—*

Black Creek Road .....	\$583 27	
Section No. 1a .....	\$728 33	
Section No. 1b .....	364 50	
Section No. 2a and 2b .....	22,738 40	
Section No. 3a and 3b .....	5,345 90	
Section No. 4a and 4b .....	3,540 14	
Section No. 4 .....	125 00	
		32,842 27
Bridges .....	5,588 71	
Riprap .....	250 70	
Lands and Moving Buildings .....	17,499 70	
Drainage and Planting .....	10,508 71	
Roadway .....	2,534 28	
Equipment .....	58 00	
		\$69,865 64
Experimental Roads (Queen Victoria Park) .....		1,933 22
Legal (including excess rental suit) .....		10,929 75
		\$95,851 95
Amount carried forward .....		\$95,851 95

## MAINTENANCE ACCOUNT:

*Salaries—*

Office and Clerical Staff for Park System....	\$9,655 00	
Constables, Queen Victoria Park .....	\$6,575 00	
Constables, Queenston .....	780 00	
Constables, Niagara Glen .....	660 00	
Constables, Lundy's Lane .....	396 29	
Constables, Fort Erie .....	319 35	
		\$8,730 64

*Wages—*

Queen Victoria Park .....	\$19,152 04	
Queenston .....	2,310 90	
Niagara Glen .....	546 47	
Lundy's Lane .....	430 94	
Niagara River Boulevard .....	3,078 90	
Fort Erie .....	227 00	
		\$25,752 25

*Materials—*

Queen Victoria Park .....	\$8,415 66	
Queenston .....	250 05	
Lundy's Lane .....	5 17	
Niagara River Boulevard .....	2,632 29	
Fort Erie .....	77 90	
		\$11,381 07

*Office Expenses—*

Travelling Expenses .....	\$663 07	
Supplies, Postage, Periodicals, etc. ....	1,036 13	
		\$1,699 20
Commissioner's Expenses .....	680 37	
Insurance .....	569 60	
Miscellaneous .....	570 50	
		\$59,038 63
Interest on daily overdraft for year 1912 .....	\$305 95	
Interest on bonds, including bank charges .....	32,911 40	
		\$33,217 35
Overdraft on Boulevard Account, December 31, 1911 ..	\$87,570 94	
Balance on Parks Account, December 31, 1911 .....	79,829 94	
		\$7,741 00
Net overdraft, December 31, 1911 .....	\$7,741 00	
		\$7,741 00
		\$195,848 93



## SPECIAL SAVINGS ACCOUNT, 1903-1912.

For maintaining water levels at Intake of Canadian Niagara Power Company  
and International Railway Company.

1903—January 31, Deposited .....	\$25,000 00
1905—December 30, Interest to date .....	2,288 41
	<hr/>
	\$27,288 41
Less Cost of Submerged Dam .....	2,189 32
	<hr/>
	\$25,099 09
1912—November 7, Interest to date .....	5,661 37
	<hr/>
	\$30,760 46

## APPENDIX "A."

## REPORT OF THE PARK SUPERINTENDENT.

*To the Commissioners of the Queen Victoria Niagara Falls Park.*

GENTLEMEN,—I beg to submit herewith my report for the year 1912, detailing the various works comprising the maintenance, betterment and improvement of the Queen Victoria Niagara Falls Park System.

While the year 1911 might be described generally as unusually hot and dry, the year 1912 would in similar manner be termed abnormally wet with an abundance of precipitation during all of the four seasons. This was particularly true of the spring and fall months, the only period of drought being experienced in the month of June, and this was the only time out of the twelve months that sprinkling operations had to be carried on for the Park lawns. The mild weather conditions experienced in the late fall of 1911, continuing to the very end of December, were quickly reversed in January, and the first three months of the new year showed a long period of very low average temperature, much more extreme than has obtained in this locality for some seasons. In addition to this the month of April, generally the beginning of spring with warm showers, brought an unusual number of cold rainy days preventing much of the work ordinarily undertaken with the first approach of warm weather, and this backward condition was experienced all through the year. The effect of these singular types of weather made necessary a considerable increase in expenditure to keep open the main roads and paths, and to combat ice conditions in the vicinity of Table Rock and Horseshoe Falls for the purpose of insuring the safety of tourists and visitors.

The estimates for 1912, under the instructions of the Board of Commissioners, were based upon the policy of straining every effort to complete the Boulevard roadway, and in the absence of a further legislative guarantee of bonds, to use the excess of revenue from all sources not actually required in the Park upkeep to secure the completion of the roadway. The effect of this is seen in the new works undertaken for the year, which are few in number, and only at such points as were not only necessary, but imperative.

Among general matters that may be mentioned as accomplished was a thorough examination by the Chief Engineer of the Dominion Railway Board of all of the passenger and railway bridges crossing the Niagara River below the Horseshoe Falls. This examination was undertaken in the month of June, and had particular reference to the Upper Steel Arch Bridge, which in the mind of some of the travelling public was unsafe when subjected to large crowds during some of the holiday season, and principally on the occasion of the Annual Carnival, held jointly by the two cities of Niagara Falls, Ontario, and Niagara Falls, New York. The report received was to the effect that all of the bridges were in a proper state of repair, and designed for the class of traffic using them. The Upper Steel Arch Bridge was reported to be safe within the limitations placed upon its use, and this structure ought not to cause any anxiety while proper supervision is exercised over it by the bridge officials.

During the month of August, one of the Commissioners, with the Superintendent and Chief Gardener, visited the cities of Philadelphia, New York and Boston to examine outstanding features of these well known Park Systems, and particularly to ascertain the extent and character of the greenhouse and conservatory

equipment required in a modern Park System. While the visit was a very hurried one, and in addition represented the Board at the Annual Convention of the American Association of Park Superintendents, many valuable ideas were gained particularly in the details of carrying on both the maintenance and construction departments. Even the mere comparison of the results accomplished by others, serves a good purpose and shows where one's general plans are along the right lines, and where modifications may be made to advantage. The City of Boston, known throughout the whole of the New England States, and, indeed, eastern America as a steadfast adherent to progressive park achievement, and the modifications required by present day conditions, proved a wonderful factor in showing what may be carried on, on a very large scale when the task is once assumed and the development consistent and continuous. Chiefly is this true of the Boulevard System for which the Metropolitan Park Commission are responsible where the outlying roads and connecting links to the city boulevards have been extended for many miles by the co-operation and expense of surrounding municipalities. On these roads the experimental features are fully maintained, and much valuable information was procured for use of the department at Queen Victoria Park. Not less interesting were the horticultural features, and when it is considered that the natural soil of this district is a barren sand and gravel, that must be excavated and refilled with suitable earth and humus before a single tree can be planted and successfully grown, one gains some idea of the difficulties to be surmounted even before a real beginning is made possible. Altogether it is believed that a considerable impetus has been given to the park staff by this educational visit and better results may be looked for over the Park System by reason of it.

#### QUEEN VICTORIA PARK.

On account of the unusual conditions of weather already alluded to, the cost of maintenance at Queen Victoria Park has somewhat exceeded the estimated amount required for this division, but another element is forcing itself to the front in this connection, namely, the difficulty of procuring proper labor and the dissatisfaction with the rate of wages. Not only at Niagara Falls is this true, but over every city and town in Canada, and it is found that the rates must be considerably increased if an efficient staff of gardeners and laborers is to be maintained. Notwithstanding that the ordinary day labor was increased in wages several years ago, further increases for particular works, such as road building, had to be made last year, and no doubt the coming year will see a general demand in this respect. Other conditions operating to swell the maintenance account are the extensive works of thinning out and transplanting trees and shrubs where the prolific growth at the Falls has exceeded the most sanguine hopes and expectations at the inception of the Park. Much of the smaller material has entirely overgrown its limits to the detriment of valuable subjects in the same vicinity, and a large labor item is accounted for in the transfer of this stock to other locations. During the preceding year, and the year 1912, a great deal of experimental work has been undertaken with herbaceous plants of new and untried varieties for the Park bedding. Many of these species are very encouraging in their results, and last year a number of new and distinct bedding designs were made possible with this new material.

Considerable repairs had to be undertaken at the older portion of the greenhouse plant where the foundations and lower walls had given way. All of this work has been accomplished with the ordinary staff, and advantage was taken



of this necessity to enlarge the cold storage plant and provide more commodious quarters for the subtropical shrubs that are used in the summer season for decorative purposes. Last year showed in marked degree the beneficial effect of the large quantity of manure secured in car load lots, spread over the lawn surfaces, and even the specimen trees took on a better color and showed a more vigorous appearance from this treatment. During the very limited dry season in June, the new type of sprinkling apparatus consisting of iron pipe with holes drilled at an angle to provide a maximum spread of the water spray fully met our expectations, providing an economical and efficient lawn watering apparatus that would cover large areas with very little attention. The effect of this will be more striking in a very dry season, when the seared condition of the sward appears, due to the shallow depth of soil upon the rock formation adjacent to the gorge.

During the winter season an attempt was again made to maintain a skating pond on the still water of the "elbow" at the bathing pool in the rear of Dufferin Islands. Owing, however, to the sheltered location, from the high bluffs surrounding this secluded area, and more particularly to the fact that the stream runs constantly from the water supply through the forebay of the Ontario Power Company, and leakage at the stop logs, a satisfactory sheet of ice could not be kept in condition for skating purposes. Very little enthusiasm was displayed by the young people of the city in frequenting the ice, but doubtless this was partially due to the unsatisfactory surface, while the isolated location also accounts for it in some measure. In marked contrast the bathing pool in summer is proving a popular attraction to young people and visitors, so much so indeed, that a caretaker is required through the evening hours during the warm balmy weather.

The two new ranges of roomy glass houses added to the greenhouse plant have proved of inestimable value, particularly for exhibiting the fall flowers, and last year the chrysanthemums show, comprising over a thousand fine blooms, and probably more separate varieties than was contained in a single greenhouse in the whole of this district, or indeed in Ontario, attracted many visitors and won deserving praise from all sides. The heating arrangement in the new houses is efficient and ample, taking the strain off number one furnace to such an extent that the whole of the plant is now supplied without the addition of temporary stoves. It is the intention to have the usual spring exhibition at Easter, and advertise it well so that the surrounding towns and cities may know, and be able to take advantage of this occasion.

During the wet spring weather and the late fall new arrangements were put into effect over the whole of the northern area from the Administration Building to the Clifton House. Many shrubs at curves along the main driveway were removed where their thickly growing branches made driving dangerous. A large number of shrubs shaded by finely growing specimen trees were removed to other locations, for the most part along the boulevard, and in this way both the shrub and the tree will be benefited. A new plantation of lilacs has been planted along the main driveway, and as far as conditions will allow the grouping of specimens, according to their natural order, is being carried out.

The proper care of the natural trees of the Park System, together with the specimen subjects planted from time to time, is a question of the utmost importance demanding the most careful consideration. In some departments, and particularly in the vicinity of public buildings where the number of trees is comparatively small, the services of tree experts have been used to advantage, and then again it must be said that a great deal of spurious tree doctoring is being foisted on the

public at a cost altogether out of proportion to the service rendered. Where the cavity in a tree is small and in such a position as to render it practically impossible for moisture to enter, filling with concrete is beneficial, providing every vestige of disease can be eradicated by the chisel and gouge, but where the microscopic threads of disease are not completely removed it seems that the condition is likely to become worse from filling than from leaving the specimen alone. Many experts now consider it unwise to spend a large amount of money upon saving trees where they think a wiser policy would result from the planting of healthy specimens. In the case of an old tree such as the Washington Elm at Cambridge, it is of course justifiable to use every effort for its preservation, for such a tree having historic and sentimental values could not be replaced if disease were allowed to conquer. When the cost of expert services for a System such as the Niagara Falls Park is considered, particularly where expenditure is required in so many directions at one and the same time, one must hesitate to use funds lavishly in this direction. It is believed, therefore, that a small force of expert tree pruners operating under the direction of the Horticultural Department can successfully cope with the more aggressive types of disease so as to insure the practical safety of the forest growth as a whole, and while specimen trees will undoubtedly be lost as time goes on, the number will not be large, and with proper foresight new specimens may be planted in their place at a moderate cost.

Both in the greenhouse and outside work the United States Department of Agriculture is co-operating with this department in testing out seeds and plants from foreign countries, and in addition a quantity of seeds from northern latitudes of China, collected by Mr. Forrest, were sent to the Niagara Falls Park by Mr. J. Williams, of Cornwall, England. All of this material is being worked upon, and doubtless some of it will prove valuable for out-door work in both the coniferous and deciduous stock.

The spring water supply over the whole Park System was analysed early in the year with the result that only one source of drinking water was found to be contaminated for public use. This precaution enabled the Park department to purify this source of supply, and render the whole of the drinking water suitable for public use.

In addition to building two new bays to supplement the greenhouse equipment, new works at Queen Victoria Park comprised the building of several small stretches of new roads and paths, and an extensive overhauling of the water and drainage systems, the latter work being continued from 1911. Another important new work was that of grading and re-sloping the Burning Springs Embankment. This side hill which was cut back for the construction of the electric railway to Chippawa has been a scar on the landscape for many years, notwithstanding some early efforts to sod it and re-plant it. Owing to the nature of the soil, however, and the effect of heavy downpours of rain the early work was abandoned, with the result that the sides of the slope washed down and became very irregular. With the finishing of the head works of the Ontario Power Company in this vicinity, and the consequent increased use of the Park drives, together with the Boulevard gaining entrance to the Park limits at this location, the unkempt state was greatly noticed, and called for a remedy. During the year over one-half of this slope was sodded, and the remainder prepared for planting with native white cedar such as originally grew here, and it is now hoped that this length of about two thousand feet will take on an appearance that will do credit to the effort expended upon it.

## OUTLYING PARKS.

At Queenston Heights the new works constructed in 1911 added greatly to the utility and beauty of the Park as a whole, and particularly was this true of the grading and seeding upon the ball grounds. The new lookouts at Brock's shaft and the Laura Secord Monument were greatly appreciated in providing new and expansive views of the lower fruit lands. A new path has been constructed down the slope of the escarpment through the evergreen woods to connect with the route to the steamboat landing. This eliminates the long line of stairs and utilizes gently ascending slopes to overcome the rise in elevation.

There is a constant fear in the dry summer season and early fall that fire may attack the cedar and pine branches particularly in the thickly wooded portions where the undergrowth has become dry and brittle. To minimize this danger the whole of the side slope toward Queenston Village is being under-brushed and cleaned out, and the opening up of this provides one of the most beautiful areas of the north-easterly part of the Park, descending as it does to the lower Niagara River, and providing at each lookout point views that cannot be procured elsewhere. October 13th, 1912, marked the centenary of the Battle of Queenston Heights, fought on the northerly slope and the upper escarpment surrounding Brock's monument, and on Saturday preceding the anniversary of the Battle, occasion was taken by many thousands to journey to the ancient battle field where patriotic addresses were delivered by loyal citizens from Toronto and the surrounding district. Many memorial wreaths were sent by Historical Societies, Militia Companies and private citizens, and altogether the occasion was one of much patriotic enthusiasm, doing credit to the Province and to Canada.

A new small area was added to the Park territory at Lundy's Lane by the addition of a private burying ground to the plot known as the Lundy's Lane Battle Field. Considerable work will be required to clear up this area and make it part of the Park, and it will also need fencing in a similar manner to the original plot. With this new land another exit to the street is provided, this being used for the most part at burials.

Only the usual works of maintenance have been carried on at other portions of the Park, namely, Niagara Glen, the Whirlpool, Fort Erie and Butler's Burying Ground.

With the decision to let nothing impede the completing of the Boulevard in the year 1912, this important project, started in 1908, was pushed forward with the utmost vigor, and with the exception of the road construction which, from the very commencement, and upon all sections of the work has been most tedious and altogether too long under way, good progress was made particularly upon grading, planting and all of the details which were undertaken by this department apart from contract work. There are many reasons for the slow progress upon the road construction, but the principal item operating to hold back completion was the lack of road metal of a suitable quality for building a high class macadam road. The first deliveries of material in 1912, notwithstanding that they were late in arriving, had to be condemned as unfit for use, and the contractors, therefore, had to look for new quarries and endeavor to obtain delivery on the shortest notice. The unusual season, late in opening and wet beyond the average, with early rains in the late summer and the beginning of the fall, also helped to retard the progress which both this department and the contractors desired. In spite of all these difficulties, however, the road was opened for traffic late in the year, and



it remains now to re-crown the last finished portion in the spring and finish the gutters and drainage. With this length, which is immediately north of Black Creek, satisfactorily completed, the full length of the Boulevard to the northerly limits of the Village of Bridgeburg will be ready for traffic and turned over for maintenance.

The grading of the various sections to conform to new contours corresponding with the road grade was vigorously prosecuted on the stretch of roadway along the Shipyard property, and on Section No. 3 from the Shipyard to Black Creek. In addition to this a great deal of work was done upon the areas adjacent to the roadway from Chippawa southerly to the point where road construction was in progress. This grading and levelling had advanced so that planting was undertaken upon a large scale in the fall, and while it is not yet completed the important outlines of the landscape treatment can be distinguished and the general scheme is taking definite shape. During the late fall and winter months of 1912 and 1913, plans have been under way for finishing all of the planting during the opening of the spring season, and in the fall of 1913.

There are still several cases of lands expropriated that have to be paid for, but in all cases possession has been taken, and it only remains to determine the amount which the owner is entitled to, or pay the amount for moving buildings when that operation is completed.

During the year the Canadian Niagara Power Company has been engaged upon the completion of its power house building, and this structure is now finished for the full complement of machinery which the company is entitled to. The whole structure presents an appearance quite in keeping with the Park, and is in full accord with the designs approved by the Commissioners. It is of interest to note the present capacity of the plant with the dates upon which the various units were put into operation.

Unit No. 1 .....	July 27th, 1905
Unit No. 2 .....	September 11th, 1905
Unit No. 3 .....	September 27th, 1905
Unit No. 4 .....	April 2nd, 1906
Unit No. 5 .....	May 17th, 1906
Unit No. 6 .....	December 5th, 1910

The Electrical Development Company has also been busily engaged in fully completing its generating station, and this building now presents the finished appearance which the designs called for, and the final units may be added from time to time as the commercial requirements of the Company demand. The progress in the commercial development is shown in the following table, wherein the dates of starting the various units are indicated.

Unit No. 1 .....	1906-1907
Unit No. 2 .....	1906-1907
Unit No. 3 .....	1906-1907
Unit No. 4 .....	1906-1907
Unit No. 5 .....	January 29th, 1912
Unit No. 6 .....	March 31st, 1912
Unit No. 7 .....	May 28th, 1912

The Ontario Power Company during the year extended its second water carrying conduit to supply Units Nos. 11 and 12, and has completed the power house for this equipment. In addition to this the remainder of the restoration work along the mile of pipe line through the Park has been restored, but there still

remains, both in connection with this company and the other two, buildings for machinery which it is hoped will be removed early in the spring. The various units of the Ontario Power Company were put in commercial service upon the following dates.

Unit No. 1	.....	July 1st, 1905
Unit No. 2	.....	July 1st, 1905
Unit No. 3	.....	July 1st, 1905
Unit No. 4	.....	November 5th, 1906
Unit No. 5	.....	January 18th, 1908
Unit No. 6	.....	January 18th, 1908
Unit No. 7	.....	September 10th, 1909
Unit No. 8	.....	December 22nd, 1910
Unit No. 9	.....	April 12th, 1911
Unit No. 10	.....	July 30th, 1911
Unit No. 11	.....	March 3rd, 1913

One of the most important works that this department has to look after is its roadway system, which now comprises many miles to be maintained in first class condition to withstand the heavy strains of the large motor traffic which is increasing from year to year. During the season all of the roads were oiled and tarred by the surface method of treatment, and this, for the most part, proved satisfactory, but there still remains the consideration of a superior class of road metal for the top surface of all driveways, and it would appear to be economical to pay a considerably higher price for trap rock to use in this construction.

The following paper, prepared and published, will indicate the work of the department in looking after the experimental side of road work which is a feature that has not been omitted, and indeed it is believed to be most important:

## ROAD WORK

### IN THE QUEEN VICTORIA NIAGARA FALLS PARK-SYSTEM.

In the year 1908, the Roadway System of Queen Victoria Park consisted of but four miles of driveway with about two miles practically out of commission owing to Power Company construction, and but one experiment in dust laying had been attempted. This experiment consisted of applying an oil preparation late in the year when wet weather was approaching, and the results seemed to indicate that watering would be quite as economical as oiling, so the report of the work stated. At the close of 1912, there are twenty-five miles of main thoroughfare upon the Park System, extending from Niagara Falls to Bridgeburg in a continuous line, and a small length at Queenston, with prospects of an increase of from fifteen to twenty miles in the next two years.

With the inception of an extensive Road System such as has been planned, it was recognized that much had to be learned, first, from the general progress that road building was making and would continue to make owing to the change in the requirements of modern traffic facilities, and, second, from the nature of the route adopted, with its soil characteristics and the class of traffic expected. The consideration of these two phases of the work, viz.: the general problem of road making and the modification that this particular project required, lead to a close study of the existing park roads and the establishment upon a moderate scale of an experimental department. The existing roads indicated that the ordinary class of

limestone used upon so many of our main arteries throughout the Province would not stand up under even moderate traffic, much less heavy vehicles, without constant repairing at a cost altogether out of proportion to the service rendered. The surface metal constantly ravelled out, leaving not only an unsightly stretch, but a road that was a menace to both horse and motor alike. The remedy for this failure to meet the requirements appeared to be in two directions, the road metal should be hard and tough; but not too brittle; or a "binder" should be provided to retain it in place, with a certain amount of resiliency, preferably also capable of withstanding disintegration from air and water.

The experiment carried out at Niagara Falls and now under way, indicate two general classes of materials which promise results adequate to the first cost and satisfactory from the theoretical standpoint, but time alone will show whether the maintenance item will be prohibitive. The first class is based upon the cementitious value of certain chemicals, and the representative of this class is known as the "Rocmac" process. Briefly, the method consists of preparing a matrix with limestone screenings and the "Rocmac" solution, spreading this upon the subgrade, which is first made impervious to water and thoroughly consolidated. The road metal is then spread evenly over the matrix and the whole rolled until the screenings show up upon the surface. Thus the chemical action of the solution upon the screenings is such as to firmly cement the road metal in place, but still retain a surface that is resilient, and in case of wear at one spot a healing process develops in place of the fracture so often observed in concrete. This process requires a hard tough stone, for no binder, however effective, will prevent wear in the stone unless the binder itself is capable of assuming the wear.

The second class of binder depends upon both binding the metal in place and assisting in bearing the wear caused by the traffic. It is represented by all of the bituminous products of a tar and asphalt nature which flood the market at the present time. Apart from mere dust laying, usually accomplished by a surface treatment of light or heavy oil, with or without bitumen, this class of road consists in constructing a bituminous cement road or a bituminous macadam road by either the "penetration" or "mixing" methods, the aim being to hold the stone in place and cover or seal the surface to prevent water penetrating to the subgrade and to take a portion of the wear. This road is resilient, and with a careful selection of binder does not become soft with a high temperature, and a lower grade of stone may be used here when it is relieved from a portion of the direct abrasion.

Many different products have been tried in the Experimental Department, and the results carefully tabulated to show first costs and maintenance, so that within the next two or three years these will be available as valuable data for future guidance. It is hoped that this information may be published for use in the Province. While, however, much has been learned and will continue to be learned, there are three important points that require to be emphasized in road building, and failure will be sure to follow when any one of the three is neglected. The first of these is Drainage! Then there is a second point not to be forgotten, and it is Drainage! The third point is one that every careful engineer must thoroughly master and decide only after the most painstaking enquiry !! It is Drainage.

All of which is respectfully submitted.

JOHN H. JACKSON,  
*Superintendent.*

March 8th, 1913.



## APPENDIX "B."

## ANNUAL REPORT OF CHIEF GARDENER.

*To the Superintendent of the Queen Victoria Niagara Falls Park.*

SIR,—I submit herewith my Annual Report for the year ending December 31st, 1912, in which I refer generally to operations and conditions in the Horticultural Department, and especially to the experiments with new plants, the courses of horticultural instruction and other innovations introduced or continued during the year.

## GENERAL REPORT.

Satisfactory progress was made along the Niagara River Boulevard, where the grading and planting, owing to favorable weather, is in an advanced state. The seeded areas along the older sections of the roadway were rolled, and the grass cut short so that a good lawn has resulted. The trees planted in previous years were pruned to symmetrical shape, carefully watered and properly cultivated. In the Park proper the trees received considerable attention, and as a result of thinning out of dense limbs, careful pruning, proper treatment, and filling of cavities caused by decay, present a better appearance. Considered as a whole the trees in the Park System were remarkably free from insect pests, with the exception of the Tussock Moth, which especially in and around Dufferin Islands proved a menace. The cocoons of this insect were removed and destroyed by fire.

With the object of stocking a nursery with suitable subjects for park and boulevard planting, propagation of trees and shrubs was undertaken on a small scale. Trees and shrubs grown under park supervision may be lifted with abundant root fibres, and replanted ere these are injured by exposure to sunshine or wind, and as specimen trees are required for special purposes these could be grown with straight trunks and perfect heads. The addition of the two new greenhouses to the old plant has considerably facilitated the propagation, not only of trees and shrubs, but also the propagation and growth of summer bedding plants. The accommodation, however, is still inadequate to supply the demand made upon it for bedding plants in ever-increasing quantity and variety year by year.

## EXPERIMENTAL WORK.

The results of the experimental work both as regards plant breeding and the testing of various ornamental plants for hardiness and other desirable qualities have been very encouraging. Several species of trees, shrubs, and varieties of herbaceous plants, new to the Dominion, have been introduced, while many varieties of ornamental greenhouse and bedding plants comprising the following genera—*Begonia*, *Calceolaria*, *Primula*, *Pelargonium* (*Geranium*), and *Salvia* have been raised by crossing, and while the time to speak of the relative merits of these is inopportune, indications are that many will prove desirable acquisitions to horticulture.

*Test of Hardy Annuals.*—The following is a list of hardy annuals which were tested during the summer; for convenience, only those found worthy of cultivation or of special merit are noted, and their colour, height, and other characters described:—

*Aspe'rula azurea seto'sa* (Woodruff). Flowers light blue and fragrant; blooms five weeks after sowing; an excellent plant for borders; one foot.

*Chrysanth'emum sege'tum* (Corn Marigold). Rich yellow; useful for cutting; desirable for borders; two feet.

*Chrysanth'emum carina'tum au'reum* (Summer Marguerite). Bright yellow, with dark centre; blooms ten weeks after sowing, excellent; eighteen inches.

*Calen'dula officina'lis eriocarpa* (Pot Marigold). Deep orange with red centre; blooms six weeks after sowing; when sown in masses very effective; about two feet.

*Calen'dula officina'lis*. Varieties—Meteor, Orange King, and Yellow Queen, all desirable plants; eighteen inches to two feet.

*Coreop'sis tincto'ria* (Syn Calliopsis). Deep golden with maroon scarlet centre, seven weeks after sowing; splendid border plant, useful for cutting; remains in bloom ten weeks; thirty inches.

*Coreop'sis tincto'ria—sanguinea*. Dark maroon scarlet; eight weeks after sowing; very distinctive, remains in bloom nine weeks; thirty inches.

*Coreop'sis Drummon'dii*. Golden yellow with dark centres; seven weeks after sowing, remains in bloom eight to ten weeks; excellent; two feet.

*Eschsholt'zia califor'nica* (Yellow Californian Poppy). Yellow with orange centre; six weeks after sowing; one foot.

*Eschscholt'zia cro'cea*. Rose cardinal, dark rose; seven weeks after sowing; most effective when sown in large masses; one foot.

*Gypsoph'ila e'legans*. White with rose lilac reverse, five weeks after sowing; remains in bloom five weeks, useful for cutting; excellent; eighteen inches to two feet.

*Helianth'us* (Munstead Primrose). Ray florets, a beautiful soft primrose; disc chiefly dark although it varies; flower seven to eight inches in diameter, nine weeks after sowing; a distinct advance on many of the older types; new: five feet.

*Helianth'us cucumerifo'l'ius*. Rich golden yellow with black centre; nine weeks after sowing; remains in bloom until injured by frost; splendid for massing; recently introduced; three to four feet.

*Hymenox'ys califor'nica*. Bright yellow with golden centre; nine weeks after sowing; a splendid bedding annual; beautiful when effectively massed in borders; remains in bloom eight to ten weeks; six to nine inches.

*Iberis umbellata* (Candytuft). Barr's Giant Flowered White, Rose Cardinal, Carmine Rose, six weeks after sowing; excellent for massing in borders, or filling beds; remains in bloom about six weeks; fifteen inches.

*Lupi'nus lut'eus* (Lupin). Yellow; nine weeks after sowing; should be sown in large masses; one foot to fifteen inches.

*Lupi'nus hyb'ridus albo-coccin'eus*. Crimson, rose and white; nine weeks after sowing; remains in bloom until injured by frost; beautiful when massed; thirty inches.

*Lina'ria marocca'na* (Toad Flax). Variety excelsior, dark violet to light blue; six weeks after sowing; a new strain; fifteen inches.

*Lina'ria Marocca'na*. Varieties Queen of Roses, and White Pearl; six weeks after sowing; beautiful annuals; fifteen inches.

*Li'num grandiflo'rum coccin'eum* (Flax). Crimson rose; nine weeks after sowing; remains in bloom until late in October; a showy annual; one foot to fifteen inches.



*Lay'ia e'legans*. Yellow with white borders and golden centre; seven weeks after sowing; remains long in bloom; Profuse; excellent for massing in borders, and very pretty in beds; about fifteen inches.

*Lavate'ra trimes'tris alba* (Tree Mallow). Snowy white; nine weeks after sowing; profuse, and effective as a background when massed in borders; four feet.

*Matth'iola Bicorn'is* (Night scented stock). Various colours, chiefly pink and white; deliciously perfumed when covered with dew or after a shower at night or early morning; should be sown freely in the border; fifteen inches.

*Ma'lope grandiflo'ra* (Mallow Wort). Brilliant rose, with blood crimson centre; remains long in bloom; thirty inches.

*Ma'lope grandiflo'ra al'ba*. White, desirable for massing in the herbaceous border; thirty inches.

*Nigel'la hispa'nica al'ba* (Love in a Mist). White, an exceptionally beautiful plant; two feet.

*Nigel'la hispa'nica atro'-purpurea*. Deep purplish blue; handsome; nine weeks after sowing; two feet.

*Nigel'la damasce'na coelesti'na*. Azure blue; ten weeks after sowing: remains in bloom until October; desirable; about two feet.

*Papaver* (Poppy). Pæony flowered, large double flowers of brilliant colours; nine weeks after sowing; excellent when massed in the herbaceous border.

Shirley Poppy, varieties rose, apricot, salmon, pink and blush; eight weeks after sowing; worthy of cultivation; should be sown in masses and remain undisturbed; about two feet.

*Platyste'mon califor'nicum*. Pale cream; a dainty rock or border plant; nine weeks after sowing; splendid in every way; about nine inches.

*Phacel'ia campanula'ria*. Gentian blue; four weeks after sowing; one of the best annuals for borders, or for edging beds, the flowers stand well up above the foliage, and are conspicuous, remaining in bloom six weeks; one foot.

*Phacel'ia Whitlav'ia*. Violet blue; five weeks after sowing; very pretty, should be massed in the border; remains in bloom five weeks; fifteen inches.

*Rudbeck'ia Bi'color superb'a* (Cone Flower). Deep golden, with a central brown ring and disc; five weeks after sowing; the plants form bushes which especially in the herbaceous border are handsome and effective; thirty inches.

*Sanvita'lia procum'bens*. Petals rich yellow, centre crimson brown; suitable for beds, edgings, or few rock work; nine inches.

*Scabiosa* (Pincushion Flower). Many beautiful varieties which are all excellent for the border, and useful for cutting; average height two feet.

Through the courtesy of the United States Department of Agriculture the following seeds and plants were received, and are being tested, many of these have been under cultivation, but others are new to science, and give promise of hardiness and ornamental qualities:

*Celastrus articulatus*; Hardy, ornamental shrub.

*Eucommia ulmoides, deducuous*; Hardy rubber tree, China.

*Euonymus sp*, semi-deciduous ornamental shrub, China.

*Hemerocallis aurantiaca magnifica*; an improved garden form with deep, lily-like flowers; six inches across.

*Ilex paraguariensis* (Yerba Mate). Small evergreen tree, Brazil.

*Ip'moea tuberculata* (Morning Glory). Ornamental vine of rapid growth, East Indies.

*Iris Tenax*. Purple (Flag), pencilled with yellow, Oregon.

*Jasminum* sp (Jasmine). Low growing shrubs; two to three feet, Crimea.  
*Juniperus Pachyphlaea*. Checkered bark Juniper, New Mexico.  
*Lonicera* sp (Honeysuckle). Dwarf shrubby variety, China.  
*Pinus bungeana*. Conifer, China.  
*Pinus gerardiana*. Chilgoza pine, Baluchistan.  
*Pinus peuce*. Ornamental conifer.  
*Coffea arabica* (Maragogipe coffee).  
*Citrus Limonum*. Dwarf ornamental variety, China.

Special tests.—Two very interesting plants, viz., *Clianthus Dampieri*, and *Asclepias curassavica* have, after careful experiments to ascertain their merits as bedding subjects, proved all that is desirable, and are adapted for summer culture in Southern Ontario. The *Asclepiad* may be associated with plants usually employed for sub-tropical bedding, or used individually to fill beds. Its culture is simple, it is easily raised by cuttings, and only requires similar care to that of the average bedding stock. With the *Clianthus*, however, it is different, and being a plant of such beauty a description of its culture is justified.

*Clianthus Dampieri* is a half hardy herbaceous perennial, the flowers which are red with a dark purple blotch at base of the standard are four or five inches across when expanded, and are borne in clusters of five or six in pendulous axillary racemes, the foliage is silvery grey.

As a basket plan this species has no superior, it is a desirable pot plant, and when used as a summer bedding subject its remarkable flowers and foliage attract much attention, but as its cultivation is so little understood, and being difficult to grow on its own roots it is not commonly grown. A few explanatory remarks regarding its culture may thus be of value.

The plant should be grafted upon stocks of *colutea arborescens* the common "Bladder senna" in August or September when in a seedling stage. Seeds of the stock should be sown three weeks before those of the Scion, as they take longer to germinate, after germination the seedlings should be potted singly into two inch pots and allowed to become established before grafting. When the seedling scions (*Clianthus*) have produced their first leaf, other than *Cotyledons*, they should be grafted in the following manner: Remove the plumule or growing point of the *Colutea* stock, make a wedge shaped incision between the *Cotyledons*, then sever the *Clianthus* seedlings close to the soil and shape the hypocotyl or portion of the stem below the *Cotyledons* to fit into the incision in the corresponding portion of the stock, using a razor or fine scalpel for the operation. Take a piece of Raffia split to the fineness of thread, moisten it, to facilitate tying, and bind the grafts gently but firmly. Place the plants under cloches (bell glasses) or in propagating cases and shade from sunlight. Wipe away the moisture which condenses on the inside of the bell glasses or cases twice daily, and do not allow water to come in contact with the grafts or "damping" will probably result. All buds which start into growth on the *Colutea* stock should be removed at their juncture with the *Cotyledons*.

When union has been effected, remove the bell glasses, carefully cut away the Raffia and place the plants on a shelf two feet or so from the roof glass. In three or four weeks they will grow sufficiently to be shifted into four inch pots, for which operation the following compost should be used: One-half of fibrous well rooted loam, and one-half of leaf soil, broken charcoal, and lime rubble (lime from an old building). The whole should be passed through a half inch sieve. In potting do not cover the graft, nor pot too firmly. Pinch out the points

of the shoots when six inches long, and laterals will be produced from buds just above the graft. Being a desert plant copious watering should be avoided. In order to ascertain the approximate amount of moisture in the soil tap the pot with the knuckle, if a dull sound is heard water is not required, if a sharp ring the reverse, do not err in affording too much water.

If pot plants are desired six inches is a convenient size for the final potting, but if intended for baskets they should be transferred from four's, three or four plants being placed in each basket during March or April. By June they will furnish the baskets nicely, and eventually produce shoots about four feet in length, covered with magnificent flowers. For bedding purposes the plants should be finally potted into five or six inch pots transferred to cold frames after danger of frost is past, thence planted out in position to which full sunshine has access, during June. Small plants for bedding may also be obtained by grafting in January.

In summer a cool greenhouse temperature will suit the *Clianthus*, but in winter the temperature should not fall below 45 deg. Fahrenheit. An atmosphere dry and free from draughts is essential to prevent the attacks of "Mildew" to which the species is susceptible. During the second (that is one year after grafting) and subsequent winters the plants should be housed in the greenhouse with an average temperature of 55 deg. Fahrenheit, and watered very sparingly until they again show signs of growth in Spring.

*Recommendations.*—The conditions for experimental work being so favorable in the Queen Victoria Park, and the facilities for receiving and disseminating plants so excellent, I would suggest that you confer with the Park's Commission re the advisability of affiliation with the Dominion Experimental Station in Ottawa and the Ontario Agricultural Experiment Station at Guelph. The continually increasing number of enquiries regarding matters horticultural, render it necessary to find a way to place such information before the public, and while much has been given, much more would be possible with the co-operation of the above institutions. The "Canadian Horticulturist" affords an excellent medium through which information could be disseminated, and if the Editor were approached with a view to utilizing its columns and his sanction obtained the public would be brought close into touch with the sources of information.

#### HORTICULTURAL INSTRUCTION.

The classes in horticulture inaugurated during 1911 have undoubtedly been beneficial to the students of the high school, who availed themselves of the privilege. The boys have done excellent work, were interested in theory and practice, but more especially in the latter operations such as the planting and pruning of trees and shrubs, repotting of plants, propagation by various means, and planting of bulbs were performed. If, however, the instruction is to maintain a high standard and be thoroughly up to date it will be necessary to provide laboratories with the usual appliances and general equipment in connection with the greenhouses, as in winter the work is done under glass and facilities at present are not conducive to best results.

*Syllabus of Course.*—The following is a syllabus of the first year's course, which, being in the nature of an experiment had to be somewhat modified as conditions demanded, the outlined subjects were treated in an elementary manner, and presented in such a way as to be readily understood by the students.

Theory of the formation and chemical composition of soils.

The chemistry of manures.

Drainage, soil physics, and the capillary processes by which moisture rises in soils, and its conservation.

The formation of soluble plant foods, nitrification and putrification of substances in soils, and a discussion of the bacteria causing the changes. The effect of tillage upon soil.

How to improve soils of various kinds mechanically and otherwise. How to conserve soluble plant foods.

The theory of seed germination and rules for sowing seeds. Preparation of the seed bed.

The theory of budding and grafting with a description of the various fruit and other stocks and scions, and practical demonstrations.

A description of the various kinds of florist flowers, such as carnations, violets, roses, etc., under glass and out of doors, the soils and temperatures most suitable for their culture.

The choice of subjects suitable for landscape design and the manner in which they should be arranged.

The morphology, physiology and anatomy of plants. The manner in which they absorb and assimilate food materials.

The structure of flowers and seeds, and a discussion of the various means by which flowers are pollinated with a view to the production of seeds true to type.

What is a weed? The methods of eradicating noxious weeds of all kinds.

The culture of fruits and vegetables out doors, and methods of forcing.

Respectively submitted,

H. J. MOORE,  
*Chief Gardener.*

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10 EDWARD VII, CHAPTER 21. 1910.

An Act respecting The Queen Victoria Niagara  
Falls Park

**H**IS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:—

1. This Act may be cited as "*The Queen Victoria Niagara Falls* Short title.  
*Park Act.*" R.S.O. 1897, c. 45, s. 1.

2.—(1) The Lieutenant-Governor in Council may appoint a Board Board of  
of Commissioners composed of not less than five persons, which board Commissioners.  
shall be a corporation by the name of "The Commissioners for the  
Queen Victoria Niagara Falls Park."

(2) The members of the board shall hold office during pleasure.

(3) The Commissioners shall receive their actual disbursements,  
but no compensation. R.S.O., 1897, c. 45, s. 2.

PART I.

QUEEN VICTORIA NIAGARA FALLS PARK.

3.—(1) The lands in the vicinity of Niagara Falls selected by Boundaries  
the Commissioners and approved by the Lieutenant-Governor in Council, of park.  
whereof the boundaries as surveyed upon the ground are shown by  
a red verge line marked upon a map, whereof copies duly certified  
and authenticated are filed and deposited in the office of the Registrar  
of the County of Welland and in the Department of Lands, Forests  
and Mines, excepting thereout the strip of land, lying between Range  
No. 6, as laid down in the plan of the City of the Falls, in the Town-  
ship of Stamford, on the north, and by Street's Mill Road and the  
lands held by the Carmelite Monastery on the south, the easterly  
boundary whereof is at a distance of 130 feet east of the centre line  
of the Canada Southern Railway, and the westerly boundary whereof  
is the westerly line of the Park as marked upon the said map, shall  
constitute "The Queen Victoria Niagara Falls Park" and shall be  
vested in the said Corporation as trustees for the Province.

(2) Until the municipal corporation otherwise enacts by by-law, 3 Edw. VII.  
c. 19.  
passed in compliance with section 632 of *The Consolidated Municipal  
Act, 1903*, Robinson and Murray streets shall be public entrances to  
the Park for visitors in carriages, or on horses, or on foot. R.S.O.  
1897, c. 45, s. 3.

4. The lands lying along the bank of the Niagara river, and not Lands along  
river bank.  
included in the original survey of lots laid out in the Townships of  
Stamford and Niagara, which have by order of the Lieutenant-Governor

in Council been vested in the Commissioners to be held for the purposes of the Park, and commonly known as "The Chain Reservation," shall form part of the Park and be subject to the control of the Commissioners as other lands within the boundaries of the Park. R.S.O. 1897, c. 45, s. 4.

Foreshores  
and part  
of bed of  
Niagara  
River may  
be vested  
in Com-  
missioners.

5. The Lieutenant-Governor in Council may also vest in the Commissioners, to be held for the purposes of the Park and subject to any conditions which may be imposed by order in Council, any portions of the foreshores or bed of the River Niagara or lands covered with water in the River Niagara, which lie in front of the lands vested in the Commissioners by section 3, and which at the time of the Order in Council are the property of Ontario, and the foreshores, bed of the river and lands so vested shall thenceforth form part of the Park and be subject to the control of the Commissioners as other Park lands. R.S.O. 1897, c. 45, s. 5.

Rights of  
proprietors  
of road  
vested in  
Commis-  
sioners.

6.—(1) The rights, title, possession and franchises which were held and exercised by the St. Catharines, Thorold, and Niagara Falls Road Company, or by the persons having the title, interest and possessory rights thereof in respect of that portion of the St. Catharines, Thorold, and Niagara Falls Road, between the Table Rock and Niagara Falls Suspension Bridge on lot 92 of Stamford are also vested in the Commissioners.

(2) All rights to take and collect tolls, as well as the public rights in the portion of the St. Catharines, Thorold, and Niagara Falls Road, within the limits of the Park, as shown upon the said plan, are extinguished. R.S.O. 1897, c. 45, s. 6.

Commis-  
sioners may  
construct  
street  
railway.

7. The Commissioners shall have power to construct and operate a street railway over the said road and may build the same to any points or lands vested in the Commissioners and tolls on any such railway may be charged as provided by sections 13 and 15. R.S.O. 1897, c. 45, s. 7.

Powers  
of expro-  
priation.

8. The Commissioners shall have power to expropriate, in accordance with section 10 the interest of any person in any land lying between the river and the road built on the Chain Reservation, and vested in the Commissioners under the authority of this or any other Act. R.S.O. 1897, c. 45, s. 8.

Power to  
acquire  
lands for  
approaches,  
roads, etc.

9.—(1) The Commissioners with the consent of the Lieutenant-Governor in Council may enter upon, take, use or acquire such lands, tenements and rights as they think expedient to be acquired for the purpose of making, forming and completing any new roads, avenues or approaches to the Park, but, except where the lands, tenements, or rights to be acquired are for the purpose of opening or widening a highway, the Commissioners shall not take any land for the purposes aforesaid without the consent of the parties interested therein. R.S.O. 1897, c. 45, s. 9 (1); 4 Edw. VII. c. 10, s. 9 (1).

(2) A highway so opened or widened shall not be used or occupied as a stand by vehicles kept for hire, or by booths or stands for the sale of newspapers or photographs, or for the carrying on of a refreshment business or the like. 4 Edw. VII. c. 10, s. 9 (2).

*(The following section is substituted for s. 10 of the Revised Statute. It is taken from The Hydro-Electric Power Act of 1907.)*

**10.**—(1) Whenever the Commissioners are authorized by the Lieutenant-Governor in Council to enter upon, take, use or acquire any lands, tenements or rights under the provisions of sections 8, 9 or 12, the Commissioners, in respect thereof shall have the powers and shall proceed in the manner provided by *The Ontario Public Works Act* where the Minister of Public Works takes land or property for the use of the Province, and the provisions of that Act shall *mutatis mutandis* apply. See 7 Edw. VII. c. 19, s. 9. Procedure to acquire land, etc.

(2) The compulsory powers conferred by this Act shall extend to lands, works, rights, powers, privileges and property notwithstanding that the same are or may be deemed to be devoted to the public use or that the owner thereof possesses the power to take lands compulsorily. See 7 Edw. VII. c. 19, s. 10.

**11.**—(1) The debentures, amounting to \$525,000. issued by the Commissioners under the authority of *The Queen Victoria Niagara Falls Park Act, 1887*, and countersigned by the Treasurer of the Province and guaranteed by Order in Council shall, equally and without preference of one over another, be a charge on all the revenues of the Corporation, and subject thereto the further issue amounting to \$75,000. subsequently issued by the Commissioners under the authority of *The Act respecting the Queen Victoria Niagara Falls Park*, passed in the fifty-seventh year of the reign of Her late Majesty Queen Victoria, countersigned and guaranteed as aforesaid, shall also equally and without preference of one over another, be a charge on the said revenues. Issues of debentures authorized. 50 V. c. 13.

(2) The debentures being so issued and countersigned shall be conclusive of the same having been issued in pursuance of the said Acts, and of the same being guaranteed by the Province of Ontario. 57 V. c. 13.

(3) The debentures and the coupons for interest annexed thereto shall be transferable by delivery. R.S.O. 1897, c. 45, s. 11.

**12.**—(1) Subject to the debentures issued and secured under section 11 in the order of charge thereby enacted the Commissioners may, with the approval of the Lieutenant-Governor in Council, issue further debentures to an amount not exceeding in all \$300,000 for improvements and the appropriation and application of the proceeds, the form and effect of the debentures, their payment with interest, as also the security guarantee and negotiability thereof shall be as provided by section 11 with respect to the debentures therein mentioned. 8 Edw. VII. c. 29, s. 1; 9 Edw. VII. c. 24, s. 2. Further issue of debentures for \$300,000.

Applications  
of proceeds  
of further  
issue.

(2) The proceeds of the further debentures mentioned in subsection 1 shall be applied by the Commissioners primarily towards the preservation of the bank of the Niagara River, between Fort Erie and the southerly boundary of the Park proper against erosion, wash or other action by nature affecting or which may affect the same, and the construction of an esplanade on and along the said bank for public purposes and of such width as may be determined and for the purchase of such land as may be necessary or the acquisition thereof by expropriation in accordance with the powers exercisable by the Commissioners under this Act. The holders of the debentures shall not be required to see to the application of the said proceeds. 8 Edw. VII. c. 29, s. 2 (1).

(3) A plan and survey shall be made of the lands which the Commissioners propose to purchase, take or acquire under the powers conferred by subsection 2.

(4) The plan shall be approved and certified by the Commissioners who shall keep one copy thereof on file in their office and a duplicate shall be deposited in the office of the Minister of Public Works.

(5) If any alterations in the plan or survey of the land proposed to be taken are deemed advisable to be made, the Commissioners may make the same and a plan in duplicate showing such alterations on the same scale and containing the same particulars as the original plan and survey shall be deposited and kept in the same manner as the original plan and survey.

(6) A copy of any such plan or survey, certified by the Chairman, under the corporate seal of the Commissioners, shall be evidence that the original thereof was deposited at the time certified thereon and shall be prima facie proof of the original so deposited and that the same was signed, certified or otherwise approved of by the Commissioners in the manner in which the same purports to be signed and certified and that the same was prepared and approved by the Commissioners. See 6 Edw. VII. c. 30, s. 59, ss. (2), (3), (8), (12), (*The Ontario Railway Act*, 1906).

Powers of  
Commis-  
sioners.

**13.**—(1) Subject to any direction of the Lieutenant-Governor in Council, the Commissioners may

(a) Construct and operate inclined planes and hydraulic or other lifts, to be worked by any power; and may build and operate boats or vessels to be used in connection with the Park;

(b) Pull down all houses and other erections and buildings on lands acquired and purchased by the authority of this Act, or such of them or such part thereof as they shall think proper to be pulled down, and may level and clear the ground whereon the same stand, in such manner as they



think proper, and sell the materials of the houses and other buildings to be taken down and removed; and the moneys to be produced by the sale thereof, after deducting expenses, and also the rents and profits to which they may be entitled meantime, shall be applied in carrying out the purposes of this Act;

- (c) Lay out, plant and enclose the Park in such manner as they think fit, and improve and develop the same in accordance with the objects of this Act;
- (d) Take and collect tolls for the use of constructions, appliances, vessels or works required to afford facilities to visitors to reach and view the points of interest within the Park, and involving the expenditure of money in construction and maintenance, as well as for services to be rendered for the convenience or accommodation of visitors;
- (e) Make orders and regulations for opening and closing the gates and entrances of the Park, at such hours as they think fit, but so as not to interfere with, or affect, an agreement heretofore entered into between the Commissioners and the Canada Southern Railway Company. R.S.O. 1897, c. 45, s. 12.

**14.** All works or lands whereon any expenditure is authorized in pursuance of this Act shall be deemed and are declared to be <sup>Park to be a Public</sup> Works of Ontario notwithstanding that they are in the care or charge of the Commissioners. 9 Edw. VII. c. 24, s. 3, *part*.

**15.** No by-law, plan of works proposed, tariff of toll or payment for the use of works, vessels or services, shall be acted upon until approved by the Lieutenant-Governor in Council. R.S.O. 1897, c. 45, s. 13. <sup>Plans, tolls and by-laws subject to approval of Lieutenant-Governor.</sup>

**16.** The Park Grounds shall be open to the public, subject to any rules and regulations as to management approved by the Lieutenant-Governor in Council. R.S.O. 1897, c. 45, s. 14. <sup>Grounds open to public.</sup>

**17.—(1)** Subject to the approval of the Lieutenant-Governor in Council, the Commissioners may make by-laws for the use, government, control and management of the Park, and for the protection and preservation of all works of the same from injury, and of the trees, shrubs, walks, seats, gates, fences and palings and all other parts thereof, and for the exclusion of improper persons from the same, and may by any such by-law impose a penalty, not exceeding \$20, for any breach thereof. R.S.O. 1897, c. 45, s. 15, *part*. <sup>Powers of Commissioners as to by-laws.</sup>

(2) Any offence against any such by-law shall be punishable upon summary conviction under *The Ontario Summary Convictions Act* 8 Edw. VII. c. 29, s. 4. <sup>Offences against by-laws. 10 Edw. VII. c. 37.</sup>

Park officers

**18.**—(1) The Commissioners may appoint such officers as may be required for the superintendence and management of the Park, and may also appoint Park keepers and other officers to preserve order in the Park, and may dismiss any persons so appointed.

(2) Such appointments or dismissals shall be subject to the approval of the Lieutenant-Governor in Council.

(3) The salaries of such officers shall be payable out of any funds in the hands of the Commissioners.

Gardeners  
and work-  
men.

(4) The Commissioners may employ gardeners and workmen, as they may deem necessary, and may dismiss or dispense with the services of such persons, subject to any directions of the Lieutenant-Governor in Council. R.S.O. 1897, e. 45, s. 15, *part*.

Books of  
account to  
be kept.

**19.** The Commissioners shall cause books to be provided and true and regular accounts to be entered therein of all moneys received and paid, and of the several purposes for which the same were received and paid; and such books shall at all times be open to the inspection of any of the Commissioners, and of the Treasurer of Ontario, and of any person appointed by the Commissioners or Treasurer for that purpose and of any other person appointed by the Lieutenant-Governor; and any Commissioner and any such person may take copies of or extracts from such books. R.S.O. 1897, e. 45, s. 15.

Securities  
for moneys.

9 Edw. VII.  
c. 5.

**20.** Any person entrusted by the Commissioners with the custody or control of money by virtue of his employment shall give security in the manner and form provided by *The Public Officers Act*. R.S.O. 1897, e. 45, s. 15, *part*.

Revenue  
and rental  
payable by  
certain  
Power  
Companies.

**21.** (1) The revenues and rentals payable or collectable under the several agreements made by and between the Commissioners acting on their own behalf and with the approval of the Government of the Province of Ontario and the Canadian Niagara Power Company, the Ontario Power Company of Niagara Falls and the Electrical Development Company of Ontario, Limited, shall be applied:—

(a) To the payment half-yearly of the interest payable on the debentures issued by the Commissioners, namely, such as are described in section 11, and such as have been issued or are issuable under section 12, in all \$900,000;

(b) To provide a sinking fund at the rate of one per cent. per annum on the entire amount of the debentures.

(2) The application of the sinking fund in respect of such debentures shall be as provided by section 23. 9 Edw. VII. c. 24, s. 5.

**22.** Subject to any direction or order of the Lieutenant-Governor in Council, and to the provisions of this Act, the Commissioners may continue to collect the revenues and rentals in the next preceding section mentioned, and for the years, 1910, 1911 and 1912 and shall apply the same in accordance with the provisions of that section. 9 Edw. VII. c. 24, s. 6. Collection and application thereof.

**23.** The revenue received from the sources authorized by this Act and any excess of revenue received under the next two preceding sections shall be applied as follows:— Application of revenue.

1st. To the necessary outgoing expenses of all works necessary to the preservation, improvement, and maintenance of the Park, and to the payment of the salaries of the officers and others employed by the Commissioners, and other incidental expenses.

2nd. To the payment half-yearly of the interest payable on the debentures issued by the Commissioners.

3rd. To provide a sinking fund at the rate of one per cent. per annum on the entire amount of the debentures issued as aforesaid. R.S.O. 1897, c. 45, s. 16.

**24.** The annual sums for the sinking fund shall be remitted by the Commissioners to the Treasurer of Ontario by half-yearly payments in such manner as the Lieutenant-Governor in Council may direct. Application of sinking fund.  
R.S.O. 1897, c. 45, s. 17.

**25.**—(1) The Commissioners shall make an annual report for the information of the Legislature, setting forth the receipts and expenditures of the year and such other matters as may appear to them to be of public interest in relation to the Park, or as the Lieutenant-Governor in Council may direct. Annual report and accounts.

(2) Sections 11 and 29 to 31 of *The Audit Act* shall apply to the accounts of the Commissioners in respect of receipts and expenditures. 8 Edw. VII. c. 9, ss. 11, 29-31 to apply.  
R.S.O. 1897, c. 45, s. 18.

**26.**—(1) The Commissioners may empower the Clifton Suspension Bridge Company to operate their cars by any power, except steam, to and from their bridge across the Chain Reservation, subject to any order of the Board of Railway Commissioners of Canada in that behalf and subject to the rights if any of the Niagara Falls Park and River Railway Company, and to the terms of any agreement made with such company. Operating cars across the Clifton Suspension Bridge.

(2) Any agreement between the Commissioners and the Clifton Suspension Bridge Company heretofore made which, if made hereafter would be authorized by this section, is confirmed as if made after the passing of this Act. R.S.O. 1897, c. 45, s. 22.

Granting  
rights over  
lands to  
bridge  
companies.

**27.** Subject to the approval of the Lieutenant-Governor in Council, the Commissioners may, upon terms to be agreed on, grant to the Clifton Suspension Bridge Company, or any other duly incorporated bridge company, the rights over or in respect of lands held by the Commissioners which may be required for the purposes of building any new bridge over the Niagara river, or of confirming the present occupation of land by any bridge company now existing, but this shall not authorize the granting of any rights for the purpose in this section mentioned, through the lands vested in the Commissioners by section 3. R.S.O. 1897, c. 45, s. 23.

Rights not  
to be  
granted in  
Park proper.

Commis-  
sioners  
empowered  
to grant  
strip to  
Clifton  
Suspension  
Bridge  
Company.

**28.** Subject to the approval of the Lieutenant-Governor in Council, the Commissioners may grant to the Clifton Suspension Bridge Company a strip of Land from the Chain Reservation along the Niagara River and abutting the lands in occupation of the Company. R.S.O. 1897, c. 45, s. 24.

Agreement  
for sur-  
render of  
powers of  
Canadian  
Niagara  
Power  
Company.

**29.** The Commissioners with the approval of the Lieutenant-Governor in Council and the Canadian Niagara Power Company may enter into an agreement for the surrender and abandonment of the sole or exclusive right to use the waters of the Niagara River within the limits of the Park granted by the agreement bearing date the seventh day of April, 1892, and set out in Chapter 8 of the Statutes of Ontario, 1892, upon such terms and conditions as to abatement of rent, the extension of time for the completion of the contract under the agreement or any variation of such contract and for other purposes in connection therewith as may to the Commissioners and the Lieutenant-Governor in Council appear to be necessary or in the public interest, and any such agreement so entered into shall be binding and effectual according to its terms. 62 V. (2), c. 11, s. 35.

Agreements  
with other  
companies.

**30.** The Commissioners with the approval of the Lieutenant-Governor in Council may enter into an agreement or agreements with any person or corporation to take water from the Niagara River or from the Niagara and Welland Rivers at certain points within or without the Park for the purpose of enabling such person or corporation to generate within or without the Park electricity, pneumatic, hydraulic or other power, conducting and discharging such water through and across the Park or otherwise, in such manner, for such rental and upon such terms and conditions as may be embodied in the agreement, and as may appear to the Lieutenant-Governor in Council to be in the public interest, including provisions for the removal or demolition of any houses, buildings or structures and the re-erection of the same, or the erection of other houses, buildings or structures instead thereof; but no such agreement shall be operative unless and until ratified and confirmed by resolution of the Assembly. 62 V. (2), c. 11, s. 36; 3 Edw. VII. c. 7, s. 52.



31. Any expenditure which the Commissioners may have made or incurred under or in pursuance of section 14 of the Act passed in the third year of His Majesty's reign, Chaptered 6, intituled *An Act providing for the Construction of Works of Improvement along the Bank of the Upper Niagara River*, shall be discharged by the application of money to be raised on the debentures authorized under this Act as the Lieutenant-Governor in Council may determine. 8 Edw. VII., c. 29, s. 3, in part.

Expenditure made under 3 Edw. VII. c. 6, may be met out of debentures issued under this Act.

## PART II.

### BUTLER'S BURYING GROUND.

32.—(1) The Commissioners shall have power to acquire the land set apart as a burying ground, wherein the remains of Colonel John Butler and other officers and men of the corps known as Butler's Rangers, were interred, and described as:

Power to acquire Butler's burying ground

All that certain parcel or tract of land situate in the township of Niagara, in the county of Lincoln, containing two rods and thirty-six perches, more or less, and being part of a certain tract of land containing one hundred and fifteen acres, more or less, granted by patent from the Crown, bearing date the fifth day of February, one thousand eight hundred and three, to one Andrew Butler, gentleman, and described as follows:—Commencing in survey at the distance of eighty-six chains from what is called the Mile tree on the Garrison Line, on a course bearing north seventeen degrees west and which said two rods and thirty-six perches are butted and bounded or may be otherwise known as follows, that is to say, commencing at a stone monument marked G.Y., at the southeast angle of the graveyard, thence north eight degrees forty minutes east two chains, thence north forty-nine degrees west along the bottom of the hill two chains, thence south seventy-one degrees west one chain seventeen links, thence south ten degrees west three chains fifty links, thence north seventy degrees east one chain sixty-one links to the place of beginning.

(2) Where the boundaries of such lands have become obliterated the Commissioners shall have power to acquire such parcels of land as they shall determine with the aid of an Ontario Land Surveyor to be identical or as nearly as may be identical with such burying ground.

(3) The Commissioners shall have power to acquire roadways not exceeding 40 feet in width from any of the roads in the neighbourhood of the burying ground.

And roadways.

(4) Upon acquiring such land, or any part thereof, from any person now in possession of the same or of any part thereof, claiming title by prescription or by conveyance from a person claiming title by prescription, and shewing such title to the satisfaction of the Commissioners, a valid title to such land shall be vested in the Commissioners.

(5) With the consent of the Lieutenant-Governor in Council, the Commissioners may acquire other adjacent lands.

Other adjacent lands.

(6) The Commissioners in respect of such lands and ways shall have powers for the acquisition, management, control and improvement thereof similar to those conferred by Part I. 7 Edw. VII. c. 21, ss. 1-4.

General powers in relation thereto.



Rights of  
interments  
not affected.

**33.** Nothing in the next preceding section shall authorize the interference with any existing right to inter the body of any deceased person in such burying ground, nor shall anything herein confer the right to remove any body there interred, but, subject to the provisions of this section, the Commissioners shall have the right to enter upon, put in order, maintain and keep in repair such burying ground. 7 Edw. VII., c. 21, s. 5.

### PART III.

#### LUNDY'S LANE CEMETERY.

Drummond  
Hill Bury-  
ing Ground  
vested in  
Commission.

**34.**—(1) The interest of the Crown in the lands set apart as a burying ground and sometimes known as Drummond Hill Burying Ground, is hereby vested in the Commissioners, which said lands are particularly described as follows:—

All and singular that certain parcel or tract of land and premises situate, lying and being in the City of Niagara Falls, in the County of Welland, and being composed of Lot No. 6, on the south side of Lundy's Lane, between Victoria Street and Main Street and Lot No. "C" in the rear thereof, both being known as part or parcel of the Drummond Hill Burying Ground and shown upon plan No. 653 registered for the Village of Niagara Falls, and which may be better described as follows, that is to say:—Commencing at the north-west corner of said Lot No. 6, thence southerly and along the westerly limit of said lots Nos. 6 and "C" four hundred and forty feet ten and one-half inches, more or less, to the south-west corner of said lot "C," thence easterly along the south limit of said lot "C" three hundred and six feet eleven inches, more or less, to the south-east corner of said lot "C," thence northerly along the east limit of said lots "C" and 6, four hundred and forty feet ten and one-half inches, more or less, to the south side of Lundy's Lane, and thence westerly along the said south side of Lundy's Lane three hundred and six feet eleven inches, more or less, to the place of beginning.

(2) The commissioners in respect of such land shall have powers for the management, control and improvement thereof similar to those conferred by Part I.

Existing  
rights as  
to burial  
preserved.

**35.** Nothing in the next preceding section shall authorize the interference with any existing right to inter the body of any deceased person in such burying ground, nor shall anything herein confer the right to remove any body there interred, but, subject to the provisions of this section, the commissioners shall have the right to enter upon, put in order, maintain and keep in repair such burying ground.

### PART IV.

#### REPEAL.

Rev. stat.,  
c. 45  
repealed.

**36.** Chapter 45 of the Revised Statutes, 1897, and all amendments thereto except section 4 of the Act passed in the ninth year of His Majesty's reign, chaptered 24, and Chapter 21 of the Act passed in the seventh year of His Majesty's reign, are repealed.

## 2 GEO. V, CHAPTER 17, SECTION 9. 1912.

9. *The Queen Victoria Niagara Falls Park Act* is amended by <sup>10 Edw. VII. c. 21.</sup> inserting the following section immediately after Section 34 as 34a:—

34a.—(1) The interest of the Crown in the following lands is hereby vested in the Commissioners:—“All and singular that certain parcel or tract of land and premises situate, lying and being in the City (formerly the Village) of Niagara Falls, in the County of Welland, and being composed of that part of Lot Number Five (5) on the East side of Victoria Street or Concession Road between Lundy's Lane and Barker Street, as shown upon Plan No. 653, registered for the said Village of Niagara Falls, being part of The Drummond Hill Lundy's Lane Battle Ground Cemetery, which may be more particularly described as follows: Commencing at the South East corner of the Presbyterian Church Property, being also the North East corner of said Lot 5, thence Westerly along the Southern limit of the said Presbyterian Church property One Hundred and Sixty-seven feet seven and one-half inches more or less to the South West corner of the said Church lands, thence southerly and parallel with Victoria Street Two Hundred and Fifty-nine feet ten and one-half inches more or less to the lands of William Dart, being the Southern boundary of said Lot 5, thence Easterly in the said Southern boundary of Lot 5, One Hundred and Sixty-seven feet seven and one-half inches to the lands heretofore conveyed by the parties of the First part to His Majesty the King, and thence Northerly along the Western limit of the lands so conveyed to His Majesty the King Two Hundred and Fifty-nine feet ten and one-half inches, more or less, to the place of beginning.”

(2) The Commissioners in respect of such land shall have powers for the management, control and improvement thereof similar to those conferred by Part 1.

## 3 GEO. V, CHAPTER . . 1913.

An Act to amend The Queen Victoria Niagara Falls  
Park Act.

**H**IS MAJESTY by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:—

10 Edw. VII.  
c. 21, s. 21,  
subs. 2.

**1.** Subsection 2 of section 21 of *The Queen Victoria Niagara Falls Park Act* is amended by striking out the figures "23," in the second line and substituting therefor the figures "24."

10 Edw. VII.  
c. 21, s. 22,  
amended.

**2.** Section 22 of the said Act is amended by inserting after the figures "1912" in the fifth line the words and figures "1913, 1914 and 1915, 1916 and 1917."

10 Edw. VII.  
c. 21, s. 22.

**3.** The said section is further amended by adding thereto the following section:—

Estimates  
to be  
approved  
of by  
Lieutenant-  
Governor  
in Council.

23a. Before any expenditure on capital account is made out of such revenues and rentals in respect of any works within the Park or on premises under the control of the Commissioners, the estimates therefor shall be submitted to and approved of by the Lieutenant-Governor in Council.

10 Edw. VII.  
c. 21,  
amended.

**4.** The said Act is amended by adding the following section:—

Appropriation  
of  
certain  
revenues.

23b. All revenues and rentals which are not required for the purposes set out in sections 21 and 23, shall on or before the first of July in each year be paid over by the Commissioners to the Treasurer of Ontario, and shall form part of the Consolidated Revenue Fund of Ontario.

## AGREEMENT WITH CANADIAN NIAGARA POWER COMPANY.

THIS AGREEMENT made this 21st day of November, 1912.

## BETWEEN :

The Commissioners for the Queen Victoria Niagara Falls Park, acting herein on their own behalf, and with the approval of the Government of Ontario, and hereinafter called "The Commissioners," of the first part;

and

Canadian Niagara Power Company, hereinafter called "The Company," of the second part.

Whereas, under and by virtue of certain Agreements heretofore made by and between the parties hereto, and of certain Acts of the Legislature, which Agreements and Acts are set forth in the Schedule hereto, certain rights were granted to the Company as in the said Agreements and Acts are more particularly set forth.

And Whereas the Company proposes certain changes in the intake portion of its development, made desirable by ice conditions, which changes with plan and specifications have been submitted to the Commissioners for their consideration, and which changes the Company alleges are not designed to increase the amount of water which the Company under its Agreements is already authorized to abstract from the River for the purpose of generating electricity, the said changes being as follows:—

1. Construction of an improved ice shield at the entrance of the Intake, to prevent as far as possible the entrance of ice into the Intake.

(a) By deflecting ice from the Intake, and

(b) By decreasing the velocity and regulating the flow of water into the Intake with means and appliances for controlling the water entering into the forebay.

2. An opening between the River and the up-stream end of the forebay whereby a current will be created to carry to the ice sluiceway such ice as may have passed through the ice shield, two pair of underground conduits each to be not more than twenty-two (22) feet in width measured internally.

3. A submerged weir (to be constructed of irregularly sunken rock or cement blocks according to plans and specifications which shall be submitted to and have received the approval of the Commissioners for the Park, and also shall have been submitted to the Canadian Section of the International Waterways Commission, and shall not have been disapproved by them) extending into the River from the downstream end of the Ice Shield, (in order to raise the level of the water in the forebay and so maintaining at all times a sufficient flow through the ice sluiceway as it now exists and so discharge into the river ice which otherwise would accumulate in the forebay).

These Presents Witness that the Commissioners hereby signify their approval of changes Nos. 1, 2 and 3, respectively set forth above according to the plan and specifications attached to these Presents of which they are to form a part identified by the signature of A. Monro Grier of the Canadian Niagara Power Company and by the signature of John W. Langmuir, Chairman of the Commissioners for the Queen Victoria Niagara Falls Park, but such approval so far as change No. 3 is concerned, is subject to the consideration of the Commissioners



of the Canadian Section of the International Waterways Commission, and shall not take effect if they notify their disapproval.

And these Presents further Witness that in respect of all matters provided by these Presents, and of all acts done, executed or performed, or to be done, executed, or performed hereunder, and of all works to be done, executed, or performed by the Company in pursuance of the rights or powers hereby conferred or intended so to be, the same shall be subject to the same provisions and indemnities of the Commissioners by the Company, and to the same control of the Commissioners (where such at present exists under the said Agreements), and to the same limitations (including therein the same tenure in respect of the said works) as now exist in respect of works already created and existing, so that in respect of the conditions, licenses or privileges now conferred, the same shall be as if they had been created or granted by or had been a part of the matters included in the matters comprised in the several Agreements and Acts set forth in the Schedule hereto.

And these Presents further Witness in respect of change No. 3 described above that the work covered thereby shall be commenced in the easterly bed of the River within the Canadian boundary line, and if found on such experiment to produce results satisfactory to the Commissioners for the Queen Victoria Niagara Falls Park, the work may be proceeded with to completion according to the plans and specifications approved or to be approved from time to time by the Commissioners, but if the turbulent state or condition of the water surface as presented now (that is to say before the sunken weir or any part thereof be deposited or sunken as above provided) shall in the opinion of the Commissioners be altered or affected prejudicially, all work upon the proposed submerged weir shall be stopped at once, and the license to deposit the said rocks or cement blocks as given or granted by the Commissioners to the Company or as may be inferred from these presents, shall be revoked as a consequence of the disapproval by the Commissioners as hereinbefore provided, unless and until the Commissioners shall notify the Company that the work may be proceeded with upon a changed or modified plan and so on from time to time the cessation or the resumption of the work being always under the control of the Commissioners. The opinion of the Commissioners from time to time shall be final and any Resolution of the Board of the said Commissioners containing their opinion in writing communicated to the Company shall be notice to the Company of the Commissioners' decision.

And the Company covenants with the Commissioners that it will carry into effect, observe, perform and fulfil all the provisions and stipulations on its part contained herein, and that any works to be constructed under these Presents shall be constructed in accordance with the provisions hereof.

It is hereby understood and agreed that (a) in the event of the disapproval by the Commissioners during the progress of the said change No. 3 of the experiment of sinking the rocks or cement blocks or of the formation of the submerged weir as far as it has been constructed or attempted to be constructed, or (b) if in the opinion of the Commissioners the said works are disappointing, and the Commissioners direct or order the stoppage of all work relating to the said weir, or on or about the same, or (c) if the approval of the Commissioners has not been obtained as prescribed by these presents, and the Company disregards the order to stop or any direction relating to the said weir or any part thereof, and the Commissioners take or institute proceedings by reason of the disregard of the said order to stop, or of any directions of the Commissioners relating to the work,



the Company in any proceedings in any court of competent jurisdiction may be enjoined against proceeding with any works or acts to which the assent or approval of the Commissioners shall not have been obtained, or with any works or acts of which their approval had been obtained, if the Commissioners disapprove of the manner in which the work is being carried out or of the result as it then may appear, and it is agreed and conceded that the opinion of the Commissioners and their disapproval shall be taken as final on the matter which the Commissioners shall have decided in the premises.

In witness whereof the corporate seal of the Commissioners has been affixed to these Presents by the Chairman, who has signed the same, and the Company has affixed hereto its corporate seal under the hand of A. Monro Grier, Vice-President and Secretary.

THE COMMISSIONERS OF THE  
QUEEN VICTORIA NIAGARA FALLS  
PARK,

By J. W. LANGMUIR,  
Chairman.

Attest:  
JOHN H. JACKSON.

(Seal.)

CANADIAN NIAGARA POWER  
COMPANY,

By A. MONRO GRIER,  
Vice-President and Secretary.

Attest:  
F. C. DURDAN.

(Seal.)

Assented to by the City of Niagara Falls.  
(Seal.)

W. J. SEYMOUR,  
Clerk.

CHAS. C. COLE,  
Mayor.

March 6th, 1913.

Assented to by International Railway  
Company.

J. A. MCKENNA,  
Assistant Secretary.

T. E. MITTEN,  
President.

March 7th, 1913.

(Seal.)

SCHEDULE.

- (1)—7th April, 1892 ..... Agreement between Commissioners and Stetson,  
*et al.*
- (2) 14th April, 1892 ..... Statute 55 Victoria, Chapter 8.
- (3) 1st April, 1899 ..... Statute 62 Victoria (2), Chapter 11, Sec. 35.
- (4) 15th July, 1899 ..... Agreement between Commissioners and Canadian  
Niagara Power Company and Albert D.  
Shaw, Francis Lynde Stetson, and William  
B. Rankine.
- (5) 15th July, 1899 ..... Agreement between Commissioners and Canadian  
Niagara Power Company.

- (6) 19th June, 1901 ..... (a) Agreement between Commissioners and Canadian Niagara Power Company for extension of time.
- (7) 19th June, 1901 ..... (b) Agreement between Commissioners and Canadian Niagara Power Company *re* Shaft, etc.
- (8) 17th March, 1902 ..... Statute 2 Edward VII, Chapter 11.
- (9) 12th June, 1903 ..... Statute 3 Edward VII, Chapter 7, Section 59.
- (10) 26th April, 1904 ..... Statute 4 Edward VII, Chapter 10, Section 69.

#### RESOLUTION.

At a meeting of the Board of Directors of the Canadian Niagara Power Company, held on the 20th day of September, 1912, the Agreement between the Commissioners for the Queen Victoria Niagara Falls Park of the first part, and Canadian Niagara Power Company of the second part, bearing date the 21st day of November, 1912, was produced, and read, and on motion, duly seconded, it was unanimously Resolved that the Agreement between the Commissioners for the Queen Victoria Niagara Falls Park acting therein on their own behalf and with the approval of the Government of Ontario, and the Canadian Niagara Power Company, submitted to this meeting, be and the same is hereby approved and adopted, and Mr. A. Monro Grier, the Vice-President and Secretary of the Company is hereby authorized and directed to execute the same on behalf of this Company in triplicate by affixing the Corporate Seal of this Company thereto and to the plan and specifications attached to the said Agreement and forming a part thereof, and by signing the said Agreement and the said plan and specifications as such Vice-President and Secretary, and that when so executed the said Mr. Grier is authorized, empowered, and directed to make delivery thereof as the act and deed of this Company, and that the said agreement, plan and specifications be entered in full on the minutes of the meeting which is accordingly done below.

I, A. Monro Grier, Secretary of the Canadian Niagara Power Company hereby certify that the foregoing Resolution is a true copy of the Resolution passed at a meeting of the Board of Directors of said Company held on the 20th day of September, 1912.

A. MONRO GRIER,  
Secretary.  
(Seal.)

#### CANADIAN NIAGARA POWER COMPANY.

##### SPECIFICATIONS FOR PROPOSED INTAKE ALTERATIONS.

Niagara Falls, Ontario, April 24, 1912.

These specifications describe the character and extent of the alterations to its present intake which the Canadian Niagara Power Company proposes to make in and under the Queen Victoria Niagara Falls Park.

The contemplated alterations may be briefly described as follows:

1. The construction of an ice shield of masonry 390 feet long, to extend across the present inlet with its outer face parallel to and 150 feet distant from the

centre line of the bridge which now crosses the narrow portion of the intake. The said ice shield to be pierced below the water surface with a series of openings through which to enable the water to flow into the present forebay. Upon the completion of the above described ice shield, the present ice shield will be removed.

2. The construction of two pairs of underground conduits between the river and the upstream end of the present forebay. Each conduit to have a clear width of about 22 feet and a depth sufficient to efficiently conduct the water from the river to the existing forebay. The conduits to be made of substantial concrete masonry resting upon solid rock and completely buried beneath the surface of the Park. The entrance to the two pairs of conduits to be flared out to permit the efficient entrance of the water and to extend a distance of 290 feet upstream from the end of the ice shield described above. The entrance to be protected by a substantial masonry wall pierced below the water surface with a series of openings through which to enable the water to flow into the conduits. The wall to be back-filled and the filling graded off to suit the adjacent surface of the Park.

3. The submerged openings in the ice shield and in the entrance to the conduits as above described to be fitted with means of controlling the flow through each opening in order to partially shut off the inflow through the present intake and cause the water to flow through the underground conduits into the upper end of the present forebay.

4. At the point at the north end of the present forebay where the overflow into the present ice sluiceway is located, the corners of the masonry to be rounded off and right angle turns removed in order to facilitate the discharge of ice from the forebay into the sluiceway.

5. The construction of a submerged weir extending from the downstream end of the ice shield described above in paragraph (1), approximately at right angles to the direction of flow of the river, out to the shoals approximately 775 feet distant.

6. In all operations connected with the construction, proper precautions shall be exercised to prevent injury to persons and property and to prevent interruption to the passage of cars on the tracks of the Niagara Falls Park and River Railway.

7. Before excavating for the conduits, cofferdams shall be erected at the river shore about the site of the conduit entrance wall and across the south end of the existing forebay to exclude the water so that the work of constructing the conduits can be done in the dry. The space enclosed by the cofferdams shall be drained during construction through one of the unused turbine inlets into the wheelpit.

8. The construction for the masonry ice shield to be erected across the existing intake as described in paragraph (1) shall be carried out by means of cofferdams or pneumatic caissons.

9. Upon the completion of the work, the grounds disturbed by it shall be neatly graded and grass plots, roadways, and walks shall be put in condition equivalent to that in which they are now.

10. The alterations above described shall be carried out in accordance with attached drawing on linen, C. N. P. Co., No. D12328, entitled Plan F, General Arrangement of Proposed Intake Alterations, and dated April 24, 1912, or as the same may be modified by joint consent of the Commissioners of the Queen Victoria Niagara Falls Park and Canadian Niagara Power Company.

THE COMMISSIONERS FOR THE  
QUEEN VICTORIA NIAGARA FALLS  
PARK.

J. W. LANGMUIR,

Chairman.

(Seal.)

CANADIAN NIAGARA POWER  
COMPANY

By A. MONRO GRIER,  
Vice-President and Secretary.

(Seal.)

ORDER IN COUNCIL.

Copy of an Order-in-Council approved by His Honour the Lieutenant-Governor, the 21st day of May, A.D. 1913.

Upon the recommendation of the Honourable the Minister of Public Works, the Committee of Council advise that pursuant to the provisions of section 35 of the Act of the Legislature passed on the 1st day of April, 1899, 62 Victoria (2) and Chaptered 11 Your Honour may be pleased to approve of the accompanying agreement bearing date the 21st day of November, 1912, with identified plan thereto attached made between the Commissioners for the Queen Victoria Niagara Falls Park, acting therein on their own behalf and with the approval of the Government of Ontario, and therein called the "Commissioners" of the First Part, and the Canadian Niagara Power Company, thereafter called "The Company" of the Second Part, respecting the construction of work and exercise of powers for the use of waters of the Niagara River within the Queen Victoria Niagara Falls Park under the above section 35, Chapter 11, 62 Victoria (2) the said agreement of the 21st day of November, 1912, being in accordance with the agreement of 15th day of July, 1899, made and approved by the Lieutenant Governor in Council on the 20th July, 1899.

Certified,

J. LONSDALE CAPREOL,

Clerk, Executive Council.

# QUEEN VICTORIA NIAGARA FALLS PARK.

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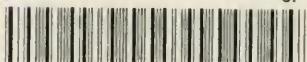




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