

HAMILTON

TOWN PLANNING



THE JOURNAL OF THE TOWN PLANNING INSTITUTE OF CANADA

DECEMBER 1926

VOL. V.

NO. VI.

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OTTAWA

Planning the British Columbia University Endowment Lands

A GREAT TOWN PLANNING SCHEME FOR WESTERN CANADA

BY ALFRED BUCKLEY

During the past four years we have made frequent and appreciative reference to the planning of the British Columbia University Endowment Lands at Point Grey, Vancouver. We are able to present in this issue a considered statement of the history of the movement and the present situation of this magnificent project, written by the resident engineer, and approved by the British Columbia Minister of Lands.

To the professional town planner, the engineer, surveyor, architect or landscape architect, whose first interest may naturally centre in the scientific and artistic technique of the project, the modest, restrained and direct style of the report will be attractive and agreeable. He will follow step by step the means that have been adopted to exemplify the known and proved principles of scientific planning. He will realize that the time has come in Canada, as in other countries, when men are to be convinced by actual demonstration that the philosophy and science of town planning, based, as every science must be, upon theories that seem fantastic and utopian to the average mind are as practical as those astonishing feats of engineering which, a quarter of a century ago, were received with incredulous derision.

The Social Idea

Releasing himself from the technique of the project, which may be theoretically familiar to him, he may then become sociologist, humanitarian and even patriot. From the study of this great scheme there will be revealed to him something of the social implications of the project and he may feel a glow of pride that it has been undertaken by a government of one of the provinces of Canada. He will notice that no one concerned seems to doubt that it was a right and wise thing to do. He will not himself doubt that it must lead on to success and expanding ideas as to the public uses that may be made of the undeveloped areas of Canada. He will see the wilderness and the solitary place blossoming with the roses of great social ideas.

The social problem was the education of the youth of British Columbia and beyond that the great hope of an educated democracy, which alone can make democracy something better than a terror. Almost every magazine in these later days seems to contain a nerve-racking revelation that the triumph of democracy has but enthroned ignorance and stupidity in place of autocratic authority. Certain countries are fleeing from democracy as from a terror, and once more welcoming the dominant tyrant. There is no cure for the evils of democracy, it is said, except education. So only can Reason attain her rightful sway.

The British Columbia government wished to make it possible for every boy and girl in the province to have the incomparable advantage of a university education. But the problem of finance loomed large. Householders and businessmen can-

not stand unlimited taxation even for so splendid an object as the education of their youth. There were government-owned lands lying idle and bringing in no revenue. The minds of the legislators turned first to the agricultural lands owned by the province as a possible source of revenue. But isolated farming in British Columbia has special difficulties, (*experto crede*) and no humanized and scientific scheme of directed, assisted and supervised farm settlement, such as is now proving successful under the Federal immigration scheme, had then been conceived. The sale of wild lands for farm purposes as a source of endowment revenue for building the British Columbia University was not successful and had to be abandoned. But certain suburban lands near Vancouver and near the site of the future university were at the disposal of the government. Could not these be utilized and utilized in some more intelligent way than throwing them to speculators in the old time fashion, at prices next to nothing, to lie unimproved and unused for decades, waiting for a population to whom no inducement for settlement was offered beyond raw swamp lands, covered with mighty stumps?

Why Not Town Planning?

The idea of town planning was in the air and suddenly it took root in the minds of the legislators. Why not plan the whole area concerned surrounding the university site on modern, scientific lines, under one control, and under the guidance of scientific men, and make it so attractive that people would want to settle there because order and beauty had made the place desirable? Urban settlement multiplies land values. Why not make urban settlement desirable by the creation of civilized amenities and then reap the earned increment of land values—instead of giving it away as unearned increment to speculators—to finance the university project, which meant the provision of university education for the boys and girls of British Columbia?

Scientific Humanism

Scientific humanism was born. Something vastly more important and more interesting than party politics was occupying the minds of legislators. The first principles of psychology—human thinking, feeling, desiring, likes and dislikes, happiness and misery were not in this case to be grossly neglected, as they usually are by land speculators and land developers. The science of the social organism was called in for service.

This is the idea that has now fructified. It is and was a town planning idea. The 2,700 acres of endowment lands are to be planned as a municipal unit, under the control of town planning law. The land values created by scientific planning and by the people (for even now these lands will be valueless unless the people occupy them) are to be con-

served to finance a fine public cause and to relieve people from the considerable cost of educating their own and other people's children. They are also to be conserved for the provision of such living conditions that no resident can complain that his life is being worn away by needless noises, dirty smoke, chemical stinks, needless ugliness, jumble building, poverty of light and air and inability to find room for himself and his children to play and to find some contact with natural beauty.

Scientific Method

The details of the project are supplied in the accompanying article, but certain significant social and scientific implications may be here briefly mentioned. When the project was determined, a Site Commission was appointed to decide upon the location of the proposed university. A complete topographical survey of the whole area was undertaken. This means that a competent technical staff was employed from the beginning. Need one say again that the failure to do this in other quarters is responsible for the stagnation that characterizes most of our provincial Acts? The immense importance of town planning to the welfare of the people of Canada and to national prosperity has not yet dawned upon many of our provincial legislators, and on the score of a false economy, town planning progress is stifled in Canada when it is advancing by leaps and bounds in practically every other civilized country in the world.

The old subdivision plans were considered and remodelled in accordance with modern town planning ideas. Roads that had difficult grades were relocated and the grades reduced from 10 and 11 per cent to 4 per cent. The clearing was so serious, as everybody who knows that part of British Columbia will realize, that the lowest tender ran to \$700 an acre. This kind of thing would have dismayed any private speculator, and the fact that it did not dismay the British Columbia government proves that some things can be done best by this country by large scale operations, and sometimes only by governments, and that we may sentimentalize much too much about the virtues of private enterprise.

Public utilities, such as electric wiring, and telephone systems, have been laid underground where possible, and sidewalks have been provided. Corners of streets have been rounded so that this work will not be done wrongly in the first case and have to be rectified later at double expense. The average size of the lots is 85' by 175', giving an average area of 14,000 square feet. On the arterial roads no turn-outs to the individual lots are permitted. Ingress is provided from the parallel and minor streets at the rear of the blocks. A rapid transit road is to be realized. Major roads run from 80' to 100' and minor roads from 40' to 60', thus shattering the tradition of the invariable 66' road. The planting of trees and shrubs has been studied with as much care as the pavements. No tram lines are to be installed. Their place will be taken by a fleet of motor busses. The home sites are to be safeguarded by zoning regulations.

Modified Leasehold

Lots can be leased for 99 years or can be bought outright. Probably the need for immediate financial returns appeared to the authorities to stand in the way of a thorough-going modern leasehold experiment. It is being gradually proved in Europe, that, aside from quick returns and in the civilized modern form adopted by the English Garden Cities, the long lease is better economy for the homemaker, all that any reasonable man needs to assure security of tenure, since the lease is practically perpetual, and better economy for the nation, especially if the lease carries an obligatory clause compelling use of the land. European thought is moving to the idea that the use of land is so important to a nation that land can no longer be considered a "commodity" to be bought and sold and held out of use at the will and convenience of the buyer. The crying need of Canada is the economic release of Canadian land from the grip of the speculator. The Liberal and Labor parties in England are committed to this reform. Mr. Cauchon has been urging it in Canada for many years. At the recent International Town Planning Conference at Vienna, the chief engineer of the city stated his views on this subject in the following words:

The price of land, in a great town, for the most part, does not rise in a natural way, i.e., in proportion to the development of the area, but is artificially driven up by speculation and operates then to raise rents and the purchase price of land required by the commune for roads and public buildings. The reason for this undesirable position was for a long time unrecognized and it was not until the last few decades that *the idea began gradually to spread that land is not an ordinary commodity but a common necessity for all.*

There are two remedies by which communes can safeguard themselves against this constant land speculation. They are restriction of the density of population and *the public acquisition of land.*

The late George Cadbury, influenced by the idea that land owning was a "natural" desire, which it was good to satisfy, tried the freehold system in the disposition of his home-sites at Bourneville Garden Village, but later was compelled to abandon it in favour of leasehold, because once land had passed from unified control, the whole integrity of his town planning project became endangered. In the Vancouver University project some lots will obviously pass from the unified control, but the idea doubtless prevails that the safeguarding of the amenities of the scheme will be secured by zoning regulations. It is good to see that no dependence is to be placed on private restrictions, since such restrictions are dead failures, because they usually lapse and collapse when property changes hands.

State Credit for Housing

The scientific humanism of the project is again manifest in the provision to advance to the prospective builder by way of loan an amount of money

not exceeding 60 per cent of the cost of the house, to a maximum of \$7,000. Thus it will be possible for a home builder to lease a lot, pay all taxes and borrow the maximum for the monthly sum of \$70. Thus provincial credit is established for housing purposes—a great forward step. Here are some of the elements of the Public Utility system of housing in the Old Country and some escape from the cast-iron individualistic philosophy that has made this continent so insusceptible to social reform. Any one who cares to see a really philosophical discussion of the national benefit of fusing what is best in individualism and in social co-operation may be referred to Havelock Ellis' last chapter in "The Task of Social Hygiene."

A Real Estate Scheme?

"This is a real estate scheme," says some one, and of course there is no doubt about it, but that is not the whole story. It is a real estate scheme charged with scientific humanism and engineered by scientific men for a great public cause and not for the profit of a group of land speculators caring for nothing but the sale of the land to the highest bidder. The prices of lots run pretty high, but the cost of development is also high and the standards of public service and amenities are also high. It is in no sense a housing scheme for the low paid wage earner, such as the English Garden City has in mind, but it may lead on to that. It is the beginning of large scale town-planning in Canada and its influence will be far-reaching and revolutionary, in a peaceful and scientific way, throughout the whole of Canada. Sometime we shall see national credit applied to the housing of working families.

A Glorious Canadian Example

To those of us who are engaged in the journalism of the movement it will be a glorious Canadian example to which we can turn for proof of the practicability of the town planning idea instead of wandering all over the world for our demonstration material. It will also show what public men whose minds are hospitable to new ideas and wise enough to accept the co-operation of trained scientific men can do for their day and generation. From the dreary waste of political squabbling we can turn with relief to these serious-minded men who are using their opportunity of public office to forward a great national cause. Behind the public men to whom credit will naturally first accrue for the achievement of this magnificent project are men of scientific imagination patiently housing the ideas of the new science of the social organism, which are part of their training and study, and responding to the challenge of difficulty with original solutions, children of their own brains and hearts, offered for service to the community. In a great passage Huxley once said that he knew nothing so much like the Christian conception of submission to the will of God as the scientist's humble devotion to a scientific problem.

This scheme will succeed because it is in the hands of men of scientific training and temper, whose business is not, as this report shows, to exalt

themselves, but to serve their day and generation. Town planning in Canada will only begin to make headway commensurate with the progress of other countries when room is made for its men of science in every province and in every town and city to deal with the problem of our ugly, congested, and inefficient towns and cities. Give them their chance and men of science must become sociologists. Stifle them and disregard them and they will remain mere technicians, detached and cynical and largely sterile.

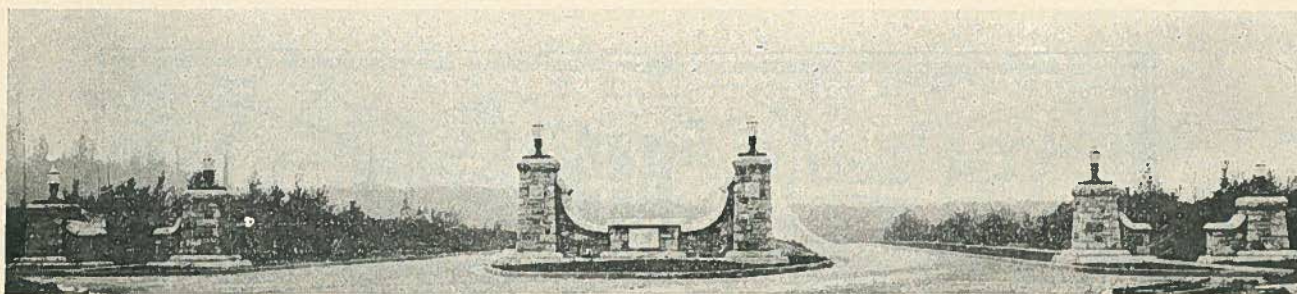
In *Harpers Magazine* for October, Dr. Will Durant, author of a history of philosophy which has become a best seller in the American market, studying the political phenomena of his own country under an article entitled "Is Democracy a Failure?" comes to the conclusion that things are as they are because men of science are shoved into the background in the administration of their country. He compares "the democratic disfranchisement of the educated man" to the former "aristocratic suppression of new talent by ancient pedigree." "A democracy without education," he says, "means hypocrisy without limitation; it means the degradation of statesmanship into politics; it means the expensive maintenance, in addition to the real ruling class, of a large parasitic class of politicians whose function it is to serve the rulers and deceive the ruled; it has made all public life a sewer of corruption which poisons the breath of heaven. We are rank cowards if we any longer blink this evil denouement of our wishful dreams. If we cannot find some amendment to democracy that shall cleanse it of its villianry and rid it of its ignorance, we may as well present our Constitution to some stripling nation and import a king."

The Town Planning Institute of Canada has stimulated to study and efficiency scores of men who are capable of handling the town planning problems of Canada. It is high time a better chance were afforded for the exercise of their talents, in their own country. Some of these men have been concerned in the great project under review. Our literary men have had to find an outlet for their talents and energies in other countries. We should be wise enough to keep our town planners and find them work to do. Science is trying, if we may use the wise words of Pasteur, "by obeying a law of humanity to extend the frontiers of life," and no science has greater potentialities to "extend the frontiers of life" than the science of town planning. The British Columbia University authorities are aiming at an educated democracy and they are using the new science of the social organism.

"Industry and Humanity"

Industry and Nationality exist for the sake of Humanity, not Humanity for the sake of Industry or Nationality. The production and use of material wealth, and the political organization of society, can be of enduring value to mankind only in so far as they serve to advance human well-being.

—Rt. Hon. W. L. Mackenzie King.



UNIVERSITY BOULEVARD ENTRANCE

The Planning of the University Endowment Lands, Vancouver, British Columbia

BY H. L. McPHERSON, RESIDENT ENGINEER AND AGENT

Historical Sketch

Although the creation of a University of British Columbia was first advocated about fifty years ago, and although during the following thirty years various attempts to establish it were made, it was not until 1908 that the Provincial Legislature passed an Act establishing and incorporating the University of British Columbia. Two years later a Site Commission was appointed to decide upon a location for the proposed University. After a thorough examination of the entire Province, the Commission recommended the vicinity of Vancouver and in 1911 the Legislature passed an Act giving authorization to the granting of the site to the University at the western extremity of the Point Grey peninsula. As subsequent events have proved, the Site Commission chose more wisely than they perhaps realized at the time.

Endowment

With the creation of the University it was realized that it was both desirable and necessary to endow the institution in order that adequate funds might be available for the erection of buildings and for the provision of equipment in keeping with a University of the first order. With this in view the Government set aside some 750,000 acres of agricultural land, scattered throughout the Province, to provide an endowment fund.

At the time this policy was formulated it was looked upon as a wise provision, as there was a strong movement in farm lands and it appeared that these lands would furnish a considerable fund for University purposes. Subsequently, however, with the changing economic conditions, it was found that very little return in the near future could be expected from these farm lands, and that some other source from which a revenue could be expected, would have to be provided.

Being a Provincial University, all expenses in connection with the institution are paid out of public funds, and the annuity required for its upkeep is very considerable.

The University was temporarily established in the City of Vancouver, near the General Hospital, pending the development of the permanent site, and the

erection of buildings. In spite of the War the University expanded very rapidly, and after the cessation of hostilities the attendance greatly increased. As it became apparent that the development of the permanent site would have to be accelerated, and in order that the cost of the new buildings and equipment might not be a permanent tax upon the people of the Province, it was decided specifically to set aside the large tract of land owned by the Province in the westerly part of the District of Point Grey as a special endowment to the University in lieu of the agricultural lands which had not achieved the purpose expected of them. It was felt the development of these lands for residential purposes would provide a surer, safer and earlier return for an endowment fund than any other method.

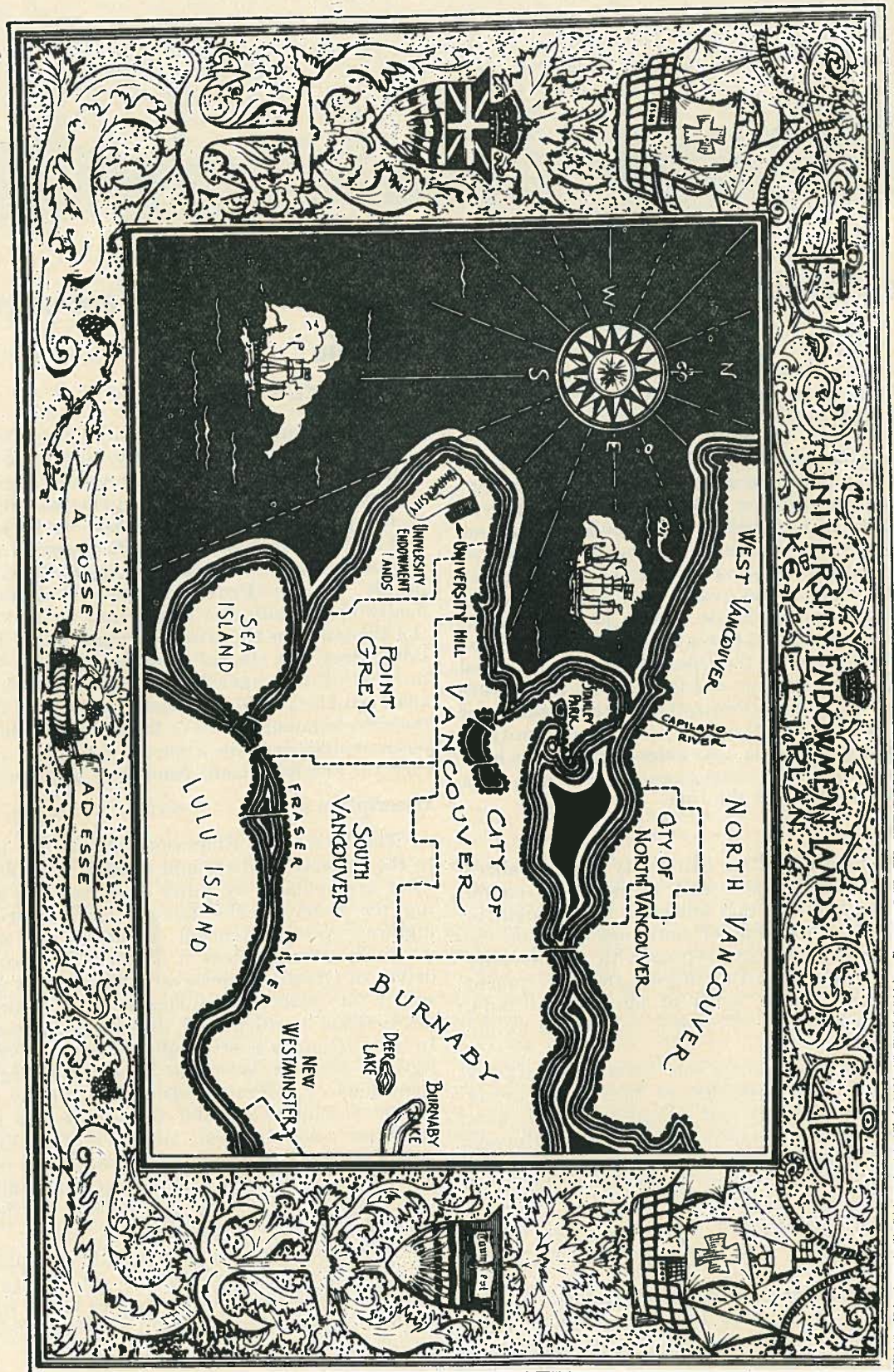
Description of Site

The University Endowment Lands are contiguous to the University itself and contain some 2,700 acres. They are bounded by water on three sides and, skirting the water, is the famous Marine Drive. This highway was constructed in 1911. On account of its scenic attractiveness, it is one of the most popular drives in Greater Vancouver. The area is admirably suited for residential purposes, being situated on a conspicuous headland of the inland waters of the In all directions a strikingly impressive view is afforded—westerly, over the Strait of Georgia to the mountains of Vancouver Island; northerly, over the Pacific Ocean, about 300 feet above sea level and six miles from the heart of the city of Vancouver, waters of Howe Sound to the snow-capped mountains of the Coast and the rich Britannia Range, and, southerly, to the quiet pastoral landscape of the delta lands at the mouth of the Fraser River.

In the main the site is sufficiently undulating and rolling to preclude monotony. At the same time with the exception of three ravines in the north-east portion of the area, there are no steep inclines nor abrupt changes of grades.

Initiation of the Project

In the beginning of the year 1923 it was decided to proceed with the initial work.



KEY PLAN, BRITISH COLUMBIA UNIVERSITY ENDOWMENT LANDS

A subdivision plan of the area was already in existence, but it was felt that a closer study of the topography could be given and building lots of a more suitable and a more readily saleable area obtained.

Commencement of the Planning

A complete topographical survey of the whole area was undertaken and the first work of the planning was the selection of the location of the main arterial roads.

At this particular stage the Government decided to commence work on the University Buildings. The two permanent buildings, one of which has been commenced, were to be completed, plans for the semi-permanent buildings were prepared, contracts were entered into and the opening of the University in its new home was set for September, 1925.

Simultaneously instructions were issued to proceed with the development of a unit of 100 acres.

The Government-owned lands in the westerly portion of the District of Point Grey originally contained some 3,500 acres. In the preparation of the plans for the first unit some adjustments were made in the boundaries of the University site, and early in 1924 the Governors of the University received a Crown Grant of 277 acres and a 21-year lease on an adjoining tract of 271 acres—a total of 548 acres for University purposes.

The land lying between Marine Drive and the water, some 186 acres within the boundaries of the Endowment Lands, is being reserved. Marine Drive itself covers 61 acres, making a total of 800 acres, approximately, taken out of the original tract of 3,500 acres, leaving 2,700 acres for subdivision purposes.

As mentioned, a tract of 100 acres was to compose the first unit to be developed and it was decided to locate this tract immediately to the east of the northerly portion of the University Site.

Roads

The arterial roads in the entire tract were governed on the one hand by the location of the main avenues of approach to the area through the district of Point Grey from the east and south-east, and on the other hand by the location of roads in the design of the University campus.

When the development of the University Endowment Lands was undertaken, a gravel road existed from Blanca Street (the westerly boundary of the District of Point Grey) to the University site, but, as this road had gradients, in portions, from 10% to 11%, it was deemed necessary to re-locate it. University Boulevard, a continuation of 10th Avenue in Point Grey, is the result of this re-location, and it extends from 10th Avenue and Blanca Street to the southerly approach to the Mall of the University. Fair alignment and a maximum gradient of 4% were obtained. The first unit was located to the north of this highway.

Clearing

Tenders for the clearing of the first unit and a strip 300 feet in width along University Boulevard

from the unit to Blanca Street, 300 acres in all, were called for in August, 1923. Some idea of the nature of the clearing may be formed from the fact that the lowest tender submitted was in the neighborhood of \$700 per acre. The land had been "logged off," leaving the stumps, windfall, slashing and small growth.

Grading

In October, 1923, the sub-grading of the roads was commenced and continued throughout the winter as the weather permitted.

Sewerage and Drainage

In May, 1924, a start on the installation of the sewer system was made. After a careful study as to the best and most economical system, it was finally decided to install the separate system. Vitrified clay pipe was used for the sanitary and concrete pipe for the storm water.

The outfall for the sanitary system entailed the carrying of a pipe some 1500 feet over the Spanish Banks to deep water. Household sewer connections were laid to the street line of every lot, at the time the mains were installed.

The storm water from the area comprising the first unit was discharged into the westerly ravine, whence it flowed to English Bay. In order to secure a check on the calculations and for future reference, a measuring weir was placed at the storm water outfall. A complete record is being kept of the discharge.

Water

The water is delivered to the University area at the Point Grey boundary by the Greater Vancouver Water Board where twin 6" meters are installed. In September, 1924, the laying of the 12 inch main was commenced and the distribution in the unit installed, cast iron pipe of various sizes being used. House service connections were laid to the street line of every lot. Each house is metered and fire hydrants are installed at regular intervals.

Road Paving

After the installation of the sewerage and water systems, paving operations were undertaken late in October, 1924. Owing to inclement weather the work was suspended and was finally completed, insofar as the programme was concerned at that time, in April, 1925.

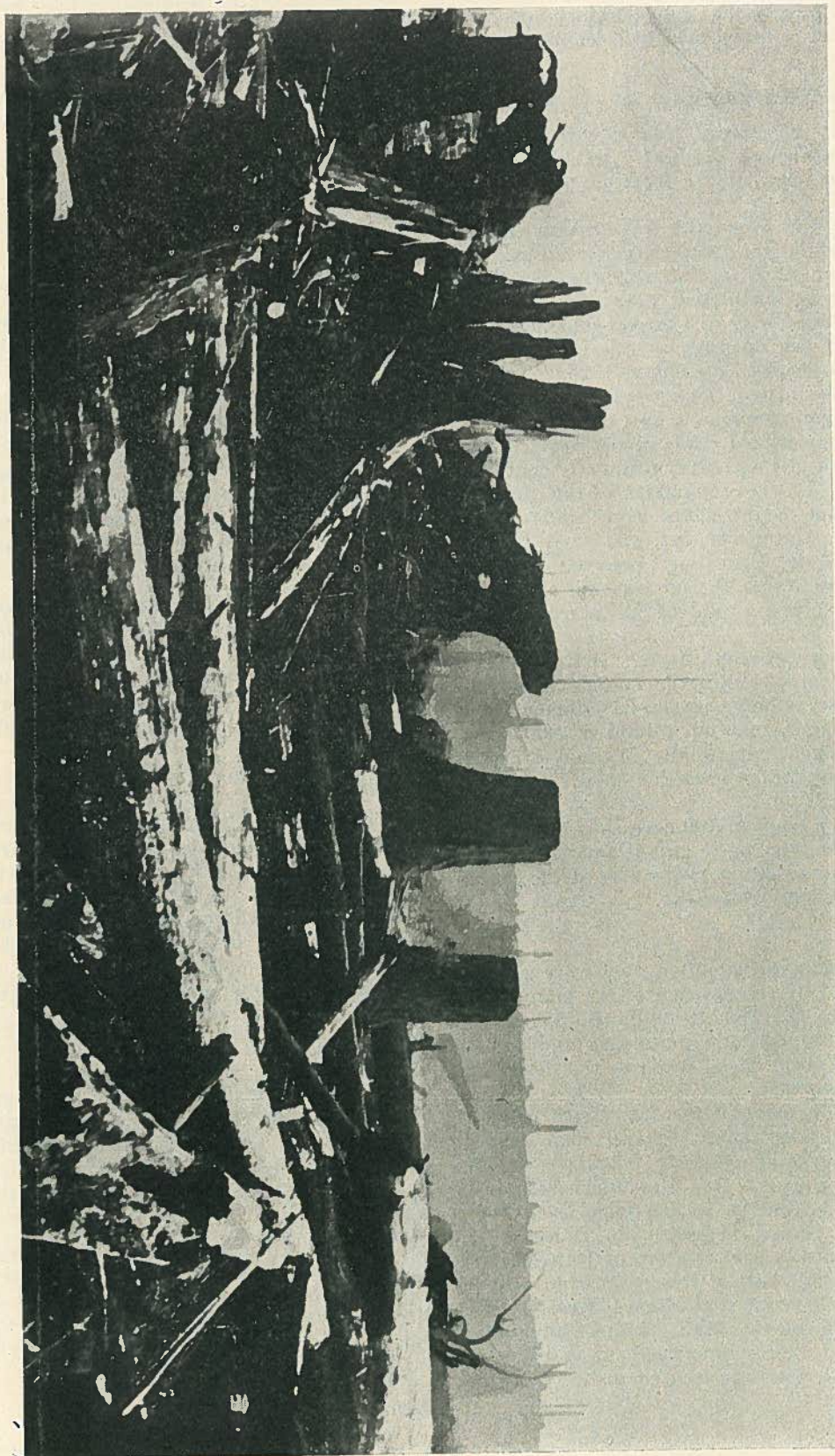
The paving consists of varying thicknesses according to the anticipated traffic. Warrenite bitulithic top, in general, has been utilized, laid on concrete, bituminous or rock base as the traffic would demand. Small sections of water-bound and penetration macadam were also constructed.

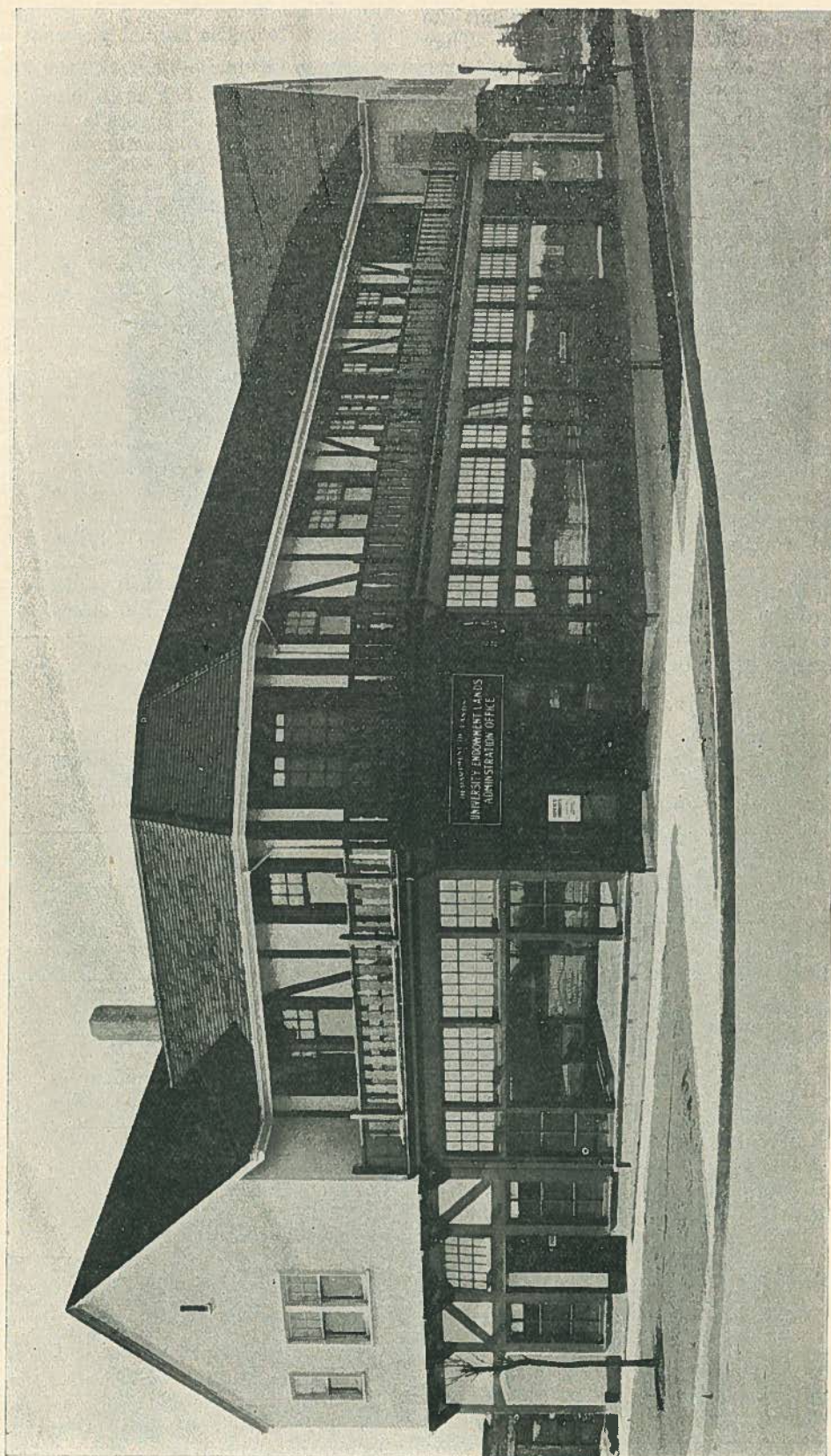
Curbs

Concrete curbs and gutters have been installed on all roads. The curbs have been broken and rounded off for the formation of entrances to each lot.



CLEARING OPERATIONS IN VICINITY AT PRESENT. BUSINESS SECTION





BUSINESS SECTION AND ADMINISTRATION OFFICE

Sidewalks

Concrete sidewalks have been laid throughout the unit and on both sides of University Boulevard. They are 4 inches thick and 6 inches at the lot entrances. In the main they are 4 feet in width and laid one foot from the property line.

Public Utilities

Public utilities, such as electric wiring and telephone system, have been laid underground where possible. The overhead wiring within the individual blocks has been placed on a registered easement at the rear of the lots. These utilities, along with the gas distribution mains have been laid on the boulevards.

Street Lighting

Standard street lighting has been installed on all streets of the unit and University Boulevard. Cast iron standards, manufactured locally, of the Acadian pattern, painted green, have been used. These have been mounted with Solex Tops, Bi-lux and Symmetrical refractors, according to location.

Careful attention has been given to the location of all underground work and a complete and accurate record is on file.

In regard to Unit No. 1, the following table gives data pertinent to the cost of the land and improvements per nett acre. These figures may prove interesting to directors of similar projects.

Unit No. 1

Gross acreage—108 Ac. Net acreage 79 Ac.
Number of Lots all classes—243

Improvements included in cost of land.

Clearing per nett acre ..	\$ 885.00
Grading per nett acre ..	635.00
Cost of raw land valued per net acre	\$4,000.00
Clearing and grading per nett acre—	1,520.00

Selling value of land per nett acre—\$5,520.00

Cost of Improvements, under Local Improvement repayable 20 annual payments.

Cost per nett ac. Sewers (Sanitary & Storm)	\$1,175.00
" Water	475.00
" Sidewalks	250.00
" Curbs and gutters	455.00
" Pavement	1,700.00
" Boulevards and planting ..	180.00
" Street and house lighting*	430.00
" Telephones	25.00

Total cost per nett ac. \$4,690.00

Gas mains were installed direct by the Gas Company.

The property is subject to an annual payment extending to and including the year 1945 in respect of these improvements, and amounts with interest to

* A rebate of \$32.00 per house constructed within the next 3 years in Unit No. 1 will be given by the Light and Power Co.

82 cents per 100 square feet of lot area. The average size of lots being 80' x 175' giving an average area of 14,000 feet. the annual payment averages \$115.00.

The following table shows the amount of development work which has been done to date, chiefly in Unit No. 1 and on University Boulevard.

The amount expended is in the neighborhood of \$980,000.00.

Development Work to Date**Clearing:**

Cleared and grubbed—	300 Ac.
Slashed and burned—	50 Ac.

350 Acres

Sewer Systems**Sanitary:**

Mains	3.25 miles
Connections	2.18 miles
Outfall	0.30 miles

Storm Water:

Mains	3.22 miles
Connections	0.50 miles
Outfall	0.10 miles
Combined Sewer—	0.50 miles

10.05 miles

Water System

Main	1.53 miles
Distribution	2.92 miles
Connections	1.37 miles
Sprinkling system—	1.80 miles

7.62 miles

Light and Telephone Conduit

Telephone ducts—	3.78 miles
Light	0.87 miles

4.65 miles

Concrete Curb and Gutter

Curb and gutter—	9.65 miles
Single curb	2.53 miles

12.18 miles

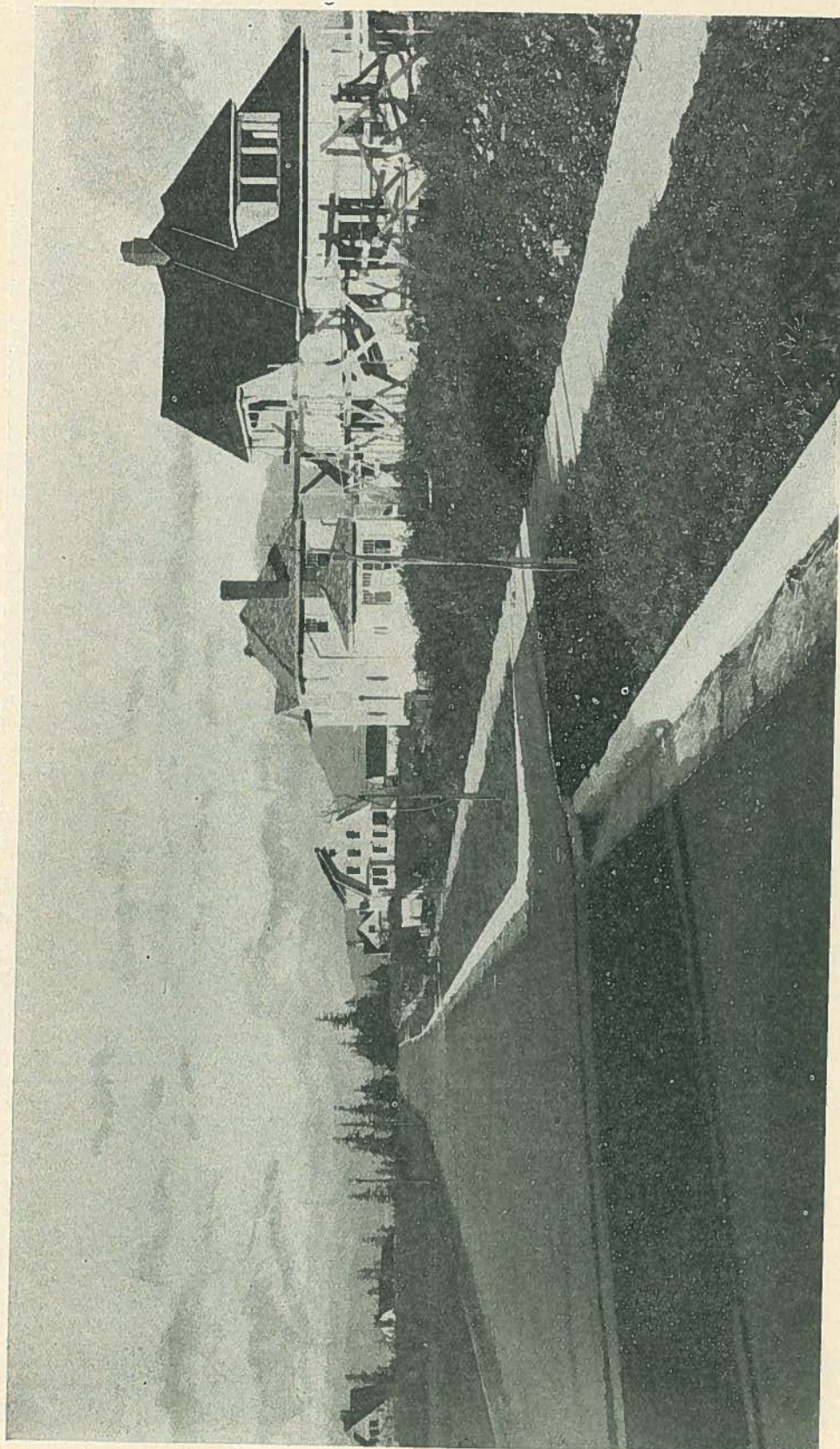
Concrete Sidewalks

4' wide sidewalks—

6.71 miles

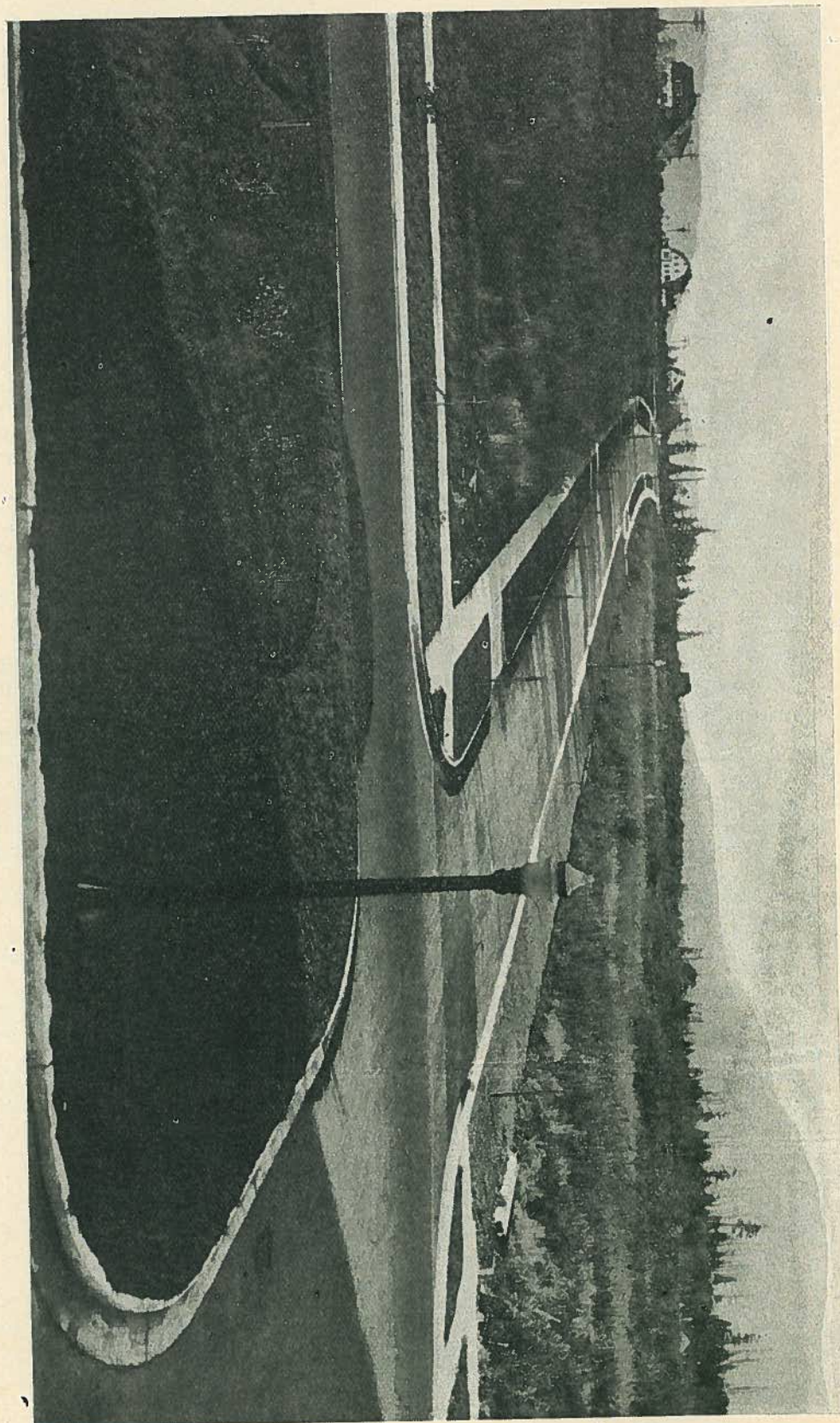
Road Surfacing

Concrete base and Warrenite top—	1.19 miles
Bituminous base & Warrenite top—	4.09 miles
Rock base and War- renite top	7.38 miles
Penetration macad- am	0.41 miles



WESTERN PARKWAY, LOOKING NORTH

McGILL ROAD, LOOKING NORTH



Waterbound macadam	2.54 miles
Gravel	0.50 miles

16.11 miles

Ornamental Street Lighting

Standards Acadian pattern bi-lux refractor ..	110
Standards Acadian pattern symmetrical	20
	130

Mileage of road lighted—641 miles

Boulevards and Planting

Boulevards seeded—	23 acres
Trees planted	1,310 acres
Shrubs planted—	5,000 acres

The Plan in General

As has been stated, the easterly boundary of the University site influenced the choice of the location of the first unit. In planning the roads and blocks of this unit an area of about 700 acres of the adjoining territory was considered so as to insure the proper design for all time of the area then particularly being under consideration. Before the final design of this 700-acre tract was made, practically the whole 2,700-acre was considered and the design platted.

The main approaches from Point Grey were connected by the most direct routes, consistent with good alignment and grades, by arterial roads with the main focal points of the University layout. These roads vary in width from 80 to 100 feet. At present University boulevard is the only one paved.

The section of this road shows two 18 foot roads, two 4-foot sidewalks, a planting area 36 feet in width between the roads and two 9-foot planting strips between the roads and sidewalks. As these main roads are designed for fast traffic, the blocks fronting them are unusually long and are one lot deep. No turn-outs to the individual lots have been permitted, but ingress has been provided from the parallel and minor street to the rear of the block.

In residential areas no lanes or alleys have been provided. The minimum frontage of lots being 80 feet, lanes were not considered necessary. The turn-outs are constructed usually in pairs, one on either side of the dividing line of the lots and about 20 feet apart.

The minor roads range in width from 40 to 60 feet. The blocks in general are two lots deep except, as stated, in the blocks fronting on the arterial roads and on the steeper hillsides where, owing to topographical conditions, it was deemed advisable to narrow the blocks.

Planting

An extensive planting programme throughout the first unit and on University Boulevard has been carried out. In addition to the tree planting on all boulevards, evergreen shrubs, both of the coniferous

and the deciduous flowering variety, have been planted on Wesbrook Crescent, Western Parkway and University Boulevard.

Transportation

After considerable enquiry and consultation with the British Columbia Electric Railway Co. Ltd., it was decided not to make any provision for the use of electric street cars in the University Endowment Lands. The British Columbia Electric Railway maintain a fleet of large motor busses which connect with the street cars at Sasamat and 10th Avenue. These busses are exceedingly mobile and serve the inhabitants of the University townsite as well as the University Faculty and students.

Zoning

Careful consideration was given to the ensuring of the essentials which will make the University Endowment Lands as nearly as possible a self-contained municipal unit. Provision has been made for practically every conceivable convenience and necessity, and it is intended that these shall be located in appropriate places. In the general plan provision has been made for public parks and playgrounds, including golf courses, church, public and private school sites, retail business and apartment house sites and provision has been made for fraternity and sorority houses.

The homesites are safeguarded by sane zoning regulations and the practical and binding restrictions which are incorporated in the agreement of sale of each lot will ensure against neighboring buildings of an undesirable character.

Plans of buildings must be submitted before a permit will be issued and no house of a value of less than \$6,000.00 is permitted. Stores and apartment houses are required to be artistically and harmoniously designed.

In tabulated form the following shows the areas now allocated and the prospective percentages of uses to which the Endowment Lands may be put.

Total Area of Original Government-Owned

Lands	3497.6 Ac.
University Crown Grant	277.0 Ac.
University Lease—	271.0 Ac.
	548.0 Ac.
Military Reserve	10.0
Lands reserved between Marine Drive & high water mark—	186.5
Area of Marine Drive right-of-way	60.6

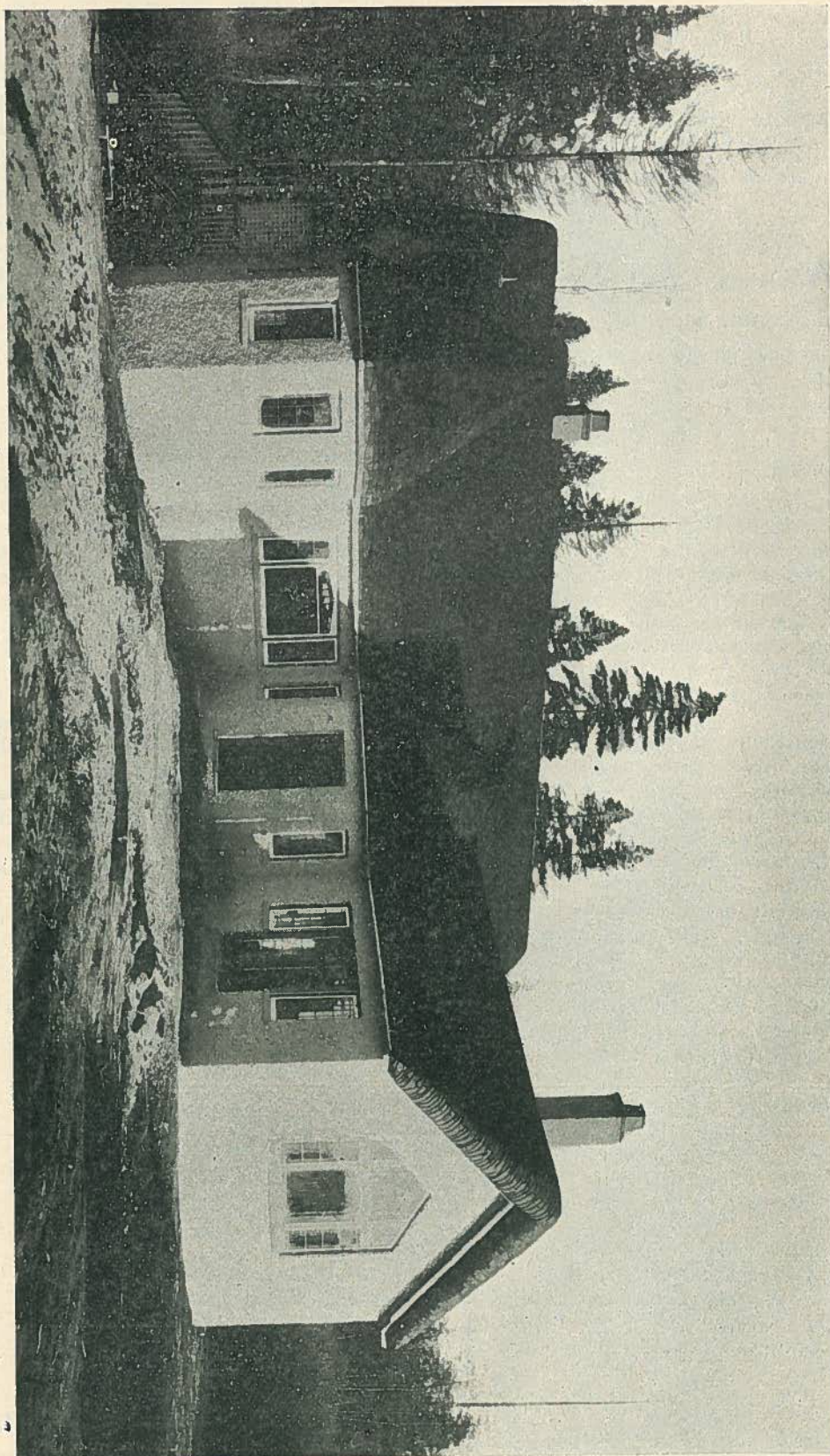
257.1 Ac.

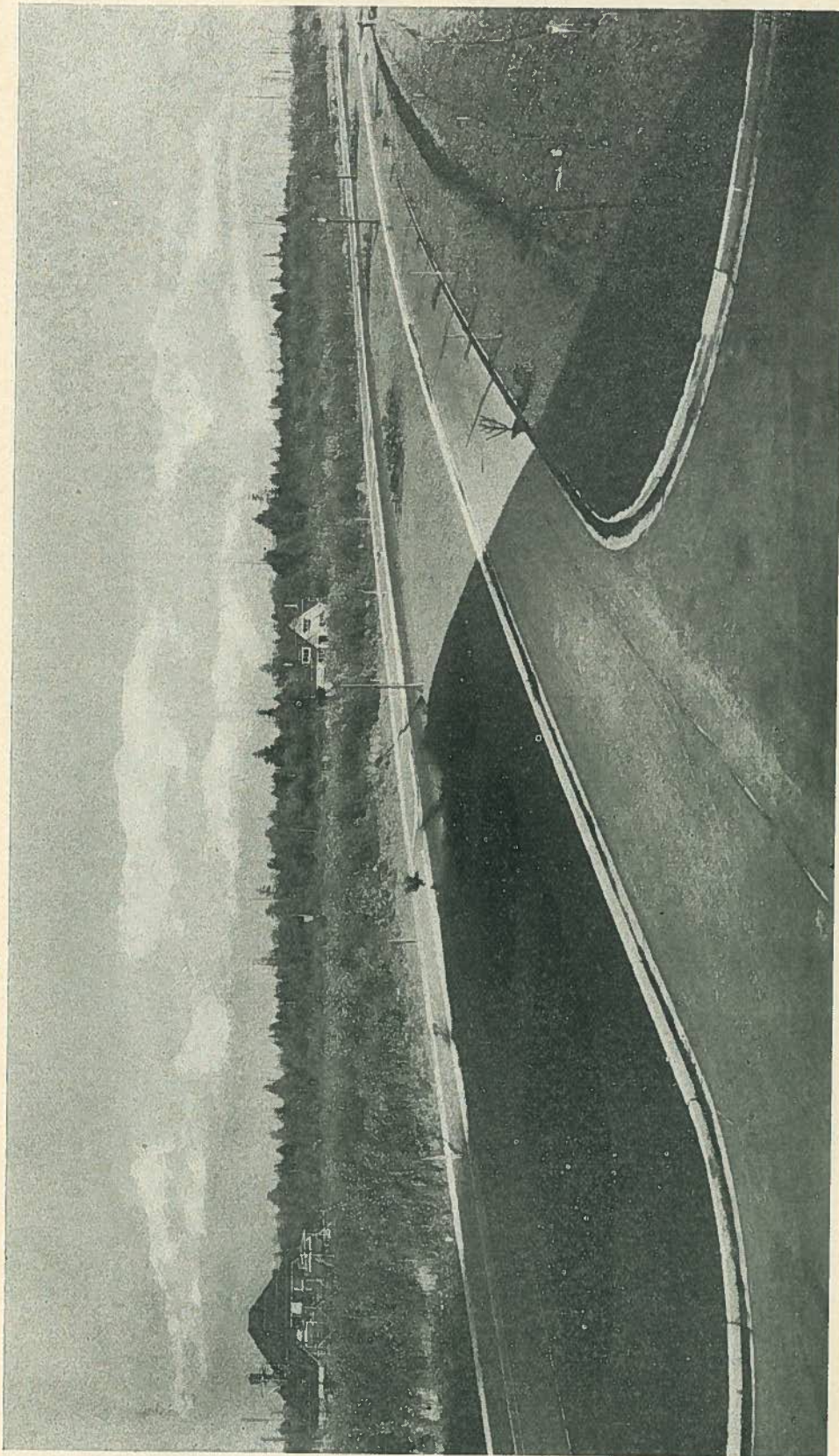
805.1 Ac.

Endowment Lands—2692.5 Ac.—

(a) Residential sites (4250 lots)—	1644.0 Ac.—61.1%
(b) Apartment house sites	21.2 Ac.— 0.8%
(c) Retail business	7.6 Ac.— 0.3%

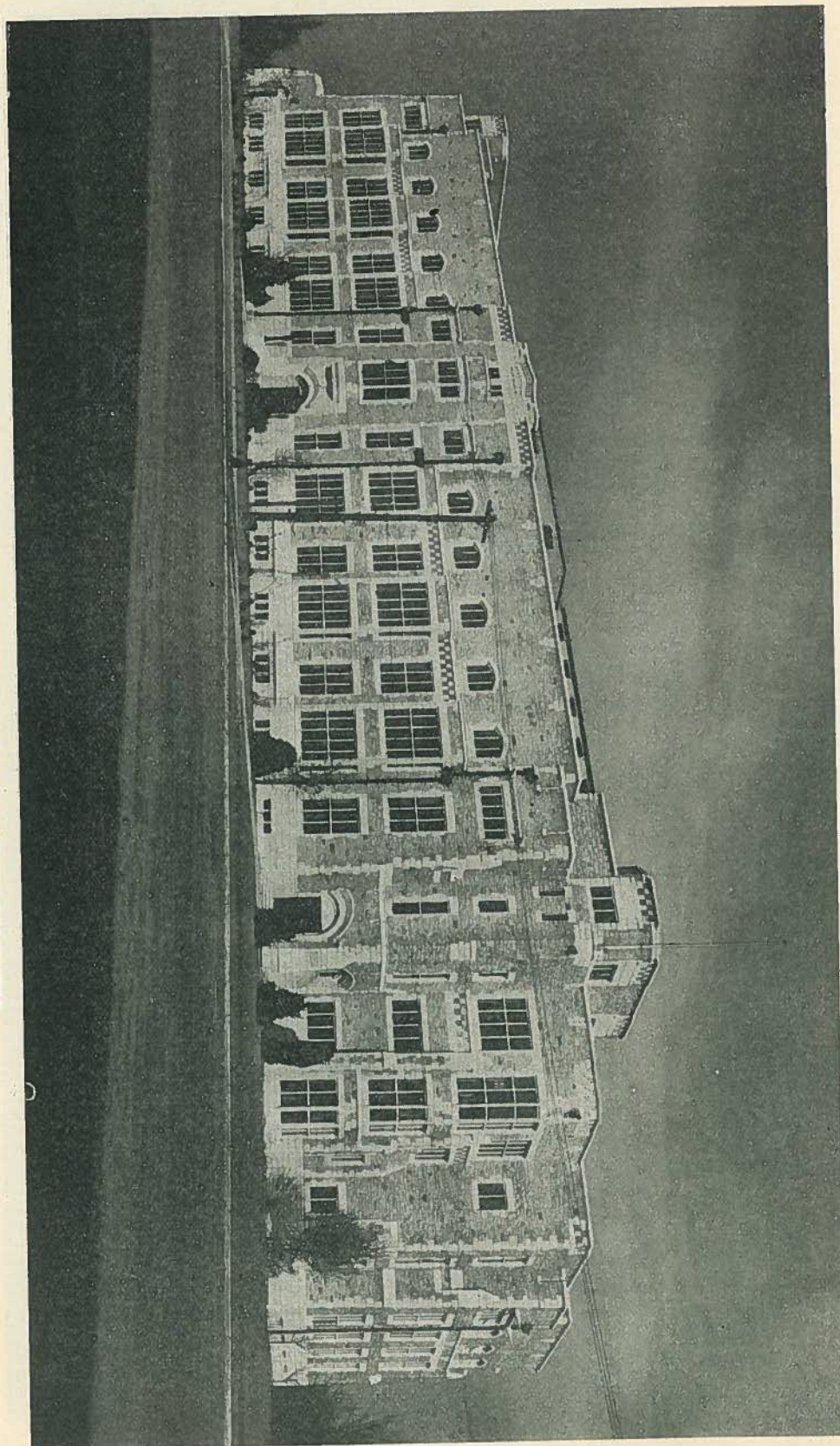
HOUSE, ACADIA ROAD

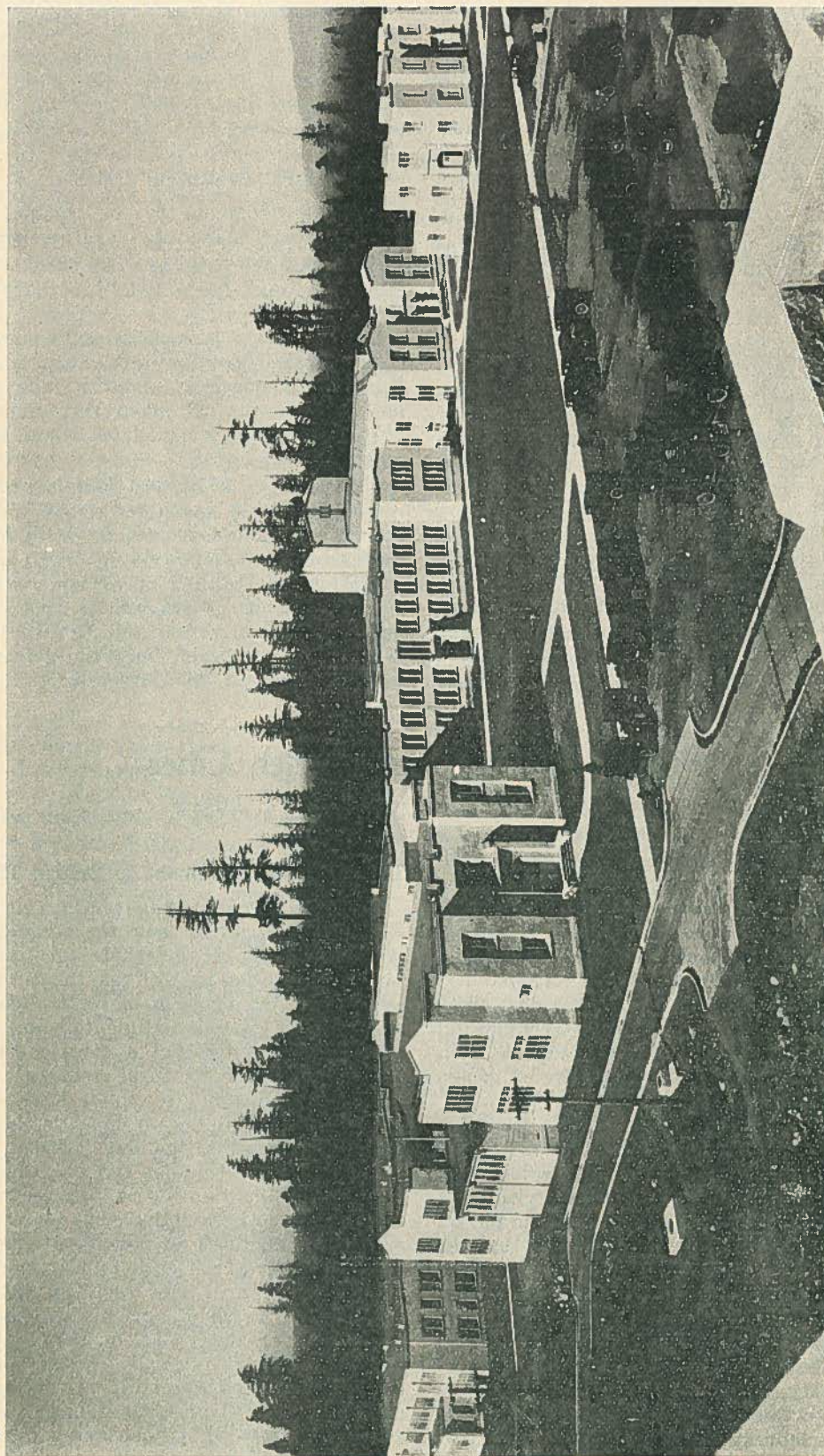




UNIVERSITY BOULEVARD, LOOKING EAST

SCIENCE BUILDING, UNIVERSITY OF BRITISH COLUMBIA





SEMI-PERMANENT BUILDINGS, UNIVERSITY OF BRITISH COLUMBIA

(d) Fraternity and Sorority site—	8.5 Ac.—	0.3%
(e) Church & private school sites—	7.0 Ac.—	0.3%
(f) Proposed community golf course—		
.....	125.0 Ac.—	4.6%
(g) Private golf course	131.0 Ac.—	4.8%
(h) Public school grounds	17.2 Ac.—	0.6%
(i) Public Buildings	10.0 Ac.—	0.4%
(j) Parks and playing fields	140.0 Ac.—	5.2%
(k) Roads and islands	581.0 Ac.—	21.6%
	2692.5 Ac.	100.0%

A portion of the unit under development was placed on the market in May, 1925, and the balance in May of this year.

Sale Conditions

The lots are sold direct through the Administration office or by accredited or registered realtors. The property may either be purchased outright or leased for 99 years on a basis of 6% of the present value of the sites. A considerable amount of property has been taken up and everything points to a rapid building up of the area. At the time of writing, building permits to the amount of \$227,000.00 have been issued. To assist intending home builders the Government is prepared to advance by way of loan an amount not exceeding 60% of the cost of the house, to a maximum of \$7,000.00. The loan is repayable at 6% on several plans. It is possible for a home-builder to lease a lot, pay all taxes and borrow the

maximum, for a monthly sum of \$70.00.

In addition to the Local Improvement Tax, the property is subject to a general tax levied under the "Taxation Act" of 1% of the assessed value, the assessed value being the cost price. A further tax for schools will be levied next year. This is expected not to exceed 12 mills. One of the main attractions for property in the area is the information on taxation before purchasing or leasing.

The development of the Spanish Banks beach, on the north shore of the University Endowment Lands, as a beach resort and promenade, is in contemplation for development at opportune time in the future.

Surveys have been made and comprehensive plans of the project are now in the course of preparation. This sandy beach is about a mile and a half in length and runs out about three-quarters of a mile at low water. It is considered one of the best beaches on the Pacific Coast.

The citizens of British Columbia are, directly and indirectly, vitally interested in this undertaking upon the part of their Government. Out of the raw state a magnificent asset is being created. Through co-operation the building up of this asset, which is destined to become a residential area second to none, may be consummated, and British Columbians, as taxpayers, will benefit materially from the development and sale of the University Endowment Lands.

British Housing and Garden Cities

The Garden Cities and Town Planning magazine anticipates that by the end of 1927 the million new houses for the working classes demanded by Dr. Addison, Minister of Health during the War, will have been built and that the movement towards the two and a half million houses demanded by Mr. Wheatley, the Labour Minister of Health, will have made substantial progress. These are to cost the National Exchequer and the local taxpayer, during the next forty years, the appalling sum of more than six thousand million dollars, though there will be, of course, revenue from them over the period, though by no means adequate to meet the expenditure.

It is to the credit of the British nation that this debt to past neglect of the housing conditions of the workers, by the industrialists and land dealers who made fortunes out of them, is being paid with such spartan courage and so little complaint by the nation as a whole, but it is also a dramatic warning to other nations of the price that must be paid by *innocent people* for the crimes of land profiteers and slum creators and the civic authorities who condone their crimes.

Even though the houses are being built, and being built to standards such as the working classes have never before known in England, the Garden Cities and Town Planning Association is gravely critical of the opportunist way in which the work is being done. Houses are being built wherever land can be secured or expropriated, and thus new additions are

being made everywhere to already overgrown towns and cities.

The Advance Movement in British Thought

The following passage from *Garden Cities and Town Planning* will show the advance movement in British thought on the whole question of expanding towns and cities as well as the proposed scientific solution of the problem of better housing for working people. Canadian students who have been accustomed to thinking that a town must begin by the discovery of some "natural resource" and the founding of an industry to exploit it, to be followed by an orgy of gambling in land, will find something new in the idea that the best "natural resource" may be intelligent and humanistic thinking and planning, resulting in the planting of a model town on an agricultural area where nothing but scientific vision could ever have imagined an urban settlement. Two Garden Cities have been built in England on these lines. Ebenezer Howard went scouting in Hertfordshire; selected two areas of agricultural land which could be bought for about \$200 an acre. He said: "Here we will build two Garden Cities." and these new model towns have been built. In the case of Welwyn, now the second flourishing Garden City, he attended an auction sale of a nobleman's estate and bought the land with not enough money in his pocket to pay the deposit. The towns were built. Manufacturers were attracted by cheap leasehold land—prac-