

PUKEKURA PARK COMMITTEE.

62 B Brois Street,
NEW PLYMOUTH.

12th Sept. 1967,

To the Chairman and Members of the Pukekura Park Committee,

Dear Sirs, and Madam,

'Water Effects in the Park.'

The Park Committee over the years has discussed the use of water in various ways and enquiries are still proceeding in several fields.

One thing that seems most desirable is that whatever is done should be as natural as possible and that artificial arrangements should blend in with the predominantly natural surroundings.

A second important factor is that whatever is planned should be of easy maintenance and so constructed that a minimum of repairs will be necessary. Also on the costs side, the increase in power charges could become a heavy burden with large installations requiring electric motors, controls or lights.

Sheet water is always effective in setting off a landscape and the reflections in the Park lakes are exceptionally good. These same clear areas may be used for boating, model boating and waterfowl. Every effort is being made to obtain a wider variety of waterfowl. Last year Camlian Ducks were added to the fountain lake. Most recent development is the news that we will be granted a permit to keep Black Teal in the Park. (These are native ducks which are very active divers.) The time when Mandarin ducks or other colourful exotic waterfowl will become available is most uncertain. Most graceful of all are the Swans, particularly the white ones and we are perhaps fortunate in what we now have. Every effort will be made to ensure a wide and varied collection of waterfowl.

TRUBY KING DELL: Though not actually in this park will incorporate a collection of water lilies and it would be desirable to reform the waterfalls in Pukekura Park and improve the views from the foot bridge and the upper end of the main lake.

FLORA FAUNA: The Brooklands aviary will incorporate some minor water effects and some of these are shown in the new Peafowl pen. The Flora Fauna could also be the medium for the first steps in the introduction of uncommon waterfowl prior to their liberation on the lakes.

BROOKLANDS LAKE: This is partly under the control of the Brooklands Bowl Trust and any effects planned there could be affected by the plans made by users of the bowl. The water curtain has been used in the past and it would seem that the natural development would be a further extension of water and lighting effects, using existing equipment in the vicinity of the stage.

Many of the other lakes are too shaded for water lilies to be fully effective, or it is desirable that they should remain clear for boating or reflections. Similarly Brooklands Lake in front and to either side of the stages should remain clear for the dual effect created by reflections. It was decided some years ago that the lower end of this lake would be a suitable spot for featuring some of the newer waterlily varieties. Whilst waterfowl may interfere with some of the more slender stemmed varieties they do keep insect pests down whilst the shade of the water lily leaves tends to suppress algal and weedy growth. Major damage to waterlilies could come from floating timbers or rafts which are expected to be less of a problem in the future. The overflow from Brooklands lake was at one time in the form of a waterfall with a series of rivulets giving an attractive sound of running water. The lip of the waterfall has, in recent years, been damaged by timber floating down and causing erosion. This has been so rapid that the fall is out of sight from the Pukekura lakeside path. It is suggested that this could be rebuilt in its former position. Over recent years margins of the main lake and the hillsides have been planted with colourful subjects which in

season lend variety to the reflections as well as the landscape.

THE STAINTON DELL: The upper lily pond and bog garden area is quite attractive for the greater part of the year even though it is shaded by the hillside and trees to the north. In recent years the area has been opened more on the southern side and with the new plantings this has lent depth and character to the landscape. Most attractive features of the ponds are the young ducklings, which in season scramble over the water lily pads, the frogs and the gold fish in the open spaces. The lower of the two ponds formerly an attractive tree fern margined lily pond is now rather overshadowed by the native trees planted on the islands and the increase in the height of tree ferns. This area could well be developed by using some of the elements of a Japanese garden and incorporating some very choice plants as well as distinctive form and character. Because of the comparatively low flow of water in the summer time these ponds are kept well furnished with submerged aquatics to keep the water fresh and gold fish to destroy mosquito larvae.

Above the fernery lawn and leading down from the lily pond is an attractive rivulet which whilst able to cope with flood waters still makes an attractive sound when the flow is small. At the time this was formed a proposal to form a rock garden and pools along the north eastern side of the lawn was deferred. In among the trees and below the path running between kiosk and fernery this small stream has lost some of its sound values with the growth of tree roots and accumulations of leaf debris. This area is too closed in, and with insufficient fall to be of use except in providing the musical sounds of running water.

THE GLASSHOUSES: These have always had some running water but this has to be restricted because the air when moisture laden and confined, is frequently the cause of molds or spots forming on flowers and foliage. A pool for tropical water lilies is contemplated for the new house and a small jet of water would fit into this setting.

THE KIOSK DELL: This is an area which has been overplanted in the past and little can be done because of the need to preserve a mass of tree growth both to provide shelter and form back grounds for both the sportsground and main lake areas. At one time the small lawn was used regularly by picnickers but does not appear to be used to the same extent since the childrens playground and other lawn areas have been developed.

Possible developments considered here in the past were a dry wall garden around the west side and a wishing well nearer the stream. An improved approach and an artistic or rustic handrail were also considered for the bridge. This area was also considered as a site for the display of large floral carpets. Three possible features for the stream, one of which could be incorporated here are the erection of an old electricity turbine, a hydraulic ram or a water-wheel. The latter has been mentioned previously and along with the others are links from the past which always attract interest.

THE FOUNTAIN LAWN: This was formed when the fountain was constructed to make more room for picnickers and provide a sheltered area with the fountain back ground for concerts, dancing on the green etc. There is a definite lack of a link between the fountain and the main lakes, particularly at night. Lighting of the waterfall was considered and also some of the trees. When the area was first filled a plan for a stream effect was abandoned because of the already damp conditions and the use of the area at night. One other proposal considered near this area was the illuminated waterfall on the Vogeltown hillside and all though at that time linked with a proposed boat shed could still become a major feature. At this stage it is necessary to emphasise that only by using the same water over and over again would it be possible to operate a large feature in the summer time for the flow in the stream becomes very low at times.

FOUNTAIN LAKE: It has long been considered that a series of miniature illuminated sprays and jets could effectively enhance the striking effect of the main fountain, other suggestions have included the synchronisation of the main water

effects with music.

BELOW THE FOUNTAIN LAKE: This area has been more fully treated by other staff members and the general succession of pools with wide spillways to cope with stormwater would certainly enhance this area. Here also rocks could be used effectively. The possibility of constructing an aqueduct fed from a by-pass with water falling as from a wall into these pools could also be given further consideration. Similarly it would be desirable to improve the appearance of the three bridges.

The water chute below the play area has also been the subject of several proposals to which the following one is added. Reverse the curve of the proposed spray and form a horseshoe fall in conformity with the bank behind. It could also be possible to form a walk behind this to protect the foot of the banks but it may not be suitable for general use.

This overall sketch is necessarily brief but never-the-less desirable when considering the development of features with distinctive character and their possible relationship to the whole park. There are many other features which could be introduced and one which is usually associated with water is the model village with the associated flourmill or waterwheel. This latter however, is frequently a work of love or for a group interested in architecture as the cost could be quite high as a construction project.

Yours faithfully,
Director Parks and Reserves.
J.W. Goodwin.
NEW PLYMOUTH.

JWG/lmm.

WATER EFFECTS

ALAN D. JELLYMAN.

13th September, 1967.

To the Chairman and Members of the Pukekura Park Committee,

In no other centre in New Zealand do I know of a park with an atmosphere comparable to Pukekura Park. It will be readily conceded that the natural setting that comprises this park is radically different from the conventional parks with spacious lawns and lavish displays of bedding. This then, is the key factor in the character of the park and thus an important consideration when any plan is formulated to improve or diversify water features within the park.

Water is an invaluable component in the design of Pukekura Park. With our sixty inches of annual rainfall there is seldom a season when the flow of water feeding our lakes slow down drastically. The main masses of water which comprise three lakes are probably best kept in their present form excepting for the Fountain Lake which could perhaps be enhanced by a few simple effects I will outline later. If then we are to diversify water effects in the park and endeavour to maintain the naturalistic character of the park it seems logical that attention should be directed to the watercourses connecting and feeding the lakes.

One area with considerable potential for development along such lines is the stream running from the outlet of the Fountain lake, through the playing area towards Gilbert Street. By extending the sluice race from the Fountain Lake and creating another overflow outlet above the existing sluice, a concave fall of water could be made at the confluence of these two channels. Below this point rounded boulders could be placed in the stream bed to simulate the atmosphere of a Mountain stream. Below this again there is an area that lends itself to widening to create a stretch of placid water terminating in a small fall.

Between the two bridges of the playarea a continuation of the Mountain stream atmosphere should be pursued with some visual access from the playarea. The outflow flume presents a problem in creating and continuing the natural character of the stream. In its present form it will be difficult to mask the frame work or to blend it in with the surrounding area. It would be possible to reclaim all the area behind the outflow of the flume by erecting a crib wall and filling behind it until the contour of the surrounding land is blended into the reclamation work. I would envisage keeping the outflow from the flume just as it is at present to create as much spectacle as possible. This flow could issue onto a raised platform that is depressed in the centre and designed to absorb the force of the water from this single flow and disperse it evenly round the outer rim of the platform. Reclamation work could be healed by the establishment of common ferns upon the walls and exposed soils.

Despite the difficulties encountered with a fountain at water level it is far superior aesthetically than the pedestal type because of its greater unity and closer association with the water mass. It would be unwarranted to detract from the diversities of play of our present fountain but coupled with cleverly devised lighting small play of water could be introduced around the margins of the lake. Ultimately lighting and water effects could be extended to marry the floodlighting features of the Fountain Lake and the Fairy lights display on the Main Lake to create a display of water and illuminations unparalleled in this country.

The Stainton Dell has a small but attractive flow of water running through it. The water feeding the upper pond runs underground beneath the present planting of hydrangeas. This water could be easily brought to the surface to create a small rill passed over by stepping stones and the whole area redesigned to feature an extensive collection of wood land a moisture loving plant. The water flowing along the margin of the fernery lawn could be transformed into a series of small pools and created into an attractive and additional feature of the area.

The outlet of the lake at the Brooklands Bowl is another area that could be altered to good effect. If the present outflow was diverted from its present course to form a cascade down in the eastern corner of the Rhodo. Dell near where the plant of Rhodo. Mrs. R.W. Wallace is now sited the flow could be fed into the central area of the flat to form a reflections pond. Spoil from the necessary excavations could be used to build up low lying areas to form a floral basin planted to the waters edge. Such a feature could be viewed from the dam face or from the northern side of the planting.

A place should be considered for the siting of sculpture as additional and complementary features of any future development. Such features should be associated with tranquil stretches of water where the restful atmosphere and reflections combine to give added character to the area. Local artists could, I feel, sure have a very major contribution to make to the community in this aspect of development.

ADJ. 1mm.

SUGGESTED ALTERATIONS TO THE
HATCHERY LAWN AREA.

WATER EFFECTS.

GEORGE M. FULLER.

12th Sept. 1967.

Mankind has a natural tendency to follow water to its source, but in Pukekura Park this subconscious instinct is baulked by the mysterious disappearance of water underground and its re-appearance in the most unlikely places. It is possible for visitors to arrive at the fountain lake and have no idea that there are other water attractions, (let alone another larger lake) in the immediate vicinity. The continuity of water movement is badly disrupted and nowhere is this more to be sensed than between our two lakes. The hatchery lawn area provides a unique opportunity to restore the link between these two water masses and at the same time form a setting for water effects possible nowhere else in the park.

D Development of this area presents no major difficulties, since the essentials already exist in the form of a source of water from the fall spilling from the main lake, a clear area between it and the fountain lake, a natural gradient in the right direction, and beautiful surroundings already in existence.

View 'A' gives an indication of the setting but does not reveal that the water-course is underground from the waterfall, crossing the lawn in front of the old punga shed and following the eastern edge of the lawn down to the fountain lake. The proposed alteration would retain this culvert for storm water dispersal but introduce an open watercourse following roughly the same line.

In front of the shed it could form an attractive pool and be crossed with stepping stones, then meander slowly along the edge of the lawn, providing an ideal setting for pockets of plant communities such as rushes, conifers etc.

Mature feature-trees already exist in the area and no addition is required- rather the reverse. In order to improve conditions in front of the shed, it would be advisable to remove the large Rhodo. Sir Robert Peel, thus revealing to greater advantage what must surely be one of the largest camellias in the country with its spread of 44'. This tree has dark shiny foliage- an excellent foil for the second maple which would also be released from its present captivity by removal of the rhodo.

The area beneath the camellia (which at present is only an embarrassing eyesore) could be formed into a mound with the spoil from the pond and planted with low shrubs including the Acer dissectum, thus transforming this into an area of particular interest in spring and autumn. Access to the shed and drainage vale could be maintained so that present functional requirements would be unimpaired.

Minor alterations to the waterfall could give it a more natural appearance, particularly from above, greatly enhancing the approach from this direction.

The old hatchery shed, already destined for major repair, could be transformed more authentically into what it already half looks like-, a maori whare. It is not unlikely that a group of enthusiasts on maori culture would take this up as a serious project and transform it into yet another unique feature of the park. Visitors to the fountain lake would find this an irresistible attraction, yet it would retain its functional role as a storage building.

It will be seen that development of this area involves no major upheaval or expense and most of the work could be carried out by our present staff.