

8. SOUTH NEW BRIGHTON PARK TREES

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Corporate Plan Output: Major Parks Tree Replacement Projects 9.4.90	

The purpose of this report is to inform the Board of the proposed removal of potentially dangerous trees in South New Brighton Park growing adjacent to the boundary with Estuary Road properties to the north and south of Jellicoe Street.

PUBLIC SAFETY RESPONSIBILITY/PROCEDURAL CONSIDERATIONS

The Parks and Waterways Unit has received further complaints from residents living in Estuary Road and Jellicoe Street requesting the removal of trees growing near their boundaries in South New Brighton Park. The residents are concerned about the safety of the trees and the risk they present to their persons and properties given the large scale of tree failure and private property damage that occurred in the storm of October 2000.

In concurrence with the views of the residents, the Unit proposes to carry out the following work to eliminate the risk to the properties. As this is deemed to be purely a health and safety issue which falls under the delegated authority of the Parks and Waterways Manager, the usual wider public consultation process applicable to any proposal involving the removal of relatively safe and healthy trees has not been followed. The reason is the risk of the plantation trees to adjacent properties as exemplified by the damage caused by a series of gales in recent years leaves no doubt as to the potential for further damage to occur. In view of the obvious risks involved, it is considered that in this instance the officers of the Council (upon whom full responsibility for public safety rests), exercise the legal "Duty of Care" and eliminate the hazard presented by the trees.

HISTORY

The trees in question are *Pinus radiata* and *Cupressus macrocarpa* that form part of the large scale forestry style conifer plantations extending over much of the South New Brighton Park area. In 1996 in response to the concerns of adjacent residents, the Parks Unit commenced a programme of removal and replacement planting of 20 to 30 metres strips of trees situated along the park boundary. This created a safety zone of about one tree length between the remaining park plantation trees and the adjacent properties. To date, boundary trees to the north and south of Bridge street have been removed and the areas replanted. Further felling of at risk trees and replacement planting was carried out around the South New Brighton Motor Camp after an increasing incidence of wind-thrown trees falling into the camp grounds narrowly missing occupied caravans.

The severe storm of October 2000 caused large scale damage to the South New Brighton plantation trees with a number of trees being blown onto adjacent properties, including one in the area in question. Fortunately, although fences and sheds were damaged, little damage occurred to houses and there were no injuries to persons. A number of vacant caravans were destroyed by fallen trees and others severely damaged. Most of the remaining boundary trees to the rear and south of the motor camp were subsequently removed as winds continued to up-root trees weeks after the event. Another tree has recently fallen into the camp grounds.

The sheer volume and costs of the clear-up operation (which is still continuing) lead to a halting of the planned removal of trees in South New Brighton and other similar areas. However, residents have continued to express their concerns as to the safety of the reserve boundary trees, requesting that trees be removed as carried out in other areas of the park.

CONDITION/SAFETY OF TREES

The pines and macrocarpas range from an estimated 45 to 75 years of age. The trees on the north side of the Jellicoe Street entrance to the park are the older (and larger) trees in this respect. By plantation tree standards, the trees are considered to be over mature, with little vertical top growth and most new growth extension being confined to the lateral branches. Typical of plantation trees, the lower branches are dead up to about three quarters of their height, except for trees on the edges of the plantation which receive more light.

As a plantation group, the trees have a landscape and functional (windbreak) value to the reserve but as individual specimens most have a scraggy appearance. With the lower branches now being largely devoid of foliage, the effectiveness of the trees as a windbreak has been considerably reduced.

The main factor in considering the safety of the trees in South New Brighton Park and the area in question is that the land is low lying in relation to the Avon Estuary water levels and the soil water table tends to be high. In periods of high spring tides and high rainfall in particular, the soil tends to be saturated up to within a few millimetres of the soil surface. This saturation results in little root development below this level. Normal vertical root anchorage to the deeper soil levels is therefore greatly reduced or none existent. In climatic conditions where there is a combination of high winds and soil saturation, the potential for trees to be blown over is therefore considerably increased.

Examinations of the roots of fallen trees in the park have discovered root plates only 300 millimetres deep, even on very large trees. The situation is exacerbated for the trees that have survived the October 2000 storm in that many have lost some of the wind protection previously afforded by nearby trees. The increased wind forces render them more prone to failure.

The average height of the plantation trees is about 27 metres. At this height and the distance they are growing from the park boundary, a wind-thrown tree could extend 20 metres or more into private property.

PROPOSED WORK

In view of the potential hazard to persons and property presented by the plantation trees along the South New Brighton Park boundary it is proposed to remove all trees within a distance of 25 metres from the boundary to the north and south of Jellicoe Street. This will create a safe falling distance of one tree length from the adjacent properties.

The felling operation is proposed to be carried out in two stages with priority being given to removing the boundary trees south of Jellicoe Street up to the boundary of the motor camp. This area lost about a dozen trees at the time of the October 2000 storm. Every effort will be made to remove this group of trees this winter before the onset of high spring tides and southerly gales. The trees to the north of Jellicoe Street, which are not quite in the same risk category, are to be removed when budget funds are available.

Following the felling operations, the sites will be replanted with taller growing conifers closer to the remaining plantation trees, and smaller growing trees and shrubs with a high native content closer to the boundary as planted in the areas felled previously.

Recommendation: That the information be received.

Chairperson's

- Recommendations:**
1. That the information be received.
 2. That the Board support the proposed removal of the plantation trees along the South New Brighton Park boundary within a distance of 25 metres from the boundary to the north and south of Jellicoe Street.