

**ORDINARY MEETING OF COUNCIL
14 SEPTEMBER 2009**

7	BEACON COVE – TREE REMOVAL
LOCATION/ADDRESS:	BEACON COVE, PORT MELBOURNE
GENERAL MANAGER:	GREG WOOD, ACTING GENERAL MANAGER CITY AND INFRASTRUCTURE SERVICES
PREPARED BY:	FIONA BLAIR, MANAGER PARKS AND OPEN SPACE SERVICES
FILE NO.:	TRIM FILE NO. 0511/1
ATTACHMENTS:	ATTACHMENT ONE – FIG TREE LOCATIONS IN BEACON COVE

1. EXECUTIVE SUMMARY

- 1.1 A petition was tabled at the August 10, 2009 Ordinary Council Meeting from 45 people requesting tree removal and replacement in Beacon Vista, Port Melbourne.
- 1.2 The petition requested the removal of *Ficus hillii* trees, commonly known as Hills Fig Trees, in the nature strip bordering Beacon Vista Park Square due to the damage the root system is causing to infrastructure.
- 1.3 Council requested that officers present a report to council that provides:
 - 1.3.1 options on actions that can be taken to address the identified problems with the Hills Fig Trees
 - 1.3.2 the costs for the Hills Fig Tree removal and replacement at Beacon Cove Park
 - 1.3.3 information of other streets that have Hills Fig Trees
 - 1.3.4 advice on any other tree issues in the municipality that would be comparable to Hills Fig Tree issue

2. RECOMMENDATION

That Council:

- 2.1 Undertakes urgent works to remove the Hills Fig Trees in Beacon Cove to address the associated risk issues and undertake replacement planting with a suitable species in the second half of the 2009/10 financial year.
- 2.2 Authorises this unbudgeted expenditure which will be off set by savings identified during the year across the organisation.
- 2.3 Evaluates the footpath condition in the relevant areas and prepare a program for renewal, once the Hills Fig Trees have been removed.
- 2.4 Undertakes appropriate consultation and information processes to inform and engage the community in relation to the removal and replacement of the Hills Fig Trees.

3. BACKGROUND AND CONTEXT

A Petition was received from 45 people regarding tree removal and replacement in Beacon Vista surrounding Beacon Vista Park, Port Melbourne. The Petition stated the following:

The existing planted Hills Fig Trees in the nature strip bordering Beacon Vista Park Square have a highly invasive root system. This root system is causing extensive damage to the footpaths, driveways and drains, resulting in both a significant safety hazard to local residents and potential damage to buildings.

That extensive repair costs have already been incurred by Council to date (19% of the footpath has already been replaced, and 26% ground with more sections marked for grinding or replacement) and these costs will be ongoing and wasteful.

That the residents are concerned about potential damage to their building foundations, as there are numerous instances, where the root system has already reached the building.

The Petitioners requested, that due to the circumstances peculiar to the residents of the 31 properties surrounding Beacon Vista Park Square:

- *All the Hills Fig Trees currently planted in the nature strip surrounding Beacon Vista Park Square be removed.*
- *That such removal take place immediately in one operation to remove a safety hazard and to minimize potential damage to both Council and private property.*
- *That the removed trees be replaced with *Pyrus Calleryana* "CAPITAL".*

- *That the replacement trees be planted as soon as the existing trees are removed and the damaged areas of footpath etc, be repaired/replaced as appropriate.*

A number of immediate safety concerns were highlighted through the petition. These have been rectified.

The issue of long term management of the Hills Fig Trees in Beacon Cove came up as part of the consultation during the Beacon Cove Landscape Works undertaken in 2008-2009.

The Hills Fig Trees are an issue in Beacon Cove and other sites in Port Melbourne because at maturity, the trees will reach heights of 15+ metres and canopy/root spread of 10+ metres. Further, Fig Trees are known to have large, strong and invasive root systems that relentlessly seek water. When water is not available, as in times of prolonged drought, the tree's roots will seek water in storm drains, sewer lines and in/around residences. The roots are quite capable of breaking through most surfaces including concrete.

Hills Fig Trees are the main street tree in Beacon Vista and the Crescent, two main and iconic streets within the Beacon Cove Development and their presence creates much of the neighbourhood character. Any species change would change that character.

When these results were made available to the community, there was considerable feedback that this view was not universally supported. As such, the management of the Fig Trees was put on hold pending future consultation.

An independent arborist report was commissioned to provide more information about the Hills Fig Trees in Beacon Cove. This report indicated that Figs were inappropriate for this area and provided options for replacement planting.

Council's Infrastructure Maintenance officers conducted a review of the current damage to the visible infrastructure at Beacon Cove. They provided guidance that, as of 10 December 2008, approximately \$43,000 is required to repair/maintain the footpaths in Beacon Cove lifted by the Fig trees.

Port Melbourne Hills Fig Trees were planted approximately 15 to 20 years ago in the developed area of Beacon Cove and Port Melbourne. The trees were planted by Mirvac as part of the development.

It is likely that the trees were selected for their instant aesthetic appearance and rapid growth rate. The Hills Fig Trees are located in Clifford Street, Beacon Vista and The Crescent. (Refer attachment one).

Hills Fig Trees have a vigorous growth rate which results in damage to infrastructure. There is evidence of this damage in Beacon Cove.

There are a number of locations in Port Melbourne that have Hills Fig Trees, each of these locations has been evaluated and a cost estimate undertaken for the removal and replacement of these trees.

Identified areas where Hills Fig Trees are an issue

Street	No. of trees	Removal Costs	Replacement Costs	Design	Comment
Clifford Street	19	\$9,500	\$8,500	Suggested species and design has been undertaken	The trees are approximately 20 years old and have caused damage to surrounding infrastructure and pavement. The Department of Housing have requested their removal and provided an engineer report noting damages caused.
Webb Street	4	\$2,000	\$2,000	Suggested species and design has been undertaken	The trees are approximately 20 years old and have caused damage to surrounding infrastructure and pavement. The Department of Housing have requested their removal and provided an engineer report noting damages caused.
Beacon Vista	37	\$18,000	\$16,000	Residents are requesting Ornamental Pear	The trees are approximately 15 years old and have caused damage to surrounding infrastructure residents have expressed concern and sought removal.
The Crescent	64	\$31,500	\$27,500	Not determined	The trees are approximately 15 years old and have caused damage to surrounding infrastructure. Some residents have expressed concern and sought removal.
Park Square	8	\$4,000	\$3,500	Not determined	The trees are approximately 15 years old and have caused damage to surrounding infrastructure. Some residents have expressed concerns and sought removal.
Swallow Street	12	\$6,000	\$5,000	Not determined	The trees are approximately 15 years old and have caused damage to surrounding infrastructure. Some residents have expressed concerns and sought removal.
TOTAL	144	\$71,000	\$62,500		

Damage has occurred at all of these locations to infrastructure. The age and size of the trees has a direct correlation to the amount of damage caused. The damage at Clifford and Webb Street is more extensive than that at the other locations.

Tree Issues across the municipality

In an urban environment, any tree has the potential to cause damage to infrastructure through its roots system and canopy. The challenge in an urban environment is obtaining a balance between the need to have trees to assist with amenity and community welfare and managing the risk associated with trees.

The soil profile has the ability to impact upon a tree's root system establishment. If a soil profile is clay, the clay shrinks with lack of water when this occurs the roots system takes any remaining moisture in the soil, resulting in cracking to surrounding infrastructure. Various profiles of soil exist throughout the municipality. In other parts of the municipality damage caused by tree roots is managed on a 'site by site' basis by the use of tree root barriers.

Tree roots barriers are used to control tree roots. Tree root barriers are only effective in areas where trees have the ability to grow in the restrained environment. In the instance of Beacon Cove this is not possible due the trees proximity to the surrounding infrastructure and confined growing environment. Tree root mitigation for root pruning and tree root barrier would not prevent future damages in this instance.

Across the municipality there are issues with tree roots, however there is not a comparable issue with the Hills Fig Trees in Beacon Cove.

The selection of tree species is critical in an urban environment, there are species that can adapt to the restricted urban environment and minimise the risk of root damage.

4. CONSULTATION AND STAKEHOLDERS

During public consultation for the Beacon Cove Landscape Works project undertaken in 2008-2009, the issue of long term management of the Hills Fig Trees in Beacon Cove came up.

At the initial community consultation on 18 October 2008, Council presented proposed landscape works inclusive of two options for managing the Hills Fig Trees. Residents were asked if Council should: *Continue to/maintain the topiary style tree canopy and clip twice yearly? Or: Remove the Figs and replace with a lower maintenance, site appropriate species with similar characteristics?* On the day 75% (31 out of 41 respondents) favored removal and replacement.

When these results were made available to the community, there was considerable feedback that this view was not universally supported.

Consultation has occurred with the Office of Housing in relation to Clifford and Webb Streets. The Office of Housing supports the removal of the Hills Fig Trees; however the residents in these streets are not supportive of the trees being removed.

Should Council determine to remove and replace the trees; information would be sent to residents informing them of the removal and seeking feedback from the residents to determine the replacement species. Residents would be given a choice of species to choose from that would be suitable to plant in an urban street environment.

5. DISCUSSION

5.1 OPTIONS

5.1.1 Option One: Remove all Fig Trees immediately and replace in April 2010

The Hills Fig Trees are not appropriate trees for an urban street environment. At maturity, the trees will reach heights of 15+ metres and canopy/root spreads of 10+ metres. Fig Trees are known to have large, strong and invasive root systems that relentlessly seek water. When water is not available, as in times of prolonged drought, the tree's roots will seek water in storm drains, sewer lines and in/around residences. The roots are quite capable of breaking through most surfaces including concrete.

For these reasons the preferred option would involve the removal of the Hills Fig Trees in Beacon Cove.

This option would address the immediate issue of damage occurring to infrastructure and would prevent any further damage occurring.

This option would involve informing the community by letter that the trees will be removed and why; and secondly consulting with the community on options for species replacement.

If this option was chosen, Council's tree maintenance contractor would schedule removal of the trees in early November.

Replacement trees could not be planted until April 2010. This is because tree stock would need to be ordered and the trees would need to be planted in the cooler months.

The total cost of this option would be \$133,500.

5.1.2 Option Two: Retain the Hills Fig Trees

A second option would be for Council to retain the Hills Fig Trees and maintain them in a topiary style tree canopy.

To maintain a topiary style, the trees would need to be clipped twice per year. This would increase the maintenance costs for the trees.

The current annual cost to maintain the 144 Hills Fig Trees is \$5,000.

The annual cost to maintain the trees in a topiary style would be \$57,600 in the initial year and \$40,320 annually after that.

This would reduce the impact of root damage, but would not prevent it; therefore it is likely that there would continue to be issues with damage to infrastructure, which would have cost implications.

5.1.3 Option Three: Remove and replace the Fig Trees in Clifford Street, Webb Street and Beacon Vista and undertake further consultation for the remaining streets

This option would respond to the current request for removal from the Office of Housing and the residents in Beacon Vista. It would address the immediate issue of damage occurring to infrastructure and would prevent any further damage occurring in these streets. Tree replacement planting would occur in April 2010.

This option would allow further consultation to occur in the remaining streets, to determine what support there is for the removal of the Fig Trees. However, if Council determines that the Hills Fig Trees should be removed from the area because they are inappropriate for street planting, consultation with the residents to ask if they want the trees to remain or be removed could be seen as insincere.

5.2 ALIGNMENT TO COUNCIL PLAN

5.2.1 Enhancing Liveability

Strategy 4.1.1 Maintain and enhance streetscapes for improved amenity, character and sustainability

5.2.2 Engaging and governing the city

Strategy 1.4.4 Maintain council and community assets to a standard that matches industry best practice.

5.3 POLICY IMPLICATIONS PLAN

5.3.1 Council is currently developing a new tree policy, which will review current tree management practices; in addition a streetscape analysis will be undertaken, which will assist council to develop a program for upgrading/improving streetscapes across the city.

5.4 FINANCE / RESOURCE IMPLICATIONS

5.4.1 The cost for removal of the Fig Hills Fig Trees in Port Melbourne is \$71,000 and replacement costs are \$62,500, the total cost is \$133,500. There is currently no budget to undertake these works.

5.4.2 It is estimated that Council is currently fixing twice the number of tree root issues in the Beacon Cove area twice as often as most other areas of Port Phillip. There are 43 current recorded trip hazards in this area or one every 20m, compared to a municipal average of around one every 50m.

5.4.3 Council's maintenance contractors repaired the footpaths in this area three years ago and it will now cost another \$43,000 to repair the footpaths again. This will be an ongoing cost to Council if these trees remain in place.

5.5 LEGAL & RISK IMPLICATIONS

- 5.5.1 The immediate removal of the Hills Fig Trees will prevent any further damage occurring to the footpath infrastructure, which will minimise any hazards that may be associated with the damage caused to infrastructure.
- 5.5.2 The current risk is trip hazards caused by damage to footpaths. There may also be a risk of residents claiming damage for private property caused by root damage.
- 5.5.3 The consultation undertaken in October 2008 indicated that not all resident were supportive of removing the Hills Fig Trees. It is likely that some members of the community will not support the removal of the trees. If the trees are removed immediately there will be a short period of time where there are no trees, which will concern some residents.

6. IMPLEMENTATION STRATEGY

6.1 TIMELINE

- 6.1.1 Option One – Remove immediately and replacement planting April 2010

October 2009	Letter to residents advising of tree removal, outlining the process and seeking input on replacement planting species in the form of a survey.
October 2009	Community information sessions (if required) and analysis of surveys. Letter to residents advising of replacement tree species.
November 2009	Tree Removal
April 2010	Replacement Tree Planting

6.2 COMMUNICATION

- 6.2.1 Council is committed to maintaining and enhancing streetscapes and increasing the street tree population.
- 6.2.2 Council will ensure that community assets are maintained to a high standard and provide a safe environment.
- 6.2.3 Residents would be advised via letter of the removal of the Hills Fig Trees and information would also be placed on Council's web site.

7. OFFICER DIRECT OR INDIRECT INTEREST

- 7.1 No officers involved in the preparation of this report have any direct or indirect interest in the matter.