

## The Tree Consultancy Company

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# Memo

**To:** Shan Warusavithana – Principal Project Delivery, Blue Green Networks, Healthy Waters

**From:** Sean McBride – Director, The Tree Consultancy Company

**Cc:**

**Date:** 10 November 2025

**Re:** Ngā Wairau Stage 1 – AF Thomas Park Arboricultural Assessment  
Fast-track Approvals Act (FTA Act) 2024 referral

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Dear Shan

## 1.0 Introduction

- 1.1 Auckland Council Healthy Waters and Flood Resilience Department (Healthy Waters) is lodging a referral application to increase flood storage at A F Thomas Park, Wairau Valley under the Fast-track Approvals Act (FTA Act) 2024. The project broadly involves:
  - a) Flood resilience infrastructure works; and
  - b) Reserve reinstatement, including site stabilisation, landscaping, new footpaths/boardwalks, and formal and informal recreation.
- 1.2 This memorandum provides a high-level arboricultural assessment of the proposal.

## 2.0 Project Description

- 2.1 The Ngā Wairau project is part of Auckland Council's Making Space for Water – Blue-green Network programme and is focused on the key areas within the Wairau catchment that were impacted by the 2023 storm events. Given the large scale of the Wairau catchment, the Ngā Wairau project is being delivered in three stages. This proposal covers Stage 1, which involves increasing the existing flood storage at A F Thomas Park, together with reserve reinstatement. The stormwater detention capacity created through Stage 1 works is critical to enabling future Stages 2 and 3. Further design development and funding confirmation is required for Stages 2 and 3, and they therefore do not form part of this proposal.
- 2.2 The works proposed under Stage 1 enable the delivery of flood resilience in the catchment by increasing flood storage within A F Thomas Park, initially for the downstream residential area, and undertaking additional stormwater improvement works.
- 2.3 The proposed works to increase flood storage at A F Thomas Park include the following:
  - Excavate the park to increase the existing flood storage to reduce flood flows and flood levels. Formalisation of a wetland on the northern end of the park where water naturally ponds as a result of the works and dry detention in other areas of the park. At this stage the earthworks on the site are indicatively estimated to be in the order of

700,000m<sup>3</sup> – 800,000m<sup>3</sup> (cut and fill) to achieve a flood storage volume of approximately 550,000m<sup>3</sup>. All excavated material is to remain onsite unless unsuitable.

- The proposed flood storage changes will amend the consented dam. At this stage, the proposed changes may include reducing the dam height, increasing the flood storage capacity and providing an additional spillway.
- Construct a new spillway channel linking the existing channel north of A F Thomas Park that flows east under State Highway 1 to A F Thomas Park to optimise storage and release of flood flows in the park to maximise benefits.
- Reshaping ground using cut material to convey flood flows between proposed raise areas.
- Vegetation removal is required to facilitate the works.
- A temporary construction laydown area will be established on-site (location TBC).
- Reinstatement of A F Thomas Park and constructing new multi-use maintenance accessways.

2.4 The technical parameters provided above are indicative, as design is ongoing. The referral is sought on the basis of the broader project description provided above (i.e. (a) flood resilience infrastructure works and (b) reserve reinstatement, including site stabilisation, landscaping, new footpaths/boardwalks, and formal and informal recreation), with final design specifications and precise quantities to follow in the substantive application.

### 3.0 Project Area

3.1 The project boundary is outlined in the figure below; the red line is the project boundary and the parcels that make up the project area are shown in the yellow line and associated numbering.

A F Thomas Park Project Boundary

Scale 1:4500 @ A3



Figure 1 – Project Area

3.2 The site addresses and the legal descriptions for the project area are as follows:

Property address	Legal description
R 21 and 21 Northcote Road	Lot 1 DP 150598, Lot 3 DP 150598, Lot 4 DP 150598, Lot 8 DP 150598 and Lot 8 DP 101760
17 Silverfield Lane	Lot 2 DP 150598
17A Silverfield Lane	Lot 5 DP 150598
17B Silverfield Lane	Lot 6 DP 150598
17C Silverfield Lane	Lot 7 DP 150598
Nil	Part Allot 103 PSH OF Takapuna

#### 4.0 Site assessment

- 4.1 On the 25<sup>th</sup> and 26<sup>th</sup> of August 2025, Matthew Lomas (Technician Arborist, The Tree Consultancy Company) and I undertook a cursory inspection of the trees within AF Thomas Park. Over these two days, each half of the golf course was closed to enable a safer inspection of the trees to be undertaken. This enabled a walkover of the site to be conducted, noting the principal tree species and an overall brief comment on their vitality and condition. The inspection undertaken would fall within what is commonly described as a Level 1, limited visual inspection.
- 4.2 The principal trees on the site are summarised as groups in the appended Tree Inventory (Appendix A), and referenced with corresponding numbering on the appended Tree Location Plan (3810\_001\_A, Appendix B). The tree location plan depicts a wastewater transmission line which was downloaded from Auckland Council's GeoMaps portal.

#### 5.0 Site description and brief arboricultural description

- 5.1 AF Thomas Park (the Site) is a 50.9-hectare, council-owned recreation area in Wairau Valley, currently home to the Takapuna Golf Course. Historically, the site was a low-lying floodplain and wetland, which was incrementally drained and filled after being converted into a golf course in 1912. Today, the landscape is characterised by tree-lined fairways, streams, ponds, and overland flow paths. The park is situated within the highly urbanised 1,450-hectare Wairau catchment, making it susceptible to flooding; it was inundated during the 2023 Auckland Anniversary floods. A wastewater transmission line runs through the site, and Vector power cables are present, particularly on the eastern boundary near the Transpower substation.
- 5.2 From an arboricultural perspective, the Site's most significant feature is its extensive and diverse tree population. A cursory site inspection identified 110 distinct groups of trees, comprising a mix of mature exotic and native species. Many mature exotic tree species are present, including several stands of pine (*Pinus spp*), poplar (*Populus spp*) and gum trees (*Eucalyptus spp.*). Individual and small groups of swamp cypress (*Taxodium distichum*), oaks (*Quercus robur*, *Q. palustris*), cedar (*Cedrus spp*) and Norfolk Island pine trees (*Araucaria heterophylla*) are also scattered through the site.
- 5.3 A wide variety of native plants are also present, such as pōhutukawa (*Metrosideros excelsa*), kahikatea (*Dacrydium dacrydioides*), karaka (*Corynocarpus laevigatus*), tōtara (*Podocarpus totara*) and pūriri trees (*Vitex lucens*), and there are areas where native revegetation planting has occurred, some of which is more recent than others.
- 5.4 Similarly, the age class of the trees present varies widely from juvenile to mature specimens, and historical aerial photographs available via Retrolens show trees within the site dating back to 1957. Further work is required to investigate the potential age of the trees; however, from my cursory investigations to date, it is unlikely that any native trees will be classified as veteran specimens, wherein veteran is described as a tree that is 100 or more years old.

- 5.5 In terms of the overall condition of the trees, the majority can be described as having fair to good vitality, and there are trees which are considered arboriculturally good specimens, such as Group 11 (Swamp cypress), Group 22 (pin oaks), Group 25 (mature oak), Group 30 (swamp cypress), Group 34 (seven pin oak and pōhutukawa), Group 38 (mature gum tree) and Group 65 (mature pōhutukawa). Many of the pine and gum trees are in fair or poor condition, with evidence of branch failure, apical deadwood and an overall appearance of senescence. Primarily along the motorway edge, many of the trees have been topped or reduced in height to maintain clearances from the overhead high voltage powerlines, affecting their shape and form. Using Auckland Council's Open Data GIS website, and specifically the 2024-2025 infrared aerial images, and a high-level assessment of these images, it appears at least 10% of the trees are in poor condition, and further 20% are in a fair condition.
- 5.6 Using iTree Canopy software, the total tree canopy is estimated to be about 26% of the site's land area. This is slightly below the 30% average canopy cover for the wider Kaipātiki Local Board area, which has the highest overall canopy cover of all urban local boards in Auckland. While the board has a high average, AF Thomas Park is located in the Wairau Valley statistical area, which is noted for having 'bare cover' at just 8%. The park's existing 26% canopy cover, therefore, represents a local arboricultural asset within a sparsely treed industrial and commercial area.

## **7.0 Known and anticipated arboricultural effects**

- 7.1 The proposed work involves extensive earthworks being an indicative and approximate range of 700,000–800,000 m<sup>3</sup> to deliver on the flood resilience and associated reserve reinstatement works. These works will have an impact on the existing arboricultural environment where substantial tree removal is unavoidable. Further work will be undertaken to look at opportunities and assess the likelihood of retaining some of the existing trees (particularly along the boundaries and where the main trunk sewer pipe traverses through the reserve), the relocation of high-quality trees within the site where feasible, and replacement planting.

Please do not hesitate to contact the author if you require more specific information

**Yours sincerely**



Sean McBride  
Director

### Appendices

*Appendix A: Tree Inventory Table*

*Appendix B: Tree Location Plan*

## Appendix A – Tree Inventory Table

Group ID	Group description (field notes)
T1	6 m or so high pūriri tree, generally in good condition. Solitary tree near entrance in a raised planter
T2	11 m or so tall Magnolia tree, which has a canopy formed from two trunks. Overall in good condition. A cluster of cabbage trees and one pōhutukawa within 5 m of tree
G3	Group of 2 pin oaks, 4 cedar, pitto and understory planting
G4	Group of 25 mature trees. Lophostemon, pin oak , camphor, elm, she oak and phoenix palm
G5	Group of 6 mature gum trees. 3 gums poor vitality
G6	1 pōhutukawa, 2 she oak and 1 pine along driving range
G7	5 mature pine, 3 small karo
G8	1 ash, 2 pōhutukawa 1 karo, 1 mature pine. Fair to good vitality
G9	Group of 4 mature pine (1 dead) 3 mature pōhutukawa
G10	Trees on embankment. 2 gums, 6 pines (2 mature, 4 early mature)
G11	4 mature swamp cypress, 2 water gum. Nice grouping
G12	2 swamp cypress (topped). 5 mature pines next to motorway
G13	Group of 6 swapped cypress ( 2 topped)
G14	1 ash , 2 swap cypress
G15	3 cook pine (2 topped ) fair vitality
G16	Mature pine (2 ) alongside motorway
G17	2 mature pine, fair vitality. Crown dying back. 1 willow (topped)
G18	Cluster of karaka and pōhutukawa
G19	2 Lophostemon (early mature)
G20	1 Cupressus nookatensis, 1 puriri
G21	1 golden totara, 1 macrocarpa 1, pine. Fair vitality
G22	8 mature pin oak, 3 plane. Good group
G23	Young native planting, karo, kahikatea, cabbage tree, occasional willow trees scattered around
G24	Established native planting, kahikatea, flax, coprosma, rewarewa, manuka. One phoenix palm at northern end
G25	Single nice English oak, to be measured. Appears healthy tree

G26	3 pine, 2 gum trees. Native understory of totara, pittosporum, karo. Adjacent to stream
G27	12-15 gum trees, some very mature specimens. Varying health condition, with some declining and others in good to fair. 1 x camphor and 1 x coral tree also present.
G28	Mainly twisted willow trees. 2 x Taxodium. 3 x kahikatea, 1 x early mature Norfolk Island pine, 1 x English oak on motorway end
G29	Mature poplar (approx 30), with northern end comprising established native trees.
G30	5 swamp cypress. Nice grouping
G31	Large grouping. Approx 40 mature pines. 3 oaks and 3 macrocarpa. 1 cedar, 1 cook line. Understorey native vegetation. Fair to Good vitality. Pines are in worser condition
G32	Grouping of 4 cedar ( 1 nice mature specimen. Good vitality. 2 smaller pitto fair vitality
G33	Grouping of 4 monkey apple , cedar, ginkgo. Kowhai. Cedar is a nice specimen
G34	Grouping of 7 pin oak 1 pōhutukawa. Good vitality. Good grouping of mature trees
G35	Grouping of 2 camphor laurels. 5 Hibiscus and 3 plume cedar. Kowhai and pitto also present. Good vitality
G36	Grouping of puriri, magnolia, camphor laurels. Norfolk Hibiscus and new planting. 1 large totara
G37	3 ash tree, 1 unidentified. 1 kowhai
G38	Large gum (botryoidies?,). Good specimen
G39	Mature gum (v large) pin oak 2 plume cedar. Camphor laurels. Horse chestnut
G40	1 large gum (corymbia ficifolia) fair vitality. Missing several leaders
G41	2 mature Lebanon cedar . Nice specimens
G42	Group of 12 mature pin oak. 1 pine. 1 pitto. Nice grouping. Good vitality
G43	Mature Norfolk island pine. Good specimen. Pōhutukawa alongside .
G44	Group of 4 liquidambar. 1 she oak, small cluster of understory veg
G45	2 Lombardy poplar, 1 cook pine. 2 pine. Unremarkable grouping
G46	Large grouping 9 Lombardy poplar. Native reveg (mature, good vitality). 15 mature pines.
G47	Group of 10 oak. Good grouping. Good vitality.
G48	10 Lombardy poplar alongside motorway. Fair vitality.
G49	3 mature pine (topped) 3 Norfolk Hibiscus (nice specimen) 2 Chinese else and ash growing next to motorway
G50	6 swamp cypress. 1 grevillea, 1 ash. Nice grouping. Good vitality
G51	2 v. Large macrocarpa. 1 puriri and 1 Hibiscus. Nice specimens
G52	Grouping of blue ice cypress. Magnolia, cedar, pōhutukawa
G53	Grouping of 10 mature pine. Fair vitality
G54	Grouping of early mature kahikatea and karaka.

G55	Grouping of 3 pines. Fair vitality. Dieback in the crown evident
G56	Grouping of 1 mature titoki, 2 plume cedar, 2 kowhai 1 photinia. 1 Norfolk island pine
G57	Standalone pink oak. Nice tree. Some tear outs
G58	2 mature pin oaks. Good vitality.
G59	4 mature pine trees. Fair vitality.
G60	4 mature pin oaks. Nice specimens
G61	Lophostemon, macrocarpa, birch ash. Not great condition. Several are dying
G62	3 blue ice cypresses. Nice grouping
G63	Grouping of native planting. Kahikatea, karo , karaka. Macrocarpa. Good vitality
G64	3 swamp cypress, 1 cook pine, 1 Hibiscus
G65	7 trees, 4 elm, 1 Japanese spindle, karamu, 1 London plane. Fair vitality
G65	Mature pōhutukawa. Good vitality
G67	Group of 5 Chinese elms. 1 oak Heavily topped for powerline clearance. Poor form
G68	2 mature Norfolk island pine , 4 mature pōhutukawa. Good form and vitality.
G68	1 camphor laurels, 2 red oak, 1 London plane. Good form and vitality. Mature. Nice grouping
G70	2 mature Norfolk island pine , fair vitality. 2 blue ice cypress fair vitality. 1 oak
G71	4 mature pine trees. Fair form and fair vitality.
G72	4 early mature Norfolk island pine. 1 plane tree. Good vitality.
G73	9 mature liquidambar, good vitality and understorey planting. 1 Norfolk island pine
G74	Juvenile native reveg
G75	Native reveg and mature willow (8). 2 pine. 2 swamp cypress
G76	5 mature swamp cypress. Good form and vitality.
G77	6 mature liquidambar. Good form and vitality.
G78	2 karo and 6 mature pine. Pines are in poor condition with dieback in the crown evident
G79	Grouping of a large macrocarpa, 3 pines with poor form and structure and native understory veg
G80	2 mature macrocarpa. Good specimens
G81	4 mature Lophostemon and 1 she oak. Lophostemon are good vitality. She oak is fair and has been topped
G82	3 mature Chinese poplar, karaka, totara and liquidambar. Fair form and good vitality
G83	Large grouping of 30 swamp cypress, 2 Chinese poplar, 2 liquidambar and 1 blue ice cypress. Good grouping forming a shelter belt
G84	2 she oak, 1 ash , 3 cedar. Good mature trees
G85	1 cedar, 5 mature pin oak (good specimens) 1 pohutukawa.

G86	1 macrocarpa , 1 poplar. 3 pines in poor condition
G87	4 titoki, coprosma. 3 pine trees. All with good form and vitality
G88	6 mature pine. Poor form and condition. In decline
G89	2 macrocarpa (poor condition) 2 mature she oak. 1 puriri, 2 totara. 2 cook pines (nice specimen)
G90	3 kahikatea, 2 cedar, 2 totara. Good grouping. Nice trees
G91	1 plume cedar, 1 monkey apple, 1 pitto. 1 cypress. Fair form and vitality.
G92	12 mature pines, fair to good vitality
G93	2 swamp cypress, 1 macrocarpa, 1 cedar, 1 pine. 1 totara
G94	2 pine (poor condition) 1 pōhutukawa, 1 Norfolk Hibiscus
G95	2 cook pine, 4 totara (fair vitality) 1 pin oak, 1 red oak.
G96	Boundary trees. 7 liquidambar. Magnolia. Willow, swamp cypress. All mature trees
G97	3 magnolia. 2 with fair vitality. 1 good specimen
G98	Italian cypress, Norfolk hibiscus, blue ice cypress, pine. Good vitality
G99	Group of Karo, pōhutukawa, oaks, rhododendron. Good form and vitality.
G100	5 mature pohutukawa. Good form and vitality. 1 mature Norfolk island pine. Nice trees
G101	2 mature magnolia. 1 pine, 3 cedar
G102	Large grouping all mature Moreton bay fig, ash, cedar, macrocarpa, oak tree. Pohutukawa and totara. Good vitality and form. 22 trees in total
G103	Mature macrocarpa, 3 liquidambar. 1 cedar. 1 Moreton bay fig. 2 mature Norfolk island pine, 1 oak.
G104	Mature totara and ash. Both good form and vitality
G105	3 mature pin oak, 1 ash and 1 Norfolk island pine. Good specimens
G106	3 pohutukawa, 1 titoki, 2 cedar, 2 ash 1 red oak. Good specimens
G107	1 mature pōhutukawa, 5 mature Lombardy poplar. Silky oak and two smaller pōhutukawa. Form a shelter belt along the boundary
G108	Shelter belt of multiple mature monkey apples.
G109	2 mature macrocarpa. 1 v large specimen albeit with fair vitality
G110	1 large pōhutukawa. Ash, pitto and camellia. 1 plume cedar. Good vitality

