Thames-Coromandel District Tree Strategy

Introduction

The purpose of this Tree Strategy is to provide a consistent framework for managing trees on Council land throughout the District. This covers mainly street trees and trees on reserve land, and includes the following main topics:

- Design master-planning, species selection, programming and planting
- On-going management and protection
- Removal and replacements

Context

The Coromandel is one of the most scenic areas in New Zealand due to its dramatic topography and coastline, its native forests, and its relaxed coastal settlements. Trees are an essential element of this character, including such iconic species as the kauri and rewarewa of the mountains to the pohutukawa, puriri and nikau of the coastal forest. Most of this vegetation is in rural areas and on Crown land or private farmland. Trees on Council land, on the other hand, are usually located within the settlements where most people live. They therefore play a more immediate role in people's living environments and at the same time face particular issues as part of urban settlements.

Objectives

The Tree Strategy is intended to improve the management of trees by achieving the following **objectives:**

- A coherent tree masterplan for each Ward that covers all Council trees in that Ward, and reinforces the amenities and natural values of the area.

- A programme covering new tree planting and replacement

- Improved planting using the right species in the right places and best practice planting techniques.

- Consistent approach to on-going maintenance and protection of trees

- Consistent criteria for decisions on pruning, removing and replacing trees.

- Formalised procedures to deal with requests from people to prune, or remove trees in public land.

- Formalised procedures to deal with requests from people to plant trees in public land.

The table on the following pages sets out policies designed to achieve each of these objectives.

Policies

Objectives	Policies	Discussion/Implementation
Tree Master-planning		
A coherent overall tree masterplan that covers all Council trees in each Ward, and reinforces the amenities and natural values of the area.	Prepare a **tree masterplan** for each of the five Wards. This will indicate the main planting in reserves, coastal edges, streams and river margins, main routes and entranceways, and residential streets. It will include proposed species. Design the **tree masterplan** so that it is complementary to **reserves management plans** for each of the Wards, and preferably is prepared as part of the same consultative process. Design the **tree masterplan** on the following principles: • Strengthens natural landscape patterns and ecological processes. • Strengthens the form of settlements. • Strengthens the area's "sense of place".	Preparing a **tree masterplan** over a whole ward enables the trees to be seen as part of a network, rather than as individual streets and reserves. It means trees can used to strengthen the form of settlements (for instance by emphasising gateways, main routes, and character areas), strengthen natural patterns (reinforcing streams, coastal edges, areas of bush). Ideally tree masterplans will be carried out at the same time as reserves management plans. Street trees, for instance, can extend and tie together different reserves. Residents involved in workshops for reserves are likely to have a similar interest in street trees, and using the same workshop process helps resident's input into selection of tree species. Carrying out the tree masterplan on a Ward by Ward basis will enable each Ward to reinforce naturally its own character, avoiding uniformity on the one hand and artificially imposed difference on the other.

Objectives	Policies	Discussion/Implementation
Programme		
Tree planting and replacement or removal programme	Prepare a budgeted programme to implement the **tree masterplan** in each Ward. Determine priorities on the following criteria: 1. Replacement or removal of trees that are posing safety hazards or damaging services or infrastructure. 2. Planting trees that will contribute strongly to the use and enjoyment of reserves. 3. Planting trees that will contribute significantly to the urban form of settlements, for instance main roads, entranceways, town centres. 4. Planting trees that will significantly improve ecological processes and natural landscape patterns. 5. Requests from residents for specific tree planting (see below). 6. Remaining streets where there is no specific request from residents, providing there is general support from residents (see below)	In order to achieve a coherent tree plan the intention is to keep to a realistic programme to implement the tree masterplan over a reasonable period –say 10-15 years. At the same time funds should be directed as priorities to areas where there are safety or asset issues, areas where trees will have the maximum effect, and where tree planting is supported by residents' initiatives.

Objectives	Policies	Discussion/Implementation
Tree selection and planting.		
Species selection:	Select tree species according to the following criteria: ▪ Consistent with the tree masterplan for the area. ▪ The species will thrive in the site conditions, taking into account such things as soil conditions, wind and sun exposure, drainage. ▪ The anticipated mature size of the tree **at that particular site** can be accommodated without unduly threatening structures or services. ▪ The species is native to the area or there is a compelling, specific reason to use exotic species. ▪ Provide for deciduous trees	Tree selection should involve responding to the specific site requirements in a way that fits in with the broad tree masterplan. Any individual planting should be seen as part of the broader plan. Planting conditions vary between reserves where natural conditions can be readily replicated, through open recreation reserves and streets where conditions are often modified. In particular regard needs to be given to modified and compacted soils (especially in streets), open situations, and the likelihood of impeded drainage. Selecting trees to fit the location requires judgement on how large a tree can be expected to grow in (usually) sub-optimum conditions within a reasonable period (for instance 50 years). It is too restrictive to take into account the ultimate size of a tree in optimum conditions over a very long time. It needs to be borne in mind that relatively vigorous species are needed to cope with the conditions and to create impact within a reasonable period. Potential problems that might ultimately develop in the long term can be dealt with by pruning or tree replacement. Particular emphasis is placed on native species because

Objectives	Policies	Discussion/Implementation
		native vegetation plays such a strong role in Coromandel's identity or "sense of place" particularly iconic tree species such as kauri, pohutukawa, rewarewa, puriri, nikau. Such species are also more likely to promote biodiversity, ecological processes and natural landscape patterns. However there are occasions when exotic trees may play a particular role. Some trees have particular historical associations (Norfolk Island pines) or contribute to sense of place (pines at Pauanui).
Consultation	Consult with residents within a street, or residents adjacent to reserves, prior to significant tree planting or replacement. (This does not apply to routine planting or replacement of individual trees). Inform residents by letter of proposed tree planting (including species and timing), request feedback, and consider responses.	The goal is to ensure work in the public land has widespread support.. Unanimous support is not essential to carry out tree planting programme, and individual concerns might be addressed specifically (for instance fine tuning location of reserve tree to maintain a view, or shifting a street tree to improve visibility from driveway), but Council should reconsider plans where there is widespread disaffection. In such cases such disaffection would need to be weighed against likely public benefit of the project.
Planting	Plant trees to ensure **safety:** Street trees and trees along boundaries of reserves should have clear trunks up to eye height. (up to at least 1.7m).	Maintaining sightlines into public places from roads and adjoining properties helps promote personal safety by maintaining informal surveillance. Trees along such boundaries should have clear trunks, or be crown lifted, to

Objectives	Policies	Discussion/Implementation
	Comply with Transit NZ Guidelines for Safety in roads with a speed limit of 80kph or more.	eye height.
	Plant trees in a way that **protects kerbs, paths, and services**.	
	Plant street trees at least 700mm from kerbs or paths and use a root barrier to protect them.	
	Plant trees at least 3m from sewer lateral lines.	
	Do not plant trees beneath overhead lines.	
	Plant trees according to arboricultural best practice to ensure their continued good health and growth.	[Inset tree planting diagram]
	Street trees should normally be planted at Pb95 grade (1.5m high), in a properly prepared planting pit, and be double staked (see diagram).	
	Reserve trees may be planted as specimens similar to street trees, but may also be planted at smaller grades as part of mass planting or re-vegetation.	

Objectives	Policies	Discussion/Implementation
On-going maintenance and protection of trees.		
Pruning	Prune trees where the following criteria apply: ▪ Branches are obstructing roads, footpaths, or access to properties. ▪ Branches are overhanging private property and there is a request from the property owner (see below). ▪ Branches are obscuring street lighting. ▪ Branches are obscuring traffic signs or traffic visibility. ▪ Branches are within clearance tolerances of overhead cables. It is Council policy not to prune trees to preserve **private views** or to reduce **tree litter** or to reduce **shading**. However discretion might be exercised to prune trees for these reasons where it would not unduly affect the tree's form or health or detract from the public amenity provided by the tree. Prune trees to retain their natural habit as far as possible.	It is better to prune trees to solve issues than to remove the tree. Pruning is an essential management tool if a vigorous tree framework is to achieved within settlements while meeting imperatives of safety and protection of property. It is not possible to avoid such a balance simply by locating trees clear of potential conflicts within the confines of settlements. It is preferable to prune trees to grow around overhead wires rather than remove or top trees. "Trees" not capable of reaching the height of overhead wires are usually of insufficient scale for street tree planting and are low growing and bushy and likely to cause traffic safety issues. Public amenity should not be sacrificed to private views or minor nuisance issues such as leaf fall or nesting birds. However it may be in the community's interest as a whole to accommodate private views through careful siting of trees and pruning where this doesn't unduly compromise the tree masterplan.

Objectives	Policies	Discussion/Implementation
	Do not top or pollard trees.	Sensitive pruning is often the best way of resolving conflicting issues. Topping is not desirable because it results in bushy re-growth that can exacerbate conflicts (eg obscuring views), and can increase the potential for structural weakness or disease.
Damage to Drains	Where tree roots are damaging drains it is Council policy to retain trees and relay drains rather than remove the tree. Exceptions may be made for the following reasons: • It is impracticable to relay the drains. • The tree is a weed species, or a poor specimen, or in poor health, and the amenity of the area would be better served by a replacement tree.	
Costs	Council will carry the cost of repairs carried out by Council to lateral drains on public land where the repairs are required as a result of trees on public land. Council will carry the cost of tree maintenance on private land where this is carried out by Council to protect public services. Council does not accept liability for damage by trees to driveways or paths within the road reserve.	

Objectives	Policies	Discussion/Implementation
Damage, removal or replacement of public trees by individuals	Council permission is required for any activity affecting the health of trees on public land, including pruning or work beneath the canopy of the tree. Council may require property owners to undertake measures to protect trees during construction, such as fencing trees or using temporary ramps to prevent soil compaction near trees. Council may give permission to property owners to prune, transplant, or remove/replace a tree where this is necessary for reasonable use of the property. Any such approved work will be carried out at the expense of the property owner. Council may require a bond to cover the contingent cost of any remedial work should the property owner not carry out works successfully.	Changes to private land use may conflict with trees in public land from time to time, for instance relocation of a driveway may conflict with a street tree, or construction may temporarily threaten the health of a tree. In principle land owners will be required to avoid impacting on public trees. Where this unreasonably restricts use of the land, property owners may be required to transplant or replace trees.

Removing and replacing trees.

| | Council will remove trees that meet the following criteria:

▪ Trees are dead, dying or seriously diseased.

▪ Trees are a danger to people's safety, including danger from falling limbs, and where the tree obstructs | Council's over-riding responsibility is to people's health and safety, and it should take all steps to reduce potential risk from trees.

Remedial measures can often solve issues. This may include removing diseased limbs, crown lifting trees to |

Objectives	Policies	Discussion/Implementation
	views of traffic or pedestrians.	improve visibility, pruning trees to accommodate overhead wires, or bundling wires through the trees crown. These measures are preferred to removing trees, in particular where the tree has significant value.
	▪ Trees are damaging structures or services, or endangering property.	
	▪ If the tree is a weed species or recognised as environmentally damaging (see Appendix …)	
	▪ If the tree is to be replaced by a species that contributes more positively to the tree masterplan.	
	Remedial measures, such as pruning or crown lifting, will be preferred to tree removal where such measures can satisfactorily overcome the issue.	
Requests to prune or remove trees.		
For safety reasons	The process for dealing with requests from people to prune or remove trees is outlined on the Tree Pruning/Removal Flow Chart (Appendix 5) .	
	Requests to prune or remove trees will be assessed in the first instance in terms of potential danger to safety or property. Where there is doubt priority will be given to health and safety.	
	Requests to prune or remove trees for safety reasons will	

Objectives	Policies	Discussion/Implementation
	be prioritised as follows:	
	1. **Immediate Threat:** Immediate or same day action will be taken where there is a significant **immediate or sudden threat** to safety or property.	
	2. **Emerging Threat:** Work will be carried out within one month where an **emerging** threat to safety or property is identified.	
For other reasons	Where a person requests pruning or removal of a tree for other reasons or where any threat to safety or property is minor, Council will consider the request in terms of the public value of the tree and the level of affect to the person, against the following criteria:	
	Value of the tree: Council will follow the Standard Tree Evaluation Method (STEM) which considers the tree's condition (health), amenity (community benefit), and notability. Greater weight will be given to protecting trees native to the area and those that reinforce the tree masterplan, whereas weed species or those considered environmentally damaging will generally be removed. Greater weight will be given to protecting prominent or notable trees. Greater weight will be given to protecting	

Objectives	Policies	Discussion/Implementation
	trees with good form and health whereas trees with poor form and poor health are more likely to be removed. **Effect on Resident:** Council will consider whether any nuisance or inconvenience on an individual property is significant or minor. It is Council's policy to not prune or remove trees for views or minor nuisance effects such as leaf fall or bird roosting. However discretion may be exercised where the level of effects is great –for instance a tree completely blocks the outlook from a house, or causes severe shading, or other exceptional circumstance. Requests to prune or remove trees for other than safety reasons will usually be programmed in to routine maintenance work.	
Requests to plant trees.		
	Requests for tree planting in streets or reserves will be assessed against the following criteria: ▪ That the tree planting forms a coherent group –i.e a whole street rather than individual trees. ▪ That the planting is consistent with the tree masterplan, including the species list in the	The tree development programme (see above) may be modified in response to particular community initiatives. This may include enthusiasm from residents within a particular street for street trees, or an initiative to rehabilitate a reserve area involving voluntary labour to plant and maintain such areas. Note that Council permission as land owner is required to

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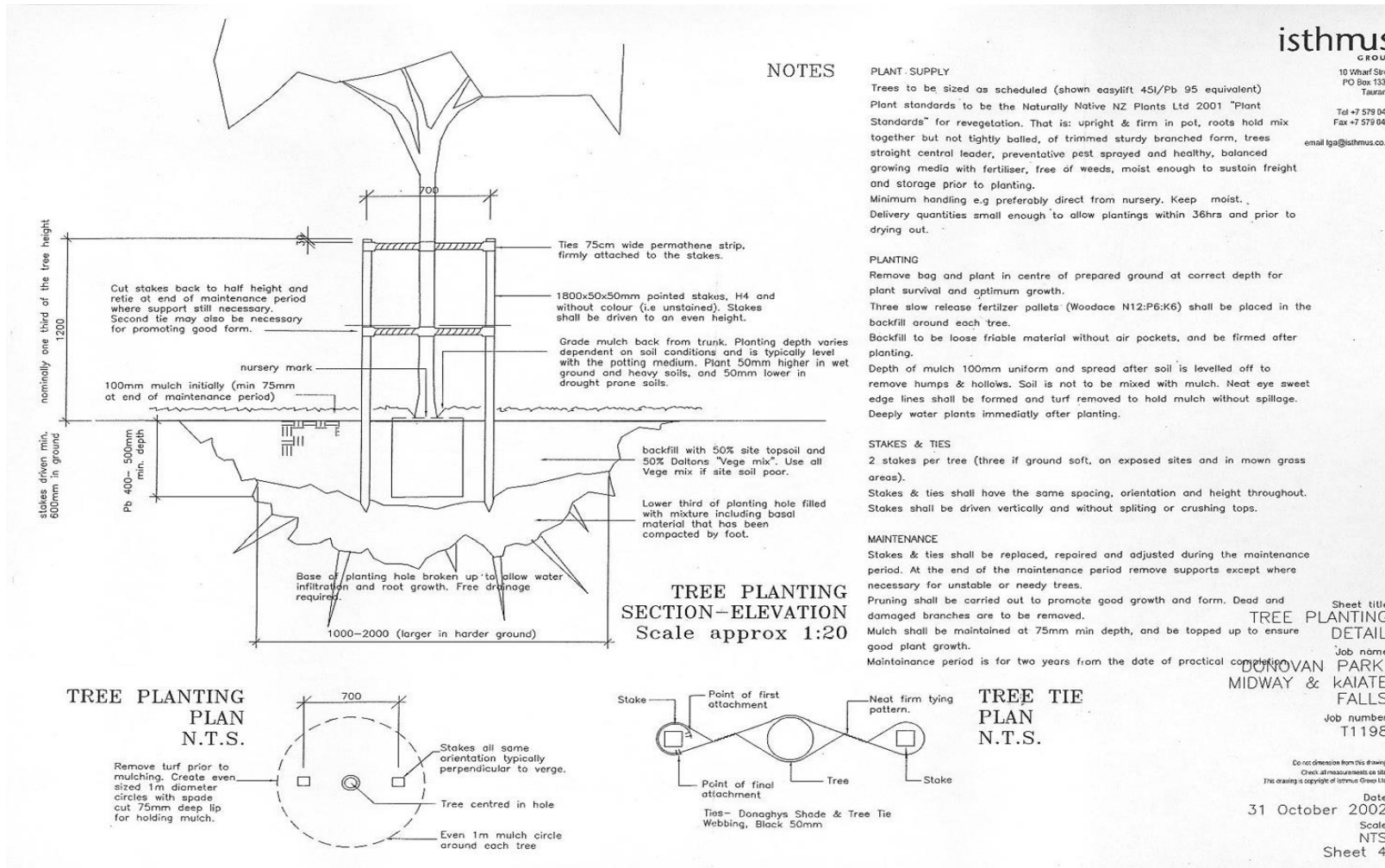| Objectives	Policies	Discussion/Implementation
	masterplan.	plant a tree in public land, and Council may remove trees that are planted without permission.
	▪ That there is substantial support from neighbours. Council will consult residents within a street or adjacent to a reserve regarding proposed planting. Unanimous approval is not required but Council will consider the level of support and feedback on a case by case basis.	
	▪ That tree planting is in accordance with safety and functional requirements set out above.	

Appendix 1 – Example of Tree Planting Standard

NOTES

PLANT SUPPLY

Trees to be sized as scheduled (shown easylift 4Sl/Pb 95 equivalent)
Plant standards to be the Naturally Native NZ Plants Ltd 2001 "Plant Standards" for revegetation. That is: upright & firm in pot, roots hold mix together but not tightly balled, of trimmed sturdy branched form, trees straight central leader, preventative pest sprayed and healthy, balanced growing media with fertiliser, free of weeds, moist enough to sustain freight and storage prior to planting.
Minimum handling e.g preferably direct from nursery. Keep moist.
Delivery quantities small enough to allow plantings within 36hrs and prior to drying out.

PLANTING

Remove bag and plant in centre of prepared ground at correct depth for plant survival and optimum growth.
Three slow release fertilzer pallets (Woodace N12:P6:K6) shall be placed in the backfill around each tree.
Backfill to be loose friable material without air pockets, and be firmed after planting.
Depth of mulch 100mm uniform and spread after soil is levelled off to remove humps & hollows. Soil is not to be mixed with mulch. Neat eye sweet edge lines shall be formed and turf removed to hold mulch without spillage.
Deeply water plants immediately after planting.

STAKES & TIES

2 stakes per tree (three if ground soft, on exposed sites and in mown grass areas).
Stakes & ties shall have the same spacing, orientation and height throughout.
Stakes shall be driven vertically and without spliting or crushing tops.

MAINTENANCE

Stakes & ties shall be replaced, repaired and adjusted during the maintenance period. At the end of the maintenance period remove supports except where necessary for unstable or needy trees.
Pruning shall be carried out to promote good growth and form. Dead and damaged branches are to be removed.
Mulch shall be maintained at 75mm min depth, and be topped up to ensure good plant growth.
Maintainance period is for two years from the date of practical completion.

Ties 75cm wide permathene strip, firmly attached to the stakes.

Cut stakes back to half height and retie at end of maintenance period where support still necessary. Second tie may also be necessary for promoting good form.

1800x50x50mm pointed stakes, H4 and without colour (i.e unstained). Stakes shall be driven to an even height.

Grade mulch back from trunk. Planting depth varies dependent on soil conditions and is typically level with the potting medium. Plant 50mm higher in wet ground and heavy soils, and 50mm lower in drought prone soils.

nursery mark

100mm mulch initially (min 75mm at end of maintenance period)

backfill with 50% site topsoil and 50% Daltons "Vege mix". Use all Vege mix if site soil poor.

Lower third of planting hole filled with mixture including basal material that has been compacted by foot.

Base of planting hole broken up to allow water infiltration and root growth. Free drainage required.

700

nominally one third of the tree height
1200

stakes driven min. 600mm in ground

Pb 400-500mm min. depth

1000–2000 (larger in harder ground)

TREE PLANTING
SECTION–ELEVATION
Scale approx 1:20

TREE PLANTING
PLAN
N.T.S.

Remove turf prior to mulching. Create even sized 1m diameter circles with spade cut 75mm deep lip for holding mulch.

700

Stakes all same orientation typically perpendicular to verge.

Tree centred in hole

Even 1m mulch circle around each tree

Stake

Point of first attachment

Point of final attachment

Neat firm tying pattern.

Tree

Stake

Ties- Donaghys Shade & Tree Tie Webbing, Black 50mm

TREE TIE
PLAN
N.T.S.

Appendix 2 – Basic Pruning Techniques (Williamson, 1976)

All pruning cuts should be made back to or just above some growth (refer figure one on how to position prune shears). Don't cut so far from the bud that a stub is left, but don't cut too close so as to injure the bud. Generally on young stems, make the cut moderately slanted in the direction the bud is pointed (figure 2). When the branch is too heavy to be comfortably supported with the free hand while using a saw, make a cut from the underneath, and on from the top, both half way, then resaw in the proper place (figure3).

For trees there are no set angles for a correct cut, the size of the collar determines the correct position of the pruning cut (figure 4)
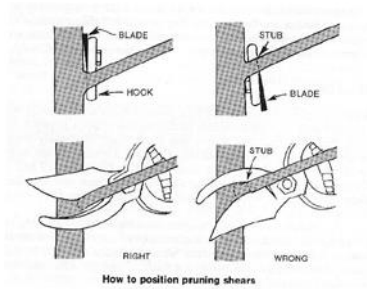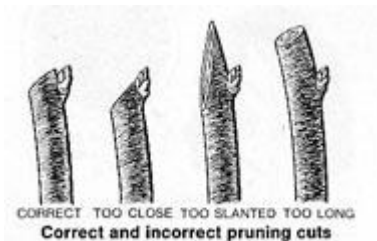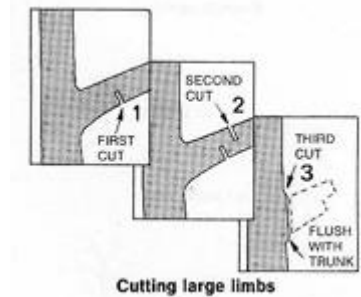
Figure 1   Figure 2   Figure 3   Figure 4
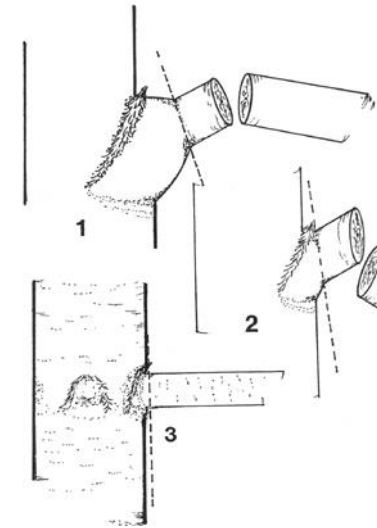
Appendix 3 – Amenity Evaluation Worksheet

Regional Location ……………………………… District …………………………..

Address ……………………………………………………………………………….

Botanical name …………………………………

Common name …………………………………

Height (m) ……………… Average Width (m) ……………...Volume (m³) ………………………

Worksheet

Points	3	9	15	21	27	Score
Stature (m)	3 to 8	9 to 14	15 to 20	21 to 26	27+	
Visibility (km)	0.5	1.0	2.0	4.0	8.0	
Proximity	Forest	Parkland	Group 10 +	Group 3 +	Solitary	
Role	Minor	Moderate	Important	Significant	Major	
Climate	Minor	Moderate	Important	Significant	Major	

Subtotal Points

Total Score Percentage Sore

Reference Notes:

Amenity Assessor ……………………………………………………………………

Name ………………………………………………………………………………..

Address ………..

Telephone …………………………………………………………………………

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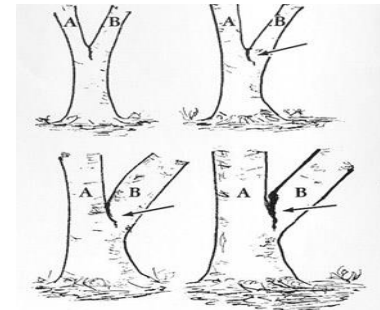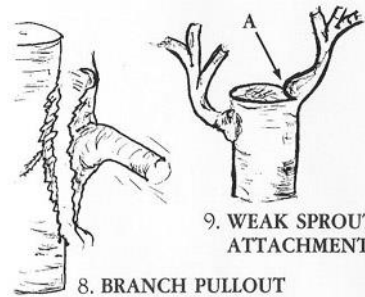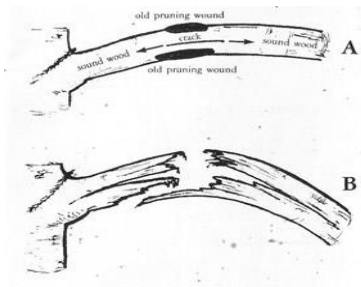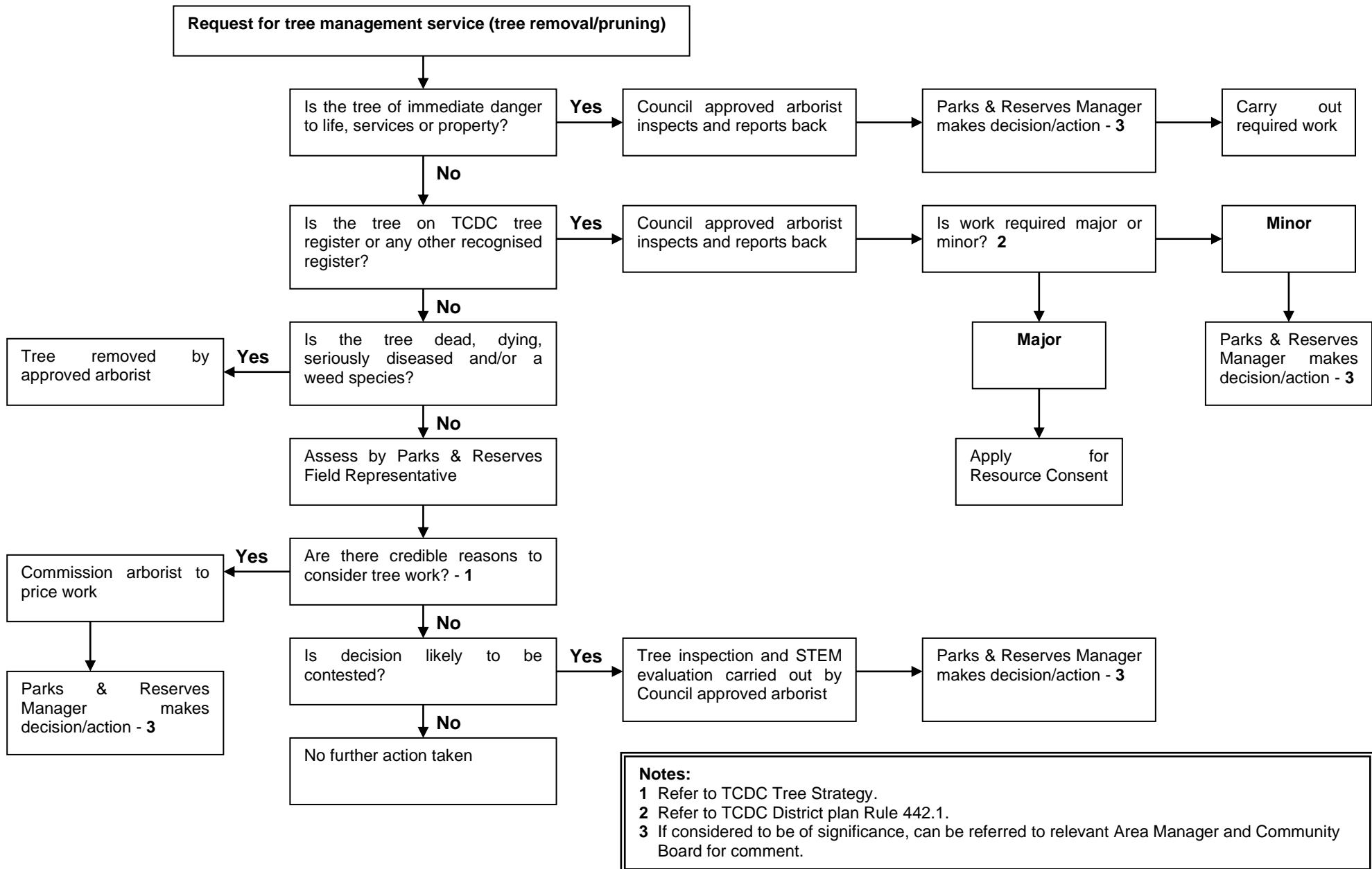## Appendix 4 - Criteria for Assessing Hazardous Trees (Shigo, A)

Some common questions to ask as whether a tree is hazardous include:

- Architecture – Has the tree grown beyond its normal form into a dangerous form?
- History – Has the tree lost large branches recently?
- Edge tree – Were neighbouring trees cut away recently leaving tall trees at the edge?
- Dead Branches – Are there dead tops or branches? Is the tree dead?
- Cracks – Are there deep, open cracks in the trunk and branches?
- Crotch Cracks – Are there deep, open cracks below joining stems?
- Living Branches – Do living branches bend abruptly upward or downward where tips of large branches were cut off?
- Storm Injury – Are there broken branches, split trunks, or injured roots? Are branches close to power lines.
- Root Rot – Are there fungus fruit bodies on roots? Were roots injured by constriction?
- Rots and Cankers – Are there any hollows or cankers – dead spots? Is the tree leaning?
- Construction Injury – Have roots, trunk, or branches been injured? Is there a new lawn or garden over injured roots?
- Target – If the tree falls will it hit cars, houses, power lines or people?

Appendix 5 - Tree Pruning/Removal Flowchart

Request for tree management service (tree removal/pruning)

Is the tree of immediate danger to life, services or property? — **Yes** → Council approved arborist inspects and reports back → Parks & Reserves Manager makes decision/action - **3** → Carry out required work

No

Is the tree on TCDC tree register or any other recognised register? — **Yes** → Council approved arborist inspects and reports back → Is work required major or minor? **2** → **Minor**

No

Minor → Parks & Reserves Manager makes decision/action - **3**

Is work required major or minor? **2** → **Major** → Apply for Resource Consent

Is the tree dead, dying, seriously diseased and/or a weed species? — **Yes** → Tree removed by approved arborist

No

Assess by Parks & Reserves Field Representative

Are there credible reasons to consider tree work? - **1** — **Yes** → Commission arborist to price work → Parks & Reserves Manager makes decision/action - **3**

No

Is decision likely to be contested? — **Yes** → Tree inspection and STEM evaluation carried out by Council approved arborist → Parks & Reserves Manager makes decision/action - **3**

No

No further action taken

Notes:
1 Refer to TCDC Tree Strategy.
2 Refer to TCDC District plan Rule 442.1.
3 If considered to be of significance, can be referred to relevant Area Manager and Community Board for comment.

Council Adopted Thames Coromandel District Tree Strategy 28 May 2003

Minutes
of the
Service Delivery Committee
Ordinary Meeting

Date: 29 October 2008

Venue: Coromandel Meeting Room
355 Kapanga Road
Coromandel

Present:

NS Hewlett JP (Chairperson)	WM Barclay
	PD Sieling

In Attendance:

Name	Item(s)
John Whittle, Group Manager Service Delivery	All
Ingrid Le Fevre, PA to Service Delivery Group Manager	All
Matt Busch, Roading Manager	Items 5.0 – 5.3
John Rich, Community Services Manager	Items 3.0 – 3.4

Apologies: AB Catran JP

Meeting Commenced: 09.00 AM

Adjournments and Absences

Adjournments	Start	Finish	Reason
Absences			Item
Bill Barclay	9:46am	9:48am	7.1

Council Adopted Thames Coromandel District Tree Strategy 28 May 2003

Agenda

Council Adopted Thames Coromandel District Tree Strategy 28 May 2003

3.3 Tree Pruning removal flow chart

The purpose of the report is to seek a decision from the Committee regarding the Thames Coromandel District Tree Strategy Flow Chart.

The Community Services Manager noted that the Tree strategy is working really well.

Resolves

That the Service Delivery Committee:

1. Receives the report; and
2. Determines that it believes it has complied with the decision-making provisions of the Local Government Act 2002 to the extent necessary in relation to this decision; and in accordance with the provisions of section 79 of the Act determines that it does not require further information prior to making a decision on this matter;
3. Recommends that Council approve the Tree Strategy flow chart for inclusion into the Thames-Coromandel District Tree Strategy.

Moved/Seconded By: Hewlett/Barclay