appendix d:

methodology used to identify natural, heritage & amenity features of value in waitakere city

NATURAL

This appendix outlines the methodology used for identifying the natural, heritage and amenity resources of value in Waitakere city. Details of each type of feature can be found in other appendices.

NATURAL

Significant Native Vegetation:

Areas of significant vegetation meet one of the following criteria:

1. It is the best, or one of the best, representative site(s) of an indigenous vegetation community within its ecological district.
2. It is a threatened vegetation community within its ecological district or contains populations of threatened species.
3. It contains a significant population of indigenous species.
4. It is an indigenous vegetation community type poorly represented in the City's protected area network.
5. It is threatened in the short-term with loss or destruction, or significant degradation in condition or health.
6. It contains a high diversity of native plant species for its vegetation community type.
7. It contains a high diversity of ecological pattern, for example a change in species composition or vegetation communities along an environmental gradient.
8. It is a vegetation community in an original condition, or is in a largely natural state or healthy condition.
9. It will maintain or has the potential to maintain its ecological viability through its size, shape and health.
10. It has adequate buffering or protection from external effects, or has the potential for buffer areas to be added in the future.
11. It is linked or can be linked to other protected natural areas (i.e. presence or establishment of ecological corridors).
12. It is a site which as the potential for restoration of a threatened indigenous vegetation community.

Outstanding Native Vegetation:

Outstanding vegetation areas were selected from those sites identified as priority vegetation sites in the Waitakere[1] and Tamaki[2] Protected Natural Area Surveys. These are areas of significant vegetation that are of special importance to local, regional or national biodiversity, and are the best representative example of each vegetation community in that ecological district.

The Protected Natural Area Programme is a New Zealand-wide Department of Conservation programme, developed as a way of ensuring that the range of natural features of New Zealand are conserved for the future. This programme is confined to land and does not include aquatic ecosystems.

Waitakere City encompasses part of two Ecological Districts-Waitakere Ecological District and Tamaki Ecological District. Most of Waitakere City is within the Waitakere Ecological District, only a relatively small part (approximately one quarter) of the City is within the Tamaki Ecological District.

The Waitakere Ecological District extends along the West coast from Muriwai in the north to Whatipu in the south, and inland from Muriwai to Green Bay. It includes all of the uplifted Waitakere Ranges and the upper catchment area of the eastern foothills. It is largely covered in a continuous area of native vegetation, much of which is either significant or outstanding.

The remainder of the foothills and the lowland areas of Waitakere City are in the Tamaki Ecological District, which in contrast to the Waitakere City Ecological District, has highly fragmented bush remnants, with little remaining of the vegetation which originally covered the District.

Significant Native Fauna Habitat:

Areas of significant native fauna habitat were selected using the former New Zealand Wildlife Service (now Department of Conservation) methodology to identify Sites of Special Wildlife Interest. Areas identified as being moderate to moderate-high value were selected as significant fauna habitat.

Outstanding Native Fauna Habitat:

Areas of outstanding fauna habitat were chosen from areas of significant fauna habitat that are of special importance to local, regional or national biodiversity. These are documented in the Waitakere[1] and Tamaki[2] Protected Natural Areas Surveys as sites of priority fauna habitat. Fauna habitat ranked as outstanding or high value in the PNA Survey reports were regarded as outstanding fauna habitat in the District Plan. These are areas that have largely unmodified habitat, are of a large size, have threatened species present, or possess a diverse wildlife community.

Ecological Linkage Opportunities & Restoration Areas

While the area of native vegetation in Waitakere City is relatively large, it is not evenly spread throughout the City. Also, many areas of native vegetation are in a degraded state, being in some cases isolated and fragmented, particularly in the Tamaki Ecological District. Isolated forest remnants are vulnerable to loss of diversity and degradation, as it is easy for plant species to disappear when seed sources are not readily available. Small areas of forest are also vulnerable to so called 'edge effects' (where wind, weeds and other forces cause damage to the edges of the forest), as proportionally more of the forest is exposed to these forces. Moreover, small forest remnants are not suitable for many native birds, especially when they are isolated from other areas of forest. Many of the processes that cause degradation of native ecosystems, such as weeds and animal pests, grazing, burning and exposure to 'edge effects', will cause increasing deterioration if left unchecked.

Such measures as revegetation, weed and pest control, and reintroduction of native species increase the cohesiveness and vigour of the native vegetation cover in the City. Reintroduction of fauna may also be considered. This will mean that existing areas of native vegetation and particularly remnants, are less vulnerable to further degradation, and possible disappearance in the future.

Establishing links between areas of native vegetation has been identified as effective in facilitation the natural spread of native plants and animals, and thereby increasing natural regeneration and maintaining natural biodiversity. This is analogous to providing stepping stones between natural areas.

Areas have been selected in the City where it is desirable in the long-term, to restore native vegetation and wildlife habitat. The areas consist of two basic types - restoration areas and ecological linkage opportunities.

Restoration areas are those areas in the City that are over 300m² and have between 20% and 50% native vegetation cover. This includes plant cover in both canopy and sub-canopy tiers of the vegetation. These areas often have an exotic tree canopy of wattle or pine, with native plants regenerating in the understorey. Plant diversity is often low because of the isolated character of many of these areas, and the high degree of ongoing disturbance from such threats as grazing and burning. Weed numbers are often high.

Ecological linkage opportunities are those areas that have been identified as probable linkages between isolated patches of significant vegetation, or between restoration areas and significant vegetation. Revegetation or restoration of these areas is considered desirable. Some restoration areas are themselves linkages between areas of significant vegetation, particularly along riparian margins (stream edges). The linkage areas identified are intended to link the bush covered Ranges with remnant forest patches in the City lowlands down to the coast of the Waitemata Harbour. Linkages have also been identified in esplanade reserve along the riparian margins of streams in the City lowlands and along the Waitemata Harbour coastline.

Principles followed in defining the linkage areas were to:

- connect as many isolated patches of native vegetation as possible;
- establish Natural Area connections along streams and around the coast;
- reduce edge effects on existing native vegetation
- use public land, particularly reserve land;
- use Riparian Margin Natural Areas, as identified on the Natural Area maps;

where possible

- avoid including dwellings and other buildings;
- avoid covering more than 25% of any one lot in an ecological linkage.

Although not mapped, roadsides and public open space are also considered to be potential ecological linkages.

Outstanding Coastal Area

The outstanding coastal area encompasses those places in Waitakere City which are directly influenced by the sea generally and area extending inland to the first coastal ridgeline and which still retain considerable natural character. This includes:

- the west coast and Manukau coastlines around the Waitakere Ranges with their largely bush covered coastal margins, coastal headlands and dunelands;
- around the Waitemata Harbour coastline at Whenuapai and Hobsonville (from Brighams Creek to Scott Road);
- from Lawsons Creek to the end of Taitapu Street, where the largely unbuilt coastal margin still retains considerable natural character; and
- the eastern margin of Te Atatu Peninsula.

These areas were initially identified in the Green Network Report[4], with other areas of high natural character, identified through interpretation of aerial photographs, also included. These were checked against the Auckland proposed Regional Coastal Plan (RCP)[5]. The RCP identifies Coastal Protection Areas (CPAs) in the coastal marine area. These are areas of regional, national or international significance due to their ecological, landform or geological values. CPAs which border Waitakere City occur around much of the West coast and Manukau Harbour coastline, and in some locations along the Waitemata Harbour.

In addition, the Auckland RCP includes sites of Significant Conservation Value, identified by the Minister of Conservation. These include the entire Manukau Harbour, west coast lower Miocene volcanic deposits, the upper Waitemata Harbour and the Hobsonville Peninsula Landslide.

Riparian Margins

Riparian margins are the edges or banks of natural watercourses, including streams, lakes, and wetland.

Riparian margins are threatened by the runoff of sediment, nutrients and heavy metals, tramping and grazing by domestic stock, earthworks, and the loss of permeable surfaces which occurs as a consequence of building.

Field Work

A survey of the riparian margin of the City's streams, wetlands and natural lakes that were not covered in vegetation contiguous with the Waitakere Ranges, were conducted between April and July 1995, with further surveys completed during 1997. The main objectives of this survey was to:

- identify the condition of the riparian margin; and
- collect information which would be the basis to assigning the most appropriate riparian margin width.

Information indicative of the state of a riparian margin, and able to be assessed quickly in the field was obtained, including:

- the broad vegetation classes within 20m of a stream, wetland or lake;
- the adjacent land use (including grazing);
- the location of fences within 20m of a stream, wetland or lake (as a basis for assessing public access issues and to quantify the current area being fenced off to prevent stock access;
- the incidence of litter;
- an assessment of stream stability using the features associated with bank stability, using the Pfankuch method[6];
- the presence and abundance of target weed species (including noxious plants and weeds considered an environmental risk);
- a qualitative statement of any other problems encountered (e.g. contamination).

Watercourses were surveyed in sections, within which the characteristics were approximately homogenous. Only streams greater than 50cm in width were surveyed.

Assigning Riparian Margins

A standard 20m (the maximum width) was assigned to waterbodies that were covered in vegetation contiguous with the Waitakere Ranges. All other riparian margins were assigned on a site specific basis according to:

- the environmental conditions, including topography, determined as part of the field survey;
- the filtering capacity (determined for each site according to Department of Conservation guidelines[7]); and
- the primary reason for having a riparian margin (e.g. shading to enhance fauna habitat, prevent, contaminants entering the water, and to mitigate flooding).

Coastal Edges

Coastal edges are the margins of the City's coastline. Much like riparian margins, coastal edges (and the associated coastal waters) are under threat from the runoff of contaminants from adjacent land, trampling and grazing by domestic stock, earthworks, and the loss of permeable surfaces.

Field-Based Survey

A survey of the Waitemata Harbour coastline was carried out in February 1997. The main areas of concern were those which were not in public ownership or where the esplanade reserve no longer exists. The principle survey areas were the coastlines of Whenuapai, Hobsonville, Herald Island, Kelston and New Lynn.

The main purpose of the survey was to collect information which would assist in assigning appropriate coastal edge widths. The information collected during the field-based survey included:

- the dominant landuse of the properties adjacent to the coast;
- the broad classes of vegetation in the immediate vicinity of the coast;
- any disturbances to the coastal edge (e.g. earthworks, structures, vegetation clearance, grazing activity);
- general topography of the area, including the approximate height above mean high water springs (MHWS);
- evidence of any natural hazards in the area.

The information compiled from this survey was supplemented with data obtained from other sources; this includes analysis of aerial photographs, topographic maps and miscellaneous reports e.g., the ARC's Auckland Urban Area Coastal Landscape Assessment.

Assigning Coastal Edges

Unlike riparian margins of the City's rivers and streams, much of the land that is immediately adjacent to the coast is in public ownership. This publicly owned land is primarily in the form of esplanade reserves (which range in width from 5-20 metres), however, other reserve types also occur (e.g. ARC park land around much of the Manukau Harbour and West Coast coastline). Apart from not being subject to the same development pressures as privately owned land, these reserves already have a degree of protection against the adverse effects of use and development. Because of this, along areas of the City's coastline where there is an esplanade reserve, a coastal edge equivalent to that of the esplanade reserve has been assigned. However, in areas where there is no reserve, or it no longer exists (e.g.as a result of erosion), an appropriate coastal edge width (varying from a minimum of 5 metres to a maximum of 20 metres) was assigned using the information compiled from the field-bases coastal edges survey.

Because of the partial reliance on the width of esplanade reserves for coastal edges, it is considered that the most appropriate way of measuring coastal edges is by planimetric means (i.e. measured along the horizontal distance). This differs with the method of measurement for riparian margins, which are measured topographically (i.e. along the relief of the land). As well as being consistent with the way that esplanade reserves are measured, the planimetric measurement of coastal edges also removes the problem of inadequate protection by topographically measured coastal edges in areas where there are high coastal cliffs.

Outstanding Natural Features

Outstanding Landforms

Outstanding landforms were identified from areas defined as 'priority landform sites' in the Waitakere and Tamaki Protected Natural Areas Surveys. These priority landforms include single features, and assemblages of landforms which were selected because they:

- have features that illustrate the processes which have given the Ecological District its particular character; or
- are the best example in New Zealand; or
- illustrate the dramatic juxtapositions of landforms found in the District, for example rocky headlands and sandy beaches; high sea cliffs and bluffs and sand dunes; low gradient streams penetrating inland along broad valleys and high waterfalls with gorges; or
- are good examples of the landform features found in the Ecological District.

Landform features selected include:

- bluffs;
- waterfalls;
- gorges;
- steep hillsides;
- tunnels and caves;
- elevated coastal terraces;
- sand landforms, such as sand plains still being formed (unusual on the west coast of New Zealand), mobile sand dunes and sand lakes.

Outstanding landforms in the Waitakere Ecological District meet the criteria, but no landforms were selected in the Tamaki Ecological District. Examples likely to be priority landforms in the Ecological District, such as the volcanic cones of the Auckland Isthmus, fall outside Waitakere City.

In addition to the priority landforms identified by the PNA survey, several knolls in the City are also included. These are isolated outcrops of erosion resistant volcanic breccias/conglomerates that form dramatic peaks due to the erosion of the surrounding softer tertiary sedimentary rocks.

Geopreservation Sites

Geopreservation Sites are landforms and geological sites identified as being of particular interest internationally, nationally or regionally. These have been identified in the Geopreservation Inventory[8], prepared by the Geological Society of New Zealand. This inventory aims to list the best features and processes that together characterise each part of New Zealand, and document its long and complex geological history, the formation of its landforms, and the evolution of its unique biota. Twenty-two such sites occur in Waitakere City.

Many of these sites are part of a larger area of Outstanding Landforms, but are of particular interest.

Representative Soils

The New Zealand Society of Soil Science has established an inventory[9] of soils considered of international, national or regional significance, because they best represent a particular soil type or are rare or unusual. Waitakere City has one soil site that is considered to be of regional significance as it is a good example of the soil type known as Huia soil. This occurs in the Wainamu Scenic Reserve.

Public Access Routes

Public access is defined as providing routes which the public can walk and/or ride along to get to waterbodies, reserves or parks.

The following criteria were used to identify potential public access routes in the City. Areas were selected which provide public access:

- to existing public parks and reserves;
- from one road to another road;
- links between existing reserves;
- to the coast from a public place. Public land such as road reserves, 'paper' roads, and existing reserves were used for access routes where ever possible.

The Green Network Report[4] provides more detail on public access.

Outstanding Landscapes, Landscapes Elements, and Sensitive Ridges, Headlands and Cliffs/Scarps

A landscape is generally a broad area which has a unique combination of natural and physical elements, such as landforms, vegetation and waterways, and human elements, such as buildings and roads. Outstanding landscapes are areas or sites that are particularly valued by people.

Outstanding landscapes were identified in a report prepared for Council[11] and through field work carried out by Council staff.

Identifying Outstanding Landscapes

A combination of techniques was used to identify these landscapes, including a preliminary desktop assessment using NZMS 260 series topographical maps, aerial photos and field surveys.

Seven broad landscape areas were identified, three of which were considered outstanding.

Landscape Elements

Landscape elements were identified by selecting generic elements which repeat themselves in the landscape. With the exception of built elements, these elements are landforms and/or vegetation cover (natural landscape elements).

Natural landscape elements were mapped on computer using orthophotos and stereo pairs of aerial photos, topographical maps and geographical maps.

Sensitive Ridges, Headlands and Cliffs/Scarps

Waitakere City is covered in a complex mosaic of ridges, especially in the Ranges, while headlands and cliffs/scarps are common around much of the Manukau Harbour coastline and along the west coast. Some ridges, headlands and cliffs/scarps are more sensitive to development and change than others because of their character, prominence or the amount of existing development.

Ridges, headlands and cliff/scarps in Waitakere City were mapped using stereo pairs of aerial photos. The following methodology (including criteria) was then used to identify which ridges, headlands, cliffs/scarps to include as sensitive to development etc. This involved a combination of desk exercises and field checks.

The criteria for determining the sensitivity of ridges, headlands, scarps and cliffs is outlined below.

- Whether the ridge is visible with a backdrop of either sea or sky, when seen from a public place.
- Whether the ridge has been modified or is predominantly natural.
- Whether the ridge is steep, moderate or broad.

Visual quality:

- intactness: the degree of alteration of the landscape element;
- complexity-the richness and diversity in the visual qualities of the ridgeline;
- coherence: the visual unity of both natural and built elements on the ridgeline.

Visibility:

- size and type of audience: is it observed by a large number of people or not, and whether these people are transient or permanent;
- distance from landscape element: the distance at which the landscape element is observed;
- position of the audience: the location of the audience when the landscape element is observed

Vulnerability:

This is a measure of the sensitivity of the ridgeline to modification.

The rules use a two-tier system of protection, by making a distinction between:

1. those sensitive ridgelines which are already modified by development (the "modified sensitive ridgelines"), where restrictions on building and development can be more relaxed; and
2. those sensitive ridgelines which are still predominantly natural (the "natural sensitive ridgelines"), where future development could have greater impact on amenity and landscape values, thus needing tighter management.

Three different buffer widths of 25m, 65m and 100m either side of the centreline of the sensitive ridge are used. These different buffer widths take account of the differences in steepness found in the sensitive ridgelines of the City, with broad ridges requiring a wider buffer, and steep, narrow ridges a narrower buffer.

The rules are structured to ensure that development that would be seen against either the sea or skyline when viewed from a public place is subject to a more detailed examination than developments that do not intrude in front of the sea or skyline.

A total of 119 ridges are included for protection. Of these, 108 are included as "natural sensitive ridgelines", while 8 are "modified sensitive ridgelines". A further 3 are included as "natural" for part of their length, but "modified" for the other part.

(See also "An Assessment of Significant Ridges, etc", and "Sensitive Ridgelines: A Review of the Provisions in the Proposed District Plan" by M. Absolum.)

Significant Public Views

A number of views of particular note or importance were identified in a report prepared for Council[14] and through field work by Council staff, as being worthy of special protection. The view points were chosen for:

- their scenic qualities;
- their views of notable locations;
- their contribution to the visual experience of road travel.

These views have been limited to those visible from the roadside and which are already recognised by the presence of signs, platforms and a formed path leading from a formal parking area, as such views are likely to be valued by the greatest number of people. The majority of viewpoints identified are concentrated around the edge of the Ranges or along the coast. Views were described and the extent of the view determined by the use of compass measurements.

The Auckland Regional Policy Statement has regional provisions to better provide for the management of Auckland's landscape and volcanic features which represent landscapes of regional and/or national significance. It is therefore necessary to protect significant public views of Auckland's volcanic cones by identifying a number of volcanic veiwshafts across the region.

The criteria used to identify significant volcanic viewshafts are set out in a report entitled "Review of Visual Protection of Auckland's Volcanic Cones" prepared for the former Auckland Regional Council[15].

In the report, a regionally significant volcanic viewshaft visible to motorists heading east from Te Atatu along State Highway 16 is identified and referred as A13:

A13 The north-western motorway provides panoramic views across the Waitemata Harbour and towards the heart of Auckland for travellers heading east from Te Atatu and along the causeway to Point Chevalier. The horizon is punctuated by three cones; Rangitoto looming up behind the harbour bridge, Mt Eden and Mt Albert. Of these, Mt Albert is the focal feature of the horizon when viewed from the straight that connects the Rosebank peninsula to Traheme Island. While the mount is over 4 kilometres away, this view plays an important role in the sequence of views along this stretch of the motorway, which began just past the Te Atatu intersection..

A map showing the exact dimensions and land contours within Volcanic Viewshaft A13 from Te Atatu along State Highway 16 is included as Appendix XXX to the District Plan maps.

HERITAGE

Heritage Sites

An inventory of approximately 800 items was established which consisted of sites or structures either;

- already protected for their heritage value by the existing District Plan; or
- identified by the community as being of significance; or
- identified through a survey of Waitakere City carried out by Council.

These were then placed in seven categories according to their significance:

1. historic - the item is associated with a past event, notable people or activity, a social period, a particular technological milestone, scientific history or principles, or scientific data about fabric (such as the composition of mortar);
2. architectural - the item is a good example of a particular architectural style, construction technology or the work of a notable architect;
3. landmark - the item is a physical landmark within the City which is valued community;
4. the item has significance to the community-consideration given to value placed on an object by the local community, irrespective of other values;
5. visual - the item is important visually and contributes to the amenity, the form, scale, fabric and setting of the place or an area;
6. patterns of settlement - the item is an important representative example of the surrounding settlement pattern (such as an example of a bungalow within an area where housing built in the 1930's dominates), or is a relatively rare example in an area which is dominated by another form of settlement;
7. sense of Place - contributes to the identity of the local area or city e.g. orchards, special buildings, community halls etc.

All sites or structures considered significant in one of these categories were assessed to establish the level of protection appropriate.

This process established a list of approximately 200 sites or structures to be protected in the District Plan, and management strategies were prepared for each.

Three management categories were identified for the District Plan:

Category 1

Structures of high value which should not be modified, or modified only minimally, for example Lopdell House and the Glen Eden Playhouse.

Category 2

Structures of value, but where change could be considered if it is in keeping with the character. This category mostly includes dwellings. No demolition would be considered.

Category 3

Structures of value, but where change could be considered if it is in keeping with the character. These items are good examples of their kind. This category recognised the need for greater flexibility in terms of the management of the items. Demolition may be considered according to stipulated criteria.

Heritage Vegetation

Heritage Vegetation listed on the Heritage Appendix were required to meet the following criteria:

- trees already protected for their heritage value by the existing plan; or
- trees identified by the community as being of significance.

From this inventory, trees deserving of protection under the District Plan were selected. This selection process involved evaluation against the following criteria:

- community criteria
- scientific criteria
- amenity criteria
- historical criteria

HERITAGE continued

General tree protection controls offer a degree of protection to trees considered to have amenity value, so the trees protected in the District

Plan Heritage Appendix are those having particular heritage value and for which the general tree protection controls would not provide sufficient recognition and protection.

In future, trees will be included on the Heritage Appendix if they are nominated by the community or the Council and meet a threshold of 125 using the Royal New Zealand Institute of Horticulture (RNZIH) Standard Tree Evaluation Method (STEM), as modified by the Council as a method of assessing arboricultural (scientific), amenity, and notable criteria. Any tree scoring 15 or more under the notable criteria will be included in the Heritage Appendix.

A copy of the RNZIH STEM as modified by the Council is shown at the end of this Appendix.

Archaeological Sites and Waahi Tapu

The New Zealand Archaeological Association (NZAA) records all known archaeological sites and waahi tapu in New Zealand. The Council holds a copy of the NZAA list of sites within Waitakere City.

Archaeological sites protected by the District Plan include those nominated by the community and known recorded archaeological sites. The Historic Places Act 1993 protects all archaeological sites whether recorded or unrecorded. Further survey work of archaeological sites is required within the Foothills and Waitemata Harbour coastline of the City.

Waahi Tapu

The Historic Places Act 1993 definition of "archaeological site", includes sites that have been modified by Maori and are of significance to iwi. The approach used in the Plan considers such sites as "waahi tapu", rather than as "archaeological sites". Thus, in the context of heritage sites, "waahi tapu" refers to modified sites of significance to tangata whenua holding manawhenua status in Waitakere City, and "archaeological sites" refers to all other sites.

ARCHAEOLOGICAL SITES

Of those sites listed in the New Zealand Archaeological Association site files, some have also been included in the Heritage Appendix. Sites listed in the Heritage Appendix are those which, over time, have been identified as significant by the community.

Note: the Historic Places Act 1993 definition of archaeological sites differs from that adopted in this Plan. The Act definition reads:

"Archaeological site" means any place in New Zealand that -

(a) Either:

  (i) Was associated with human activity that occurred before 1900; or

  (ii) Is the site of the wreck of any vessel where that wreck occurred before 1900; and

(b) Is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand.

Protection of Archaeological Sites and Waahi Tapu

Under the Historic Places Act 1993, all archaeological sites (including waahi tapu) are protected whether recorded or not. An authority must always be obtained from the New Zealand Historic Places Trust (NZHPT) under the Historic Places Act in order to destroy, damage or modify any archaeological site or waahi tapu.

Under the Resource Management Act, the Council has a responsibility to protect archaeological sites and waahi tapu. Archaeological sites protected by the District Plan include both those nominated by the community and known recorded archaeological sites. Any alteration of waahi tapu and known, recorded archaeological sites requires an archaeological or waahi tapu resource consent from the Council. This consent may be required in association with any development proposed involving the development of land, including buildings, subdivision, vegetation clearance and earthworks.

Further survey work of waahi tapu and archaeological sites is required, particularly within the Foothills and Waitemata Harbour coastline of the City.

HERITAGE continued

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appendix d: methodology used to identify natural,

Waitakere *City Council*
Te Taiao o Waitakere

PROPOSED DISTRICT PLAN : HERITAGE TREES
TREE EVALUATION

Location .....Date .....

Address .....

Legal description of property .....

Botanical name .....

Common name(s) .....

Height.....m Avg Width.....m Volume.....m^3

Photograph #: Film.....Frame(s) .....

Environmental damage potential.....

Notes:

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Evaluation carried out by:.....

Adapted from STEM Copyright Ron Flook DipLA (Glos), ALI (UK), PPNZILA, FNZIH

Full Tree Evaluation Score Sheet

Condition Evaluation

Points	3	9	15	21	27	Score
Form	Poor	Moderate	Good	Very good	Specimen	
Occurrence	Predominant	Common	Infrequent	Rare	Very Rare	
Vigour & Vitality	Poor	Some	Good	Very good	Excellent	
Function	Minor	Useful	Important	Significant	Major	
Age (yr)	10yrs. +	20yrs. +	40yrs. +	80yrs. +	100yrs. +	
Subtotal Points						

Amenity Evaluation

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						

Notable Evaluation

Recognition Points	Local 3	District 9	Regional 15	National 21	International 27	Score
Stature						
• Feature						
• Form						
Historic						
• Age 100+						
• Association						
• Commemoration						
• Remnant						
• Relict						
Scientific						
• Source						
• Rarity						
• Endangered						
Subtotal Points						
Total Points						