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A street tree is a tree growing in a public road reserve. A street tree must be appropriate for its location and purpose and is characterised by a single clear trunk, well formed branches and a distinct elevated canopy. A street tree may be deciduous or evergreen, native or introduced.

Brush Box - *Lophostemon confertus*  
Balfour Street
Summary

This strategy has been developed to provide a coordinated, strategic approach to the planting of street trees in Launceston. A review of the current street tree situation has identified many areas that would benefit from additional street tree planting. This strategy is more than just a tree planting plan and will seek to improve some of Launceston's highest profile streetscapes through the addition of carefully selected trees. This is a working document that will be subject to continual review with a major review at the end of ten years.

Trees provide many environmental, social, economical, functional, health and amenity benefits and are an important part of our city. There are numerous street tree planning considerations that need to be addressed to ensure the most suitable trees are planted in appropriate locations. Sourcing funding, developing partnerships, seeking sponsorship and undertaking community consultation will be important steps in implementing this strategy.

The implementation plan prioritises areas for planting by identifying ten linkages or nodes to be planted every two years over the life of the strategy. This is in addition to regular and ongoing street tree planting in the residential streets. The strategy includes a process for record keeping, measuring and reviewing progress.

Acknowledgements

The development of this strategy has been guided by the Street Tree Advisory Committee, chaired by The Hon. Don Wing with membership including Alderman Ivan Dean, Alderman Rosemary Armitage, Gus Green (Lions) Kevin Watkins (Rotary), Andrew Smith (LCC), Peter Stacey (LCC), Niall Simpson (LCC) and Chris Moore (LCC).
Introduction

Launceston is renowned for its leafy parks containing an abundance of significant trees, a legacy of park development during the Victorian period. By contrast its street trees, especially in high profile areas in and around the city are comparatively small with very few notable avenues present.

Part of the reason for this imbalance is that Launceston has never had a street tree planting or management strategy. Planting has focused on the "ready to plant" nature strips, predominantly in the outer suburbs and some high profile streets and roads in and around the city. Difficult sites in the Central Activities District (see Strategy Area Map on page 5) have mostly been left without planting. A street tree strategy is required to address the imbalance, providing a more equitable spread of trees and an improvement in Launceston's green infrastructure.

Streetscapes contribute strongly to the image of a city and provide one of the first impressions that visitors and residents form whether they are passing through, visiting or staying. Street trees are a major component of streetscapes so it is important that they are planned for and managed in a strategic and sustainable way.

Climate change has been a major consideration in developing this strategy. Even small changes in temperature, rainfall and other environmental conditions can have an influence on the establishment of street trees. Considering street trees can have a long life it is important that climate change be taken into account when selecting species, locations and determining management techniques. Proven performance of a selected species in a particular environment must be a prime consideration.

Although focused on tree planting, this strategy is not a planting plan as such and hence will be providing strategic direction for the addition of trees city wide. This will be achieved through identifying, prioritising and planting "missing links" and iconic areas in Launceston, including the Central Activities District. Although the Central Activities District is significant the strategy will not simply start in the centre of the city and work outwards. To ensure a more balanced approach to budgeting and resourcing, the planting of the primary and secondary elements will be evenly distributed over the ten years of the strategy. Streets in the central activities district will be evenly distributed throughout the ten years.

This strategy will complement any recent or current strategies for Launceston such as the 2010 Launceston Public Spaces and Public Life report undertaken by Gehl Architects.

This will be a ten year strategy starting in 2011 with a major review in 2021. The implementation of this strategy will be dependant on funding from both internal and external sources.

Vision

A liveable green network with attractive and useable tree-lined streets connecting areas of interest for all road and footpath users to safely experience and explore the city.
Objectives

- Increasing Launceston’s green infrastructure through strategic street tree planting
- To provide a consistent and coordinated approach to street tree development
- To encourage the people of Launceston to embrace the greening of their city
- To encourage community and business involvement in the street tree planting plan
- Ensure street trees remain healthy and viable
- Provide attractive and leafier streetscapes

Strategy Area

The strategy applies to all of the Launceston City Council urban area and any primary or secondary links that cross over into rural areas or other municipalities.
Strategic Documents, Policies, Standards, Legislation and Reports Related to Street Trees

Links to Council’s Strategic Documents and Policies

Launceston City Council Launceston Community Plan May 2010
Preferred Future 1: A Sustainable Environment
PF1.3 Strategy Three: Plan for green space and native vegetation areas.
Actions already underway or completed:
Planting trees along appropriate streets and roads.
Maintaining and enhancing vegetation in parks, waterfront and recreational areas.
The Street Tree Strategy supports the above goals and strategies.

Launceston City Council Strategic Plan 2008-2013
Priority Area 1: Natural Environment
Goal: Sustainable management of natural resources, parks and recreational areas.
Strategy 1.3. Enhance and maintain parks and recreation areas, including river edges.
Strategy 1.4. Initiate Council and Community Action on Climate change.
The Street Tree Strategy supports the above goals and strategies.

Launceston Vision 2020
This vision documents the community’s vision, priorities, goals and values for 2020.
Major priority areas identified within this vision include the Natural Environment, Built Environment, Social and Economic Environment and Cultural Environment. The Street Tree Strategy will assist in fulfilling many of the goals required to fulfil Vision 2020, in particular goals that enhance the city and its liveability.

26-PI-005 Council Tree Management Policy
This policy applies to all street, landscaping, park, bushland trees etc on land owned or maintained by the Parks and Recreation Department. The purpose of this policy is to set the broad direction for the ongoing management, operation and levels of service for trees on Launceston City Council owned or maintained land.
Trees planted under the Street Tree Strategy will be subject to the above policy.

10-PI-002 Sun Protection in Public Places Guidelines Policy
The purpose of this policy is to provide an on-going increase of passive protection of the community from exposure to ultra violet radiation.
Street trees are recognised as a means of reducing UV exposure.
Australian Standards Related to Street Trees

AS 4373:1996 Pruning of Amenity Trees
This standard has been adopted by Council and must be applied to all pruning of street trees.

Legislation Related to Street Trees

Launceston City Council Reserves, Parks and Gardens By-Law No. 4 of 2009
This By-Law regulates, controls and protects all Council land including nature and median strips.

Launceston City Council Planning Scheme 1996
Where applicable Scenic Protection provisions for street trees must be adhered to as part of this planning scheme.

Launceston Public Spaces and Public Life January 2011 - Gehl Architects

This report identifies a fragmented green network in Launceston. The report states that the city centre is wrapped around a number of fine parks although the connections between the parks are generally poor. Street trees are currently concentrated around parks, Brisbane Street (the Avenue) and residential areas. The appearance of the city will be greatly improved by the future planting that is currently proposed.

Recommendations from this report that support or link to this strategy include:

- Develop a green connected Launceston. Develop a network of clearly identifiable, recreational cycling and walking routes that link the city centre with the riverfront, City Park, Royal Park, Prince’s Square, Brickfields Reserve, Windmill Hill Reserve but also links to Cataract Gorge Reserve and Trevallyn Nature Recreational Area (west), Kate Reed Nature Recreational Area (south), Hoblers Bridge Reserve (east), Heritage Forest and York Park (north).

- Develop a network of green boulevards. Identify key streets that lead to the city centre eg. Bathurst Street and Wellington Street. Develop a boulevard strategy for turning these key streets into clearly identifiable boulevards offering good conditions for walking and cycling as well as including public transport and vehicular traffic.

- 'Greening the desert'. Develop an open space streetscape ‘Planting Strategy’: Plant 200-300 trees every year. Supplement the general street tree strategy by a flexible planting strategy, introducing temporary greenery in selected spots. Use different types and species to create individual identities for different streets and areas.

The Street Tree Strategy will fulfil the above recommendations from the Gehl report.
Street Tree Values and Benefits

General Value
Trees are an intrinsically valuable part of the environment, in particular the built environment and are greatly appreciated by the community. They provide environmental, social, economic, health, amenity and functional benefits. Although applying a monetary value is not always useful, larger street trees can have a substantial monetary value, one that increases with time. This value is often reflected in nearby property values.

Image and Identity
Streets trees can provide a very strong sense of identity to a street and local area, especially where avenues of the same species are used. Street trees are often the element that people associate with a particular street, Elphin Road's crab apples and Campbell Street's paperbarks are an example of this. Street trees can also reflect the history of an area, providing an important link with the past, Invermay Road's plane trees for example.

Improve Visual Amenity
Street trees will improve the visual amenity of a place by complementing architectural features, softening the hard surfaces of the built environment and screening undesirable features. This is further enhanced through the introduction of natural sound, scent and movement into the environment.

Habitat and Biodiversity
Street trees assist in maintaining and enhancing biodiversity in the urban environment and provide habitat for a wide range of bird and animal life. They also assist in providing wildlife corridors for migratory species.

Climate Change
Climate change can refer to any long-term significant change in the weather patterns of an area. Examples of this may include an increase in temperature or precipitation. The planting of trees can assist in moderating the effects of climate change. Trees absorb carbon dioxide from the atmosphere, locking up carbon that in turn helps regulate the earth's climate. On a local level street trees can also assist in fighting climate change. Their shade lowers the local temperatures of hard surfaces by 3 - 5°C. They reduce evaporation from the soil, retaining moisture in soil. Indirectly street trees can reduce heating or cooling requirements in nearby buildings therefore reducing power consumption. It is important that the right tree species are chosen to suit and adapt to a changing climate.
Reduce Air Pollution
Street trees improve our air quality and therefore our health. Trees absorb carbon dioxide (CO2) and release oxygen (O2). As part of this process the tree stores carbon in its roots, trunk, branches and leaves. Newly planted trees tend to grow quickly and will sequester carbon quicker than an older, more mature tree. Trees also reduce air pollution by intercepting and filtering harmful gases and airborne particle pollution, such as car fumes.

Contribution to Urban Water Management
In some situations street trees can intercept and slow stormwater which reduces the impact of flooding and erosion. There is also an opportunity to utilise stormwater for irrigation of street trees. This approach can reduce peak stormwater flows relieving pressure on stormwater infrastructure and the reliance on potable water.

Health and Wellbeing
Trees improve and enrich health and wellbeing, in the built environment they are one of the main connections people have with nature. In addition tree shade can provide a direct health benefit by protecting people from harmful UV radiation and can facilitate outdoor activities.

Legibility of the Street Network
Street trees can help with vehicle navigation by providing visual cues. Trees can indicate to drivers a change in direction and slope giving them time to adjust speed and directions accordingly. Careful location of trees can protect drivers from blinding sun at dawn and dusk or be used near hazards such as embankments. Trees can also act as a backdrop to traffic lights by screening out background lights and distractions.

Traffic Calming
Selective planting of trees can moderate traffic flow and excessive speed. Denser planting of trees can indicate to drivers a need to take caution as it creates a sense of enclosure. Street trees also provide a barrier between traffic lanes as well as cars and pedestrians.

Economic Benefits
Street trees add value to adjacent properties. Deciduous trees can reduce energy costs by cooling in summer through the shading of buildings but not increase winter heating costs as they allow winter sun to enter buildings.
Street Tree Considerations

Services and Pavement
Above ground and underground service locations have an impact on the provision of street trees. Services will need to be identified for each planting site and appropriate clearances must be maintained. Sites must be properly prepared to minimise pavement lifting by tree roots. Good service planning for subdivisions and developments is required so future planting locations will not be compromised. Selecting the right species will minimise many of the problems associated with services and pavement.

Pruning and Maintenance
Street trees require a regular and ongoing maintenance program which is necessary for the health of the trees as well as for the safety of the public and other assets. It is important that the right tree is chosen for a location to minimise these management and maintenance issues. Where possible water sensitive urban design initiatives should be incorporated into planting locations.

Species Selection
The cost of purchasing, planting, watering and establishing a new tree is significant and it therefore important that the species chosen can be relied upon to perform in the required way. The characteristics of each species needs to be evaluated. Trees that naturally form a single trunk will be preferred over large shrubs that require training. Longer lived species will be preferred as they provide a better return for investment. Proven performance of a selected species in a particular environment must be a prime consideration; this strategy is not a trial. In addition species selected must be resilient to climate change.

Size of Planting Stock and Sourcing Trees
Planting stock can vary from tube stock through to large semi-mature trees. Small stock is cheaper to grow and plant but is more susceptible to damage and has little initial presence. Large stock can be expensive to grow and plant but is far more resilient to damage, creating an instant presence. Larger stock will be planted in the primary links and nodes, smaller stock can be considered for the secondary and supplementary links and nodes. Planting stock can be sourced through the Council Nursery.

Planning Scheme and Heritage
Any planning scheme or heritage requirements must be considered when planning for street trees. There are a number of classified precincts in the central activities district and some of the major routes leading in and out of the central activities district.
Design Issues

Tree planting sites need to be carefully selected. In many cases site conditions will be less than ideal and will need significant improvement for trees to be planted. Above and below ground conditions need to be assessed along with a range of other environmental, social and political issues. Properly constructed planting pits and careful species selection will overcome many of the past problems associated with tree roots such as uneven footpaths, broken kerbs and damaged road services. Council needs to be proactive when negotiating new subdivisions and developments to ensure provision is made for good quality sites. Not all planting designs will be avenues or boulevards but may be treed corridors achieved through clump plantings or strategically placed specimens.

Tree Planting Pits

In residential areas grassy nature strips are traditionally used for tree planting and native soils are sufficient to ensure long term tree establishment. In the central city and other retail areas the below ground areas are more intensively developed so alternate planting methods have to be used. There are often competing uses for the ground level area above proposed root zones, such as pedestrians, parking and traffic, all which can adversely affect root development. In addition the below ground material may also be unsuitable for growing trees.

Such sites require the removal and replacement of existing material with a planting mix and the creation of a reinforced planting zone able to take the loads of pedestrians and cars while allowing root growth. This includes utilising structural soils and structural root cells, products that are incorporated into the planting pit that are able to transfer the surface loads to the sub-base whilst providing an uncompacted volume for the development of an adequate root ball. These methods allow for the planting of trees in previously unplantable situations whilst facilitating the joint use of green infrastructure and pedestrian or vehicular movement. These methods will also protect existing adjacent assets and allow the incorporation of some service assets into the planting pits.

Vandalism and Protection

Street tree vandalism while prevalent in all areas is particularly noticeable in the city centre and other high profile areas. Crime prevention through design, community education, planting larger trees and appropriate protection can help minimise vandalism.
Traffic Vision
Maintaining vision for road users both on the road and when entering or exiting property is very important. Consideration must also be given to street lighting, sign visibility and traffic lights.

Road Type and Vehicle Speed
Type and use of road is important, whether it is a major highway, arterial road or minor road and whether it travels through a commercial, shopping or residential area. The road user must also be considered. Maintaining parking is important in the central activities district although this needs to be balanced with making Launceston a more pedestrian friendly city.

Council has developed some local standards in the absence of clear state or national guidance for dealing with traffic management or tree planting.

1. Where the 85%ile speed is less than 55 kph and where parking normally occurs a minimum clear zone of 1 metre shall be maintained from the edge of the travelled way and any street tree.

2. Where the 85%ile speed is between 55 and 65 kph a minimum clear zone of 3 metres shall be maintained unless the street tree is behind the kerb line or a kerbed outstand.

3. Where the 85%ile speed exceeds 65 kph the Austroads guidance shall be used.

4. When trees are located within the carriageway the edge of the traffic lane shall be delineated.

5. Any street tree planting using the carriageway pavement shall be referred to DIER for approval.

6. These standards will be reviewed as national research provides more guidance in this area.

Street Cleansing
The cleansing of streets, gutters and footpaths is an important part of Council's operations. The location and design of tree pits and tree surrounds should consider cleansing requirements including the size of cleansing machines and methods of cleansing. Areas that trap leaves and other debris should be avoided. For access purposes trees should not be planted next to roadside gully pits.
Street Tree Analysis

According to GIS records Launceston has approximately 18,000 street trees made up of approximately 260 species. The top 20 species account for 10800 trees. These are:

<table>
<thead>
<tr>
<th></th>
<th>Species Name</th>
<th>Common Name</th>
<th>Species Code</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Double Pink Flowering Plum - <em>Prunus bllreana</em></td>
<td>Prunus blireana</td>
<td>1582</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Snow in Summer - <em>Melaleuca linariifolia</em></td>
<td>Melaleuca linariifolia</td>
<td>1212 (Australian native)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Photinia - <em>Photinia robusta</em></td>
<td>Photinia robusta</td>
<td>984</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Single Pink Flowering Plum - <em>Prunus cerasifera ‘Nigra’</em></td>
<td>Prunus cerasifera ‘Nigra’</td>
<td>746</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Willow Bottlebrush - <em>Callistemon salignus</em></td>
<td>Callistemon salignus</td>
<td>722 (Australian native)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Flowering Cherry - <em>Prunus serrulata</em></td>
<td>Prunus serrulata</td>
<td>589</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Silver Birch - <em>Betula pendula</em></td>
<td>Betula pendula</td>
<td>464</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Pittosporum - <em>Pittosporum eugenioides</em></td>
<td>Pittosporum eugenioides</td>
<td>367</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Weeping Bottlebrush - <em>Callistemon viminalis</em></td>
<td>Callistemon viminalis</td>
<td>322 (Australian native)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Prickly Leaved Paperbark - <em>Melaleuca stypheloides</em></td>
<td>Melaleuca stypheloides</td>
<td>318 (Australian native)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Elvins Flowering Plum - <em>Prunus ‘Elvins’</em></td>
<td>Prunus ‘Elvins’</td>
<td>289</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Common Ash - <em>Fraxinus excelsior</em></td>
<td>Fraxinus excelsior</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Rose of Sharon - <em>Hibiscus syriacus</em></td>
<td>Hibiscus syriacus</td>
<td>233</td>
<td></td>
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<tr>
<td>14</td>
<td>Silver Wattle - <em>Acacia dealbata</em></td>
<td>Acacia dealbata</td>
<td>218 (local native)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Mountain Ash - <em>Sorbus aucuparia</em></td>
<td>Sorbus aucuparia</td>
<td>218</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Common Lime - <em>Tilia europaea</em></td>
<td>Tilia europaea</td>
<td>215</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Betchel’s Crab Apple - <em>Malus ioensis</em></td>
<td>Malus ioensis</td>
<td>214</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Claret Ash - <em>Fraxinus oxycarpa</em></td>
<td>Fraxinus oxycarpa</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Blackwood - <em>Acacia melanoxylon</em></td>
<td>Acacia melanoxylon</td>
<td>190 (local native)</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>English Elm - <em>Ulmus procera</em></td>
<td>Ulmus procera</td>
<td>189</td>
<td></td>
</tr>
</tbody>
</table>

The breakdown of species shows a high proportion of the Prunus genus. Due to climatic conditions this genus has not performed well in some locations over the last few years and needs to be progressively replaced with more adaptable species.

Species selection has sometimes been limited because of services. Due to overhead power lines and limited growing space there is a high proportion of smaller trees that have been trained as street trees, including Photinia, Pittosporum, Callistemon and Hibiscus. While these smaller trees are better suited to these confined situations, where space permits larger single trunk trees with elevated canopies should be planted. These trees generally require less pruning and training than smaller multi-trunked trees.

The current street tree palette of around 260 individual species is too large to be managed effectively; ideally the palette should be much smaller. This high number is indicative of isolated local level planning highlighting the need for a city wide street tree strategy.

Average tree height varies for each suburb depending on when the suburb was first planted, individual tree ages, available planting space and overhead services. Average tree height will be used as one of the measures for the trees planted in the linkages and nodes identified in this strategy.
There are obvious gaps in street tree plantings across the city. These are most noticeable in areas without grassy nature strips, generally the Central Activities District and other shopping centres such as Mowbray and Kings Meadows. Other noticeable gaps are along roads with no residential development. The details of each street as identified in this review are recorded in the tables starting on page 17 in this strategy. The information in the tables has been used as the basis for developing planting strategies.
Communication Plan

Consultation
The consultation process needs to reflect the changing focus of the different stages within the strategy.

The stages include:

1. **Development - Internal**
2. **Development - External**
3. **Adoption**
4. **Implementation**

Please note: This strategy is a high level document and a guiding instrument only.

1. **Strategy Development - Internal**  
   *Goal; Approval in Principal.*
   
   **What:**
   - To outline the intent and the focus of the strategy
   - To ensure allied asset manager's roles are considered
   - To ensure asset longevity is maintained.

   The section has been completed in consultation with the Launceston Street Tree Strategy Committee.

2. **Strategy Development - External**  
   *Goal; Endorsement.*
   
   **WHAT:**
   To communicate with stakeholders and the wider community about the intent and scope of the strategy.

   **WHO:**
   The private sector and associations (see bulleted underneath), stakeholders and the community.
   
   - Launceston Cityprom
   - Launceston Chamber of Commerce
   - Launceston residents and ratepayers
   - Launceston Ratepayers Association
   - Service Clubs
   - Tasmanian Bicycle Users Group (TBUG)
   - Schools
   - Horticultural Clubs
   - Landcare and Greencare

   Non Government Organisation's (NGO's) and interests groups will also be directly approached.
HOW;
The consultation with the private sector will be by:

- Presentations to their associations by the Parks Planner and the Landscape Architect.

The consultation with the community will be through a number of methods, some of which will include:

- The LCC webpage
- Your Voice Your Launceston (an online community engagement tool)
- A Town Hall Customer Service Centre display

The Launceston Street Tree Strategy Committee will then review the public feedback and prepare the final draft for the adoption stage.

3. Adoption

**Goal; Ownership.**

**WHAT:**
Endorsement of the completed Street Tree Strategy.

**WHO:**
The Launceston City Council.

**HOW:**
- The agenda item with background information will go to Council for consideration
- A presentation will be made to the Strategic Planning and Policy Committee (SPPC).
- Launch the completed strategy (including a media release)
- Distribution of the strategy to key people, champions and ambassadors.

4. Implementation

**Goal; Planting Works**

**WHAT:**
Commencement of elements as outlined in Strategies implementation plan.

**WHO:**
Community consultation for businesses and residences will be undertaken prior to implementation of the individual elements;

The following external service providers will be approached individually as the individual elements are progressed through concept and design development.

- Ben Lomond Water
- Metro Tasmania
- Dial Before You Dig (DBYD)
- Launceston Traffic Committee

These will be approached individually as the individual elements are progressed through concept and design development.
A typical Consultation plan for an element would be;

STEP ONE
- A concept is prepared for the individual element explaining planting theme, species and proposed locations
- Council representatives meet face to face with each business and property owner in the first instance and then by letter and phone to discuss the concept

STEP TWO
- Immediately prior to construction properties will be advised of construction dates and times
- For elements containing predominantly residential properties communication would be by a letter drop
- The Council Communications department will issue a media release for each project or stage.
- High profile spokespeople who live/work in the streets being planted will be used to endorse the strategy, particularly in the early stages (e.g. using service clubs to show they’re getting behind the tree planting)
- Taking advantage of Council road engineering developments and their community engagement process

Partnerships
Partnerships will be an important part of this strategy and can be developed during the Concept Plan and Planting Plan stages. Partnerships should be fostered with a range of government, non-government, community and volunteer organisations. These could include neighbouring Councils, DIER, UTAS, Landcare, NRM, Service Clubs, Aurora, schools, businesses or similar organisations. Organisations could be encouraged to adopt a street or a tree. Consideration can also be given to forming a street tree friends group.

Sponsorship
Sponsorship will be sought to implement the strategy. Plaques will not be permitted on or near trees although acknowledgement can be considered through other means. Sponsorship acknowledgement could be done on the Council website.

Budget
An ongoing budget will be needed to achieve this strategy. Money will need to be budgeted internally while external funding sources such as grants and sponsorship should be sought. Grant funding may be sought under different areas such as tourism, recreational trails, environmental works, sustainability and liveable neighbourhoods.

Other potential sources of funding include:
- Local businesses which would benefit from street trees being planted on or in proximity to their business.
- Local schools who could also care for the trees in the vicinity of their school
- Service clubs who could undertake a whole planting element or part of one as a project
- Memorial planting for individuals or organisations
- Donations or bequests
Strategy Plan

Planting Linkages or Nodes
Each definable planting area is a linkage or node. Linkages are corridors that link one area to another. Linkages can be Primary or Secondary. Nodes are central points where people regularly gather. Nodes can be Primary or Secondary. All other planting areas are precincts. Precincts are larger areas, generally covering a suburb or area with similar characteristics. The Street Tree Strategy Plan provides a spatial representation of the planting linkages and nodes.

Linkage and Node Character
Character will be defined for each of the linkages and nodes and will be based on the underlying precinct.

Street tree planting outside of the defined linkages and nodes will continue as part of Council’s ongoing street tree planting program. Existing trees and neighbourhood character will continue to guide species selection for these areas.

Key to Tables and Strategy Plan

- Primary Linkage
  - Major roads or streets that link areas to each other
- Secondary Linkage
  - Roads, streets or recreational trails that link areas to each other
- Primary Node
  - Major shopping centres or meeting points
- Secondary Node
  - Minor shopping centres or meeting points
<table>
<thead>
<tr>
<th>Primary Linkages:</th>
<th>Description</th>
<th>Current tree status and requirements</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eastern Avenue</strong></td>
<td>Long, vehicle and tourist link. Major entrance into city from east of Launceston.</td>
<td>Moderately well treed. Mostly developed nature strips</td>
<td>See Implementation Plan. Consultation with DIER may be required.</td>
</tr>
<tr>
<td><strong>Elphin Road</strong></td>
<td>Medium, vehicle, pedestrian and tourist link. Major entrance into city from east</td>
<td>Generally well treed. Mostly developed nature strips</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>Northern Avenue</strong></td>
<td>Long, vehicle and tourist link. Major entrance into city from East Tamar</td>
<td>Few street trees present. Mostly grassy roadsides or developed nature strips</td>
<td>See Implementation Plan. Consultation with DIER may be required.</td>
</tr>
<tr>
<td><strong>Southern Avenue</strong></td>
<td>Long, vehicle and tourist link. Major entrance into city from south of Launceston.</td>
<td>Few street trees present. Mostly grassy roadsides or developed nature strips</td>
<td>See Implementation Plan. Consultation with DIER may be required.</td>
</tr>
<tr>
<td><strong>St Leonards Link</strong></td>
<td>Medium, vehicle link. Major entrance into city from St Leonards and rural areas south east of Launceston</td>
<td>Moderately well treed. Mostly developed nature strips or grassy roadsides</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>Western Avenue (north west)</strong></td>
<td>Long, vehicle and tourist link. Major entrance into city from West Tamar.</td>
<td>Few street trees present. Mostly developed nature strips</td>
<td>See Implementation Plan. Consultation with DIER may be required.</td>
</tr>
<tr>
<td><strong>Meander Avenue</strong></td>
<td>Long, vehicle and tourist link. Major entrance into city from south west.</td>
<td>Few street trees present. Mostly grassy roadsides or developed nature strips</td>
<td>See Implementation Plan. Consultation with DIER may be required.</td>
</tr>
</tbody>
</table>
### Secondary Linkages

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
<th>Current tree status and requirements</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alanvale Link</strong></td>
<td>Medium, vehicle and pedestrian link.</td>
<td>Generally well treed. Mostly developed nature strips</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>Between Two Bridges</strong></td>
<td>Short, pedestrian and tourist link.</td>
<td>Few trees present. Mostly grassy developed parkland</td>
<td>Can be achieved as part of ongoing projects. Suitable for planting by community groups.</td>
</tr>
<tr>
<td><strong>City Brisbane Street/The Avenue/Mall</strong></td>
<td>Short, vehicle, pedestrian, tourist and retail link. On street dining present.</td>
<td>Moderately well treed. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>City Cameron Street</strong></td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Few street trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>City Charles Street</strong></td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Moderately well treed. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>City Cimitiere Street</strong></td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Few street trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>City Elizabeth Street</strong></td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Few street trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>City Frederick Street</strong></td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Few street trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>City George Street</strong></td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Moderately well treed. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>City Kingsway</strong></td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Generally well treed. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>City Paterson Street</strong></td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Few street trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Street Name</td>
<td>Description</td>
<td>Current tree status and requirements</td>
<td>Implementation</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>City St John Street</td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Moderately well treed. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>City Tamar Street</td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Few street trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>City William Street</td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Few street trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>City York Street</td>
<td>Short, vehicle, pedestrian, tourist and retail link.</td>
<td>Few street trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Connaught Crescent</td>
<td>Medium, vehicle, pedestrian and tourist link.</td>
<td>Moderately well treed. Mostly developed nature strips</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Esplanade</td>
<td>Short, vehicle, pedestrian and tourist link.</td>
<td>Moderately well treed. Mostly developed nature strips. Tree pit construction may be required along southern side</td>
<td>Can be achieved as part of ongoing projects</td>
</tr>
<tr>
<td>Forster Link</td>
<td>Medium, vehicle and pedestrian link.</td>
<td>Generally well treed. Mostly developed nature strips</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Gorge Link</td>
<td>Medium, vehicle, pedestrian and tourist link.</td>
<td>Moderately well treed. Mostly developed nature strips</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>High Street/Talbot Road</td>
<td>Medium, vehicle, pedestrian and tourist link.</td>
<td>Generally well treed. Mostly developed nature strips</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Hobart Road</td>
<td>Medium, vehicle, pedestrian and retail link.</td>
<td>Moderately well treed. Mostly developed nature strips</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Howick Street</td>
<td>Short, vehicle and pedestrian link</td>
<td>Moderately well treed. Mostly developed nature strips</td>
<td>Can be achieved through normal planting</td>
</tr>
<tr>
<td>Johnston Link</td>
<td>Medium, vehicle link.</td>
<td>Moderately well treed. Mostly grassy roadsides or developed nature strips</td>
<td>Can be achieved through normal planting.</td>
</tr>
<tr>
<td>Kings Meadows Link</td>
<td>Medium, vehicle link.</td>
<td>Moderately well treed. Mostly grassy roadsides</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Mowbray Link</td>
<td>Short, vehicle link.</td>
<td>Moderately well treed. Mostly grassy roadsides. Tree pit construction may be required at eastern end</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td><strong>Current tree status and requirements</strong></td>
<td><strong>Implementation</strong></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Newnham Trail</strong></td>
<td>Medium, cycle and pedestrian link.</td>
<td>Moderately well treed. Mostly developed parkland</td>
<td>Can be achieved through normal park planting. Suitable for planting by community groups.</td>
</tr>
<tr>
<td><strong>North East Link</strong></td>
<td>Medium, vehicle, pedestrian and tourist link.</td>
<td>Few street trees present. Mostly grassy roadsides or developed nature strips</td>
<td>Can be achieved through normal planting. Consultation with DIER may be required.</td>
</tr>
<tr>
<td><strong>Penquite Link</strong></td>
<td>Medium, vehicle and pedestrian link.</td>
<td>Moderately well treed. Mostly developed nature strips</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>Quarantine Link</strong></td>
<td>Medium, vehicle and pedestrian link.</td>
<td>Generally well treed. Mostly developed nature strips</td>
<td>Can be achieved through normal planting</td>
</tr>
<tr>
<td><strong>Rail Trail</strong></td>
<td>Long, cycle and pedestrian link.</td>
<td>Moderately well treed. Mostly undeveloped grassy land</td>
<td>Can be achieved through normal park planting. Suitable for planting by community groups.</td>
</tr>
<tr>
<td><strong>Ravenswood Link</strong></td>
<td>Short, vehicle and pedestrian link.</td>
<td>Few street trees present. Mostly grassy roadsides or developed nature strips</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td><strong>Ribbon of Blue</strong></td>
<td>Medium, cycle and pedestrian link.</td>
<td>Generally well treed. Mostly developed parkland</td>
<td>See Implementation Plan. Suitable for planting by community groups.</td>
</tr>
<tr>
<td><strong>Scottsdale Levee</strong></td>
<td>Medium, cycle and pedestrian link</td>
<td>Few trees present. Mostly developed parkland or flood levee</td>
<td>Can be achieved through normal park planting. Suitable for planting by community groups.</td>
</tr>
<tr>
<td><strong>Seaport</strong></td>
<td>Short, vehicle, pedestrian and tourist link.</td>
<td>Moderately well treed. Mostly developed parkland</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Description</td>
<td>Current tree status and requirements</td>
<td>Implementation</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Town Point</td>
<td>Short, cycle and pedestrian link.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Few trees present. Mostly undeveloped grassy land.</td>
<td>Can be achieved as part of ongoing projects. Suitable for planting by community groups.</td>
<td></td>
</tr>
<tr>
<td>UTAS Link</td>
<td>Short, vehicle link.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately well treed. Mostly grassy roadsides or mostly developed nature strips</td>
<td>See Implementation Plan</td>
<td></td>
</tr>
<tr>
<td>Vermont Link</td>
<td>Medium, vehicle and pedestrian link.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately well treed. Mostly grassy roadsides or mostly developed nature strips</td>
<td>See Implementation Plan</td>
<td></td>
</tr>
<tr>
<td>Waverley Link</td>
<td>Medium, vehicle and pedestrian link.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately well treed. Mostly grassy roadsides or mostly developed nature strips</td>
<td>Can be achieved through normal planting</td>
<td></td>
</tr>
<tr>
<td>Westbury Road</td>
<td>Long, vehicle, pedestrian and tourist link.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately well treed. Mostly developed nature strips</td>
<td>See Implementation Plan</td>
<td></td>
</tr>
</tbody>
</table>

**Primary Nodes:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Current tree status and requirements</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inveresk</td>
<td>Medium, retail and tourist node</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderately well treed. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Kings Meadows</td>
<td>Large, retail node</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Few trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Mowbray</td>
<td>Large, retail node</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Few trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Newstead</td>
<td>Medium, retail node</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Few trees present. Tree pit construction required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Olde Tudor</td>
<td>Medium, retail node</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Few trees present. Some developed nature strips. Tree pit construction may be required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>Prospect (MVC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>With Meander Valley Council</td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td>Description</td>
<td>Current tree status and requirements</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ravenswood</td>
<td>Small, retail node</td>
<td>Few trees present. Some developed nature strips. Tree pit construction may be required</td>
</tr>
<tr>
<td>Riverside (WTC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seaport</td>
<td>Medium, retail and tourist node.</td>
<td>Few trees present. Tree pit construction may be required</td>
</tr>
<tr>
<td>St Leonards</td>
<td>Medium, retail node</td>
<td>Few trees present. Mostly developed nature strips. Tree pit construction may be required</td>
</tr>
<tr>
<td>Trevallyn</td>
<td>Small, retail node</td>
<td>Few trees present. Mostly developed nature strips. Tree pit construction may be required</td>
</tr>
<tr>
<td>Franklin Village</td>
<td>Small, retail node.</td>
<td>Few trees present. Mostly developed nature strips</td>
</tr>
<tr>
<td>Glen Dhu</td>
<td>Small, retail node</td>
<td>Moderately well treed. Some developed nature strips. Tree pit construction may be required.</td>
</tr>
<tr>
<td>Invermay</td>
<td>Medium, retail node</td>
<td>Few trees present. Tree pit construction required</td>
</tr>
<tr>
<td>North Mowbray</td>
<td>Small, retail node</td>
<td>Few trees present. Mostly developed nature strips.</td>
</tr>
<tr>
<td>Norwood</td>
<td>Small, retail node</td>
<td>Moderately well treed. Mostly developed nature strips.</td>
</tr>
<tr>
<td>Queechy</td>
<td>Small, retail node</td>
<td>Moderately well treed. Some developed nature strips. Tree pit construction may be required.</td>
</tr>
<tr>
<td>Six Ways</td>
<td>Small, retail node</td>
<td>Moderately well treed. Some developed nature strips. Tree pit construction may be required.</td>
</tr>
<tr>
<td>Description</td>
<td>Current tree status and requirements</td>
<td>Implementation</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Thompsons Lane *</td>
<td>Small, retail node. Few trees present. Mostly developed nature strips. Tree pit construction may be required</td>
<td>See Implementation Plan</td>
</tr>
<tr>
<td>West Launceston *</td>
<td>Small, retail node. Few trees present. Mostly developed nature strips. Tree pit construction may be required</td>
<td>Can be planted as part of linkage</td>
</tr>
<tr>
<td>Youngtown *</td>
<td>Small, retail node. Moderately well treed. Some developed nature strips. Tree pit construction may be required.</td>
<td>See Implementation Plan</td>
</tr>
</tbody>
</table>

**Implementation Plan**

A strategic approach will be adopted. This will be achieved through identifying and prioritising the linkages and nodes described in this strategy. Although the central activities district is important the strategy will not simply start in the centre of the city and work outwards.

There are 68 separate linkages and nodes identified in this strategy. It is proposed that 50 of these will be planted over the ten year life of this strategy, an average of 5 every year.

To ensure a more balanced approach to budgeting and resourcing the planting of the primary and secondary elements will be evenly distributed over the ten years of the strategy. Streets in the central activities district will be evenly distributed throughout the ten years.

Larger linkages and nodes can be staged over longer periods than two years as required with the scheduled year used as a starting point.

The remaining 18 linkages and nodes may be planted within the ten years of this strategy through existing planting programs or as a part of other projects if resources allow this. Linkages and nodes not planted over the ten years will be reevaluated as part of the review of this plan.

Scheduling of the linkages and nodes will also take into account road development projects and particular linkages and nodes may be rescheduled to coincide with other works.

Outside of the identified linkages and nodes regular planting and public requests for replacement trees can be made by contacting Councils customer service centre.
Planting Schedule 2011/2012 and 2012/2013

Primary Linkages;

- City Wellington Street (completed)
- Northern Avenue

Secondary Linkages;

- City Charles Street
- City Frederick Street
- City Kingsway
- City William Street
- High Street / Talbot Road

Primary Nodes;

- Inveresk
- Kings Meadows
- Newstead

Planting Schedule 2013/2014 and 2014/2015

Primary Linkages;

- Southern Avenue
- Western Avenue (north west)

Secondary Linkages;

- Alanvale Link
- City Brisbane Street / The Avenue / Mall
- City George Street
- City Tamar Street
- Mowbray Link

Primary Nodes:

- Mowbray
- Ravenswood
Planting Schedule 2015/2016 and 2016/2017

Primary Linkages:

- Eastern Avenue
- Meander Avenue

Secondary Linkages:

- City Elizabeth Street
- City Paterson Street
- City St John Street
- Elphin Road
- Gorge Link

Primary Nodes:

- Seaport
- Trevallyn

Secondary Nodes:

- Invermay

Planting Schedule 2017/2018 and 2018/2019

Primary Linkages:

- St Leonards Link

Secondary Linkages:

- City Cameron Street
- City York Street
- Connaught Crescent
- Forster Link
- Kings Meadows Link
- Vermont Link
- Westbury Road

Primary Nodes:

- St Leonards

Secondary Nodes:

- Six Ways
- Youngtown
Planting Schedule 2019/2020 and 2020/2021

Secondary Linkages;
- City Cimitiere Street
- Hobart Road
- Penquite Link
- Ravenswood Link
- Ribbon of Blue
- Seaport
- UTAS Link

Primary Nodes;
- Olde Tudor

Secondary Nodes;
- Norwood
- Thompsons Lane

Concept Plan
A Concept Plan will be developed for each element. This plan will expand on the design themes of each element such as species, planting theme, cultural and contextual elements, creating an identity for each linkage and node. The feasibility of planting an element can be determined at this stage. This plan will provide the information to enable the development of construction documentation. The concept plan will include and enable meaningful community engagement and identify any partnerships that can be utilised at planting time. Appendix 1 provides a species selection method and Appendix 2 provides a street tree palette to choose from. Appendix 3 contains an example Concept Plan.

Planting
Planting will be guided by the Concept Plan, detailed construction documentation and Council polices and procedures. A traffic management plan will need to be developed for all roadside plantings. Species selection will be dealt with during the Concept Plan development for each planting element.

New Subdivisions and Developments
Where appropriate all new subdivisions and developments should include street tree plantings. Tree species and locations can be determined using the guidelines in this strategy and other applicable documentation.

Maintenance Plan
Primary maintenance of street trees will be undertaken by the Launceston City Council Tree Maintenance Unit according to existing programs, standards, policies and procedures. New trees will be watered for at least three years after planting. Damaged trees will be replaced where appropriate or feasible according to standard Council procedure.
Record Keeping
All new trees will be recorded by Council's Data Officer with information stored in the Council's GIS and corporate database. Records will also be kept of sponsors and partners for trees and streets.

Measures of Success
Measures of success can include but should not be limited to:
- Increase in number of street trees across the city
- Increase in average street tree height within the linkages and nodes identified in this strategy.
- Increase in street canopy cover across the city
- Completed links and completed nodes

Review of Strategy
This strategy will be subject to continual review every two years plus a full review at the end of the ten year period.
Appendices

Appendix 1 Species Selection Method

Longevity
Ideally longer lived species should be given preference.

Appearance
Street trees need to be aesthetically pleasing with at least one significant feature such as colourful autumn leaves, flowers or similar

Adaptability and Hardiness
Street trees must be able to cope with the modified urban environment and changes associated with this environment.

Structural Integrity
Street trees must be as structurally stable as possible.

Undesirable Characteristics
The following characteristics are generally undesirable and should be avoided when selecting trees:
- Invasive or weedy tree species
- Invasive root systems
- Severe allergy or irritation causing
- Excessive fruit or nut drop
- Poisonous
- Excessive limb drop

Form
Trees with a specific type of form such as columnar or fastigiated crowns should be considered in situations where the available growing space does not allow for a broader crown. Trees that naturally form a dominant single trunk will be preferred over trees with a more branching habit such as Photinia or Pittosporum that have to be trained into a tree form.

Exotic or Native
Indigenous species may be suited to the local environmental conditions, however the growing conditions in an urban setting, particularly a street situation, are very different from natural conditions. These conditions include soil compaction, higher nutrient levels and altered drainage patterns, often indigenous species cannot cope with these microclimates within the built environment. Many exotic species have been in cultivation for hundreds of years and over that time they have been specifically bred for superior performance in the urban environment. They have been hybridised and selected for their vigour in urban growing conditions, ensuring uniformity of size, shape and growing habit.

Deciduous or Evergreen
Deciduous trees can have advantages over evergreen trees as they provide both summer shade and winter sun. Apart from light and warmth winter sun reduces the development of moss and algae on pavements, a potential slipping hazard in such high use areas. Deciduous trees lose all of their leaves in a relatively short time frame leading to increased maintenance requirements for a short period. By contrast evergreen trees drop their leaves all year round evening out maintenance requirements.
Appendix 2 Street Tree Strategy - Core Street Tree Palette

This is not a comprehensive list of trees for street tree planting in Launceston, rather it is a palette to guide species selection. Individual species for each linkage or node will be determined during the development of the Concept Plan.

Some frost and cold sensitive species have been included. While these are not suitable for all situations, they may be used in sheltered locations where frosts are unlikely to occur. Climate change may provide more opportunities to plant these species as well.

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Current Location in Launceston (if applicable)</th>
<th>Mature Height in Urban Environment</th>
<th>Form</th>
<th>Feature</th>
<th>Evergreen or Deciduous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer campestre</td>
<td>Field Maple</td>
<td>Elizabeth Street Car Park front bed</td>
<td>7 metres</td>
<td>oval</td>
<td>Yellowish autumn foliage</td>
<td>deciduous</td>
</tr>
<tr>
<td>Acer platanoides 'Crimson Sentry'</td>
<td>Norway Maple</td>
<td>Jamison Street West Launceston (species)</td>
<td>7 metres</td>
<td>columnar</td>
<td>Dark purple leaves</td>
<td>deciduous</td>
</tr>
<tr>
<td>Acer rubrum 'Fairview Flame'</td>
<td>Red Maple</td>
<td>Maitland Street Reserve (species) - grown as a park tree</td>
<td>11 metres</td>
<td>oval</td>
<td>Red autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Acer rubrum 'October Glory'</td>
<td>Red Maple</td>
<td>Maitland Street Reserve (species) - grown as a park tree</td>
<td>12 metres</td>
<td>oval</td>
<td>Red autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Acmena smithii</td>
<td>Lilly Pilly</td>
<td>City Park southern edge - grown as a park tree</td>
<td>5 metres</td>
<td>conical</td>
<td>Mauve berries</td>
<td>Evergreen</td>
</tr>
<tr>
<td>Aesculus hippocastanum</td>
<td>Horse Chestnut</td>
<td>Ormley Street Kings Meadows</td>
<td>13 metres</td>
<td>round</td>
<td>White flowers</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Aesculus x carnea</td>
<td>Red Horse Chestnut</td>
<td>Similar to Aesculus hippocastanum</td>
<td>12 metres</td>
<td>round</td>
<td>Red flowers</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Alnus cordata</td>
<td>Italian Alder</td>
<td>Chant Street East Launceston</td>
<td>10 metres</td>
<td>pyramidal</td>
<td>Textured leaves</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Alnus jorullensis</td>
<td>Evergreen Alder</td>
<td>Northcote Street Invermay</td>
<td>10 metres</td>
<td>pyramidal</td>
<td>Textured leaves</td>
<td>deciduous</td>
</tr>
<tr>
<td>Botanical Name</td>
<td>Common Name</td>
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<td>Mature Height in Urban Environment</td>
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</tr>
<tr>
<td>Cercis canadensis</td>
<td>Redbud</td>
<td>Similar to Cercis siliquastrum</td>
<td>6 metres</td>
<td>spreading</td>
<td>Pink flowers</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Cercis siliquastrum</td>
<td>Judas Tree</td>
<td>Carnarvon Street East Launceston</td>
<td>6 metres</td>
<td>spreading</td>
<td>Purple-pink flowers</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Cornus capitata</td>
<td>Evergreen Dogwood</td>
<td>Warragul Street Norwood</td>
<td>8 metres</td>
<td>spreading</td>
<td>White flowers</td>
<td>evergreen</td>
</tr>
<tr>
<td>Fagus sylvatica</td>
<td>European Beech</td>
<td>Pinkard Street Kings Meadows</td>
<td>15 metres</td>
<td>pyramidal</td>
<td>Bronze autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Fagus sylvatica 'Purpurea'</td>
<td>Copper Beech</td>
<td>City Park Tamar Street entrance</td>
<td>13 metres</td>
<td>pyramidal</td>
<td>Purple foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Fraxinus excelsior 'Aurea'</td>
<td>Golden Ash</td>
<td>Galvin Street South Launceston (species)</td>
<td>7 metres</td>
<td>round</td>
<td>Golden foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Fraxinus oxycarpa 'Raywoodi'</td>
<td>Claret Ash</td>
<td>Forster Street Invermay (outside Invermay Park)</td>
<td>12 metres</td>
<td>oval</td>
<td>Claret autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Ginkgo biloba</td>
<td>Maidenhair Tree</td>
<td>Quadrant Mall</td>
<td>9 metres</td>
<td>pyramidal</td>
<td>Yellow autumn foliage</td>
<td>deciduous</td>
</tr>
<tr>
<td>Kolreuteria paniculata</td>
<td>Golden Rain Tree</td>
<td>Vermeer Avenue Reserve centre of reserve - grown as a park tree</td>
<td>7 metres</td>
<td>rounded</td>
<td>Yellow flowers</td>
<td>deciduous</td>
</tr>
<tr>
<td>Liriodendron tulipifera</td>
<td>Tulip Tree</td>
<td>George Street Launceston southern end</td>
<td>13 metres</td>
<td>conical</td>
<td>Yellow autumn foliage, flowers</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Liriodendron tulipifera 'Aureomarginatum'</td>
<td>Variegated Tulip Tree</td>
<td>Similar to Liriodendron tulipifera</td>
<td>12 metres</td>
<td>pyramidal</td>
<td>Variegated foliage, flowers</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Liriodendron tulipifera 'Fastigiatum'</td>
<td>Upright Tulip Tree</td>
<td>Similar to Liriodendron tulipifera</td>
<td>13 metres</td>
<td>columnar</td>
<td>Golden autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Lophostemon confertus</td>
<td>Brush Box</td>
<td>Balfour Street Launceston</td>
<td>8 metres</td>
<td>round</td>
<td>Glossy green foliage</td>
<td>evergreen</td>
</tr>
<tr>
<td>Botanical Name</td>
<td>Common Name</td>
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<tr>
<td>Magnolia 'Little Gem'</td>
<td>Magnolia Little Gem</td>
<td>Smaller growing cultivar of the Evergreen Magnolia</td>
<td>5 metres round</td>
<td>Large white flowers</td>
<td>Evergreen</td>
<td></td>
</tr>
<tr>
<td>Malus ioensis plena</td>
<td>Bechtel Crab Apple</td>
<td>Elphin Road East Launceston</td>
<td>6 metres round</td>
<td>Double pink flowers</td>
<td>Deciduous</td>
<td></td>
</tr>
<tr>
<td>Malus tschonoskii</td>
<td>Pillar Apple</td>
<td>Similar to other taller Crab Apples</td>
<td>7 metres pyramidal</td>
<td>Purplish orange autumn foliage</td>
<td>Deciduous</td>
<td></td>
</tr>
<tr>
<td>Michelia doltsopa</td>
<td>Sweet Michelia</td>
<td>Similar to upright Magnolias although evergreen</td>
<td>10 metres conical</td>
<td>Fragrant white flowers</td>
<td>Evergreen</td>
<td></td>
</tr>
<tr>
<td>Nyssa sylvatica</td>
<td>Tupelo</td>
<td>No mature specimens available</td>
<td>11 metres conical</td>
<td>Brilliant orange to red autumn foliage</td>
<td>Deciduous</td>
<td></td>
</tr>
<tr>
<td>Phoenix canariensis</td>
<td>Canary Island Date Palm</td>
<td>High Street East Launceston</td>
<td>10 metres round</td>
<td>Large palm evergreen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pistacia chinensis</td>
<td>Chinese Pistachio</td>
<td>24 Bald Hill Rd Trevallyn (Link Street side)</td>
<td>8 metres round</td>
<td>Orange autumn foliage</td>
<td>Deciduous</td>
<td></td>
</tr>
<tr>
<td>Platanus orientalis 'Digitata'</td>
<td>Oriental Plane</td>
<td>Similar to Platanus x acerifolia</td>
<td>12 metres pyramidal</td>
<td>Dissected foliage</td>
<td>Deciduous</td>
<td></td>
</tr>
<tr>
<td>Platanus x acerifolia 'Bloodgood'</td>
<td>London Plane</td>
<td>Similar to Platanus x acerifolia</td>
<td>14 metres pyramidal</td>
<td>Golden autumn foliage</td>
<td>Deciduous</td>
<td></td>
</tr>
<tr>
<td>Platanus x acerifolia 'Liberty'</td>
<td>London Plane</td>
<td>Invermay Road Invermay (species)</td>
<td>14 metres pyramidal</td>
<td>Yellowish brown autumn foliage</td>
<td>Deciduous</td>
<td></td>
</tr>
<tr>
<td>Pyrus calleryana 'Capital'</td>
<td>Callery Pear</td>
<td>Civic Square back of Japanese Garden (species)</td>
<td>11 metres columnar</td>
<td>White flowers</td>
<td>Deciduous</td>
<td></td>
</tr>
<tr>
<td>Pyrus calleryana 'Chanticleer'</td>
<td>Callery Pear</td>
<td>Civic Square back of Japanese Garden (species)</td>
<td>11 metres Narrow conical</td>
<td>Mixed autumn foliage</td>
<td>Deciduous</td>
<td></td>
</tr>
<tr>
<td>Botanical Name</td>
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<tr>
<td>Pyrus 'Edgewood'</td>
<td>Callery Pear</td>
<td>Similar to Pyrus calleryana</td>
<td>8 metres</td>
<td>round</td>
<td>Mixed autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Pyrus ussuriensis</td>
<td>Ussurian Pear</td>
<td>Similar to Pyrus calleryana</td>
<td>9 metres</td>
<td>pyramidal</td>
<td>Mixed autumn foliage</td>
<td>deciduous</td>
</tr>
<tr>
<td>Quercus acutissima</td>
<td>Sawtooth Oak</td>
<td>Similar to other Quercus</td>
<td>10 metres</td>
<td>pyramidal</td>
<td>Golden autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Quercus castaneifolia</td>
<td>Chestnut-leaved Oak</td>
<td>Similar to other Quercus</td>
<td>12 metres</td>
<td>pyramidal</td>
<td>Serrated foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Quercus coccinea</td>
<td>Scarlet Oak</td>
<td>Similar to Quercus palustris</td>
<td>12 metres</td>
<td>round</td>
<td>Scarlet autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Quercus palustris</td>
<td>Pin Oak</td>
<td>David Street Newstead</td>
<td>15 metres</td>
<td>conical</td>
<td>Bronze autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Quercus palustris 'Green Pillar'</td>
<td>Pin Oak</td>
<td>Similar to but narrower than Quercus palustris</td>
<td>14 metres</td>
<td>columnar</td>
<td>Scarlet autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Quercus robur</td>
<td>English Oak</td>
<td>Howick Street South Launceston</td>
<td>11 metres</td>
<td>round</td>
<td>Yellowish autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Quercus robur 'Fastigiata'</td>
<td>English Oak</td>
<td>Tamar Street opposite Albert Hall</td>
<td>13 metres</td>
<td>Conical to columnar</td>
<td>Yellowish autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Quercus rubra</td>
<td>Red Oak</td>
<td>Similar to Quercus palustris</td>
<td>10 metres</td>
<td>Round</td>
<td>Red autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Sorbus aucuparia</td>
<td>Rowan</td>
<td>Mulgrave Street South Launceston</td>
<td>7 metres</td>
<td>Oval</td>
<td>Orange autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Tilia 'Greenspire'</td>
<td>Lime</td>
<td>59 Mayne Street Invermay (species)</td>
<td>9 metres</td>
<td>Pyramidal</td>
<td>Yellow autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Trachycarpus fortunei</td>
<td>Windmill Palm</td>
<td>Wellington Street Glen Dhu</td>
<td>10 metres</td>
<td>round</td>
<td>Medium palm</td>
<td>Evergreen</td>
</tr>
<tr>
<td>Tristaniopsis laurina</td>
<td>Water Gum</td>
<td>Abbott Street East Launceston</td>
<td>6 metres</td>
<td>Round</td>
<td>Yellow flowers</td>
<td>evergreen</td>
</tr>
<tr>
<td>Ulmus parvifolia</td>
<td>Chinese Elm</td>
<td>Canning Street Launceston</td>
<td>10 metres</td>
<td>Round</td>
<td>Serrated foliage</td>
<td>Semi-deciduous</td>
</tr>
<tr>
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<tr>
<td>Ulmus parvifolia 'Todd'</td>
<td>Chinese Elm</td>
<td>Similar to Ulmus parvifolia</td>
<td>10 metres</td>
<td>Round</td>
<td>Serrated foliage</td>
<td>Semi-Deciduous</td>
</tr>
<tr>
<td>Ulmus procera</td>
<td>Golden Elm</td>
<td>Canning Street Launceston</td>
<td>14 metres</td>
<td>Round</td>
<td>Yellow autumn foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Zelkova serrata 'Green Vase'</td>
<td>Zelkova</td>
<td>Similar to a small leaved Elm</td>
<td>14 metres</td>
<td>Round</td>
<td>Serrated foliage</td>
<td>Deciduous</td>
</tr>
<tr>
<td>Zelkova serrata 'Musashino'</td>
<td>Zelkova</td>
<td>Similar to a small leaved Elm</td>
<td>14 metres</td>
<td>columnar</td>
<td>Serrated foliage</td>
<td>deciduous</td>
</tr>
</tbody>
</table>
Appendix 3 Sample Concept Plan

CONCEPT STATEMENT
This is a short interconnecting street predominantly high turnover retail with moderate pedestrian. Both street elevations are of a consistent 2 storey facade. The facades vary in age from Victorian to early contemporary. Existing tree planting is sporadic, with no theme or contribution to the streetscape.

Species will be: Acer biglandii "Moorei" to compliment architecture, Waterhousiananas nicolas "Sordonesque" to improve pedestrian amenity.