

INSPIRE: *n. the arousing of feelings, ideas and impulses that lead to a creative activity. v. to uplift the mind of spirit.*
PLACE: *n. the connection between nature and culture which gives meaning to our everyday life. v. to position or arrange.*
NOTHOFAGUS GUNNII: *n. Deciduous beech, the only native deciduous tree endemic to the island of Tasmania, Australia.*

INSPIRING PLACE



Feasibility Study

SANDY BAY RIVULET LINEAR PARK

prepared for
Hobart City Council



Inspiring Place



August 2006



Feasibility Study

SANDY BAY RIVULET LINEAR PARK

prepared for
Hobart City Council

Inspiring Place Pty Ltd

Environmental Planning, Landscape Architecture,

Tourism & Recreation

208 Collins St Hobart TAS 7000

T: 03) 6231 1818 F: 03) 6231 1819 E: info@inspiringplace.com.au

ACN 58 684 792 133



Date	Version
25.07.06	Draft for Council Review
24.08.06	Final Draft

Project No: 05-61

TABLE OF CONTENTS

Executive Summary	i
1 Project Context.....	1
1.1 Sandy Bay Rivulet.....	1
1.2 Background to project.....	1
1.3 Study Objectives	2
1.3.1 Stage 1 : Getting Started & Desktop Research.....	2
1.3.2 Stage 2 : Initial Assessment	3
1.3.3 Stage 3 : Stakeholder Consultation	3
1.4 Project Management Team.....	4
2 Context.....	5
2.1 Review of Past Studies.....	5
2.2 Existing Open Space Areas and Recreational Use along the Rivulet.....	6
2.3 Community Values and Views.....	8
2.3.1 Friends of Sandy Bay Rivulet.....	8
2.3.2 Waterworks Valley Landcare Group.....	11
2.3.3 Department of Infrastructure, Energy and Environment.....	12
2.3.4 Selected Landowners	12
3 Assessing The Options for a Linear Park and Trail	15
3.1 Waterworks Reserve to Romilly Street.....	14
3.1.1 Start of Trail (Waterworks Reserve).....	16
3.1.2 Access from the Pipeline Track to Romilly Street	19
3.1.3 Access to the Rivulet (east) from Romilly Street	22
3.2 Romilly Street to Lynton Avenue.....	22
3.3 Lynton Avenue to Fitzroy gardens	25
3.4 Fitzroy Gardens to Regent Street	26
3.5 Regent Street to Sandy Bay Road.....	30
3.6 Sandy Bay Road to Marieville Esplanade	32
4 Action Plan	35
4.1 Overall Assessment of the Potential Linear Park and Trail	35
4.2 Interpretation	37
4.3 Action Plan	38
The Maps.....	41

EXECUTIVE SUMMARY

The following report has been prepared on behalf of the Hobart City Council by consultants Inspiring Place Pty Ltd. The report investigates the feasibility of developing a linear park extending from the Waterworks Reserve at the foothills of Mt Wellington, to the Derwent River following the journey of the Sandy Bay Rivulet.

The development of a linear park along Sandy Bay Rivulet is considered to be feasible and desirable from Waterworks Reserve to Fitzroy Gardens.

The development of a linear park along the lower section of the Sandy Bay Rivulet, between Fitzroy Gardens and Marieville Esplanade is not considered to be feasible, due to major constraints, in particular the high development costs, public safety issues and extensive land held in private ownership along the Rivulet.

Therefore, it is recommended that the route from Fitzroy Gardens to Marieville Esplanade be developed as a 'recreational street trail' that utilises existing street footpaths, and connects users to the rivulet through thematic interpretation.

However, further investigations should be undertaken regarding the feasibility of a linear connection between Regent Street and Sandy Bay Road in the longer term, given the extent of land along the Rivulet currently in Council ownership.

Preliminary consultation with a range of stakeholders was a principal objective of the feasibility study, and included discussion with selected private landowners, Council staff, and community groups such as the Friends of the Sandy Bay Rivulet and the Waterworks Valley Landcare Group.

Other key findings of the study include:

the upper section of the Sandy Bay Rivulet (i.e. between Waterworks Reserve and Romilly Street) has already been well developed as a recreational trail and is likely to continue to attract regular use;

the development of a trail along the middle section (Romilly Street – Fitzroy Gardens) is likely to be more of a local recreational trail, with the section from Fitzroy Gardens to Lynton Avenue potentially attracting higher use given that it would be an extension of the existing park experience;

the development and implementation of an Interpretation Strategy focusing on the physical and temporal journey of the rivulet is central to the proposed route, and will provide a means of linking the recreational street trail to the journey of the rivulet; and

the development of the proposed route is considered to be achievable within the realms of available Council and community resources.

The benefits associated with the development of a linear park and recreation trail include:

it will connect existing Council owned open spaces along the rivulet including popular recreational use locations such as the Marieville foreshore, Fitzroy Gardens, Parliament Street Reserve and Waterworks Reserve;

it will provide a new recreational trail connection between the foreshore and the foothills utilizing both natural and urban settings;

it provides a useful link to the proposed recreational use of Waterworks Road quarry site;

it will contribute to wider community benefits for health and well-being by providing greater opportunities for physical activity;

it will improve user safety by encouraging the development of a route based on reducing the risks associated with traffic movement;

it presents an opportunity to initiate rehabilitation of the rivulet environs adjacent to the linear park; and

it presents the opportunity for the interpretation of the rivulet history and values at different locations.



1 PROJECT CONTEXT

1.1 SANDY BAY RIVULET

The attached Key Plan shows the study area for the project.

The Sandy Bay Rivulet originates just below the Springs on Mount Wellington and is fed by thirteen tributary streams above the Council's waterworks reservoirs. It bypasses these reservoirs and continues down the catchment through an increasingly urbanised landscape of South Hobart and Sandy Bay to reach the Derwent River at Marieville Esplanade.

The character of the landscape surrounding the rivulet is diverse, and includes areas of forested land along the Pipeline Track, open rural land around Romilly Street, a formal European park landscape at Fitzroy Gardens, and the inner urban streetscape of Queen Street, Sandy Bay. The rivulet itself also changes from a natural stream with significant habitat values, to a waterway compromised by environmental weeds, to an open concrete stormwater channel in the lower Sandy Bay area.

The study divides the Sandy Bay Rivulet in two separate areas - the upper rivulet, which includes the area between the Waterworks Reserve and Lynton Avenue, and the lower rivulet, which includes the area between Lynton Avenue and Marieville Esplanade.

1.2 BACKGROUND TO PROJECT

The Hobart City Council agreed to investigate the desirability of establishing a linear park extending from the Derwent River up to Waterworks Reserve. The investigation was considered necessary to determine if development of a Sandy Bay Rivulet Linear Park would have the potential to contribute to the vitality of Hobart's overall open space system and more particularly, to complete the development of a number of key linear parks extending from the Derwent River to Mt Wellington, as a recreational asset for the benefit of the local community and visitors in years to come.

It was recognised that the formation of a contiguous linear park along the Sandy Bay Rivulet would be a complex and challenging undertaking and consequently Council commissioned this feasibility study to investigate the potential options.

Over the years there has also been community support for the protection and management of the natural values of Sandy Bay Rivulet, particularly through the community groups Friends of Sandy Bay Rivulet and the Waterworks Valley Landcare Group.

1.3 STUDY OBJECTIVES

The objectives of this study are to:

identify potential recreational opportunities associated with the development of a Linear Park along all or part of the Sandy Bay Rivulet;

identify the preferred track route and associated properties to be acquired;

undertake preliminary community consultation; and

assess other appropriate means other than purchase to facilitate the control/usage of land associated with a proposed linear park, or section thereof.

The Study has been prepared in three main stages.

1.3.1 Stage 1 : Getting Started & Desktop Research

The key tasks included:

preparing a work program and budget confirming tasks, timelines, outputs and meetings with the Project Management Team (PMT);

reviewing relevant background material and information including the location of Sandy Bay Rivulet in relationship to other open spaces, facilities and links;

reviewing land tenure information and compiling the required base information to commence site investigations; and

discussing the proposed consultation approach with the PMT to identify key stakeholders, the methods to be used and timing for various activities.



1.3.2 Stage 2 : Initial Assessment

The key tasks included:

assessment of the rivulet in relation to the network of existing recreational opportunities and also the potential opportunities that might result from the creation of an accessible linear park;

assessment of the importance, trends and participation levels associated with recreational activities that could occur within the park;

site assessment included a field trip covering the full extent of the Rivulet;

identification of site issues, the range of possible options and determining the preferred option(s); and

identification of environmental issues, recreational use, landscape design and other guidelines that would aid planning, development and management of a linear park.

1.3.3 Stage 3 : Stakeholder Consultation

Consultation was one of the principal objectives of the study. Making initial contact and discussing issues with key stakeholders was a key component of the feasibility process.

The stakeholder consultation program for the study included the following:

meeting with Friends of Sandy Bay Rivulet to present and discuss the draft study findings;

meeting with Waterworks Valley Landcare Group to present and discuss draft study findings;

meeting with Council staff involved with the management of the Sandy Bay Rivulet; and

discussion with several land owners whose properties had been identified in the study as potentially important for providing access to or along the linear park or who may be affected by the possible trail route.



1.4 PROJECT MANAGEMENT TEAM

The Project Management Team included Glenn Doyle (Manager Parks and Recreation), Rob Mather (Manager Bushland and Reserves), Jill Hickie (Bushland Planner) and Richard Weston (Parks Services Co-ordinator).



2 CONTEXT

2.1 REVIEW OF PAST STUDIES

A brief review of the previous reports of relevance to the current study is provided in the Table 2.1.

Report Title	Summary	Relevance to this Project
<p>Hepper, Marriott, de Gryse, 1994</p> <p><i>City of Hobart Open Space & Landscape Strategy</i></p>	<p>The report outlines a long term strategy for guiding Council's future role in acquiring, planning and managing the City's open spaces</p>	<p>The report identified that the existing Council Reserves in the upper section of Sandy Bay Rivulet from Lower Reservoir to the Southern Outlet should be extended so as to protect the rivulet banks, retain amenity values and offer possible pedestrian access in future years.</p> <p>Other strategies which are particularly relevant include:</p> <p>3.4.1 Identify and preserve historic links of human use and interest</p> <p>3.4.3 develop a network of pedestrian and cycle ways throughout the City with emphasis on the development of 'sea to summit' links along the major rivulets</p>
<p>Weller, 2001</p> <p><i>Urban Stream Management: an information manual for local government parts 1 and 2</i></p>	<p>The report and manual present background information and guidelines for rehabilitating urban streams and to improve existing maintenance regimes</p>	<p>The report's detailed information regarding the physical management of urban streams would be useful during the design phase of future work associated with siting and construction of infrastructure associated with the linear park. These manuals would also benefit the ongoing management of the rivulet</p>
<p>Sinclair Knight Mertz, 1999</p> <p><i>Waterworks Valley Management Plan</i></p>	<p>This plan was prepared for the Waterworks Valley Landcare Group with the assistance of an Australian Government Natural Heritage Trust grant. It examines the uses and values of Waterworks Valley along the Sandy Bay Rivulet and outlines an action plan for future management of these values.</p>	<p>The plan identifies the potential of a linear park along the upper rivulet, and provides comprehensive background assessment and action plan specific to the issues of: water quality, weed management, vegetation management, fauna, heritage, access, interpretation and community involvement.</p>

Table 2.1 Summary of Prior Reports (cont)

Report Title	Summary	Relevance to this Project
Leggett, 2002 <i>Sandy Bay Rivulet Draft Catchment Management Plan</i>	This management plan focuses on the more urban, lower reaches of the Sandy Bay Rivulet, with an emphasis on the physical management of the water course.	The report does not comment on public access to the rivulet or recommend a linear park, however it does emphasise the importance of the rivulet to the local community and recommends involving the community in the ongoing management of the rivulet.
DPIWE, Tasmania, 2004 <i>Derwent Estuary Program: A Model Stormwater Management Plan for Hobart Regional Councils – a Focus on the New Town Rivulet Catchment</i>	This report focuses on the management of storm water runoff within the Derwent Estuary, identifying the values of the estuary, issues and threats to water quality and management options	The report illustrates the success of the New Town Rivulet linear park, and its value to the community as a recreation resource. In this way, it is a positive example of what could be achieved at the Sandy Bay Rivulet

Table 2.1 Summary of Prior Reports.

2.2 EXISTING OPEN SPACE AREAS AND RECREATIONAL USE ALONG THE RIVULET

There are a number of major open space areas linked to the physical course of the rivulet within the Study Area. These open spaces include:

Waterworks Reserve – a popular bushland and parkland reserve adjoining Ridgeway Park and the Upper and Lower Reservoirs that cater for picnicking, walking, cycling, barbequing and other informal recreational activities for people within the regional urban catchment;

Fitzroy Gardens – a more formal park with ornamental plantings and lawns that attracts informal recreation and passive activities, principally used by local residents, walking commuters and families making use of the play facilities and beautiful setting;

Parliament Street Reserve – a highly used park that caters for informal sporting and recreational activities along with passive enjoyment by local residents and the wider Hobart community; and



Marieville Esplanade – Short Beach foreshore (Errol Flynn Reserve) – a highly used foreshore area for a range of activities including walking, dog exercising, play, rowing, kayaking, informal sport and other beach/park uses with toilets and play facilities provided. This area attracts high use from local residents but also people visiting the area because of the facilities and activities available. It should also be noted that this area has been identified as a key location for potential tourist routes through Battery Point.

The principal developed recreational trail within the study area is the Pipeline Track that extends from Ferntree to Waterworks Reserve with both natural bushland and historic water infrastructure as features of the walk. The walk connects along a gravel path from Waterworks Reserve to Romilly Street and is regularly used by walkers, cyclists, joggers and young families (suitable to prams and young children). There are also developed paths within Fitzroy Gardens and footpaths available within the streets to allow access to some parts of the rivulet (e.g. Lynton Avenue, Overell Street, Regent Street, Jersey Street, Sandy Bay Road, Princes Street, Quayle Street).

Elsewhere in the study area along the Sandy Bay Rivulet are informal tracks over Council owned land and private land abutting the rivulet.

The main pedestrian routes that cross the Sandy Bay Rivulet are along Marieville Esplanade (foreshore focus and connection with Battery Point), Sandy Bay Road (city centre, Salamanca and Battery Point link), Regent Street (city centre link) and Parliament Street – Fitzroy Place (city centre link). The Council is planning to upgrade access and facilities at the Waterworks Road quarry site that will encourage some increased use of the street footpaths and possibly future trails to access the site from the city centre and surrounding residential areas.

The current recreational use of the rivulet environs is higher in the upper section of the Study Area due to the existence of a formed track and Waterworks Reserve. The level of use between Romilly Street and Quayle Street is focused at the above mentioned key open spaces but it is restricted and only occasional along most parts of the rivulet due to large sections of private land ownership, lack of trail or facilities and general access difficulties (e.g. steepness, overgrown, weeds, risk/safety concerns).



2.3 COMMUNITY VALUES AND VIEWS

As required by the Project Brief, preliminary consultation was held with some of the key stakeholders in the potential development of a linear park along Sandy Bay Rivulet. Those consulted included:

Friends of Sandy Bay Rivulet;

Waterworks Valley Landcare Group;

Department of Infrastructure, Energy and Environment; and

selected landowners with property that may be required to achieve the linear park or have residences close to where a potential trail may be developed if a linear park was achieved in the future.

2.3.1 Friends of Sandy Bay Rivulet

The meeting presented the draft route and discussed potential options and issues. The following views do not necessarily represent the views of all members of this group, but lists those views expressed by individuals at the meeting.

The views expressed were:

Romilly Street Bridge area is a habitat for pink robins and there is concern about the impact of the proposed stairs (and subsequent increase in visitor numbers) on the birds;

interpretation points at crossings – each crossing point has its own story with possibilities for interpretation e.g. Romilly St has a Percy Granger quote associated with it;

concerns were expressed regarding conflict between walkers and wildlife if a walking track is introduced below Romilly Street;

the Eastern barred bandicoot route from Lynton Avenue to Waterworks Reserve was negotiated by Friends of SBR;

a bridge over the rivulet at Overell Street to the trail was suggested;

strong support was expressed for the link between Lynton Avenue and Fitzroy Garden as a native vegetation corridor, rather than using exotic vegetation;



the need for acoustic baffling to counter road noise;

the need to carefully program weed-tree removal, as it will have visual and noise impact for residents nearby;

Princes Street Primary School students could be involved in planting and maintenance;

suggestion to install pedestrian bridge over Regent Street as a way of countering the pedestrian safety issues at this location;

the existing pedestrian link from King Street to Parliament Gardens is used by school children;

Grosvenor Street - Star Street - Fitzroy Place – City is a well-used walking route to the city for local residents;

suggestion for flat concrete path to allow walking access in rivulet section below Sandy Bay Road – cultural heritage features such as old bridge;

comment that public access to rivulet provides passive surveillance, increasing security for adjacent owners;

Whitebait breed up to tidal zone at Quayle Street;

comment that the plan should show a public open space area on the corner of Osbourne Street and Sandy Bay Road;

suggestion that the trail should follow the rivulet up to the source;

suggests that the Kooyong Glen access point should be prioritised to reduce walkers traversing through residents' front yards;

Council should look to acquire land if large holdings adjacent to the Rivulet come up for sale or subdivision;

dogs should not be encouraged due to conflict with wildlife;

Greenlands Avenue link through units to Parliament Gardens – gate is often closed but it should be open to the public;



indicates that there is land for sale on Kooyong Glen – has Council considered purchasing a link through?

strong support for a link between Parliament Gardens and Regent Street; and

comment that it would enhance safety to have access to the rivulet in the case of a rescue emergency.

After the meeting, correspondence was received from both the President and Secretary of the Friends of Sandy Bay Rivulet Inc., the main issues raised are outlined below:

the group were impressed with the level of detail shown in the presentation, particularly with regard to the upper rivulet;

the group were concerned that the project was primarily focused on recreational use ;

general agreement was expressed regarding the recommendations for sections between Waterworks and Lynton Avenue, except for concern regarding wildlife habitat;

agreement was expressed regarding the section from Lynton Ave to Parliament Street, including the suggestion of a footbridge over the rivulet at Overell Street;

disagree with the proposed route from Parliament Street onward due to concern about safety at Antill Street pedestrian crossing and that this route loses the intent of the linear park. The group's preferred route is through Parliament Street Reserve, to Greenlands Avenue and through to Regent Street, then via Queen Street to Sandy Bay Road and via Queen St and Princes St to Quayle St;

believe there is a need for a long term plan to eventually achieve a route that follows the rivulet bank;

believe that the feasibility study should recommend a mechanism for securing riparian zones of two land holdings in Sandy Bay / Lower Battery Point which border the rivulet;

believe that Quayle Street should be upgraded as a priority in its own right, regardless of its inclusion in the linear park;



the rivulet section in Quayle Street and the Short Beach Reserve and a possible waterfront walkway is another area with great potential that requires a detailed study; and

believe that there is a need to look at the linear park on a series of time frames, e.g. 5 to 10 years, 20-40 years and 50-100 years.

A major point of discussion was about the potential to restore the rivulet to its original natural condition in the long term despite the high costs of land acquisition and site rehabilitation works, the likelihood of strong opposition from most landowners with adjoining properties in the urban setting, and the risk/safety factors involved. The options are discussed further in Section 3.4, 3.5 and 3.6 covering the lower part of the rivulet between Parliament Street Reserve and Marieville Esplanade.

2.3.2 Waterworks Valley Landcare Group

A similar presentation was made to the Landcare Group and there appeared to be general agreement with the options for the upper parts of the rivulet catchment of direct interest to the group. The need for a pathway along Waterworks Road to the entrance to the Reserve was raised. Some members of the Friends of Sandy Bay Rivulet are also members of the Landcare Group and raised similar issues to that documented above for the lower sections of the rivulet catchment. There were some mixed views as to the practicality of achieving a natural rivulet in the lower catchment given the existing land use and costs involved, although most saw this as being a desirable long term objective.

The Group provided a copy of a letter from the Environmental Defenders Office (Tas) Inc., which investigated options for creating public access along the rivulet. These options were:

Conservation Covenant (with Management Agreement);

Declaration of Public Reserve;

Sale of land to Council;

Restrictive Covenant;

Easement;

Lease; and

Part 5 Agreement.



The report considered it unlikely that the first two options, managed under the Protected Areas on Private Land Program, would apply to the Sandy Bay Rivulet. The more effective and secure options were considered to be sale of land, subject to a restrictive covenant, or entering a Part 5 Agreement under the *Land Use Planning Approvals Act 1993*.

2.3.3 Department of Infrastructure, Energy and Environment

Discussions with DIER indicated that:

the land along the rivulet on the eastern side of the Southern Outlet between Lynton Avenue and Fitzroy Gardens is within a road reserve managed by the Department;

the road reserve is set aside for future expansion of the Southern Outlet, if required in the future;

DIER would provide in-principal support for the rehabilitation of the rivulet environs and development of a trail as this should not significantly compromise its potential to be used for expansion of the Southern Outlet in the future;

a maintenance contract exists for the DIER land and boundaries for management responsibilities would need to be established with the Council if the linear park and trail was to be developed;

the consent of DIER would be required for all development; and

further consultation should be with the Manager for Transport Infrastructure.

2.3.4 Selected Landowners

Contact was made with 10 private landowners nominated by Council following the initial investigations into the linear park and trail route. The contact was made by phone and where this was unsuccessful, a letter to invite contact was sent – 8 of the landowners responded to either phone or letter contact. All of the landowners contacted were located between Lynton Avenue and Romilly Street. The names of the landowners are not mentioned in the report in order to maintain confidentiality.



The majority of those landowners contacted indicated the potential benefits of the linear park and trail outweighed the possible impacts on individual private landowners. They considered the trail was beneficial for the whole community and considered the rivulet would benefit from increased maintenance and management resources. Several of these landowners mentioned the wildlife values of the rivulet and bushland. Some issues that would need further consideration include location, design and management of the trail.

Two landowners were concerned about the proposal and cited loss of privacy, impact on wildlife and increased security risks associated with public access near their residential property. In both cases, the Council already owns a reserve along the rivulet adjoining their property and there was no requirement for Council to acquire land from these owners. One of the landowners no longer lived at the site but another family lives in the residence. One of the landowners was concerned that native wildlife would be threatened by the use of the trail for walking with dogs and disturbance of the habitat.

One landowner was considering the feasibility of subdivision of the land and had discussed the opportunity for a reserve along the rivulet with Council. Another landowner was receptive to the idea of a local linking trail being negotiated across their land to join a nearby street. The other property is currently on the market for sale.



3

ASSESSING THE OPTIONS FOR A LINEAR PARK AND TRAIL

Beginning at the Waterworks Reserve and moving downstream to Marieville Esplanade, an assessment summary and recommendations for the various sections of the rivulet are outlined below. The Sections include:

Waterworks Reserve to Romilly Street (Section 3.1);

Romilly Street to Lynton Avenue (Section 3.2);

Lynton Avenue to Fitzroy Gardens (Section 3.3);

Fitzroy Gardens to Regent Street (Section 3.4);

Regent Street to Sandy Bay Road (Section 3.5); and

Sandy Bay Road to Marieville Esplanade (Section 3.6)

At the end of this section, A3 maps show the preferred routes.

3.1 WATERWORKS RESERVE TO ROMILLY STREET (REFER TO MAPS 1-2)

This popular track is in good condition and is suitable in its current state for a range of users, including walking, jogging, cycling and wheelchairs and prams. Within a bushland/semi-rural setting, the track is elevated above the Rivulet, with the watercourse being visible for most of its length to Romilly Street.

Although Council does not currently own any land between the Pipeline Track and Stoney Steps Road/Livingston Street to the north, it would be desirable to acquire or negotiate public access given visible signs of regular use along the existing informal foot track.

Issues associated with this section of track include access at either ends (see Sections 4.1.1 and 4.3), weed management and possible local planning issues involved with development control (several properties span the Rivulet in this location and the siting of outbuildings and outdoor storage could reduce the overall quality of the bushland/semi-rural experience).

3.1.1 Start of Trail (Waterworks Reserve)

Currently there are no sign-posted links between Waterworks Road and the lower section of the Waterworks Reserve and the existing trail connecting through to Romilly Street. However existing local users access the track via the loop trail around Lower Reservoir, over the dam wall or via the Hobart Water treatment site. The connections for visitors are not obvious or promoted.

There are three suggested options for the location of the start of the trail:

Waterworks Reserve, between upper and lower reservoirs;

Waterworks Road, near lower reservoir; and

Waterworks Road, below Hobart Water treatment plant.

Each option offers a slightly different beginning experience, and each has its benefits in terms of connectivity to Waterworks Reserve, accessibility and amenity. It is possible that all three starting points could be developed and used.

Option 1 - Waterworks Reserve, between Upper and Lower Reservoirs

The first option for the starting point would be from within Waterworks Reserve, between the Upper and Lower Reservoirs, using the existing track. This option is not shown on the maps.

Advantages

The advantages include:

Waterworks Reserve makes an excellent 'anchor' at one end of the trail. It is an attractive and popular destination with a range of visitor facilities including car parking, toilets and barbeque/picnic shelters. These facilities have the capacity to provide for expected users of Sandy Bay Rivulet walk and thus avoid the need for duplicating some facilities at another location;

It offers good connections to other walks within Wellington Park and Ridgeway Park, allowing users the opportunity for a longer walk by adding the Sandy Bay Rivulet trail to other existing walks;



the track is already constructed and in reasonable condition;

it is a relatively safe destination with lower traffic volumes and speeds than Waterworks Road and the benefit of passive surveillance from other site users; and

the route is attractive, winding along the edge of eucalypt forest with views overlooking the reservoirs.

Disadvantages

The main disadvantage is that the terrain is uneven and steep in parts with steps, so while it suits walkers it is unsuitable for road cycles (not including mountain bikes), wheelchairs, prams, etc.

Option 2 – From Waterworks Road, near Lower Reservoir

This option is for a starting point at an existing vehicle entrance, off Waterworks Road near the lower end of the Lower Reservoir (refer Map 1)

Advantages

The advantages include:

easily accessible from the road without needing to enter Waterworks Reserve;

with some line-marking, roadside parking is possible in this location if required;

avoids much of the steep and uneven grade of the first option (one steep section, however);

historic stone walling associated with the dam engineering and stone bridge provide interest and opportunities for interpretation; and

offers good views of the reservoir and vistas into the reserve.



Disadvantages

The disadvantages include:

this entrance would not be accessible for wheelchairs or prams as there is a steep descent from edge of the Reservoir, requiring steps. (Mountain bikers are currently using the steep section, and this use could be maintained by retaining a gravel path alongside the steps.);

may require construction of a gravel trail across the dam wall depending on the level of use and impact; and

may involve some vehicles turning on Waterworks Road to park on the northern side of the road (although road width for turning is available near the entrance to Waterworks Reserve) thus adding to possible traffic safety issues.

Option 3 – From Waterworks Road, below Hobart Water treatment plant

This option is for a starting point at an existing vehicle entrance off Waterworks Road, which is used to access the Hobart Water treatment plant (refer Map 1).

Advantages

The advantages include:

entrance via existing access road, which offers direct access to pipeline track;

potentially more convenient for some users in nearby residences to access the trail; and

although steeper than the 1 in 14 grade required for universal access, if sealed, the grade would be suitable for some wheeled users, e.g. bicycles, prams and assisted wheelchairs.



Disadvantages

The disadvantages include:

Hobart Water treatment plant is considered a hazardous facility and should be securely fenced off for reasons of public safety and risk management, prior to this location being used as a formal starting point to the walk;

does not offer universal access due to gradient from Waterworks Road to the Rivulet; and

the lack of car parking nearby would potentially limit its convenience and use to an access point for cyclists and local users only.

Recommendation:

All three options should be available due to their various advantages for different users. Option 1 – starting within Waterworks Reserve is recommended as the main starting point to be promoted for community use, with the other access options available as alternative or additional access points.

The negotiation of public access, or acquisition of private land between the Pipeline Track and Stoney Steps / Livingston Street is recommended given visible signs of regular use along the existing informal foot track.

Opportunities exist for interpretation to be developed for this section of the proposed trail, and may include interpretive panels or other installations located on the existing bridge.

3.1.2 Access from the Pipeline Track to Romilly Street

The current connection between the Pipeline Track and the Romilly Street Bridge (and potential future access to the Sandy Bay Rivulet Trail downstream of Romilly Street), requires pedestrians to walk along the road edge (no footpath), down a steep hill and around a blind corner, posing significant safety issues. A safer option would need to be implemented as part of any future trail connection. Several options are possible:

steps from Pipeline Track to Romilly Street bridge through HCC owned land;



upgrade pedestrian path along Romilly Street to the bridge;

or

steps from Pipeline track to Romilly Street bridge through privately owned land.

Option 1 – Steps from Pipeline Track to Romilly Street bridge through HCC owned land

This option involves creating a new walk link from the Pipeline Track, south through steep Council owned land, exiting adjacent to the bridge. This link would require steps and the feasibility of the option is subject to a site survey and environmental and geotechnical reports to assess the suitability of the site for this purpose.

Advantages

The advantages include:

improved safety for track users (not having to use Romilly Street);

achieves a safer crossing point over Romilly Street where there is good sight distance;

brings users more directly to the continuation of the rivulet trail east of the bridge; and

a substantial amount of the land required is currently owned by Council.

Disadvantages

The disadvantages include:

the possibility that the land is too steep for development;

high construction costs for the stairs; and

the need to consider cyclist use of the trail e.g. either they continue on existing path to Romilly Street (may be desired route for cyclists heading to the CBD or returning to South Hobart) or provide a side-slide for pushing bikes along stairs.



Option 2: Upgrade pedestrian path along Romilly Street to the bridge

This option would involve providing a safer environment for pedestrians and cyclists on the eastern side of Romilly Street by constructing a footpath and cycle lane within the existing road reserve, from the current exit point of the trail, downhill to the bridge. Additional improvements would include:

signage and change in road surface to alert drivers to pedestrians crossing;

narrowing the vehicle lane width; and

designating this section as a no-parking area.

Advantages

The advantages include:

costs may be less than construction of stairs;

existing road is wide enough to accommodate a path;

one route can continue to be a shared trail; and

footpath is beneficial for other pedestrian use in the area.

Disadvantages

The disadvantages include:

construction costs for road works that may be required, barrier fence (if needed) and footpath; and

crossing point at end of track on Romilly Street is less safe than near the bridge given short sight distances.

Option 3: Steps from Pipeline Track to Romilly Street bridge through privately owned land

If Option 1 is not possible due to geotechnical constraints, this option provides a gradient that is less steep, but would still require steps. It would provide similar benefits but would require the Council to acquire an area of land in the adjoining property for the purpose.



Recommendation:

Option 1 is preferred as the primary link between the Pipeline Track and the possible future trail along the rivulet to the west of Romilly Street. If geotechnical issues do not allow for this, then Option 2 should be considered.

Option 3 would provide benefits for general pedestrian amenity along Romilly Street, but is seen as a 'fall back' option to be pursued if Options 1 or 2 are not possible, due to the need for land acquisition.

3.1.3 Access to the Rivulet (east) from Romilly Street (refer Map 2)

To link the existing Pipeline Track with a new track along the rivulet, east of Romilly Street, an access point needs to be provided from the bridge down to the Council owned land at the rivulet's edge. There is a change in grade from the bridge down to the rivulet of approximately 4-5 metres.

Various options were investigated (northern or southern side of rivulet) but the northern side would require acquisition of private land, and higher construction costs due to steepness of the land and bridging of the rivulet – with no tangible benefit to the user.

Recommendation:

It is recommended that access from the Romilly Street bridge be via a steel staircase on the southern side of the rivulet, connecting directly with the Council owned land beside the rivulet.

3.2 ROMILLY STREET TO LYNTON AVENUE (REFER TO MAPS 2-3)

Once down on Council land (Section 3.3.1, above), the proposed route would logically follow the line of the Rivulet, on Council land between the watercourse and the following properties:

38, 40 and 42 Romilly Street, and 104, 102, 66-64, 62, 60,
58, 56 and 54 Waterworks Road.

Significant weed clearing and track construction work would be required to achieve this. However, it is considered feasible to locate a track along this area, utilising the Council owned land in preference to negotiating access over privately owned land on the northern side of the rivulet. It is known that the



landowner is strongly opposed to any land acquisition or trail development and there are also higher costs involved with traversing the rivulet and also dealing with impacts on historic rock walls along the edge of the rivulet.

A footbridge is recommended to cross to the north side, roughly adjacent to 54 Waterworks Road. From this point the recommended trail route would require negotiation with three private properties (8A Romilly Street, 14 Kooyong Glen, 2 Romilly Street) before meeting Council owned land adjacent to 10 Waterworks Road.

In the longer term, pedestrian trail links are recommended to both ends of Kooyong Glen (within the existing road reserve) to provide local neighbourhood access to the trail. Constraints include steep land towards Romilly Street, requiring steps and woody weed clearance, and a rivulet crossing required to gain access to Waterworks Road. In addition there is a large water pipe crossing the rivulet within the road reserve, which there is no option to relocate and requires some manoeuvring by walkers to negotiate under/around it.

Council officers have requested access for 4WD vehicles and earth-working machinery to the trail from the Council owned land at 70 Waterworks Road. This proposal will need assessment and geotechnical advice due to the steep and potentially unstable nature of the site. As shown on Map 2, trail access options are considered to be better on the western side of the site. A public access point here would also provide a valuable pedestrian connection to the Waterworks Road quarry site opposite which is currently being upgraded as a recreational park for rock climbing and other activities.

From 10 Waterworks Road to Lynton Avenue the trail would be on-road, utilising the existing road network and infrastructure, to connect two off-road sections of the trail. The trail would exit the rivulet's course at Waterworks Road, travel north to Lynton Avenue, under the Southern Outlet, which passes overhead before crossing over Lynton Avenue to connect with the rivulet again.

Several issues have been identified regarding the link between 10 Waterworks Road and the Lynton Avenue crossing, including legibility of the trail and pedestrian safety crossing Lynton Avenue.

Legibility of the trail becomes an issue as the route departs the Rivulet's course, following roads before joining the rivulet east of Lynton Avenue. A clear connection could be made along the on-road sections of the trail by employing urban design techniques such as special pavement treatments.



Incorporating colour, texture, graphics and text into the pavement surface would eliminate the need for vertical signage, which has the potential to clutter this fairly restricted urban environment.

Safety of pedestrians crossing Lynton Avenue is an issue due to the eastbound traffic descending the sharp hill to the west of the Southern Outlet. The Outlet bridges overhead restrict views in both directions, which impact on the safety of drivers and pedestrians alike. The noise created by overhead traffic further intensifies the risk, with pedestrians less able to hear traffic approaching.

After consultation with Council's Traffic Engineering Unit, including a site visit, several measures are suggested to improve pedestrian safety at this point, including road widening to accommodate a traffic island, and the installation of lighting and signage.

It is considered that the planned use of the quarry site will create some interest for both walkers and cyclists to access the location along the proposed rivulet trail.

Recommendations:

The following recommendations will improve the legibility, navigability and safety of this section of the trail:

develop a trail between Romilly Street to Lynton Avenue involving negotiations with existing landowners to establish a public linear park and trail link along the rivulet;

provide a connection through Council land at 70 Waterworks Road to allow access to the quarry site;

provide trail connections along Kooyong Glen between Romilly Street and Waterworks Road;

design and implement pavement treatments along the on-road section of the trail between 10 Waterworks Road and Lynton Avenue to improve the legibility of this connection;

provide a safer crossing point over Lynton Avenue (refer map 3);



widen the road by approximately 2 metres to accommodate a traffic island in the middle of the road for pedestrian refuge. The island would need to be approximately 2.2m wide and 5-7m long;

install overhead lighting to illuminate the crossing point at night;

install kerb ramps on both sides of the road;

provide signage to alert drivers of pedestrians, located on the western side of the bridge; and

provide signs at the crossing point alerting pedestrians to give way to vehicular traffic.

3.3 LYNTON AVENUE TO FITZROY GARDENS (REFER TO MAPS 3-4)

This section of the trail could be accommodated in the Department of Infrastructure, Energy and Resources (DIER) land wedged between the Sandy Bay Rivulet and the Southern Outlet. Use of the land would require a legal agreement with DIER, and some preparatory works, particularly the removal of extensive cover of woody weeds. Negotiations with DIER will need to include discussion and agreement as to the management responsibilities of each agency in relation to the proposed trail and the road reserve through which it is envisioned to traverse.

Following clearance work, the land should be of a suitable grade and width to accommodate a shared trail for cyclists and pedestrians, linking Lynton Avenue with Fitzroy Gardens. This link would also serve as an important commuter track and enhance the habitat values of the rivulet.

Recommendations:

The following recommendations will facilitate the section of the trail between Lynton Avenue to Fitzroy Gardens:

negotiate a legal agreement with DIER for the construction and ongoing management of the trail corridor;

remove weeds from the land along the Rivulet and the Southern Outlet;



develop a sealed track to be shared by pedestrians and cyclists;

use predominately native species for any replanting but where appropriate, use may be made of non-invasive exotic ornamental species in landscaping, to thematically connect this link with the adjacent Fitzroy Gardens (this recognises that there are already exotic trees in this area that would be impractical to remove and would affect noise/visual buffers important to nearby residents);

ramp the track gently from Lynton Avenue to the Rivulet edge, avoid using steps;

consider providing lighting along this length of track – bollard style given safety risks and link to a popular City park;

provide trail signage and a bicycle-friendly gateway from Lynton Avenue that is designed to prevent vehicles entering; and

further investigate opportunities for interpretation at the intersection with Overell Street, which provides users with a connection to the proposed route from surrounding areas.

3.4 FITZROY GARDENS TO REGENT STREET (REFER TO MAP 4)

Members of the Friends of Sandy Bay Rivulet indicated support for a linear park and public access alongside the rivulet in this section during the stakeholder consultation phase.¹ However there are significant obstacles to the establishment of a trail in this section, including limited public land (other than Parliament Street Reserve), the need for private land acquisition², difficult and costly trail construction requirements (including demolition of poorly constructed rivulet retaining walls and some existing out-buildings), public safety, flooding and management issues.

Based on discussions with the Council Traffic Engineer there are also major safety/risk concerns with a trail that reaches Regent Street where there is poor sight distance, no convenient and safe pedestrian crossing point, high traffic volumes and high traffic speeds.

¹ The Friends of the Sandy Bay Rivulet group are very supportive of including this segment of the rivulet in the linear park proposal. Refer consultation notes in Appendix A.



Given these obstacles, the feasibility of a number of options has been considered for achieving access from Fitzroy Gardens to the lower section of Sandy Bay Rivulet. These options include:

following the rivulet from Parliament Street to Regent Street; and

through Fitzroy Gardens, across Antill Street, along Fitzroy Place, left at Byron Street to Sandy Bay Road.

Option 1: Follow the Rivulet from Parliament Street to Regent Street

This option would require land acquisition, construction of a walkway over/along the rivulet from Parliament Street to Regent Street with creation of a safe road crossing at Regent Street.

Advantages

The advantages include:

this route follows the natural/modified course of the rivulet;

it takes advantage of Parliament Street Reserve as an attractive open space area that is Council owned;

it presents an opportunity for Council to upgrade Parliament Street Reserve to develop its potential as focal point, and 'detour' or open space link to the proposed trail, including the addition of interpretive material and seating, and the implementation of a rehabilitation program along this section of the rivulet;

there is a relatively safe crossing point available on Digney Street, from Fitzroy Gardens to Parliament Street Reserve; and

there is community support for this route from the Friends of Sandy Bay Rivulet.



Disadvantages

The disadvantages include:

would either require acquisition of private land (costly, long time frame, likely to be disputed and thus a political issue) or high construction costs for installing a walkway over the rivulet;

risk management issues associated with managing public access and flooding in this section of the rivulet;

the amenity of sections of the rivulet is relatively low due to major modifications to the natural values (e.g. concrete floodway, retaining walls, outbuildings to the edge of the water course, public/private conflicts due to overlooking of properties and loss of privacy, weeds and pollution); and

the exit point at Regent Street is not considered desirable or safe for pedestrian crossing without major traffic stopping devices (e.g. traffic lights) which presents a high infrastructure cost and is unlikely to be a priority given the location (the alternative of directing users to Queen Street may improve pedestrian crossing safety but may not be seen as convenient to users, thus creating risk management issues for Council).

Friends of Sandy Bay Rivulet referred to a route through Parliament Street Reserve on to Greenlands Avenue and through to Regent Street, then via Queen Street to Sandy Bay Road and via Queen St and Princes St to Quayle St. The connection to Greensland Avenue is believed to be privately owned land but this could be examined and negotiations held with the landowner. Whilst Queen Street is a better location to cross than closer to the rivulet location, it still poses some risks for Council in encouraging pedestrians to cross Regent Street given the traffic volumes and speeds. The signalised traffic intersection at King Street is more logical and would also provide a direct link to the signalised traffic lights on Sandy Bay Road. The connection onto Queen Street south of Sandy Bay Road has narrow footpaths and no amenity to match the walking experience of Fitzroy Place or Quayle Street – this route is seen as possible but offering less advantages and no more benefits than the preferred route outlined below.



Option 2: Through Fitzroy Gardens, and across Antill Street

This route would journey through Fitzroy Gardens, crossing at the intersection of Antill Street and Fitzroy Place. Part of the preferred trail through the parkland is existing, the remaining is already a commonly used route for pedestrians.

Advantages

The advantages include:

the pathway for much of the route already exists as street footpaths, including a section of path through Fitzroy Gardens, thus limiting construction costs; and

it makes use of the attractive parkland of Fitzroy Gardens.

Disadvantages

The disadvantages include:

this route moves well away from the alignment of the rivulet (although the ability to achieve a linear route along the lower portions of the rivulet is not considered to be a feasible outcome);

the need to construct a short 'missing' path within the Fitzroy Gardens to join Fitzroy Crescent, which appears to be a current desire-line for users; and

the pedestrian crossing point at Antill Street and Fitzroy Place will need upgrading for pedestrian crossing to improve safety (this should occur regardless of the development of the trail)³.

It should be noted that other options were considered for this section of the trail, including an alternative route along Digney Street to Antill Street. Digney Street is an established pedestrian thoroughfare, however, it does require two road crossings to reach the crossing point at the intersection of Antill Street and Fitzroy Place, and is not considered as picturesque as the Fitzroy Gardens route.

³ The crossing point at the intersection of Regent Street and Fitzroy Place is a major safety concern and should be reviewed as a possible non-crossing point (e.g. use of barriers) given the poor sight distances, high traffic volumes, and high traffic speed due to being at the bottom of the hill. The crossing point at the northern side of the intersection at Antill Street is also considered dangerous, but safety could be improved with some modifications. Subject to its improvement, it is the preferred crossing point, which would favour Option 3.



Recommendation:

Option 2 is considered to be the most feasible option for a linear trail in the short to medium term, given the disadvantages listed for option 1, and in particular the significant acquisition and construction costs, legal issues and safety issues presented by this route. Given the other social, environmental and economic priorities for the City including priorities for recreation facilities and environmental management within the City, it is difficult to justify the high costs and impacts for such a route against the recreational benefit received.

However, it is recommended that Council investigate further the possibility of upgrading Parliament Street Reserve to provide access to the rivulet via interpretation and improved visitor amenity.

3.5 REGENT STREET TO SANDY BAY ROAD (REFER TO MAP 4)

This section deals with options for a possible route from Regent Street to Sandy Bay Road.

Council currently has four land titles on the northern side of the rivulet between Regent Street and Jersey Street with one title remaining in private ownership. It is logical for the Council to consider acquisition or negotiated access over this title, as the opportunity arises.

The options for this segment include:

following the rivulet; or

following the streets.

Option 1: Following the Rivulet

The section between Regent Street and Sandy Bay Road includes some HCC land as well as private properties. With a combination of some constructed paths and raised walkways, following the rivulet would be feasible west of Jersey Street. Although still urban in character, the rivulet in this section is more attractive and vegetated. It would allow for a connection of the Star Street – Jersey Street (a well used walking route for University students and local residents) to Regent Street. It is recommended that pedestrians be directed to cross Regent Street at the Antill Street Fitzroy Place crossing, and access the rivulet from the eastern side of Regent Street, eliminating the need to cross further down where conditions are less safe. A physical barrier to



increase the safety of pedestrians may also need to be installed along the relevant section of Regent Street.

Opportunities for the installation of interpretive material exists at intervals along this section of the proposed route (see Map 4).

The link between Jersey Street and Sandy Bay Road is problematic and less attractive, as all adjacent properties are privately owned and the watercourse here is contained within a deep concrete channel. However, this section should still be investigated as part of the longer-term plan. Safety issues remain with pedestrian access across Sandy Bay Road – the nearest signalised traffic intersection is at Byron Street or King Street intersections.

Option 2: Following the streets

This option follows Fitzroy Place, turns left into Byron Street and crosses Sandy Bay Road at the traffic lights. Signalised traffic lights for pedestrian crossing are located at Byron Street and Sandy Bay Road. The route connects to Byron Street/Sandy Bay Road traffic light intersection, which is a safe crossing point, providing direct access onto Quayle Street as another attractive and safe streetscape link to Marieville Esplanade.

An alternative option would be to follow Queen Street to Sandy Bay Road. This would eliminate the need for potentially costly construction works along the rivulet. An interpretation point could be included at the Jersey Street bridge, offering views along the watercourse in both directions.

Recommendation

Option 2 is considered to be most feasible in the short term, given the construction costs and negotiations with the private landowner required to implement Option 1.

However, Council should further investigate the possibility of achieving public access over the remaining private title along the northern side of the rivulet between Regent Street and Jersey Street, and between Jersey Street and Sandy Bay Road as a longer-term option. It is recommended that pedestrians should be encouraged to cross at the Antill Street Fitzroy Place crossing and access the rivulet from the eastern side of Regent Street, eliminating the need to cross further down where conditions are less safe. Further consideration of Option 1 requires the resolution of traffic and pedestrian safety issues on Regent Street.



Opportunities exist for the installation of interpretative material at the Jersey Street bridge area.

3.6 SANDY BAY ROAD TO MARIEVILLE ESPLANADE (REFER TO MAP 5)

This section of the rivulet runs entirely through private backyards (and flows through a major concrete drainage channel, presenting an extremely prohibitive set of constraints in terms of establishing a linear park or public trail).

The feasibility of several options has been assessed, including:

following the rivulet to Marieville Esplanade;

an on-road route along Queen Street to Princes Street to then join Quayle Street; and

an on-road route along Quayle Street to Marieville Esplanade

Option 1: Follow the rivulet from Sandy Bay Road to Marieville Esplanade

This is considered to be a highly impractical option given:

the need to negotiate land access or acquisition with 28 individual landowners on the southern side of the rivulet and/or 15 landowners on the northern side of the rivulet, given that the Council currently owns no land adjoining the rivulet between Quayle Street and Sandy Bay Road;

impacts on private landowners' privacy and property values would be considerable and based on experience elsewhere in Local Government, subject to group and individual legal actions against Council;

high costs of construction of a trail within the rivulet especially in dealing with risk management, public safety and flooding issues;



the amenity of much of the rivulet is limited to a wide concrete drainage line that offers little appeal and interest to warrant the costs of providing the trail and it being considered potentially impracticable to restore the rivulet to its original natural setting;

the high costs can not be justified on recreational benefit grounds given higher priorities for community recreational needs and trails within the City; and

street footpaths already provide safe and convenient access between Sandy Bay Road and Marieville Esplanade.

Option 2: On-road route along Queen Street to Princes Street to then join Quayle Street

This option is possible but depends on the point from which trail users will be approaching the trail. The previous section referred to the issues involved with pedestrians crossing Sandy Bay Road and if the recommended option were accepted, users would be crossing at Byron Street intersection. There is limited value in directing users to Queen Street when Quayle Street, which offers a more convenient, attractive and safe route to Marieville Esplanade is available.

The bridge crossing at Princes Street does, however, present a useful location for interpretation.

Option 3: On-road route along Quayle Street to Marieville Esplanade

This option is the preferred route to Marieville Esplanade. In addition to being a safer, more convenient and attractive route, it offers connections to pedestrian links via Nanny Goat and Billy Goat Lanes to Battery Point.

There are three locations for potential interpretation of the rivulet (available to all options):

a short walk off Quayle Street to the rivulet crossing at Princes Street;

a rivulet section along Quayle Street; and

at the mouth of the rivulet at Marieville Esplanade.



Recommendation:

Option 3 is considered to be logical and a preferred route to Marieville Esplanade for financial, safety, user convenience and aesthetic reasons.

Investigate options for interpretation at the locations shown on Map 5.



4 ACTION PLAN

4.1 OVERALL ASSESSMENT OF THE POTENTIAL LINEAR PARK AND TRAIL

The investigations (as outlined in Section 3) indicate the potential to develop a linear park and recreational trail along some sections of Sandy Bay Rivulet. In some locations where the acquisition of land may be problematic, or where development costs are high, or negotiated public access is difficult to achieve, a connecting recreational trail may be developed using the existing network of street footpaths.

If implemented, the proposed trail would provide a recreational link from the foreshore to the foothills of Wellington Park – similar to the existing trail at New Town Creek, and identified as a potential opportunity along Hobart Rivulet in the future. Another example of a linear walking trail is along Lambert Rivulet in Sandy Bay and this provides a valuable connection to the Mt Nelson bushland and ridges.

The upper section of the Sandy Bay Rivulet (i.e. between Waterworks Reserve and Romilly Street) has already been well developed as a recreational trail and is likely to continue to attract regular use. If a trail was developed along the middle section (Romilly Street – Fitzroy Gardens) it is likely to be more of a local recreational trail, with the section from Fitzroy Gardens to Lynton Avenue potentially attracting higher use given that it would be an extension of the park experience. The lower section from Fitzroy Gardens to Marieville Esplanade has major constraints and is difficult to justify in the short term, given the high acquisition, development and rehabilitation costs, for the local recreational benefits that would be attained.

However, the development of a linear trail between Regent Street and Sandy Bay Road is worth further investigation as a longer-term option.

It is recognized that development of the lower section of the rivulet would result in significant environmental benefits. Rehabilitation with locally indigenous species could be implemented along upper sections of the rivulet, particularly within the parliament Street Reserve and along the section adjacent to the Southern Outlet. Opportunities may arise for the rehabilitation of lower section in the longer term.

The proposed recreational trail is considered to be more of a local trail with the highest users being nearby local residents for daily exercise and enjoyment. It is not envisaged that the trail will become a major attraction for interstate or overseas visitors as there are a number of other strong walking opportunities available within the City and State (e.g. Great Short Walks, Wellington Park, Queens Domain) that offer more diverse experiences. Participation surveys⁴ indicate that recreational walking is the most popular activity undertaken within the community with over half the population undertaking such activities – it is also attracts highest participation across all age groups indicating life-long appeal for walking.

The benefits of the proposed linear park and trail, as presented in the report, include:

it connects existing Council owned open spaces along the rivulet including popular recreational use locations such as the Marieville foreshore, Fitzroy Gardens, Parliament Street Reserve and Waterworks Reserve;

it will provide a new recreational trail connection between the foreshore and the foothills utilizing both natural and urban settings;

it provides a useful link to the proposed recreational use of Waterworks Road quarry site;

it will provide wider community benefits for health and well-being by providing greater opportunities for physical activity;

it will improve user safety by encouraging the development of a route based on reducing the risks associated with traffic movement;

it presents an opportunity for rehabilitation of the rivulet environs adjacent to the linear park;

it provides opportunities for the interpretation of the rivulet history and values at different locations; and

it is considered to be achievable within the realms of available Council and community resources.

⁴ Office of Sport and Recreation (Tasmania) surveys in 1999 and 2000.



4.2 INTERPRETATION

Thematic interpretation has been identified as an important component of the proposed route.

The attached maps outline possible locations for the installation of interpretive materials along the proposed route, and delineate three levels of interpretation, or an 'interpretive hierarchy', based around the theme of the rivulets journey from the mountain to the sea, and its changing role and meaning for the community through time. The three levels of interpretation recognised are:

'Bookend' interpretative nodes to be located at either end of the proposed route, shown as yellow stars on maps 2 and 5. These nodes are to provide the visitor with a clearly defined beginning and end, communicate important information about the rivulet, the trail and the journey, and tie the beginning and end locations to the rivulet through natural and cultural history, perhaps by images, stories and anecdotes. For example, the interpretive node located at the end of the journey along Marieville Esplanade, within the Erroll Flynn Reserve in Sandy Bay, should communicate the importance of the location as a transitional zone between a number of precincts within the City, and between eras and roles, but also ties the rivulets journey to this location;

General interpretative points are to be located at varying intervals along the proposed route, and are shown on the maps as large green stars. These interpretation points may describe facets of the rivulets journey from the mountain to the sea, changes of the rivulet through time (including changes in use and importance), and links to the people of Hobart both past and present through the surrounding infrastructure, architecture or events; and

Directional signage or interpretive 'tasters' may be installed at various locations along the proposed route, to direct and entice visitors onto the trail from surrounding areas (shown as small green stars on the maps). Directional signage should be of a consistent design with the other interpretive material along the trail, but of a smaller scale. Thematic text or images may be used to provide visitors with a 'taste' of what the journey may offer.



The above outline of the 'interpretive hierarchy' and potential interpretive content is intended to be indicative only. The development of a comprehensive Interpretation Strategy is recommended in the section.

4.3 ACTION PLAN

The following Action Plan summarises the recommendations discussed in the Sandy Bay Linear Park Feasibility Study. Only recommendations considered to be of the highest priority for attention have been included in the Action Plan, and are to be commenced as resources allow.

High priority recommendations are defined as those which:

- are a logical part of the approval process for proceeding with a linear park and trail;

- require immediate action to alleviate existing public safety or liability concerns;

- start the process for initiating a linear park and trail e.g. negotiations with landowners, master plans, budgets; and

- address key concerns, and meet identified community needs.

Those recommendations not discussed within the Action Plan should be considered following the successful implementation of those outlined below.



No	Recommendation
1	<p>Prepare a Master Plan and undertake cost estimates for the development of the linear park in the following sections:</p> <ul style="list-style-type: none"> ▪ Fitzroy Gardens to Lynton Avenue ▪ Lynton Avenue to Romilly Street ▪ Romilly Street to Waterworks Reserve <p>The Master Plan is to be prepared in consultation with the Department of Infrastructure, Energy and Resources, the Friends of Sandy Rivulet, and Waterworks Valley Landcare Group.</p>
2	Commence negotiations with the identified private landowners to facilitate the establishment of the linear park, from Waterworks Reserve through to Lynton Avenue.
3	Prepare an Interpretation Strategy for the three sections of the linear park identified above, and including the lower section of recreational street trail below Lynton Avenue.
4	Upgrade the pedestrian crossing at the intersection of Anthill street and Fitzroy Place to improve safety.

Table 4: Action Plan



THE MAPS

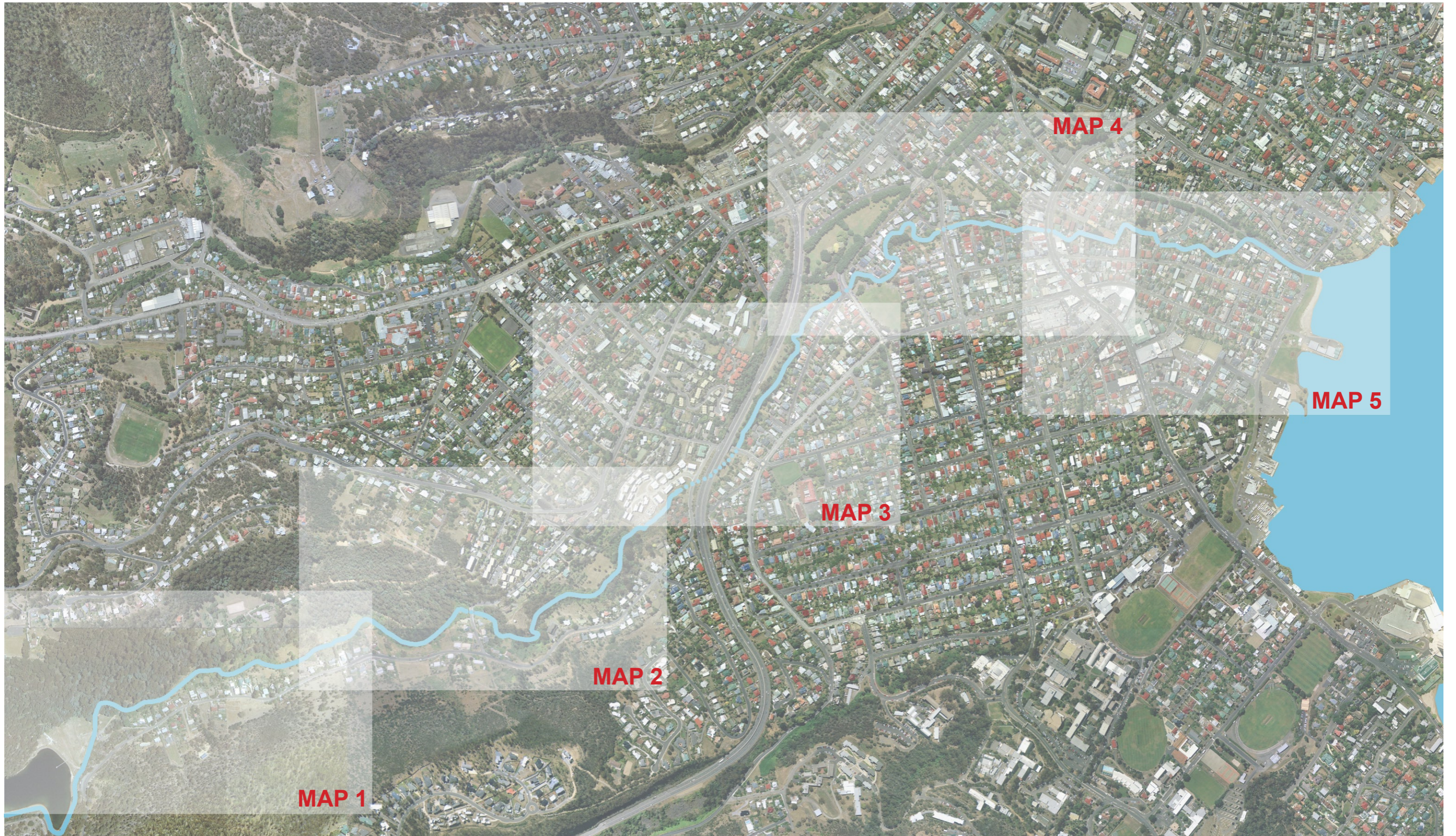
The following maps illustrate the routes and options described in Section 3 above. Also shown are neighbourhood links, proposed rivulet crossings and interpretation points. The maps also indicate whether the proposed section of trail is:

on or off road;

existing track or requiring a new track;

on Hobart City Council land or private land; and

suitable for pedestrians only or suitable for use as a shared trail with cyclists.






















Sandy Bay Rivulet Linear Park Feasibility Study

SCALE: NTS

KEY PLAN

LEGEND

-  existing track
-  prop'd track - public land
-  prop'd track - private land
-  proposed steps
-  proposed on road route
-  existing steps (on road)
-  potential link - private land
-  existing step link
-  potential link - public land
-  pedestrian track
-  pedestrian track
-  bicycle track
-  rivulet
-  rivulet (piped)
-  private land
-  public land
-  interpretation point (bookend)
-  interpretation point (general)
-  interpretation point (directional signage)



Connect into existing shared trail at Waterworks Reserve. Track uses steps to cover steep gradient.

Alternative or additional start of trail - begins from Waterworks Rd and joins existing track. Space for additional car parking on Waterworks Rd if required. Signage interpretation node

Install secure fencing around chlorine plant for public safety reasons.

Replace damaged footbridge. General interpretation node

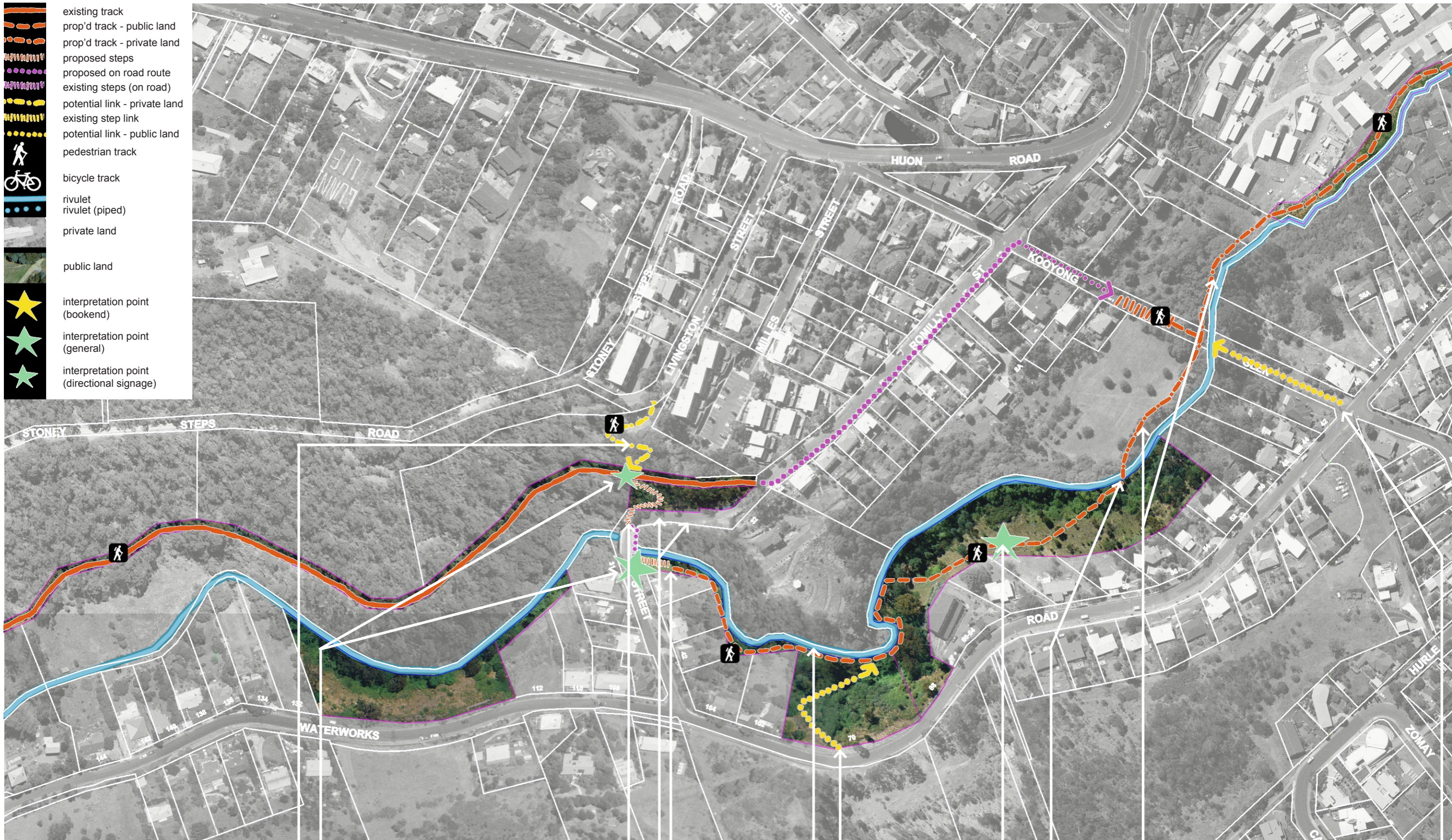
Alternative/additional start of trail - accessible for wheelchairs (assisted), bicycles and prams. Signage interpretation node

Rivulet viewing and bookend interpretation node with connections to other walks

Existing Pipeline Track in good condition and suitable for walking, jogging, cycling, prams and wheelchairs.

LEGEND

- existing track
- prop'd track - public land
- prop'd track - private land
- proposed steps
- proposed on road route
- existing steps (on road)
- potential link - private land
- potential link - public land
- existing step link
- potential link - public land
- pedestrian track
- bicycle track
- rivulet
- rivulet (piped)
- private land
- public land
- interpretation point (bookend)
- interpretation point (general)
- interpretation point (directional signage)



Potential for neighbourhood link, but would require negotiation with land owner

Rivulet viewing, signage and general interpretation nodes

Potential for link (steps) between Pipeline Track and Romilly Street bridge (HCC land)

Improve pedestrian + cycle amenity along Romilly St - no parking zone, footpath and bike lane

Staircase down from bridge to Rivulet on HCC land

Walking track alongside Rivulet within HCC land. Weed clearance and track building works required



















Rivulet viewing and general interpretation node
Install footbridge over Rivulet

Maintenance access for Bush Care (suitable for 4WD / excavator access only). Also a pedestrian link between Quarry recreation node and Rivulet Trail

Proposed trail route for walking (currently privately owned land)

Pedestrian links via Kooyong Glen to Waterworks Road and Romilly St. Romilly St connection requires extensive weed clearance & steps

LEGEND

-  existing track
-  prop'd track - public land
-  prop'd track - private land
-  proposed steps
-  proposed on road route
-  existing steps (on road)
-  potential link - private land
-  existing step link
-  potential link - public land
-  pedestrian track
-  bicycle track
-  rivulet
-  rivulet (piped)
-  private land
-  public land
-  interpretation point (bookend)
-  interpretation point (general)
-  interpretation point (directional signage)



Existing pedestrian link between Davey Place and Lynton Avenue. Design and implement pavement treatments to enhance the legibility and connectivity of the trail

Trail follows Waterworks Road to Lynton Avenue

Traffic signage west of bridge to alert drivers to pedestrians crossing ahead

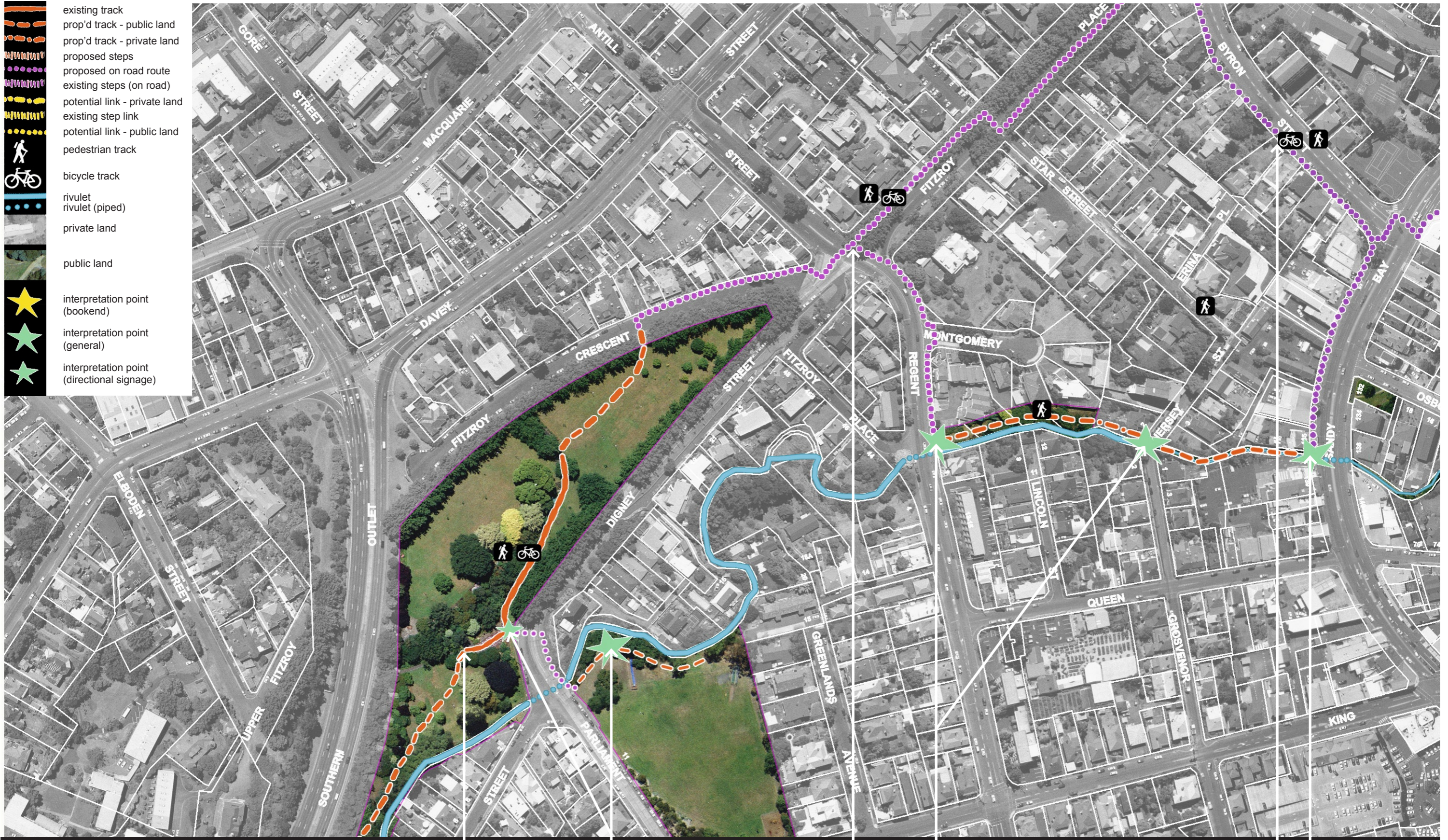
Crossing point on Lynton Avenue - widen road by 2m, install traffic island

Install shared track between Lynton Ave + Fitzroy Gardens. Work required includes weed clearance, bank stabilisation, track building, landscaping, gateway, signage, lighting and steps or ramp from Lynton Avenue

Rivulet viewing and general interpretation nodes

LEGEND

- existing track
- prop'd track - public land
- prop'd track - private land
- proposed steps
- proposed on road route
- existing steps (on road)
- potential link - private land
- potential link - public land
- pedestrian track
- bicycle track
- rivulet
- rivulet (piped)
- private land
- public land
- interpretation point (bookend)
- interpretation point (general)
- interpretation point (directional signage)



Preferred route extends through Fitzroy Gardens to Fitzroy Crescent. Part of this track is existing.

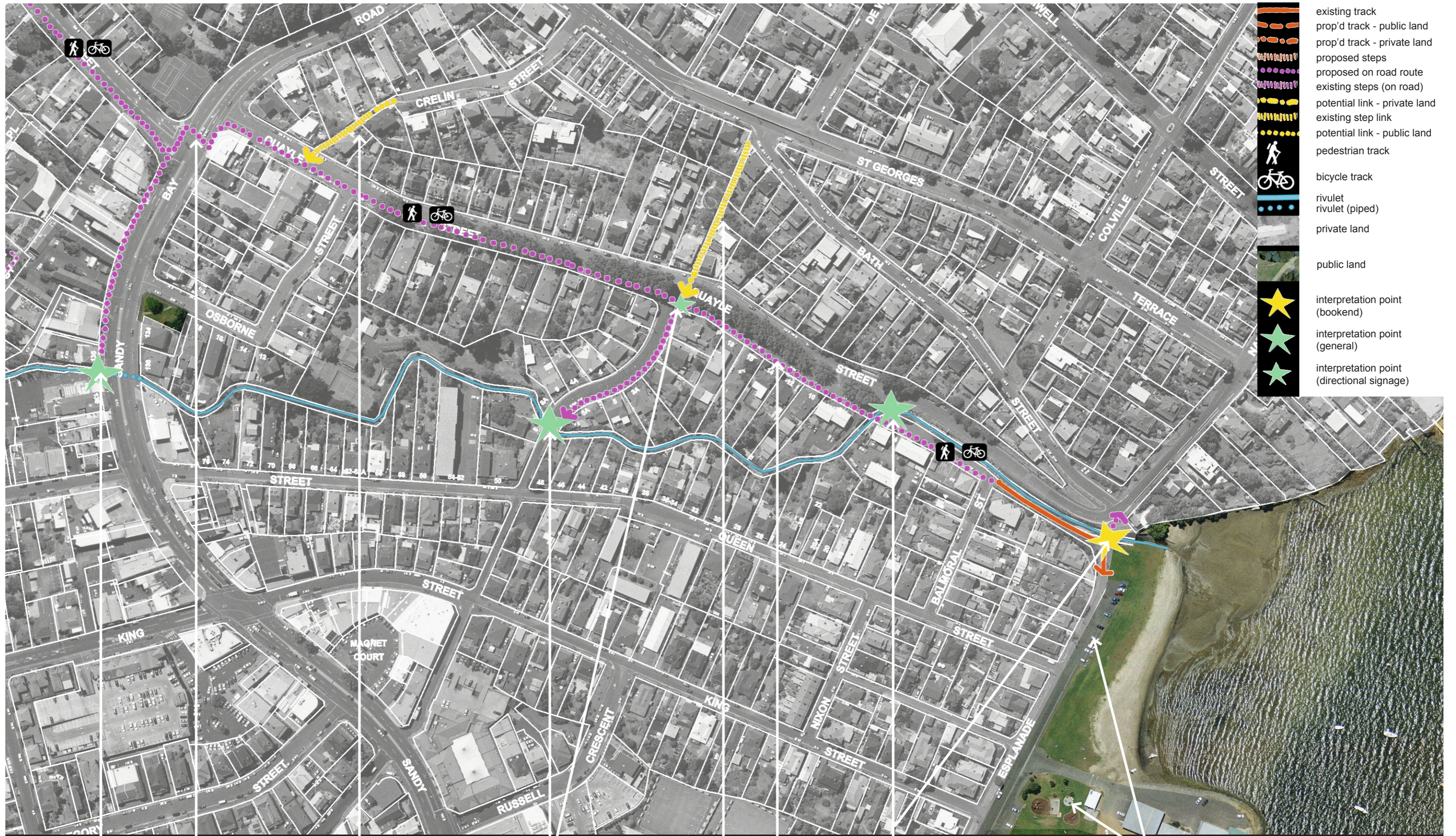
Rivulet viewing, general and signage interpretation nodes. Rehabilitate and provide amenity where park meets rivulet edge

Pedestrian crossing at Antill Street. Road modifications urgently required to improve pedestrian safety at this location.

Rivulet viewing and general interpretation nodes

Trail follows Byron Street, crossing over Sandy Bay Road at existing pedestrian lights and into Quayle Street

Rivulet viewing and general interpretation node



- LEGEND**
- existing track
 - prop'd track - public land
 - prop'd track - private land
 - proposed steps
 - proposed on road route
 - existing steps (on road)
 - potential link - private land
 - existing step link
 - potential link - public land
 - pedestrian track
 - bicycle track
 - rivulet
 - rivulet (piped)
 - private land
 - public land
 - interpretation point (bookend)
 - interpretation point (general)
 - interpretation point (directional signage)

Rivulet viewing and general interpretation node

Pedestrian crossing point over Sandy Bay Road, at Byron Street / Quayle Street traffic lights

Rivulet viewing, signage and general interpretation nodes

Existing pedestrian link connection at Billy Goat Lane

Existing pedestrian link connection at Nanny Goat Lane

Streetscape upgrade along Quayle St, to enhance pedestrian amenity

Rivulet viewing, general and bookend interpretation nodes with connections to other walks

Existing car parking, public toilets and play facilities